

GLOBAL CONFERENCE ON
BUSINESS AND FINANCE
PROCEEDINGS

VOLUME 13, NUMBER 1
2018

ISSN 2168-0612 FLASH
DRIVE

ISSN 1941-9589 ONLINE

The Institute for Business and Finance Research

*Kailua Kona, Hawaii
January 2-5, 2018*

Global
IBFR

TheIBFR.COM

TABLE OF CONTENTS

ENGLISH PROCEEDINGS	1
THE IMPACT OF TECHNOLOGY ON BUSINESS AND SOCIETY	2
Kathleen M. Wilburn, St. Edward's University	2
H. Ralph Wilburn, St. Edward's University	2
MARKETING EFFECTIVENESS OF EDUCATIONAL SERVICES ON WEBSITES	7
Mary Beth McCabe, National University	7
YOUR ACCOUNTING CAREER PATH: WHAT'S THE RIGHT CHOICE?	17
Dustin M. Grant, Clayton State University	17
THE EFFECTS OF HERZBERG'S MOTIVATORS AND HYGIENE FACTORS ON JOB SATISFACTION IN THE MILITARY	30
Arlene McConville, Forbes School of Business & Technology (FSBT), Ashford University	30
Andree Swanson, FSBT, Ashford University	30
Paula Zobisch, FSBT, Ashford University	30
CONFIGURATION ELEMENTS FOR RESTRUCTURING MANUFACTURING AND ASSEMBLY AREAS	39
Felix Bussemer, Leibniz University Hannover	39
David Herberger, Leibniz University Hannover	39
Peter Nyhuis, Leibniz University Hannover	39
COMMUNICATION INTERFACES IN INTERORGANIZATIONAL PRODUCTION NETWORKS	45
David Herberger, Leibniz Universität Hannover	45
Felix Bussemer, Leibniz Universität Hannover	45
Peter Nyhuis, Leibniz Universität Hannover	45
Joerg-Rainer Noennig, Technische Universität Dresden	45
Peter Schmiedgen, Technische Universität Dresden	45
THE ALIGNMENT BETWEEN STRATEGIC PLANNING AND HUMAN RESOURCE PROCESSES: A QUALITATIVE STUDY	53
Patricia A. Lapoint, McMurry University	53
LOGISTIC EVALUATION OF DIFFERENT ASSEMBLY ORGANIZATIONAL FORMS	57
Carolin Felix, Leibniz Universität Hannover	57
A STUDY OF THE IMPACTS OF PMIS QUALITY ON PROJECT MANAGEMENT PERFORMANCE	64
So-Hyun Park, Konkuk University, Seoul, Korea	64
Seung-Chul Kim, Hanyang University, Seoul, Korea	64
A CASE STUDY: THE TREATMENT OF LEASES AND THE IMPACT ON FINANCIAL RATIOS UNDER THE PROPOSED NEW US GAAP LEASE REQUIREMENTS PER ASU 842	74
Peter Harris, New York Institute of Technology	74
Michael Benjamin, New York Institute of Technology	74
INVENTORY COSTING: A COMPREHENSIVE CASE STUDY	79
Peter Harris, New York Institute of Technology	79
Umapathy Ananthanarayanan, Peter Harris, New York Institute of Technology	79

CHIAPANECA HANDICRAFT AS A DRIVER OF SUSTAINABLE LOCAL DEVELOPMENT	89
Karla Liliana Haro-Zea, Benemérita Universidad Autónoma de Puebla	89
Yadira Rosbinelly Haro-Zea, Benemérita Universidad Autónoma de Puebla	89
Gudiel Roblero-Mazariegos, Universidad Linda Vista	89
Samanta Sánchez Sánchez, Benemérita Universidad Autónoma de Puebla	89
EUROPEAN STATE-BUILDING: NATIONAL SELF-DETERMINATION VS. POLITICAL ECONOMIC STABILIZATION IN THE EUROPEAN UNION'S	98
Benedict E. DeDominicis, Catholic University of Korea	98
HETEROGENEOUS BELIEFS OR UNCERTAINTY	108
Yi Zhang, Prairie View A&M University	108
THE RELATIONSHIP BETWEEN MIGRATION AND THE FOOTWEAR INDUSTRY IN GUANAJUATO	114
Karla Liliana Haro-Zea, Benemérita Universidad Autónoma de Puebla	114
EXPLORING THE IMPACT OF LEADER STATUS-RELATED BEHAVIORS ON ORGANIZATIONAL OUTCOMES IN FINANCIAL SERVICE FIRMS	124
Kelly C. Mullen, Trinity Christian College	124
NEW PRODUCT DEVELOPMENTS BY A NEW COMBINATION OF EXISTING TECHNOLOGIES	132
Hiroshi Yamamoto, Keio University	132
Satoshi Tomita, Rikkyo University	132
Yoshiyasu Takefuji, Keio University	132
INDUSTRY-AVERAGE EARNINGS MANAGEMENT AND IPO PRICING	139
Joseph R. Rakestraw, Florida Atlantic University	139
Raman Kumar, Virginia Tech	139
John J. Maher, Virginia Tech	139
THE MILITARY'S NEW BLENDED RETIREMENT SYSTEM, WILL THE NEW BRS PENSION PLAN ACHIEVE THE EQUITABLE BENEFITS AND FINANCIAL INCENTIVES TO RETAIN LONG-TERM SERVICE MEMBERS?	142
Michael Mahoney, Wagner College, Staten Island, New York, USA	142
LIFE CYCLE ASSESSMENT (LCA), SUSTAINABILITY, AND INNOVATION OF TOURISTS DESTINATIONS	145
Rodolfo Delgado, Tokai University	145
DRIVING WORKFORCE DEVELOPMENT WITH CREDENTIALLED CERTIFICATE PROGRAMS	152
Jason Caudill, King University	152
STRATEGIES FOR PUBLISHING RESEARCH SUCCESSFULLY	157
Terrance Jalbert, The University of Hawaii-Hilo	157
EMOTIONAL INTELLIGENCE AND ENTREPRENEURS	163
Andree Swanson, Forbes School of Business & Technology (FSBT), Ashford University	163
Paula Zobisch, FSBT, Ashford University	163
Efiong Akwawao, FSBT, Ashford University	163
Richard Leventhal, FSBT, Ashford University	163
CHOICE BEHAVIOR IN MULTIATTRIBUTE CONSUMER DECISION MAKING	170
Zoltán Veres, University of Pannonia, Veszprém, Hungary	170

Ildikó Kaszai, E-STAND Co., Budapest, Hungary	170
A CASE STUDY OF ASIAN MARKET ENTRY STRATEGIES OF SOUTH KOREAN FIRMS	173
Mannsoo Shin, Korea University Business School	173
DISCLOSURE QUALITY OF SUDANESE LISTED COMPANIES	174
Alnour Nadir Alnour Osman, University of Khartoum, Sudan	174
Diaeldin Osman, Alcorn State University	174
DESIGN PRINCIPLES OF LONG-TERM PRODUCTION PLANNING FOR COST-OPTIMIZED DEMAND MATCHING	181
Maurice Schmidt, Institute of Production Systems and Logistics, Leibniz Universität Hannover	181
Peter Nyhuis, Institute of Production Systems and Logistics, Leibniz Universität Hannover	181
INFLUENTIAL FACTORS WHEN DESIGNING AND EVALUATING ASSEMBLY SYSTEMS	189
Vivian K. Bellmann, Leibniz Universität Hannover	189
Peter Nyhuis, Leibniz Universität Hannover	189
JOHN'S BAPTIST CHURCH: A CASE STUDY	194
Kevin L. Kemerer, Barry University	194
Noora A. Alsalmi, Barry University	194
HOW TO CREATE RESEARCH INVENTIONS BY THE COMBINATION OF MULTIPLE THEORIES AND CONCEPTS: AN IMPLICATION FROM DEVELOPING A NEW MATHEMATICAL MODEL FOR CORPORATE ALLIANCES	197
Satoshi Tomita, Rikkyo University	197
DATA-ORIENTED BUSINESS MODELS: GAINING COMPETITIVE ADVANTAGE	208
Peter Géczy, National Institute of Advanced Industrial Science and Technology (AIST)	208
ECONOMIC ASPECTS OF ORGANIC FARMING: A STUDY OF INDIA	211
Nisha Singh, Livingstone College	211
PRICE ELASTICITY OF ELECTRICITY DEMAND WITH TEMPERATURE EFFECT IN SOUTH KOREA: EMPIRICAL EVIDENCE	227
Jinwoo Dong, Pusan National University	227
Young-Duk Kim, Pusan National University	227
SPANISH PROCEEDINGS	240
ESTUDIO COMPARATIVO DEL COMERCIO FORMAL VS EL COMERCIO INFORMAL EN EL ESTADO DE MÉXICO	241
Octavio Augusto Dehesa Vargas, Centro Universitario UAEM Amecameca	241
Omar Ernesto Terán Varela, Centro Universitario UAEM Amecameca	241
ESTRATEGIAS DE COMPETENCIA LABORAL COMO DETONADOR DE LA COMPETITIVIDAD DE LAS ORGANIZACIONES DEL SECTOR TERCIARIO EN LA ZONA ORIENTE DEL ESTADO DE MÉXICO	246
Yesenia Burgos Madariaga, Centro Universitario UAEM Amecameca	246
Omar Ernesto Terán Varela, Centro Universitario UAEM Amecameca	246
LA INCLUSIÓN FINANCIERA EN LAS MICROEMPRESAS: EL CRÉDITO FACTOR ESTRATÉGICO PARA LA COMPETITIVIDAD Y DESARROLLO ECONÓMICO	251
Héctor Fabian Gutiérrez Rangel, Universidad de Guanajuato	251
PERCEPCIÓN DEL USO DE LOS SIMULADORES DE NEGOCIO EN ESTUDIANTES UNIVERSITARIOS DE LA CARRERA DE ADMINISTRACION DE EMPRESAS	259

Erick Paul Murillo Delgado, Universidad de Guayaquil	259
Christian Wladimir Bermúdez Gallegos, Universidad de Guayaquil	259
Yanina Bajaan Villagómez, Universidad Católica Santiago de Guayaquil	259
DIRECTRICES METODOLÓGICAS PARA EL DISEÑO DE INCUBADORAS DE NEGOCIOS EN INSTITUCIONES DE EDUCACIÓN SUPERIOR	265
Yolanda Saldaña Contreras, Universidad Autónoma de Coahuila	265
Fernando Miguel Ruiz Díaz, Universidad Autónoma de Coahuila	265
Laura Leticia Gaona Tamez, Universidad Autónoma de Coahuila	265
Juan Jesús Nahuat Arreguín, Universidad Autónoma de Coahuila	265
Kelly Alejandra Muñoz Peña, Universidad Autónoma de Coahuila	265
EL ENDEUDAMIENTO COMO INDICADOR DE RENTABILIDAD FINANCIERA EN LAS MIPYMES TURÍSTICAS DE CAMPECHE	278
Luis Alfredo Argüelles Ma, Universidad Autónoma de Campeche, México	278
Román Alberto Quijano García, Universidad Autónoma de Campeche, México	278
Mario Javier Fajardo, Universidad Autónoma de Campeche, México	278
Fernando Medina Blum, Universidad Autónoma de Campeche, México	278
Carlos Enrique Cruz Mora, Universidad Autónoma de Campeche, México	278
LA TECNOLOGIA DE LA INFORMACION EMPRESARIAL EN LA PROFESION DE NEGOCIOS	285
Leonor Gutiérrez González, Universidad Autónoma de Coahuila	285
Jimmy Armas Aguirre, Universidad Peruana en Ciencias	285
Liliana Patricia Zavala Chacón, Universidad Autónoma de Coahuila	285
LA ESCOLARIDAD DE LOS TRABAJADORES DE LA INDUSTRIA HOTELERA Y SU RELACIÓN CON LA CALIDAD EN EL SERVICIO CASO SAN MIGUEL DE ALLENDE	291
Betzabeth Dafne Morales, Universidad de Guanajuato	291
Mitzi Abigail Díaz Jiménez, Universidad de Guanajuato	291
CALIDAD DE VIDA LABORAL DE LOS EMPLEADOS EN EL SECTOR COMERCIAL	301
Cristina del Pilar López Saldaña, Universidad Autónoma de Coahuila-México	301
Adriana Guadalupe Chávez Macías, Universidad Autónoma de Coahuila-México	301
Maricela Carolina Peña Cárdenas, Universidad Autónoma de Coahuila-México	301
Aranza María Contreras Tovias, Universidad Autónoma de Coahuila-México	301
LOUIS J. LEBRET Y “EL ESTUDIO SOBRE LAS CONDICIONES DEL DESARROLLO DE COLOMBIA 1954-1956”	307
Carlos Alberto Cano Plata, Universidad de Bogotá Jorge Tadeo Lozano	307
Diana Sofia Cárdenas Espinoza, Universidad de Bogotá Jorge Tadeo Lozano	307
Anyi Marcela Hernández Rubio, Universidad de Bogotá Jorge Tadeo Lozano	307
FACTORES ASOCIADOS A LA ACEPTACIÓN DE CUPO EN UNA CARRERA UNIVERSITARIA	319
Betzabé del Rosario Maldonado Mera, Universidad de las Fuerzas Armadas ESPE	319
José Javier Buenaño Cabrera, Universidad de las Fuerzas Armadas ESPE	319
Karla Viviana Benavides Espinosa, Universidad de las Fuerzas Armadas ESPE	319
DISEÑO DE MODELO DE COMPETENCIAS DIRECTIVAS Y SU PROCESO DE IMPLANTACION PARA PYME: EVALUACION DIAGNOSTICA DEL SECTOR COMERCIO AL POR MENOR	326

Melchor David Elizondo Sandoval, Universidad Autónoma de Coahuila, México	326
Jesús Alberto Montalvo Morales, Universidad Autónoma de Coahuila, México	326
Xóchitl Segura Lozano, Universidad Autónoma de Coahuila, México	326
José Andrés Muñoz, Texas A&M University, USA	326
Luis Daniel Muñoz, Early College High School, USA	326
EL PERFIL DEL TRABAJADOR EN LA INDUSTRIA MAQUILADORA EXPORTADORA DE ENSENADA, B.C.	336
Victor Daniel Melendres Carlos, Universidad Autónoma de Baja California	336
Mónica Fernanda Aranibar Gutiérrez, Universidad Autónoma de Baja California	336
IMPLEMENTACIÓN DE PRÁCTICAS INNOVADORAS PARA GENERAR UN APRENDIZAJE SIGNIFICATIVO EN ESTUDIANTES UNIVERSITARIOS DE LA CIUDAD DE GUAYAQUIL	346
Jodie Padilla Lozano, Universidad de Buenos Aires	346
Danny Arévalo-Avecillas, Universidad Católica de Santiago de Guayaquil	346
FACTORES QUE INFLUYEN EN LA SATISFACCIÓN LABORAL DE LOS TELETRABAJADORES EN EMPRESAS MEXICANAS	356
Ana Isabel Ordóñez Parada, Universidad Autónoma de Chihuahua	356
Luis Raúl Sánchez Acosta, Universidad Autónoma de Chihuahua	356
Carmen Romelia Flores Morales, Universidad Autónoma de Chihuahua	356
Irma Leticia Chávez Márquez, Universidad Autónoma de Chihuahua	356
CAPACIDADES OPERATIVAS Y VENTAJA COMPETITIVA EN EMPRESAS MANUFACTURERAS DE LA REGIÓN CENTRO DEL ESTADO DE COAHUILA	366
Nidia Estela Hernández Castro, Universidad Autónoma de Coahuila	366
María del Rosario Demuner Flores, Universidad Autónoma del Estado de México	366
Zóchitl Araiza Garza, Universidad Autónoma de Coahuila	366
Liza Mariana Villarreal Moreno, Universidad Autónoma de Coahuila	366
NUEVO ESQUEMA DE FACTURACIÓN ELECTRÓNICA EN MÉXICO	371
Adriana Guadalupe Chávez Macías, Universidad Autónoma de Coahuila-México	371
Maricela Carolina Peña Cárdenas, Universidad Autónoma de Coahuila-México	371
Cristina del Pilar López Saldaña, Universidad Autónoma de Coahuila-México	371
Marlene Graciela Medina Vara, Universidad Autónoma de Coahuila-México	371
IMPACTO DE LOS FUTUROS DE ACCIONES SOBRE EL MERCADO ACCIONARIO COLOMBIANO	375
Julian Alberto Rangel Enciso, Universidad del Tolima - Colombia	375
Oscar Hernán López Montoya, Universidad del Tolima - Colombia	375
Enrique Ramírez Ramírez, Universidad del Tolima - Colombia	375
VALORACIÓN DE LA TUTORÍA UNIVERSITARIA: DESDE LA MIRADA DE LOS AGENTES IMPLICADOS	383
Zoila Margarita García Ríos, Universidad Michoacana de San Nicolás de Hidalgo	383
Alma Rosa García Ríos, Universidad Michoacana de San Nicolás de Hidalgo	383
Yenisey Castro García, Universidad Michoacana de San Nicolás de Hidalgo	383
Ma. del Carmen Arias Valencia, Universidad Michoacana de San Nicolás de Hidalgo	383

LAS RELACIONES PÚBLICAS COMO DISCIPLINA PROFESIONAL Y COMUNICACIÓN ESTRATÉGICA EN LAS ORGANIZACIONES	393
Ma. del Carmen Arias Valencia, Universidad Michoacana de San Nicolás de Hidalgo	393
Yenisey Castro García, Universidad Michoacana de San Nicolás de Hidalgo	393
Marcela Patricia Del Toro Valencia, Universidad Michoacana de San Nicolás de Hidalgo	393
LA GLOBALIZACION EN MEXICO; DESDE LO UNIVERSITARIO A LO HABITUAL	399
Leticia Sesento García, Colegio Primitivo y Nacional de San Nicolás de Hidalgo	399
Griselda Sesento García, Colegio Primitivo y Nacional de San Nicolás de Hidalgo	399
Patricia Serna González, Colegio Primitivo y Nacional de San Nicolás de Hidalgo	399
RESPONSABILIDAD SOCIAL UNIVERSITARIA DESDE LA MIRADA DE LOS DIFERENTES ACTORES INTERESADOS	406
José Javier Buenaño Cabrera, Universidad de las Fuerzas Armadas ESPE	406
Betzabé del Rosario Maldonado Mera, Universidad de las Fuerzas Armadas ESPE	406
Karla Viviana Benavides Espinosa, Universidad de las Fuerzas Armadas ESPE	406
FACTORES DETERMINANTES PARA EL DESARROLLO Y COMPETITIVIDAD DE LAS MIPYMES EN LA REGIÓN GUANAJUATO, MÉXICO	413
Martín Romero Castillo, Escuela Nacional de Estudios Superiores Unidad León, Universidad Nacional Autónoma de México	413
FINANCIAMIENTO DE LAS MIPYMES PARA EL DESARROLLO Y COMPETITIVIDAD EN LA REGIÓN GUANAJUATO, MÉXICO	422
Martín Romero Castillo, Escuela Nacional de Estudios Superiores Unidad León, Universidad Nacional Autónoma de México	422
ANÁLISIS DE LOS AMBIENTES DE INNOVACIÓN DE LAS PyMES DE LA REGIÓN SURESTE DE COAHUILA (CASO: INDUSTRIA METALMECÁNICA, AUTOMOTRIZ Y AUTOPARTES)	430
Baltazar Rodríguez Villanueva, Universidad Autónoma de Coahuila	430
Orlando W. Gutiérrez Castillo, Universidad Autónoma de Coahuila	430
Jesús Alberto Montalvo Morales, Universidad Autónoma de Coahuila	430
Saidt Gabriel Alcalá Silva, Universidad Autónoma de Coahuila	430
COMPETENCIAS DEL PROFESIONAL DE LA CONTADURÍA PÚBLICA DE LA BENEMÉRITA UNIVERSIDAD AUTÓNOMA DE PUEBLA, LA PERCEPCIÓN DEL EMPLEADOR	440
María de Jesús Ramírez Domínguez, Benemérita Universidad Autónoma de Puebla	440
Blanca H. Morales Vázquez, Benemérita Universidad Autónoma de Puebla	440
Rebeca Muñoz Velazquez, Benemérita Universidad Autónoma de Puebla	440
Martha Elva Reséndiz Ortega, Benemérita Universidad Autónoma de Puebla	440
FACTORES ASOCIADOS A LA ACEPTACIÓN DE UN CUPO EN LAS UNIVERSIDADES DE LOS BACHILLERES DE MANABÍ	449
Karla Viviana Benavides Espinosa, Universidad de las Fuerzas Armadas - ESPE	449
Betzabé del Rosario Maldonado Mera, Universidad de las Fuerzas Armadas - ESPE	449
José Javier Buenaño Cabrera, Universidad de las Fuerzas Armadas - ESPE	449
GENERACIÓN DE UN PLAN DE MEJORA PARA LAS PYMES GASERAS (GAS L.P.) EN LA ZONA CENTRO DE MÉXICO: CASO DE ESTUDIO	455
Uriel Polo García, Instituto Tecnológico de Apizaco	455

Alejandra Torres López, Instituto Tecnológico de Apizaco	455
Crisanto Tenopala Hernández, Instituto Tecnológico de Apizaco	455
Karla Gonzáles Hidalgo, Instituto Tecnológico de Apizaco	455
ANÁLISIS DEL PROCESO DE CONTROL DE INVENTARIOS PARA FARMACIAS EN HOSPITALES PÚBLICOS DE LA CIUDAD DE GUAYAQUIL	462
Fabián Espinoza Bazán, Universidad de Guayaquil	462
Rafael Ortiz Zambrano, Universidad de Guayaquil	462
Marisol Miranda Torres, Universidad de Guayaquil	462
NEGOCIACIÓN DE CONFLICTOS A TRAVÉS DE ESTRATEGIAS DE MEDIACIÓN EN PYMES EN LA CIUDAD DE GUAYAQUIL	471
Álvaro Rivera Guerrero, Universidad de Guayaquil	471
Erick Paúl Murillo Delgado, Universidad de Guayaquil	471
CADENA DE VALOR PARA DETONAR LA LOMBRICOMPOSTA EN LA ZONA SUR ORIENTE DEL ESTADO DE MÉXICO	479
Omar Ernesto Terán Varela, Centro Universitario UAEM Amecameca	479
Enrique Espinosa Ayala, Centro Universitario UAEM Amecameca	479
Pedro Abel Hernández García, Centro Universitario UAEM Amecameca	479
Jazmín Soriano Martínez, Centro Universitario UAEM Amecameca	479
MARKETING POLÍTICO COMO HERRAMIENTA DE POSICIONAMIENTO EN LA MENTE DEL CONSUMIDOR EN EL MUNICIPIO DE CHALCO, ESTADO DE MÉXICO	485
Jesús Mata Izquierdo, Centro Universitario UAEM Amecameca	485
Omar Ernesto Terán Varela, Centro Universitario UAEM Amecameca	485
Enrique Espinosa Ayala, Centro Universitario UAEM Amecameca	485
Martha Elva Ruiz Riva Palacio, Centro Universitario UAEM Amecameca	485
DRONES PARA EL MONITOREO GEODEMOGRÁFICO	490
Omar Ernesto Terán Varela, Centro Universitario UAEM Amecameca	490
Pedro Abel Hernández García, Centro Universitario UAEM Amecameca	490
Enrique Espinosa Ayala, Centro Universitario UAEM Amecameca	490
Alma Lucero Álvarez González, Centro Universitario UAEM Amecameca	490
Abraham Sánchez Gil, Centro Universitario UAEM Amecameca	490
SEGURIDAD E IMAGEN EN GARITA INTERNACIONAL DE CRUCE PEATONAL:	497
Adriana Guillermina Ríos Vázquez, Universidad Autónoma de Baja California	497
Jesús Amparo López Vizcarra, Universidad Autónoma de Baja California	497
IMPORTANCIA DE LA RESPONSABILIDAD SOCIAL EMPRESARIAL EN EL DESARROLLO LOCAL Y SU INFLUENCIA EN EL DESEMPEÑO FINANCIERO DEL SECTOR QUÍMICO-FARMACÉUTICO	508
Carmen Padilla-Lozano, Universidad Católica de Santiago de Guayaquil	508
Danny Arévalo-Avecillas, Universidad Católica de Santiago de Guayaquil	508
CONTRADICCIONES DEL SISTEMA SALARIAL PARA LOS DOCENTES DE LAS UNIVERSIDADES PÚBLICAS EN COLOMBIA	514
Gloria Yolanda Ospina Pacheco, Universidad del Tolima, Ibagué – Tolima (Colombia)	514
Inés Yohanna Pinzón Marín, Universidad del Tolima, Ibagué – Tolima (Colombia)	514

CAMBIO TECNOLÓGICO COMO FACTOR DE INNOVACIÓN EN UNA MICROFINANCIERA OAXAQUEÑA	522
María de Lourdes Vázquez Arango, Universidad Autónoma “Benito Juárez” de Oaxaca	522
Eric Amín Ramírez Castillo, Universidad Autónoma “Benito Juárez” de Oaxaca	522
Paul Jair García Contreras, Universidad Mesoamericana	522
DESIGUALDAD DE EMPRENDIMIENTO ENTRE REGIONES DE MÉXICO	532
Michelle Taxis Flores, Benemérita Universidad Autónoma de Puebla	532
Luis Enrique Bueno Cevada, Benemérita Universidad Autónoma de Puebla	532
Rafael Eduardo Saavedra Leyva, Universidad Autónoma de Baja California	532
IMPACTO DE LA APLICACIÓN DE LA UNIDAD DE MEDIDA Y DE ACTUALIZACIÓN EN LA TRIBUTACIÓN DE PERSONAS FÍSICAS EN MÉXICO	541
Gloria Alicia Nieves Bernal, Instituto Tecnológico de Mexicali	541
INCIDENCIA DE LA CADENA DE VALOR EN LA IMAGEN DE MARCA	545
Erick Paul Murillo Delgado, Universidad Católica Santiago de Guayaquil	545
Yanina Bajaña Villagómez, Universidad Católica Santiago de Guayaquil	545
Mónica Andrea Marín Aroca, Universidad Católica Santiago de Guayaquil	545
María Paula Marzo Icaza, Universidad Católica Santiago de Guayaquil	545
LA PERCEPCIÓN DE LA CALIDAD DEL SERVICIO DE LOS CLIENTES EN RESTAURANTES DE COMIDA CHINA	551
Marcela Reyes Pazos, Universidad Autónoma de Baja California	551
Cruz Elda Macías Terán, Universidad Autónoma de Baja California	551
COMERCIO ELECTRÓNICO EN EL SECTOR HOTELERO DE LOS MUNICIPIOS DE OAXACA	559
Eric Amín Ramírez Castillo, Universidad Autónoma “Benito Juárez” de Oaxaca	559
María de Lourdes Vázquez Arango, Universidad Autónoma “Benito Juárez” de Oaxaca	559
Abraham Martínez Helmes, Universidad Autónoma “Benito Juárez” de Oaxaca	559
Harold Wilson Hernández Cruz, Universitaria Agustiniana	559
PRINCIPALES CAUSAS POR LAS CUALES LAS PEQUEÑAS EMPRESAS DE TECOMÁN, COLIMA. NO PUEDEN OBTENER UN FINANCIAMIENTO EXTERNO EN LAS INSTITUCIONES DE LA BANCA MULTIPLE	567
Héctor Priego Huertas, Universidad De Colima	567
Alejandro Rodríguez Vazquez, Universidad De Colima	567
Juan Alfredo Lino Gamiño, Universidad De Colima	567
Hugo Martín Moreno Zacarías, Universidad De Colima	567
BENEFICIO DE LA TASA 0% DEL IMPUESTO AL VALOR AGREGADO (IVA), EN LOS CONTRIBUYENTES DEDICADOS AL EMPAQUE Y COMERCIALIZACIÓN DEL LIMÓN MEXICANO EN EL MUNICIPIO DE TECOMÁN, COLIMA	573
Héctor Priego Huertas, Universidad De Colima	573
Alejandro Rodríguez Vazquez, Universidad De Colima	573
Alfonso Alcocer Maldonado, Universidad De Colima	573
Hugo Martín Moreno Zacarías, Universidad De Colima	573
ESTUDIO SOBRE LA COMPRENSIÓN LECTORA EN EL NIVEL SUPERIOR	580

Yenisey Castro García, Universidad Michoacana de San Nicolás de Hidalgo	580
Alma Rosa García Ríos, Universidad Michoacana de San Nicolás de Hidalgo	580
Marcela Patricia del Toro Valencia, Universidad Michoacana de San Nicolás de Hidalgo	580
PERSPECTIVA MULTIDISCIPLINARIA DE LAS PEQUEÑAS Y MEDIANAS EMPRESAS DEL SECTOR SERVICIOS DEL ESTADO DE MORELOS, MÉXICO	584
Yadira Toledo Navarro, Universidad Politécnica del Estado de Morelos	584
Miguel Ángel Ruiz Jaimes, Universidad Politécnica del Estado de Morelos	584
Alejandro Reyes Velázquez, Universidad Politécnica del Estado de Morelos	584
Alejandra Fernández Hernández, Universidad Politécnica del Estado de Morelos	584
Jorge A. Ruiz-Vanoye, Universidad Autónoma del Estado de Hidalgo	584
Ocotlan Díaz-Parra, Universidad Autónoma del Estado de Hidalgo	584

ENGLISH PROCEEDINGS

THE IMPACT OF TECHNOLOGY ON BUSINESS AND SOCIETY

Kathleen M. Wilburn, St. Edward's University

H. Ralph Wilburn, St. Edward's University

ABSTRACT

Technology, specifically the interrelationships of Artificial intelligence (AI), big data, and the Internet of things (IoT), is accelerating its ability to help businesses do more with less and provide better results. There has been significant research in those jobs and activities that can be automated now and in the near future. While this new structure of work may allow some people the work/life balance to pursue their creative goals, for others it may mean a life with no stability or future. The result may be a two-tiered society where the rich can afford expensive products and services, and the poor require governmental assistance because although products can be produced more cheaply, they cannot afford them and so they are not produced.

JEL: M0

KEYWORDS: Technology Disruption, Business and Technology, Sharing/Gig Economy, Peer-To-Peer Structure

INTRODUCTION

Technology is accelerating its ability to help businesses do more with less and provide better results. Artificial intelligence (AI), big data, and the Internet of things (IoT), work together to create programs that businesses can use to decrease time from product idea to product creation and product creation to customer delivery. This paper will look at the major disruptions to society and the economy that are the result of technology's ability to allow businesses to automate work that humans have done, at the breakthroughs in technology and how they have changed the structure and processes of business at the meaning of work in society and the possible results of not having work, and at the sharing economy as a growing segment that could provide jobs with purpose for many people. All of this will require changes in business structure and management, government responses, and economic measurement, as well as changes in how citizens' well-being is maintained.

LITERATURE REVIEW

In combination, AI, big data, and IoT provide instant, detailed information about current and potential customers' needs and preferences that then feeds new product ideas. They produced robots that can replace humans in manufacturing, restaurants, retail, and banking. They produced IBM's Watson that can sift through millions of pages of research in seconds to provide doctors information about diagnosis and treatment options that will result in better, more affordable healthcare (Kaplan, 2015, p. 150), and Google's Deep Mind program that can read lips more accurately than human lip readers (Chui, George, & Miremedi, 2017, p. 1). The Triple Pundit: People, Planet, Profit (2015) recently reported that "GE estimates that convergence of machines, data, and analytics will become a \$200 billion global industry over the next three years" (para. 1). The analysis of Manyika et al. (2015) "estimates that the IoT has a total potential economic impact of \$3.9 trillion to \$11.1 trillion a year by 2025. At the top end, that level of value—including the consumer surplus—would be equivalent to about 11 percent of the world economy" (p. 23). More importantly, Chui et al. (2016) argue that today's technologies could "automate 45 percent of the activities people are paid to perform" and "about 60 percent of all occupations could see 30 percent or more of their constituent activities automated, again with technologies today" (para 4). The World Economic Forum

(2015) identified tipping points by 2025 for technology that include an 84% chance for producing a 3D printed car and a 76% chance of a 3D liver being transplanted, as well a 90% chance that 90% of the population will have access to the Internet and a 69% chance that over 50% of Internet traffic will go to appliances and devices in homes (p. 7).

Technology's Effects on Business

Chui et al. (2017) say that automation “can deliver significant value that is unassociated with labor substitution” (p. 2) and is allowing companies to find new ways to understand the preferences of customers, improve operations by using predictive-maintenance tools, optimize documentation work, and respond immediately to weather changes that affect products. “However, extracting value from automation often entails redesigning entire processes, not just automating individual components of the process (p. 5). Ford (2015) argues that businesses must adopt AI and robots in order to stay competitive because robots can do jobs faster and cheaper than humans can. The few humans that are needed will need skills to use, maintain, and repair the programs and robots, but these skills might not be ones that the majority of those who had done the work can learn. However, to make efficient use of AI and robots, detailed process analyses must be done in order to understand where robots, for example, can improve overall efficiency, not just efficiency of a task. This is especially important because the experts agree that many jobs will have tasks that can be automated, even though entire jobs cannot be.

Technology and the Future of Human Work

The research shows differences in how economists and technology experts perceive the future as more and more work tasks are automated. Some fear that millions of people will be left without work and income because not enough new jobs will be created for most of them (Clifton, 2011; Ford, 2015; Palmer, 2017). Others (Kaplan, 2017; Aeppel, 2015) think that this technological revolution will follow the pattern of the industrial revolution and new jobs will be created as the old are automated, just as farm workers moved to factory jobs. “Tomorrow’s labor market will be increasingly characterized by competition between humans and robots. In tomorrow’s workplace, either the human is telling the robot what to do or the robot is telling the human what to do” (Ross, 2016, p. 247).

Frey and Osborne (2016) developed a significant quantitative research model matching near-term technologies to job skills required for 702 occupations identified in O*NET, the task measures list from the U.S. Department of Labor. Their 2013 research looks at 702 occupations and ranks them according to probability of being “computerisable” or “not computerisable.” They found that 47 percent of U.S. blue-collar and white-collar employment professions are at high risk of significant automation: Service; Sales, and Related; Office and Administrative Support; Farming, Fishing, and Forestry; Construction and Extraction, Installation, Maintenance, and Repair; Production; Transportation and Material Moving.

Chui et al. (2016) and Maniyka et al. (2017) also focus on activities rather than occupations. They used O*NET occupations and analyzed both the technical feasibility of automating each activity and amount of time spent on each in the U.S. economy. Their final research showed that

Almost half the activities people are paid almost \$16 trillion in wages to do in the global economy have the potential to be automated by adapting currently demonstrated technology, according to our analysis of more than 2,000 work activities across 800 occupations. While less than 5 percent of all occupations can be automated entirely using demonstrated technologies, about 60 percent of all occupations have at least 30 percent of constituent activities that could be automated. (Maniyka et al., 2017, p. iv)

Palmer (2017) identifies five jobs that robots will take first: Middle management, Commodity Salespeople, Report Writers like sports and financial writers who report numbers, accountants and bookkeepers, and doctors (para. 2).

Other Forces

In addition to the speed of jobs being lost through automation, many economists and experts also see another force that also decreases the number of jobs—the restructuring of a business to decrease size and cost. There is the current move by U.S. companies to shift work to contractors, which leads to lower pay and few, if any, benefits. “Some large U.S. companies outsource 20-50% of their workforce” (Weber, 2017, para. 8). Deloitte’s chief talent officer said, “as much as 40 percent of the U.S. workforce may be part-timers by 2020” (as cited in Green, 2015, para. 24). Another parallel trend is that as companies decide to move manufacturing back to the U.S. in response to increasing wages in other countries and increased transportation costs, they build new plants that are automated from the beginning. Fewer humans will be hired than would have been in an older factory. Although a new plant may increase a geographic area’s available jobs, the historical number of employees and support industries cannot be used to predict future ones. Additionally, individual countries are requiring businesses to manufacture products in-country rather than import them. New companies are starting with technology so they become profitable with fewer people. AT&T was the most valuable company in 1964; today Google is worth 1B more but with less than a tenth of AT&T’s workforce (Thompson, 2015). Ford (2015) points out that YouTube was founded by three people who employed sixty-five people and sold the company in two years to Google for \$1.65 billion. Schwab (2016) notes that there is a change in definition and value of ownership: Amazon, the largest retailer, does not own stores, Uber, the largest transportation provider does not own cars, and Airbnb, the largest provider of sleeping rooms doesn’t own hotels (p. 159).

The Work Humans Will Do

Part-time work is creating a new type of economy, alternatively called the sharing, peer, or gig economy. Whether peer to peer (P2P) or gig, the economy is based on sharing of talent and resources. However, in terms of whether part-time work is a path to fulfilling one’s purpose or passion is a subject of disagreement. It is possible that elimination of full-time jobs make a new artisanal economy focused on self-expression. Thompson (2015) argues this might bring independence, and a chance to develop one’s talents and focus on one’s purpose: “The next wave of automation could return us to an age of craftsmanship and artistry” (p. 59). However, Schwab (2016) is concerned that only a few will actually be able to have this kind of work and life, and even Thompson (2015) recommends that a minimum income for all would be necessary. “Several economic studies have found that the overall self-reported level of happiness is highest when the economic disparities in society are minimized, even after controlling for all other known factors” (Kaplan, 2015, p. 164). The other side of the sharing economy is one in which people cannot make a living doing work that is meaningful to them. It is also possible that some people have to put together a string of jobs that are not meaningful in order to survive, and with the knowledge that the availability of future jobs are uncertain. This is the gig economy. It has created a new business structure that provides gigs, mostly short term or part-time, through the Internet.

Two Tier Society

Thompson (2015) calls the working class the ‘Precariat,’ “a working class that swings from task to task in order to make ends meet and suffers a loss of labor rights, bargaining rights, and job security” (p. 58). One problem with this model is that the economy is based on the rich spending their money on goods and services. “Spreading long-term social benefit is hard. . . . If gigging platforms are necessary to keep people in cash, the model’s social erosions have to be curbed. How can the gig economy be made sustainable at last?” (Heller, 2017, para. 67).

Government Changes

“Overall, robots can be a boon, freeing up humans to do more productive things—but only so long as humans create the systems to adapt their workforces, economies, and societies to the inevitable disruption” (Ross, 2016, p. 37). However, at a 2017 U.S. Governors at the National Governors Association meeting, Elon Musk said that a regulatory agency was needed to control development of AI, because not only it would threaten human jobs but also it could spark a war (Higgins, 2017).

New Economic Metrics Are Needed

As Kaplan (2015) reports, “In fact, there are two groups of people without jobs. The first are those who are looking for a job and can’t find one, Indeed, that’s the official U.S. Bureau of Labor Statistics definition of being unemployed. The other group is what the bureau calls “not in the labor force,” which includes retirees. This does not mean these people are not working, just that they are not getting paid for working (p. 170). Brynjolfsson & McAfee (2014) recommend that the human development index be used to fill in some of the gaps in official GDP statistics. They also recommend using the multidimensional poverty index that considers indicators like nutrition, sanitation and access to water, and also the Gallup-Healthways Well-Being Index that has many years of data (p. 123).

CONCLUSION

Even if a company is completely automated, demand must be there. 3D printers may allow artisans to create their own products and eBay may allow them to be sold B2B, but there still needs to be a demand. Supply may increase as more people can follow their dreams. Many artists and musicians have had other jobs so they could afford to follow their passion of creating art and music. Now those jobs will be gone, but there may be more people trying to make money in artistic endeavors. The demand for any product or service must exist, even for robots. Brynjolfsson and McAfee (2014) claim that the best solutions will come from creativity and innovation that increase the value of human labor (p. 245). For business leaders, Manyika et al. (2017) highlight the new responsibilities.

REFERENCES

- Aepfel, T. (2015, February 25). “Jobs and the Clever Robot: Experts Rethink Belief that Tech lifts Employment as Machines take on Skills once Thought to be Uniquely Human.” *The Wall Street Journal*. A1.
- Chui, M., Manyika, J., & Miremadi, M. (2016, July). “Where Machines Could Replace Humans—and Where They cN’t—Yet.” *McKinsey Quarterly*. Retrieved from <http://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/where-machines-could-replace-humans-and-where-they-cant-yet>
- Chui, M., George, K., & Miremadi, M. (2017, July). “A CEO Action Plan for Workplace Automation.” *McKinsey Quarterly*. Retrieved from <http://www.mckinsey.com/global-themes/digital-disruption/a-ceo-action-plan-for-workplace-automation>
- Clifton, J. (2011). *The Coming Jobs War*. New York: Gallup Press.
- Ford, M. (2015). *Rise of the Robots: Technology and the Threat of a Jobless Future*. New York: Basic.
- Frey, C., & Osborne, M. (2016). “The Future of Employment: How Susceptible are Jobs to Computerization?” *Technological Forecasting a Social Change*, 114, pp.254-280.

Green, J. (2015, August 18). "Why 6 Million Americans Would Rather Work Part Time." *Bloomberg Business*. Retrieved from <http://www.bloomberg.com/news/articles/2015-08-18/why-6-million-americans-would-rather-work-part-time>

Heller, N. (2017, May 15). "Is the Gig Economy Working? Many Liberals Have Embraced the Sharing Economy. But can They Survive it?" *The New Yorker*. Retrieved from <http://www.newyorkerest.com/2017/is-the-gig-economy-working/>

Higgins, T. (2017, July 15). "Elon Musk Lays Out Worst-case Scenario for AI Threat." *The Wall Street Journal*. Retrieved from <https://www.wsj.com/articles/elon-musk-warns-nations-governors-of-looming-ai-threat-calls-for-regulations-1500154345>

Kaplan, J. (2015). *Humans Need not Apply: A guide to Wealth and Work in the Age of Artificial Intelligence*. New Haven, Connecticut: Yale University Press.

Kaplan, J. (2017, July 22). "Don't Fear the Robots." *The Wall Street Journal*. C3.

Manyika, J., Chui, J., Bughin, J., Dobbs, R., Bisson, P., & Marrs, A. (2013, May). "Disruptive Technologies: Advances that will Transform Life, Business, and the Global Economy." *McKinsey Global Institute*. Retrieved from www.mckinsey.com/business-functions/digital-mckinsey/.../disruptive-technologies

Manyika, J., Chui, M., Bisson, P., Woetzel, J., Dobbs, R., Bughin, J., & Aharon, D. (2015, June). "Unlocking the Potential of the Internet of Things." *McKinsey & Co.* Retrieved from http://www.mckinsey.com/insights/business_technology/the_internet_of_things_the_value_of_digitizing_the_physical_world

Manyika, J., Chui, M., Miremadi, M., Bughin, J.; George, K., Willmott, P., & Dewhurst, M. (2017, January). "A Future that Works: Automation, Employment, and Productivity." *McKinsey & Co.* Retrieved from <https://www.gita.org.in/Attachments/Reports/MGI-A-future-that-works-Full-report.pdf>

Palmer, S. (2017, February 26). "The 5 Jobs Robots will take First." *Huffington Post*. http://www.huffingtonpost.com/entry/the-5-jobs-robots-will-take-first_us_58c9475de4b01d0d473bcf9e

Ross, A. (2016). *The Industries of the Future*. New York: Simon & Schuster.

Schwab, K. (2016). *The Fourth Industrial Revolution*. Geneva, Switzerland: World Economic Forum.

Thompson, D. (2015, July/August). "A World Without Work." *The Atlantic*. Retrieved from <https://www.theatlantic.com/magazine/archive/2015/07/world-without-work/395294/>

Triple Pundit: People, Planet, Profit. (2015, October. 8). *IoT & CSR: Better Together*. Retrieved from <http://www.triplepundit.com/podium/internet-of-things-csr-better-together/>

Weber, L. (2017, February 3). "The End of Employees." *The Wall Street Journal*. A10.

World Economic Forum. (2015). *Deep Shift—Technology Tipping Points and Social Impact*. Retrieved from http://www3.weforum.org/docs/WEF_GAC15_Technological_Tipping_Points_report_2015.pdf

MARKETING EFFECTIVENESS OF EDUCATIONAL SERVICES ON WEBSITES

Mary Beth McCabe, National University

Richard Weaver, National University

ABSTRACT

Marketing educational programs in a complex world inspired the investigation of relationships between education marketing and digital media. The research questions were: Which organizations are promoting educational programs? What are the components of the programs/products? The study considered how educational services are promoting the programs on the web. Also, the research considered how these organizations distinguish themselves, including what is their implied value proposition. Lastly, the research reviewed interaction on digital channels. The following five “search” phrases for educational programs were used in an internet search: 1) establish a positive school culture, 2) increase academic performance, 3) improve safety, 4) decrease problem behavior, and 5) physically active classrooms/education. The goal of the research was to better understand what educational programs are offering, which services provide these benefits as outcomes, classify how they are promoting themselves using website channels, and then evaluate/explain how that message is being communicated. The top 20 organizations who fit this search were selected and their digital marketing was analyzed on websites using personal computers. Researchers compared .ORG, .GOV, .EDU, and .COM types of educational organizations. The study ranked websites for effectiveness based on similar research studies. The research examined both for-profit and not-for-profit organizations that help K-12 schools solve problems of promoting and delivering services to their users such as: members, parents and students. The study showed that: In this digital age, promotion and delivery of educational services utilizing the Internet is a requirement. Websites have become a significant arena for service providers to carry their messages to potential customers/users.

KEYWORDS: Information Seeking, Website Perceptions, Content, Promotion, Consumer Behavior

INTRODUCTION

Organizations providing education-related services to schools across the country are challenged to use the Internet more effectively to both promote and deliver their services. Whether state boards of education, various associations of educators, not-for-profit organizations or for-profit companies, the realities of effective use of the Internet is vital to their reaching their intended education markets. As with all marketers, these organizations must address what is commonly known as the Marketing Mix: Product, Place, Promotion, and Price. The digital environment requires fresh ideas about each of these 4 Ps. The traditional ways of interacting with customers often do not translate to this new environment. Marketers must adapt to these changes or find they have much less access to their primary markets. The products (including services) provided by education-related services to schools and educators can look quite different from what was traditionally produced on paper in analog form. While the essence of the product often remains the same, how it is packaged must be quite different. It is critical that these providers carefully examine what they offer. Is their product line simply what they have offered in the past or is it adapted to the evolving needs of their customers? How have they modified the product mix offered? How well aligned is their product offering with the digital environment? Place is the delivery of product to customers. In this environment, the distribution primarily happens digitally but some organizations retain an in-person component. Two important issues in this arena are ease of use and quality of the visual presentation. Many

marketers simply present the same information in the same way on both the virtual and in-person environments.

The essence of promotion is how an organization presents what it has to offer. Generally, promotion is expected to: 1) provide information to customers, 2) increase demand, 3) differentiate the product, 4) enhance the product's value, and 5) stabilize sales. Marketers of educational services, especially in this digital age, are faced with new challenges to accomplish these tasks. Further complicating this challenge is the need to sufficiently understand the organizations' customers to tailor the language used in communications. Customers want and need to know the cost of what is being offered to them. This value equation is an interplay between the customers' desire for the product and the marketer's pricing strategy. The pricing is impacted by whether the organization has a mandate to distribute information, to include information as a service included for members, or plan to sell information for profit. All three types of organizations are operating in the educational services marketplace. This research is intended to explore how a variety of organizations address these marketing challenges. This task leads to the following research questions that guided this study:

What services and information are offered?

How is the organization and its services presented on its website?

What is the organization's implied value proposition to potential users/customers?

Marketing educational programs in a complicated world led the research team to investigate which companies are promoting educational programs and how are they promoting them. These educational programs were challenged to solve problems arising from the following issues:

Establish a positive school culture

Increase academic performance

Improve safety

Decrease problem behavior

Create physically active classrooms/education

The goal of the research was to better understand which educational programs are offering services that provide these benefits as outcomes, classify how they are promoting themselves, and then evaluate/explain how that message is being communicated.

LITERATURE REVIEW

In today's learning environments, students and parents are searching for outcomes. They have access to digital devices such as desktop personal computer and laptops. They also use tablets and mobile phones. The internet is a home for knowledge. Muir (2014) looked at an organization that is innovating education, the Kahn Academy, and how students accessed online educational websites. Their perceptions of how useful they were varied. The traditional role of the teacher was being challenged, as evidenced by 57,000,000 searches for "help with mathematics" on Google (Muir, 2014). What outcomes are those who are searching on personal computers for educational programs looking for? The study on these outcomes was based on three previous research studies: 1) (DePorter & Hernacki, 1992) with Quantum Learning and Supercamp, focused on outcomes of K-12 education. 2) DePorter, Reardon, & Singer-Nourie (1999) 8 Keys to Success, and, 3) Given, and DePorter (2015), transformation due to human imitation of positive interactions, and goal setting behaviors that lead to achievement in K-12 schools. Search Engines Using search engines is one of the ways to discover what we are looking for in a digital environment, similar to how we used a card catalog at the library in the past, only now we have access to every card and cross referenced in trillions of results. The major search engines currently are Google, YouTube, Bing,

and Yahoo, with Google's engine having more than a 72% share of the searching behaviors. Few would argue that this is the dominant search platform, especially as their parent company, Alphabet, also owns YouTube, the second largest search engine. The role of a search engine is to provide relevant search results quickly (Visser & Weideman, 2014). Search engines use algorithms that are designed to scale well with very large datasets. They are optimized for fast and efficient access. A search engine helps to organize results by using an algorithm to serve the results that are accurate. The web is a vast collection of completely uncontrolled heterogeneous documents, indexed by data such as hyperlinks and formatting (Brin & Page, 1998).

How usable the website is depends on the visitor's ability to connect with the information. Removing obstacles that could hurt their experiences will allow for higher levels of satisfaction by users. Once a website loses the visitor because of usability, they are unlikely to visit again (Visser & Weideman, 2014). Evidence that the classification models of searching was documented. This was based on restaurants and getting info about the details users needed, by going to content websites for the information search. Hsu & Walter (2015) looked at how consumers in need search for information on the internet. There were four conclusions on how consumers search the Internet. (Hsu & Walter, 2015): 1) Certain users create Internet searches using the dominant search engines, such as Google, 2) Some people go directly to a content website, 3) Others have their "go to" search engines, and 4) Those who search vary in how extensively they search. Marketing on the Internet Internet access services, such as websites, are the dominant communications tool for internet exchange and sharing (Jarret, 2015). The Federal Communications Commission (FCC) has regulated the telecommunications industry since 1934 and starting with dial up services, regulates the Internet, as part of the public good. In 1996, Congress drew up two categories, telecom services and information services. Information services, such as Facebook and YouTube, are mostly exempt from FCC regulations. The FCC created the Open Internet Order in 2015 with strong rules about net neutrality. This law requires that carriers cannot block, throttle or prioritize for pay, i.e., no fast lanes on the Internet (Jarret, 2015).

Given that all websites have equal access on the world wide web, how do websites get seen? The outcomes of digital marketing can be the following: increasing awareness, brand image, esteem, sales, loyalty or commitment (Flores, 2013). Good websites should be easy to use, useful and easy to understand and navigate (Aziz & Kamaludin, 2014). Pynoo & Tondeur, et al (2012) looked at secondary school teachers and how they accessed educational websites, based on usage data and online questionnaires. They tried to predict which websites would be most used and therefore useful. They also considered consumer behavior and found that searching for and downloading material was the number one use, not sharing content. The predictors for this behavior were individual's attitude and perceived usefulness of the material downloaded. Digital online relationships differ from analog offline or in-person relationships and theories emerge about the source of these differences, including anonymity. (Kozlenkova, Palmatier, et al, 2017) For a marketer there is a double edge sword; an anonymous relationship can promote both risky trial and easy termination. Two-way promotional communication in online relationships, rather than unilateral relationships help consumers differentiate, make choices and reduce risk, therefore increases sales revenues and shortens the decision-making time period and have a positive financial impact on purchasing and revenues (Kozlenkova, Palmatier, et al, 2017).

How do we promote and get the attention of our audience online? Using graphics is one way to get attention, as well as using photographs. Ozmen (2015) looked at analyzing users attitudes about online content, including how information is retrieved and processed. They considered how online ads should be presented for more effective responses. Digital users were attracted by keywords and the initial digital presentation. Users gave more importance to specific details over general information, indicating that being explicitly clear in content may lead to even greater value to users. Consumer attitudes toward information retrieval and processing made a difference. Relating to our study of educational marketing programs, in the Business

to Business (B2B) space, web pages and value-add content helped a business stand out among competitors. Holliman & Rowley (2014) reviewed digital marketing practices and suggested insights on what would improve content relevance, especially since the marketing industry is facing a decline in effectiveness in what they termed, interruptive marketing techniques. The following terms were used: useful, relevant, compelling and timely. The cultural change to “helping” is better than “selling” in these cases examined. Content marketing requires different marketing objectives, tactics, metrics and skills than those with traditional marketing approaches.

Value and Pricing

Digital Marketing on personal computers has replaced some traditional interruptive marketing tactics such as direct mail, door to door and telemarketing, which have been declining in effectiveness based on price/value. Interactive marketing is useful and valued for achieving and sustaining a trust in the brand (Holliman & Rowley, 2014). Consideration needs to be given to the relevance, usefulness, timeliness and degree of interest.

Distribution and the Digital Audience

Stranaland (2010) looks at design of web pages and consumer behavior of how different segments of people access them. If a company knows in advance the type of consumer who will be searching or seeking, that can help them to design a more appropriate website. For educational program marketers, they may have a need to reach the seekers, who want a controlled environment and simple design rather than the surfers who value the interactivity. These marketers may choose a tactic that presents websites more simply and give users more control when they visit. Controlling distribution via the Internet has been an issue for the hotel industry (Carroll & Siguaw, 2003). Internet based room reservations presented challenges for scaling their selling of perishable rooms, and lead to the success of start ups like Airbnb and other travel booking websites. The effect of Internet distribution has had an effect on brick-and-mortar sales (Pozzi, Andrea, 2013) and the music distribution (Sparrow, 2006). Revenues increase overall, in this supermarket study, and even more when the chain stores face more competitors. For the consumer, purchase behavior tends to differ across the online and offline channels, based on tangibility, (Degeratu, Rangaswamy, and Jianan 2000) product weight (Chintagunta, Chu and Cebollada, 2012), pricing (Chu et al., 2010), and assortment (Zhang et al, 2010). Metrics are more important than ever when it comes to digital marketing. Key Performance Indicators (KPI's) to measure effectiveness and Return on Investment (ROI). Globally speaking, what is too expensive or too hard to measure will be eliminated from the tactics (Flores, 2013).

METHOD

This research study began in 2012 with a Meta study on Quantum Learning and how they were effective in the advancement of educational programs. Building on that research, the key words were the outcomes of these programs, as that would be what users of educational programs would be seeking in their search processes. Here are the steps taken.

Searched for providers of identified outcomes, using Google, using variations of key words associated with five categories identified by Quantum Learning (DePorter, 2012).

Visited and documented content for each website on October 11, 2016.

Visited websites using different personal computers (desktops, laptops) with different operating systems (PC's, Macs) and different browsers (Firefox, Chrome).

Assessed the digital approach used by the identified organizations.

Each researcher searched on Google for the same five terms using different browsers to find out which programs were promoting these outcomes. Individual websites of educational programs with high rankings

were selected from the outcomes of the internet search. How these organizations used these terms for promotional messaging, was considered as well as the product or service that they are promoting. The focus was on the educational organizations that fit at least four of our outcomes. We considered the type of organization, and whether they were using paid search or organic Search Engine Optimization (SEO). We gathered data on the following factors: 1) live on-demand chat 2) scheduled chat 3) social media 4) blog) 5) Interactive 6) Searchable website. Using the following rubric, we created a ranking system. Higher scores meant that the website experiences were interactive (Aziz & Kamludin, 2014).

Usability – effectiveness – To what degree user can complete goal?

Efficiency – Are resources needed by user to complete goal available?

Accessibility – Can everyone access what is necessary to complete goal?

Learnability – How easily user can learn to interact with website?

Satisfaction – How comfortable user is with interacting with website?

Findings

The first level of examination of the websites consisted of looking for evidence that the site was addressing one or more of the search criteria. We initially identified 20 websites by using the 5 key phrases (i.e., keywords) in searches using Google. We then narrowed down our 20 websites to a list of 11 finalists, who had at least three of our key phrases. (A description of the websites are found in Appendix 1). Once these websites were identified, each was visited separately by each of the resesarchers to make a judgment about whether the search criteria were significantly addressed on the website. At a minimum, websites were expected to make information available to assist visitors in the selected areas or indicate clearly that such information would be available upon joining the organization or purchase of services. Those websites that addressed a minimum of three of the five criteria were retained for the study.

Table 1: Search Engine Results From Keyword Search, March 2016

Organization	Org Type	School Culture	Academic Performance	Emotional Safety	Decrease Behavior Problems	Physically Active Class Room
New York State Board of Ed.	GOV	X	X	X	X	X
Greater Good Science Center	ORG	X	X	X	X	X
American School Counselor Assoc (ASCA)	ORG	X	X	X	X	
Association of Supervision & Curriculum Development (ASCD)	ORG	X	X	X	X	
Counseling in Schools	ORG	X	X	X	X	
Edutopia	ORG	X	X	X	X	
FISH!	COM	X	X	X	X	
National Assoc.of Elementary School Principals (NAESP)	ORG	X	X	X	X	
Success for All Foundation	ORG	X	X	X	X	
We Are Techers	COM	X		X		X
National Center on Safe Supportive Learning Environments	GOV	X	X	X		

Table 1 identifies the presence of the various search criteria. The organizations presented in this table were those organizations that addressed at least three of the five criteria.

In examining these websites, particular attention was paid to ways in which the website offered opportunities for interaction with visitors. Such opportunities might be in the form of on-demand or scheduled chats. It might also be a blog or other specific means of engagement. Finally, the websites were examined to determine whether or not there was the capability to search the website.

Table 2 : Interactive Analysis of Websites

Website	Live Chat	Scheduled Chat	Blog	Interactive	Search Website
NY State Ed Dept	no	no	yes	No	yes-Google
Greater Good Science Center	no	no	no	Take a quiz	yes-Google
American School Counselor Association	no	no	yes/vlog*	no	yes
Assoc. Supervision& Curriculum Dev.	no	no	no	no	yes
Counseling in Schools	no	no	yes	no	yes
Edutopia	no	no	no	no	no
FISH!	no	no	no	no	no
Nat Association of Elementary School Principals	no	yes	yes	no	
Success for All Foundation	no	no	no	no	yes
We Are Teachers	no	no	no	no	no
National Center on Safe Supportive Learning	no	no	no	Take a poll	
					yes

Table 2 displays the categories of interaction available on the website. A “no” indicates the website does not offer this type of interaction to site visitors. *indicates video blog

The websites were then evaluated using the criteria developed by Aziz & Kamludin (2014): Usability, Efficiency, Accessibility, Learnability, and Satisfaction. Each website was rated on each of the criteria which yielded both individual scores as well as an overall rating. This process allowed for discernment among the websites and several were superior to the others. Four of the ten websites had the same highest total score on this process. Three websites were consistently the lowest in each of the categories.

Table 3: Results of Website Evaluations

Column1	Usability	Efficiency	Accessibility	Learnability	Satisfaction	Total
Counselors in Schools	1	1	1	1	1	5
New York Dept of Ed.	1	1	1	1	1	5
Success for All	1	1	1	1	1	5
Greater Good	2	3	4	2	2	13
Safe support	2	2	4	3	2	13
NAESP	4	3	3	3	3	16
ASCA	4	4	4	3	4	19
ASCD	4	4	4	3	4	19
Edutopia	4	4	4	3	4	19
FISH! Philosophy	4	4	4	3	4	19
We Are Teachers	4	4	4	4	4	20
Total	31	31	34	27	30	

Table 3 displays the results of the application of the evaluation criteria from Aziz & Kamludin (2014). We Are Teachers was the most consistent in its performance against these criteria.

Analysis

Three websites stood out to the researchers: FISH! Philosophy, We Are Teachers, and Edutopia. These websites had a clear webpage that was useful and responsive. The FISH! Philosophy website had prominent links to social media, including Facebook, Twitter, LinkedIn, and YouTube platforms, and clear 'contact us' information, including a web capture form which set expectations as soon as visitors arrived on the website. There were no live chats offered in any of the educational websites, which seemed to be an interactivity opportunity missed by all of the organizations in the study. Although the New York State website had extensive content that would be helpful to educators, it consistently rated at the bottom of the five measurement scales for this study. The website was simply a document repository that could be accessed if the visitor knew the exact document being sought. It did not allow for easy browsing of documents or searching by key words. It also was consistently very slow to load; even the home page took longer than expected time for any information to appear on the computer, tablet, or mobile screen. Berkeley's website was interactive, friendly and engaging. It had content that appeared to be valued by frequent users. However, the Berkeley.edu website was too busy, with so many options that it made choices of where to focus more difficult for the user. The organization of the website did not guide the attention of the visitor. The National Association of Elementary School Principals website reflected a leadership-oriented experience and scored more moderately on the measurement scales.

The FISH! promotion focused on selling their products and services. Scoring well on the measurement scales, FISH! offered an interactive customer experience using the tools on the website. Most of the other educational websites did not provide a memorable user experience, because they were mostly about them only and not about the benefits they brought to the user. They seemed very self-promoting and bureaucratic. They looked like they were created by committees, rather than to service a specific audience. They were trying to satisfy many audiences, and therefore satisfied very few. For these reasons, these websites scored lower on the measurement scales. One .org that did get positive interaction was Success For All Foundation (successforall.org). Even though the website was not interactive, the content was effective through the technique of presenting the story of the brand. We are Teachers, FISH! Philosophy and Edutopia were the top three most effective websites on PC's when looking at usability, efficiency, accessibility, learnability, satisfaction and a combination of these (Aziz & Kamludin, 2014).

CONCLUSIONS

The websites in the study ranged from government agencies to private non-profit organizations to private for-profit companies. For some organizations, the website content was publicly available for free. For others, beyond information to tempt potential members, the information was behind a member login page. The commercial organizations used the website as a lead generator for future sales opportunities and presented enough information to elicit an inquiry about purchasing. The key learnings from the research: 1) Websites with interactive opportunities helped the visit be experienced as more relevant. This allows the visitor to quickly drill down to the information most desired. 2) A focus on the visitor's perspective more than the organization's contributed to a more engaged visit. For example, rather than write, "we're great", successful websites ask "how can we be of service to you?" 3) Effectively used, photos and short videos significantly enhance the visitor experience. Ultimately, the challenge for each website is to weave these approaches into an effective promotional offering that reaches its target market and engages it successfully. What the most successful organizations did that was a best practice:

Websites were easy to find using a variety of key words in a search.

Websites presented the resources necessary for a visitor to accomplish the purpose of the visit.

The content on the websites was accessible. Visitors could find what they were seeking.

Navigation of the websites was straightforward. Visitors could easily learn how to interact with the site.

The websites provided a positive experience, creating comfort in engaging with the site.

The research shows the top five organizations for effectiveness were: We Are Teachers, Edutopia, ASCD, ASCA, and FISH! Philosophy. The lowest rated websites were: New York Board of Education, Counselors in Schools, and Success for All. What is the usefulness of the study? The results of this pioneering study can provide marketers, educators, and non-profit organizations with important guidance as they evaluate and/or revise their websites. Other educational programs, especially K-12, who may be thinking about building or rebuilding a website may be alerted to what they need to use to promote, look, feel and operate more effectively.

Limitations of our Study

Although different browsers were used in parallel to examine the websites, the researchers know that websites may display quite differently on different browsers. Timing makes a difference as these are all digital pages, which can be changed instantly. It's possible that some of the websites are already seeing much improved effectiveness since this study was conducted. Internet search engines are dependent on the search algorithms used. Google search results are different based on location, device and search history. The algorithm causes results to be skewed. For example, if an educator in California was looking for an educational program in Austria, and then searched for clothing, the searcher may find results will be retail shops near Austria, not in California. Research initiated on the east coast of the United States might result in important differences in which organizations provide these educational services than this study initiated on the west coast. However, once a visitor logs on to any website, the location of that visitor would have no effect on evaluation of the website. So, the process of the evaluation of the effectiveness of the content on the websites will not be a limitation of the study.

Recommend Further Study

What issues are still needing to be raised? Is this pioneering new research territory in this field? Since the authors could not find any previous research in educational websites, they believe it represents new territory in the field of educational program marketing. This research could be expanded into the Services Marketing field. A similar study could be conducted in the health care field, the only industry that is larger than the two trillion dollar educational program market in the US. In future studies, the authors may evaluate the categories of educational organizations, reviewing .com vs. .net, educational vs. commercial venture, or universities vs. government agencies.

APPENDIX 1

Here are a few of our exploratory findings about specific websites in the study, which were for-profit, non-profit, public, and private organizations. The New York State Education System, a public non-profit organization, appears to present its information as part of compliance to legal requirements that such information be available, rather than as a communications tool. Berkeley's Greater Good Science Center is a public non-profit organization. The Association of Supervision and Curriculum Development, a private non-profit association is membership focused. They offer services to subscribing members, in the form of paid educational packages that add value for members. ASCD aims for better learners through books, seminars, and more. Their web experience on PC was evaluated as more effective on four out of five of the measurement scales. The National Association of Elementary School Principals, a private non-profit organization for school principals. The website seeks membership from elementary school principals. The National Association of Elementary School Principals website reflects a leadership-oriented experience and scored more moderately on the measurements scales. We Are Teachers is an educators website, with ideas, inspiring activities and advice for teachers. We Are Teachers is an online community for educators providing classroom ideas and giveaways to inspire educators in K-12 schools. WeAreTeachers promotes that teachers do more than teach, and speaks to the most challenging jobs in the world that also is one of

the most rewarding jobs. Teachers relate to the way their jobs can be improved with their tools and ideas. One example is a visual image of a smiling woman in a swimming pool about “10 Things Teachers Should Do in the Next 90 Days.”

Edutopia is a private, non-profit organization. They were founded by the (George) Lucas Educational Foundation and are entertainment-based, and reflects significant resources and creativity associated with a successful organization. Fish! Philosophy uses training videos from Pike’s Peak Market in Seattle to help organizations improve teamwork, customer service, employee engagement, leadership and retention through their special training methods. Edutopia is a .org, non-profit organization that looks at assessment, projects for learning, and develops teachers. They use the tagline “join the movement for change” to motivate others to participate. Success For All Foundation (successforall.org) website is effective in telling the story about the programs in pre-school to middle school with USDOE13 grant money. FISH! Philosophy and We Are Teachers were commercial ventures, as reflected by the .com suffix. FISH! is a private, for-profit firm, with events, written material for the K-12 teachers and other organizations

REFERENCES

- Aziz, NS, Kamindun, A., (2014) Assessing website usability attributes using partial least squares *International Journal of Information and Electronics Engineering*, Vol. 4, No. 2, March 2014.
- Brin, S., Page, L, The anatomy of a large-scale hypertextual Web search engine. *Computer Networks and ISDN Systems*, Vol 30 April 1998. Pp 107-117
- Carroll, B, Siguaw, J., (2013) The Evolution of electronic distribution: Effects on hotels and intermediaries, *The Cornell Hotel and Restaurant Administration Quarterly*, vol 44, Issue 4, August 2003, Pp 38-50.
- Chintagunta, P., Chu, J., and Cebollada, J. (2012), “Quantifying Transactions Costs in Online/Offline Grocery Channel Choice,” *Marketing Science*, 31, 1, 96-114.
- Chu, J., Chintagunta, P. and Cebollada, J. (2008), “A Comparison of Within-household Price Sensitivity Across Online and Offline Channels,” *Marketing Science*, 27,2, 283-99.
- DePorter, B., & Hernacki, M. (1992). *Quantum Learning*. New York: Random House.
- DePorter, B., Reardon, M., & Singer-Nourie, S. (1999). *Quantum teaching: Orchestrating student success*. Needham Heights, MA: Allyn and Bacon.
- Degeratu, Alexandru M., Arvind Rangaswamy, and Jianan Wu (2000), “Consumer Choice Behavior in Online and Traditional Supermarkets: The Effects of Brand Name, Price and Other Search Attributes,” *International Journal of Research in Marketing*, 17, 1, 55-78.
- Flores, L. How to Measure Digital Marketing, 2013, Palgrave Macmillan, UK.
- Given, B. and DePorter, B, 2015. Excellence in Teaching and Learning, <https://www.quantumlearning.com/pdf/Excellence-in-Teaching-Chp1-2-web.pdf> accessed April 17, 2017.
- Holliman, G. & Rowley, J., (2014) Business to Business digital content marketing: marketers’ perceptions of best practice. *Journal of Research in Interactive Marketing*. Vol. 8.4 pp. 269-293.

- Hsu, L. and Walter, Z. (2015) Search engine or content website? A local information seeking classification model based on consumer characteristics and website perceptions. *International Journal of Human-Computer Interaction*, Vol 31(4), Apr, 2015. pp. 263-276.
- Jarrett, C. Douglas. (2015) The Federal Communications Commission's Network Neutrality Order. *The Business Lawyer*; Chicago 71.1 (Winter 2015/2016): 373-379.
- Kozlenkova, I, Palmatier, R, Fang, E, Xiao, B & Huang, M (2017) Online Relationship Formation. *Journal of Marketing*. May 2017 Vol 81 No 3 pp21-40.
- Muir, T. Google, Mathletics and Khan Academy: Students' Self-Initiated Use of Online Mathematical Resources *Mathematics Education Research Journal* v26 n4 p833-852 Dec 2014. 20 pp.
- Pozzi, Andrea, (2013) the effect of Internet distribution on brick-and-mortar sales, *RAND Journal of Economics*, Vol 44 (3), pp 569-583)
- Pynoo, Bram; Tondeur, Jo; van Braak, Johan; Duyck, Wouter; Sijnave, Bart; Duyck, Philippe *Teachers' Acceptance and Use of an Educational Portal Computers & Education*, v58 n4 p1308-1317 May 2012. 10 pp.
- Özmen, M. U. (2015). Online information retrieval behaviour and economics of attention. *Online Information Review*, 39(6), 779-794. doi:10.1108/OIR-05-2015-0139 (<http://search.ebscohost.com.ezproxy.nu.edu/login.aspx?direct=true&db=lxh&AN=110329412&site=ehost-live>) retrieved April 16, 2017
- Sparrow, A (2006), Music distribution and the Internet: a legal guide for the Music Business. Aldershot: Gower Publishing Co. Burlington, VT.
- Stanaland, A. The impact of surfer/seeker mode on the effectiveness of website characteristics. *International Journal of Advertising: The Quarterly Review of Marketing Communications*, Vol 29(4), 2010. pp. 569-595.
- Visser, E, Weideman, M (2014) Fusing website usability and search engine optimization *South African Journal of Information Management*. 16.1 (Jan. 2014)
- Zhang, Jie, Paul W. Farris, John W. Irvin, Tarun Kushwaha and Thomas J. Steenburgh (2010), "Crafting Integrated Multichannel Retailing Strategies," *Journal of Interactive Marketing*, 24, 2, 168-80.

AUTHOR INFORMATION

Dr. Mary Beth McCabe is a full-time Professor at the School of Business and Management at National University, where she is Academic Program Director for Marketing. She has a Doctorate in Marketing from Alliant International University (San Diego) and MBA in Marketing from DePaul University (Chicago). Her research is concentrated in the fields of Mobile Marketing and Hispanic Marketing

Dr. Richard Weaver is a fulltime Professor at the School of Business and Management in National University, and has a doctoral degree in Human and Organizational Systems from Fielding Graduate University. He is also the Academic Program Director for the Masters in Global Management Program and Bachelor of Arts in Management and teaches Management and Strategy courses. Special thanks to Robin Lockerby, librarian at National University.

YOUR ACCOUNTING CAREER PATH: WHAT'S THE RIGHT CHOICE?

Dustin M. Grant, Clayton State University

ABSTRACT

As accounting majors near graduation, they ask themselves the all-important question, where am I going to work? The students have to make that tough decision, and look for career areas that peak their interest. Accounting offers many different options when it comes to an industry choice, so this paper will explore public, audit, tax, consulting, private, corporate, managerial, governmental and non-profit, and education careers. This paper reviews the benefits and challenges to these industries, and analyses the different accounting career paths that one may pursue. The qualifications of each industry are discussed, along with some suggestions that may fit with one's personality. With all the different career path options, what is the right choice?

JEL: M40, M41

KEYWORDS: Accounting Career, Accounting Jobs, Accounting Industries, Accountant, Accounting Major

INTRODUCTION

When accounting students are nearing graduation, they must address the important issue of starting their careers and finding a job that they are interested in and will enjoy. The accounting profession offers many different paths for students to take, so finding out which accounting industry or position fits their values and personalities is a step in the right direction. This paper examines some of the more popular accounting industries and questions students about what they will look for when embarking on an accounting career.

Accounting Job Market Advantages

An article by Allegra Nagler states, "It's a good time to be in the accounting and finance professions" (Nagler, 2015). The same article claims that starting salaries for accountants and finance positions are expected to rise by 4.7% in 2016 (Nagler, 2015, referencing the Robert Half 2016 Salary Guide). Accounting has a high job growth outlook of 11% based on a report by the Bureau of Labor Statistics, so accounting majors have an advantage when entering the job force. The article from the Bureau of Labor states, "Employment of accountants and auditors is projected to grow 11 percent from 2014 to 2024, faster than the average for all occupations" (U.S. Department of Labor, n.d.). Compared to many other business majors, accounting yields more opportunities as there are many different industries to choose from, thereby increasing the number of opportunities for landing a job. The *U.S. News and World Report* ranks Accounting number three in the best business jobs category and number twenty-four overall for 2016, with the job market ranked ten out of ten based on job opportunities (*U.S. News and World Report*, 2016). Tighter regulations and the duty to uphold the public's trust also helps the accounting job market, as those factors require separation of duties to deter fraud and errors. Many jobs require prior accounting experience, therefore making internships invaluable. Internships play an important role while in school, as students gain experience and get a taste of what specific accounting industries have to offer. By participating in an internship, students gain real-world accounting experience while also determining if that particular accounting industry is of a particular interest. Due to the number of accounting jobs available, students should apply to many different accounting jobs within different accounting industries. Being exposed to

multiple areas and going through many interviews will also increase the odds of landing a job, while learning interviewing techniques along the way.

Accounting Job Market Challenges

Market constraints, job opportunities, and experience may play a significant part of the job hunting process, as many may choose based on available jobs, as opposed to what industry appeals to their qualifications and personality. Job-hunting can be a stressful and challenging time, so what obstacles must one overcome to land the perfect job? Some challenges to entering the accounting job market are high numbers of applicants, limited jobs in rural areas, and experience requirements. Finding ways to differentiate in the application process leads to higher success in landing a job. To compete against a high number of applicants, making a resume stand out from the others is vital, as many are similar and blend in with the others. Living in rural areas also poses a significant challenge. In rural areas, there are fewer jobs to choose from, which leads to increased competition due to the lack of job opportunities. Rural areas may also be very limited in their offerings in the applicant's industry expertise or industry choice, therefore limiting the job opportunities. Prior job experience requirements also poses a threat. Many do not have the opportunity to participate in an internship while in school due to different factors or personal reasons, so they are at a disadvantage when it comes to applying for a job. The number one recommendation when searching for a job is to be patient, assuming that is an option.

LITERATURE REVIEW

Accounting Industries

Accounting offers many career path choices, including but not limited to public, audit, tax, consulting, private, corporate, managerial, governmental and non-profit, and education. Each individual industries are unique and require a different set of skills and personality traits. One of the many benefits of obtaining an accounting degree are the flexibility to work in different industries until one finds their niche. Once a particular industry becomes of sincere interest, narrowing the job scope and pursuing a specific career path becomes clearer.

Public Accounting

Public accounting is an area that encompasses auditing, tax preparation, consulting, and other similar areas. A public accountant usually specializes in one of those areas, and most often licensed as a Certified Public Accountant, or a CPA. Audit and tax are probably the most popular types of public accounting, and are the services that the Big Four Accounting firms mainly provide to their clients. The Big Four Accounting firms are the holy grail of public accounting, and are widely held as the best experience that an accountant could list on their resume. However, many medium and small firms provide excellent opportunities for accounting careers as well.

Auditing

As described in Auditing (AU) Section 110 paragraph .02, Responsibilities and Functions of the Independent Auditor, "the auditor has a responsibility to plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether caused by error or fraud" (AICPA Professional Standards, 2016). An auditor is an independent third party that reviews and expresses an opinion on the client's financial statements. The broad responsibilities of an auditor would be to analyze records, and to look for noncompliance in regards to accounting and auditing rules and standards.

A benefit is that auditing is an area of accounting that continues to grow. Auditing has a high job growth outlook, which corresponds to a good choice for new graduates, as job opportunities are available. Another benefit is that usually auditor's daily tasks are not repetitive. Each client has their own unique industry and characteristics, so reviewing the information for one client could possibly be very different from another client. If an accountant likes to dig around and research, then auditing would be an area of expertise they may want to consider. Audit usually also requires a good amount of travel, so if traveling is of an interest, then audit may be a good choice. There are opportunities for external and internal auditing, so that allows for more job flexibility. A challenge for auditing is that it sometimes requires long hours and great communication skills. Auditing season can require many overtime hours in order to complete the job, so those extra hours could be a deterrent to some. One complaint about the working at the Big Four Accounting firms is that the hours are brutal. While work experience at a Big Four accounting firm is excellent to have on your resume, it is common for some to work seventy-to-eighty plus hours per week during crunch time. Communication is also key to be an auditor. If someone does not like to communicate with others and prefers to work independently, then this may not be the best option for them. A good auditor must ask the right questions to the right people, so communication is vital to completing a successful audit. Stress levels are high during peak season, due to the volume of work and attempting to meet deadlines, so be prepared to eat, sleep, and breathe auditing during peak season.

To become an auditor, a bachelor's degree in accounting is usually required, while a master in accounting is preferred for higher-level positions. Most auditors are licensed as CPA's, so obtaining a CPA license is often required if an accountant wants to move up the ladder within an organization. As obtained from Learn.org, there are many other certifications that auditors can obtain, such as the Certified Internal Auditor (CIA), Certification in Control Self-Assessment (CCSA), Certified Government Auditing Professional (CGAP) and Certified Financial Services Auditor (CFSA) (www.theiia.org). You can also earn the Certified Information Systems Auditor (CISA) credential from the ISACA (www.isaca.org). The average salary for those with less than a year of experience ranges based on the size of the firm. According to the *Robert Half 2016 Salary Guide*, auditors working with small firms earn about \$48,000 with less than one-year experience, while the average salary for medium and large size firms is \$52,000 and \$59,000 respectively. The numbers were taken from the low end of the scale, so starting salaries are very good for auditors. As one gains experience and earns promotions, top managers and partners usually make well into the six digits.

Tax

According to an article posted by in the *Washington Examiner* by Jason Russell, the number of pages in the federal tax code is 74,608 (Russell, 2016). For a tax professional, that is information overload. While a tax professional should stay current with tax laws, it is nearly impossible to know everything on those 74,608 pages. The majority of those tax laws probably do not affect the average American taxpayer, so do not let that be a deterrent to becoming a tax professional. As an entry-level tax accountant, you will work on preparing individual and corporate tax returns. While the busy season for tax is January 1 through April 15 each year, there is work that must be completed throughout the year as well. Normally each month, clients will bring in their financial information, which will require the calculation their monthly and quarterly tax payments, estimated taxes, withholdings, sales taxes, payroll, and other tax related information. One benefit of tax is similar to auditing, which is that each client is unique, so the work is not repetitive. Working with multiple clients keeps variety in the job. The work completed on one day may be very different from the next. Tax jobs are abundant, especially during peak season, so this may help a new graduate find work. As tax accountants are sought after during peak season, this offers many possibilities of landing an internship while still in school, which will become a valuable source on a resume once one graduates. Tax professionals are in high demand, so experience and knowledge in the realm of tax is invaluable.

While tax has a great upside, it also has its downside. Like auditing, it has long hours during peak season. Again, at the Big Four, seventy-to-eighty plus hour workweeks are not uncommon. Smaller firms may require less overtime hours, but do expect to stay late and work on some weekends during the tax season

of January 1 through April 15. Communication and building relationships with clients is extremely important to succeed in tax accounting. If someone does not like working with other people, then tax may not be the right choice for a career path. The relationships must be built and maintained so the clients return next year. Making the customer happy is vital to the firm's success. Relationships with tax clients requires a considerable amount of trust, as they share all of their private information. As with auditing, stress plays a huge factor during tax season. The education required to be a tax professional is usually a bachelor's in accounting. There may be bookkeepers at the firm that only have an associate's degree, but they usually do not work with clients and on the actual tax returns. In order to be promoted to higher-level positions, a master's degree is preferred along with becoming a licensed CPA. Certifications other than the CPA are available for tax accountants. The Internal Revenue Service (IRS) describes a couple of other certifications that have Unlimited Representation Rights, such as Enrolled Agents (EA) and Attorneys. The IRS also names Annual Filing Season Program Participants and Preparer Tax Identification Number (PTIN) holders as having Limited Representation Rights. The pay scale for tax accountants is similar to auditors. According to the *Robert Half 2016 Salary Guide*, a tax accountant with less than one-year experience earns on average \$49,000, while medium and large-scale firms pay \$52,250 and \$59,000 respectively, again reporting these numbers from the low side of the scale. Like with auditing, tax managers and partners make well over \$100,000, depending on the size of the firm.

Consulting

Another form of public accounting is consulting. While audit and tax are the most popular types of public accounting, consulting plays a huge role in the public accounting sector. Consulting can take place on many different levels about many different topics. Accountants can consult clients on retirement planning, estate planning, accounting systems, tax planning, compliance, training, new business start-ups, etc. There are long lists of items that accountants can consult clients on, so choosing a specialization is common. Consulting requires broad experience, so being vested in many areas is important. Attending conferences, attending trade shows, researching journal articles, and networking is necessary in order to be successful. Consulting can be a rewarding career. Consultants many times set their own schedule, select which jobs they want to accept, and have the ability to work on various projects. Many jobs could be completed remotely, so going to the office every day is not always necessary. In an article posted on accountingweb.com titled, *Tips for the Would-be Accounting Consultant*, it mentioned to learn how to play golf (accountingweb.com, 2008). The article goes on to state that "Forty-three percent of the biggest deals start on the golf course, and eighty-one percent of those are finalized within a few days of the game" (accountingweb.com, 2008). Consulting also allows for working with a firm, or starting a new consulting business. Starting a new consulting business could be difficult, as finding and building a client list takes time. Consulting, like auditing, usually involves travel. If sitting in the same office every day is not appealing, then consulting would be an option to consider.

One challenge of consulting requires strong public speaking skills, as presentations are usually made to many officers within an organization or to key personnel. As with all public accounting jobs, a personality that enjoys talking with and working closely with others is key. Consulting may even require more face-to-face time with clients than audit or tax. The clients are paying you to give them advice, so they are going to want to pick your brain and ask many questions, so patience is a good virtue to have as well. Listening is also a valuable skill, as consultants must know exactly what the client is looking to achieve. Another challenge for consulting is that the job market is more competitive with fewer opportunities than audit and tax. Finding the right job could be difficult. One of the most difficult parts of consulting is being honest with a client. Telling the client what they want to hear is one thing, but telling them what they need to hear is the difficult part, especially when the news is not good.

The education for consulting varies, mainly depending on if one starts their own consulting practice or works for an established firm. Working for an established firm will require a bachelor's degree in

accounting, and usually a CPA license. Obtaining a CPA license usually requires additional education beyond the bachelors, so a master's is usually preferred. Starting a new firm does not require any sort of education, but building relationships and finding clients will be challenging without an education, as the clients will want to pay for experience and education. Certifications could be obtained, but will vary based on the type of consulting specialization desired. Salaries for consultants are often hard to predict, especially for those starting a new consulting firm. According to [payscale.com](https://www.payscale.com), the low end of the scale shows a salary of \$44,000, which would be for new consultants. With consulting, the pay can have a broad range. On the same chart from [payscale.com](https://www.payscale.com) referenced above, the average salary for accounting consultants is \$68,000.

Private Accounting

While public accounting focuses more on working with multiple clients from various industries, private accounting focuses on one company within one industry. Private accountants are usually more specialized in one area or industry. Private accounting jobs include working for corporations, and the ability to climb the corporate ladder as one gains experience. Private accountants most likely will start with a Staff Accountant position, then work their way up to Assistant Controller, Controller, Director, and Chief Financial Officer (CFO). Private accountants are considered internal employees, meaning the work they perform benefits the specific company where they work. Private accounting tends to be the more stable choice for an accounting career. Public accounting deals more with building a client list, while corporate accounting is more reporting business transactions.

Corporate Accounting

Corporate accounting deals with the recording and reporting of financial information of an individual company. Corporate accounting could be representative of the content learned from a Principles of Accounting and Intermediate Accounting textbook. Examples of corporate accounting tasks are analyzing business transactions, preparing and posting journals entries, compiling financial statements, and performing month-end and year-end closing duties. Other duties are also required, but the focus is on properly recording and reporting the corporation's financial information. There are many benefits to working in the private sector. The number one benefit is probably the predictability of the schedule. Corporate accounting usually has a fixed work schedule, very little travel, and the office location is the same every day. If a set routine were desired, private accounting would be the way to go. Since there is very little travel with a fixed schedule, corporate accounting allows more free time to spend with family and friends. While there are still periods where overtime may be necessary, it does not compare to the hours of overtime in public accounting. Whereas public accounting works with many different clients with different backgrounds, private accounting has only one client, the company where the accountant is employed. The responsibilities are more structured based on your pay grade, so the focus is on the specialized area of the corporation. Corporate accounting involves substantially less stress, and quality of life is rated higher compared to those who work in public accounting. An article on by Bragg states, "job satisfaction tends to be higher in private accounting" (Bragg, 2013). For those who like to work independently and not interact often with others, private accounting is a good choice. While working with others is still required, it is nothing like working with clients in a public accounting setting.

The challenges to corporate accounting is that it can be boring and repetitive. Many tasks are repetitive, so there is the same routine day in and day out. Most corporate accounting jobs involve sitting at the same desk (or cubicle) every day, so be prepared for it to be somewhat mundane. The busy season for corporate accounting is year-end and budget planning. While most companies also have month-end and quarterly tasks, they do not require as much time as year-end. While overtime may be required during those times, it is significantly less than public accounting peak seasons. Entry-level corporate accounting positions usually require a bachelor's in accounting. Employees can move up without obtaining additional education, but the process will take longer. Those who want to advance their career quickly should further their

education by obtaining a master's degree. Certifications are not generally required for many lower-level positions, but for those who wish to pursue an executive position such as Controller or CFO should certainly obtain their CPA license. There are other certifications that could potentially benefit those in private industries, such as the Certified Management Accountant (CMA) and Certified Financial Manager (CFM).

A Staff Accountant can expect to start out with a salary range of \$42,500 - \$47,500, depending on the size of the company. Private accountants can move up rather quickly, so the salary will increase as well. At the top of private accounting, CFO's from even small corporations can easily pull six digits, while those at large corporations can make into the seven digits.

Managerial Accounting

Managerial accounting is another sector of accounting that performs internal work for a business. Geense tells us "managerial accounting is concerned with providing information to managers, that is, to those who are inside an organization and who direct and control its operations" (Geense, n.d.). While corporate accountants perform duties for the corporation that benefit external stakeholders, managerial accountants perform duties solely for internal use within a business that will not be prepared for or reviewed by any external source. The sole purpose is to provide financial data to managers within the company so those managers can make decisions about their departments and/or products. The benefits of managerial accounting are very similar to corporate accounting. The schedules are fixed with very little travel for lower level employees. Depending on the size of a company, some travel may be necessary to visit managers at other company branches or locations. The tasks for managerial accountants do require discussions with department managers, so there is normally more interaction with others. While many of the monthly tasks are recurring, managerial accountants generally deal with some variation, so it is not always as dull as corporate accounting. Managers may want different reports and financial information, so there are days where it may not be exactly the same work. Lower stress, quality of life, and lack of overtime makes this sector appealing. As with corporate accounting, many of the tasks are recurring. Managers are going to want the same daily, weekly, and monthly reports. Sitting at the same desk every day and completing the same tasks can be dull, but the lack of overtime other than month-end and year-end close is a plus. However, budget season will be longer for managerial accountants, as managerial accountants help prepare the annual budgets. Departments are never happy with their budget allowances, so be prepared to work with unhappy department managers.

Entry-level managerial accounting positions most often require a bachelor's in accounting. As with corporate accounting, employees can often move up without obtaining additional education, but the promotion process will take longer. As with any industry today, obtaining a master's degree will help speed up the promotion process. Certifications are not generally required for many lower-level positions, but for those who wish to pursue a management position should certainly obtain some certification, probably the Certified Management Accountant (CMA) or the CPA. The salary for managerial accountants start out a little higher than corporate accountants, mainly because only medium and large size firms have separate managerial accountants from their normal corporate accountants. Smaller firms usually combine tasks, so managerial accountant positions are not available for budget purposes. Starting out, managerial accountants can expect to make from \$46,500 - \$48,500, depending on the size of the company.

Governmental & Non-Profit Accounting

Governmental accounting seems to be somewhat of a hybrid of public and private accounting, as the transactions are accounted for similar to that of private organizations, but it is prepared for the public trust. Government money must be properly accounted for as it is the public's money. The main idea with governmental accounting is "accountability". The funds collected for taxes paid by the taxpayers is

supposed to benefit the taxpayer. Governments are not in the business to make profits, but to provide the citizens with the resources they need. Governmental accounting is different compared to other types of accounting, as they often use “fund” accounts. According to accountingedu.org, “Fund accounting refers to the management and allocation of revenue an organization acquires through donations, tax payments, grants and other public and private sources. The basic idea behind fund accounting is to monitor and document the use of assets that are donated by outside parties” (Fund Accountancy, n.d.). Non-profit organizations are accounted for similarly to a government agency, as the funds they collect are to benefit those on whose behalf they are collecting the funds.

The number one benefit for working as a government accountant has to be job security. Unless someone is doing something extremely unethical, like stealing government funds, then the job is generally safe. Governments usually do not downsize, they avoid huge layoffs, and frankly, they are lax on their standards. If for some reason they do cut jobs in a department, they are usually good about transferring employees to other departments as opposed to laying them off. Government jobs are typically low stress, and provide a means to move up within the agency or department. There is normally no overtime for entry-level positions, except for possibly fiscal year-end, so the hours and schedule is fixed. Travel is very limited in lower level positions, but often government accounting jobs allow flexibility to attend continuing education sessions and conferences to learn more about the job and industry. There are many government agencies to choose from on the federal, state and local level, so job opportunities are readily available. Non-profits are similar to governmental accounting, but job security may not be as strong. The success of the non-profit depends on large donors, so keeping those relationships is vital to keeping a job. Non-profits may involve visiting donors and organizations, so while there are recurring tasks, some site visits may make the routine somewhat less repetitive. While government accounting jobs are great, be prepared to carry the workload of others. As with all government jobs, there are always those who take advantage of their job security and do not put forth much effort. This is not always the case, but it could play a factor in some departments. As with many accounting jobs, tasks can be repetitive, and be prepared to sit at the same desk every day. For non-profits, maintaining the donors and collecting funds are vital to the success and operation of the non-profit. While the accounting employees are rarely the ones who go out soliciting funds and donors, it may be required as part of your job occasionally.

A bachelor’s degree in accounting is normally the minimum education requirement for both governmental and non-profit accounting, while there may be some accounting clerk positions that could be obtained with an associate’s degree. However, promotions rarely occur for those with an associate’s degree, so a bachelor’s degree is recommended for those who want to have a solid career. A master’s degree is great for those who want to move up quicker, so it is never a bad idea to further your education. Obtaining a CPA license is also helpful if becoming a director or vice president is of particular interest. Other certifications for governmental accountants is the Certified Government Financial Manager (CGFM) and the Certified Public Finance Officer (CPFO). The starting salary for government accountants range from \$43,250 - \$48,250, depending on which agency of the government, the location of the government, and education and experience. For non-profits, the salary will range due to the size of the non-profit, so starting salaries can be estimated to be anywhere from the low \$40’s to high \$40’s.

Education

A career in accounting that has a tremendous job growth outlook is the education of accounting. “The accounting profession still suffers from a serious faculty shortage. As the average age of tenured accounting professors is 58, the faculty drought is likely to worsen in the near future” (Vien, 2015). With the shortage of accounting faculty, and the expected number of accounting educators set to retire, the number of positions and the pay are attractive. An accounting educator will provide students with the knowledge and skills needed to prepare them for their accounting career. Along with teaching, job responsibilities also include research and service. In-depth research is encouraged and many times required depending on the type and

accreditation of the institution. Other factors that may require research includes the position held, whether it be a Lecturer, Assistant Professor, Associate Professor, and Full Professor. A public versus private college or university may have different requirements as well. Service to the university would involve actively participating and serving on committees or other university or college level activities.

Accounting educators at a college or university level often have excellent schedules, low stress, and high job satisfaction. An accounting educator allows for maximum family time, as the schedules are usually fantastic. A professor will normally teach classes two days a week, so sitting at a desk in the same office every day is unusual, except for weekly office hours. Teaching allows for discussing new topics every day, which eliminates the dull, repetitive aspects of a job. The job is usually very low stress, which leads to better job satisfaction. In addition, being able to help students achieve their dream of a college education plays an important role in job satisfaction. While the schedule is usually awesome due to teaching only two days a week, the teaching days can be long, especially if you have a morning class and an evening class. While it makes for a long day, the time in between classes can be devoted to office hours and other duties, such as committee meetings. As with any job that deals with customers, customer service is of utmost importance as a professor. The students are the customers, so they must be provided with the necessary information and knowledge so they can achieve their goals. Dealing with students can be frustrating at times, but the sense of accomplishment obtained by witnessing them apply the knowledge they learned outweighs any and all frustrations.

Teaching at a research university will require a doctoral degree if a tenure-track position is desired, along with a CPA designation. A PhD or DBA in Accounting is also required to teach graduate level accounting courses in AACSB accredited schools. Some colleges and universities will hire those with a master's degree in accounting, assuming they have at least 18 graduate credit hours in accounting subjects. Usually, those credentials generate non-tenure-track positions, and will only allow teaching of undergraduate courses. Some technical colleges will hire those with bachelor's degrees, but the pay will be much less than at a university. Depending on your teaching specialization, any certifications are certainly encouraged, especially the CPA. According to the Association to Advance Collegiate Schools of Business (AACSB), "The average full-time faculty nine-month salary across all ranks and fields was \$128,702" (AACSB, 2016). That amount does not include summer teaching pay, so salaries are higher for those that teach summer courses. A new graduate from an accounting doctoral program can expect to start out making approximately \$151,100, according to research by Bishop, Boyle, Carpenter, and Hermanson published in the *Journal of Accountancy* (Bishop, Boyle, Carpenter, & Hermanson, 2016). In the same article, the authors state that a non-tenure track position of a Lecturer makes an average of \$73,400 (Bishop, et al., 2016).

METHODOLOGY

The primary method of obtaining student data for this paper was a survey sent to accounting majors in upper-level accounting courses (juniors and seniors). The survey focused on what perspective accounting students thought about accounting as a profession, and what factors contributed or will contribute to their future career decisions when choosing an accounting job. The survey consisted of ten questions, with the majority of the questions using a ranking scale to see what motivations were most apparent. Students were given options for each question and were required to rank their choices from greatest to least based on their motivations. The responses were ranked based on the number of responses for each option and in what order the students selected their choices. For example, assume a question had eight choices where a student ranked their motivation on a scale of one to eight, with one representing their highest motivation and eight representing their lowest motivation. Each response that had a number one ranking (highest choice) would be weighted by taking the amount of number one responses times eight (as there were eight choices), to weight it based on the number of responses and number of choices. Assuming the same scenario, we took the amount of number two responses and multiplied those by seven, as they represented the second highest

of the options. The amount of the number three responses were multiplied by six, the amount of the number four responses were multiplied by five and so forth until all answer choice options were weighted.

Once they were all weighted, we added up their values and divided by the total number of responses to get a weighted score. The weighted score represents the order in which students value those particular choices, with the highest score representing the option they most value. (See appendix A for example of calculating the weighted average). The survey was sent to one hundred random accounting majors who were in their junior or senior year of their undergraduate degree. Out of the one hundred survey invitations sent, sixty-three students responded, for a response rate of sixty-three percent. While sixty-three students responded, they did not necessarily complete each question in full, causing the response rates to vary among the questions. This was why the weighting of the answer choices was important and creating a score was necessary to eliminate the choices that were not completed.

RESULTS

The purpose of the survey was to try to gauge the motivation for students entering the accounting profession in regards to what they value when seeking and continuing their career in accounting. The interest in this study was to gauge student expectations and values, and to compare the results of each question to the aspects of the accounting industries discussed in the paper, while looking for any correlations in their answers. The questions asked in the survey are in Appendix B. The very first question of the study focused on what priorities were the most important to the student in regards to finding a new job when they start their careers. The results were as expected, as money / salary was ranked as the highest priority with a weighted score of 6.43, with work schedule and family time coming in as the second priority with a weighted score of 5.57. Job security came in third with a weighted score of 5.30. Position, industry, and company measured closely to each other and came in at numbers four through six with weighted scores of 4.85, 4.80, and 4.65 respectively. Certifications came in seventh at 2.95, and just wanting an accounting job no matter what came in a distant eighth at 1.89.

Question three of the survey was similar to the first question, but question three specifically asked what they valued more when looking for their first accounting job, as opposed to just finding a new job in general. Having a flexible schedule was actually ranked higher than salary in this question, with weighted scores of 3.57 and 3.20 respectively. Just being able to land an accounting job to get started in the profession ranked slightly higher than job security in this specific question, with weighted scores of 3.05 and 3.00 respectively. The results of this question slightly conflict with the first question asked in the survey. This could be due to the students knowing what they value more long term as they progress through their career (question one), as opposed to landing their first accounting job (question three). The next set of questions dealt with why the students chose accounting, and what specific industries within accounting they plan to work. Question ten of the survey asked why they chose accounting as a career path. The top choice was that they enjoyed working with numbers with a weighted score of 4.50, followed by the high demand for accountants with a weighted score of 4.17. Following closely in third was the potential salaries with a weighted score of 4.11. Surprisingly, work schedule came in last out of six choices with a weighted score of 2.50. As addressed in question one and question three of the survey, students listed work schedule as one of their top two priorities, but chose the schedule last in this choice. This potentially shows that while a flexible work schedules are desired, the students understand the nature of their chosen career path and that accounting can be demanding at times.

To further explore the difference in how they rated work schedules (and to see if there is any correlation), question four asked what preferred accounting industry they have an interest in pursuing. Corporate accounting ranked at the top followed by audit and managerial accounting, with weighted scores of 5.48, 4.78, and 4.63 respectively. This thinking could follow what students are most comfortable with when taking their courses in the undergraduate curriculum. They have been exposed to financial and managerial

topics more than they have others, such as governmental/non-profit and tax, which came in ranked at five and six with scores of 3.60 and 3.22 respectively. Consulting came in ranked at number four with a score of 3.65, which may have some correlation to the work schedule choices from other questions, as consulting can sometimes lead to flexible work schedules. The education industry came in last at seventh with a weighted score of 3.11, which may help explain the shortage of accounting faculty out in the higher education world today. If current students show no interest in becoming accounting educators, then the shortage could grow even larger.

To see if there was any correlation between their preferred industry and their preferred characteristics, I asked in question five what characteristics best fit them in their job hunt. The number one characteristic was that they like to work independently (2.74) and in a close second, they prefer work that is non-repetitive and challenging (2.72). Working with clients and the general public came in third (2.53), while repetitive, comfortable work came in last at 2.17. While much accounting work can be independent, usually corporate accounting (number one choice of their preferred industry) is repetitive in nature, which conflicts with their choice of repetitive work coming in last. While they may prefer independent work, they may value the stability and work schedules of the corporate jobs better. Question eight of the survey asked what specific job title or position do they plan to pursue. The results from this question seem to follow the pattern from question four about their preferred industry. The top choice for question eight was Partner, followed by Executive (CEO, CFO, etc.), with scores of 4.22 and 3.78 respectively. Partner ranked the highest, which follows the auditing choice coming in second from question four. Executive came in second here as that position would most likely come from the corporate accounting industry, which was the top industry choice from question four. Manager came in third with a score of 3.67, and managerial accounting ranked third in question four as well. Being their own boss came in at number four with a score of 3.65, the exact same location that consulting ranked in question four. It appears that those results highly correlate with each other, as questions four and eight are very similar in their rankings.

Controller and education came in ranked at numbers five (3.11) and six (2.88), again showing the lack of interest in becoming higher education accounting educators. To reach their desired positions, I asked about their education plans. For their education plans (question six of the survey), obtaining their Certified Public Accounting (CPA) license and / or other certifications was listed as number one with a score of 3.35. Pursuing their master's degree was closely behind in second with a score of 3.15. These two should be closely related as most states requires 150 hours of higher education in order to obtain a CPA license, so the additional thirty hours beyond the undergraduate degree could be completed by enrolling in a master's program. More students chose not to obtain any further education (weighted score of 1.86) over pursuing a doctoral degree (weighted score of 1.63). Again, this highly correlates with the previous questions as the education industry was ranked lowest in question four, becoming an accounting professor / teacher ranked lowest in question eight, and pursuing a doctoral degree came in last here, which is usually a requirement to obtain a tenure-track faculty position at an AACSB (Association to Advance Collegiate Schools of Business) accredited school. With their education plans in place, the next question asked about how they plan to progress to their desired position once they obtained accounting experience. Question seven addressed this issue and students mentioned they would like to stay with the same company as long as they were being promoted at a reasonable progression with a weighted score of 4.79. The second choice was that they would prefer to make the most money (4.22), which would mean moving from job to job if required to do so. Trying different industries before settling down came in third at 3.74, possibly correlating with moving around to gain more money. Planning to stay with the same company until retirement came in fourth at 3.39, and owning their own business and having the best job title came in fifth and sixth at 2.61 and 2.44 respectively. With making the most money coming in second and a specific job title coming in last, it appears students value salary over a specific job title.

Since salary seems to be high on the list from other questions, question nine asked how much students expect to make when they obtain their first accounting job after graduation. The salary range of \$40,000 -

\$50,000 came in at number one with a weighted score of 3.83, with the salary range of \$50,000 - \$60,000 coming in at number two with a weighted score of 3.58. The range of \$30,000 - \$40,000 came in at number three (3.22), with \$60,000 and over coming in fourth (2.71) and under \$30,000 coming in last at 2.06. It appears that students have realistic expectations for their first accounting job, as most starting salaries as listed in the specific industries discussed above all have starting salaries in the \$40's, as noted from the references. While obtaining a higher salary seems to be on the forefront of most students, I asked them in question two how willing they were to work more hours to make more money or gain promotion quicker. The students stated that they would be willing to work 50+ hours in order to do so, which created a weighted score of 4.19. Working 60+ hours came in at number two with a score of 3.37, and working a standard forty-hour week came in third (3.30). Long hours such as 70+ and 80+ came in the lowest at 2.53 and 1.74 respectively. This somewhat addresses that students value money over schedule, as many are willing to work 50+ and 60+ as opposed to a forty-hour week. The students listed they preferred a flexible work schedule, but seem to value a higher salary more, therefore willing to work additional hours.

The results of the survey seem to show that students value making money over most anything else. The students acknowledged that once they obtain accounting experience, they would be willing to move around to gain more money and possibly try different industries. They also state they would be willing more hours in order to earn more money and get a promotion quicker. While they do like the idea of having flexible work schedules, it appears they acknowledge that may not be as much as a motivating factor due to the nature of the accounting profession, and their willingness to work extra hours. With most students seeming interested in private accounting (corporate and managerial accounting), they may be willing to work on more repetitive tasks to be comfortable in their position, although they ranked performing repetitive duties at the bottom of their list. The results did show that very few are interested in pursuing teaching accounting as a profession. With the current shortage of accounting professors and the projected number of retirees over the next ten years, the shortage could grow to an alarming number if more students do not show interest in accounting education.

CONCLUSION

Accounting is an excellent option for students to choose as their major and career choice. There are many options to choose from, and all accounting industries have a high job growth outlook. Whether one chooses to work in public, private, government, or education, any field of accounting is a fantastic choice. Each industry within accounting has its benefits and challenges, so personality and interest should play a factor in the decision. Use internships and shadowing opportunities to gain experience, which will also help determine if that particular industry was of interest. Once a specific area of accounting becomes of interest, narrow the scope and begin your journey. Now that the time has come to choose your accounting career path, what's the right choice?

LIMITATIONS

While many areas of accounting were discussed, there are other options and industries available. The topic was broad in nature, so the paper is not as detailed for each particular industry. Future studies may involve breaking down each industry in more detail, conducting more in-depth research for each industry, and writing a separate paper for each industry. Also, the students took the survey without reading the contents of this paper, so a future project could explore giving them the survey before, having them read the paper, and then having them re-take the survey to see if any of their answer choices would be different if given additional information about the different industries. The survey did not require the students to rank every answer choice, so some only ranked their top three or four choices for each question and failed to rank the others within that particular question. This could have a mild impact on the rankings for the bottom choices of each category, but should not have an impact on the statistical significance on the overall assessment of the survey given. The weighted score was created to offset the skipped rankings, which is why it was

important to incorporate that into the assessment of the survey. The survey was administered to a group of students within the same university in the same geographic region, so results may vary among different size universities and locations.

APPENDIX

Appendix A

As an example, the weighted score of 6.43 that was mentioned in questions one as money/salary being the highest priority when looking for a job is calculated as follows:

$$6.43 = ((18*8)+(15*7)+(15*6)+(12*5)+(0*4)+(0*3)+(3*2)+(0*1))/63$$

Since there were eight options in the first question, the number one ranked option received eight points each, while the second place ranking would get 7 points each, the third place ranking would receive 6 points each, etc. Once those were multiplied and added together, they were divided by the total number of responses for that option to arrive at the score.

Appendix B

The following questions were asked in the survey:

What are your priorities when finding a new job? Please list in order of importance.

How willing are you to work more hours to make more money or gain promotion quicker?

What do you value more when looking for your first accounting job?

My preferred interest in the accounting industries are:

What characteristics best fit you in your job hunt?

My education plans beyond my undergraduate degree are:

Once I gain work experience, I plan to:

My ultimate goal is to become a:

When obtaining my first accounting job after graduation, I expect my salary to be:

I chose accounting as a career because:

REFERENCES

Accountant Overview, USNews & World Report, Accessed at <http://money.usnews.com/careers/best-jobs/accountant>. Accessed on August 27, 2016.

Accountingedu.com, Fund Accountancy. Accessed at <http://www.accountingedu.org/fund-accountancy.html>. Accessed on October 27, 2016.

Accountingweb.com, 2008. "Tips for the would-be accounting consultant." 14 August, Accessed at <http://www.accountingweb.com/technology/accounting-software/tips-for-the-would-be-accounting-consultant>.

AICPA Professional Standards, AU section 110 paragraph .02, *Responsibilities and Functions of the Independent Auditor*. Accessed on September 19, 2016.

Bishop, C., Boyle, D., Carpenter, B., & Hermanson, D, 2016. "Transitioning into academia: A new pathway for practitioners." *Journal of Accountancy*, 1 March, <http://www.journalofaccountancy.com/issues/2016/mar/accounting-professor-pathways.html>.

Bragg, S, 2013. "What is the difference between public and private accounting?" Accountingtools.com, 18 January, <http://www.accountingtools.com/questions-and-answers/what-is-the-difference-between-public-and-private-accounting.html>.

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2016-17 Edition*, Accountants and Auditors. Accessed at <http://www.bls.gov/ooh/business-and-financial/accountants-and-auditors.htm>. Accessed on September 15, 2016.

Geense, I. M., n.d., Managerial Accounting. Accessed at <http://managerialaccounting.org/>. Accessed on November 2, 2016.

Internal Revenue Service. "Understanding Tax Return Preparer Credentials and Qualifications." Accessed at <https://www.irs.gov/tax-professionals/understanding-tax-return-preparer-credentials-and-qualifications>. Accessed on August 14, 2016.

Learn.org, Auditor: Job Duties, Employment Outlook, and Educational Requirements. Accessed at http://learn.org/articles/Auditor_Job_Duties_Employment_Outlook_and_Educational_Requirements.html. Accessed on September 9, 2016.

Nagler, A., 2015. "Accounting Salaries Estimated to Rise 4.7% in 2016." Accountingweb.com, 8 September, <http://www.accountingweb.com/practice/team/accounting-salaries-estimated-to-rise-47-in-2016>.

Payscale.com, Accounting Consultant Salary. Accessed at http://www.payscale.com/research/US/Job=Accounting_Consultant/Salary. Accessed on January 12, 2016.

Russell, J., 2016. "Look at How Many Pages are in the Federal Tax Code." *Washington Examiner*, 15 April, <http://www.washingtonexaminer.com/look-at-how-many-pages-are-in-the-federal-tax-code/article/2563032>.

The Association to Advance Collegiate Schools of Business, 2016. "2015-2016 Global Salary Survey Report Executive Summary." Accessed at <http://www.aacsb.edu/~media/AACSB/Publications/data-reports/global-salary-survey/2015-16%20Exec%20Summary.ashx>.

USNews.com. "The 100 Best Jobs." USNews & World Report, Accessed at <http://money.usnews.com/careers/best-jobs/rankings/the-100-best-jobs>. Accessed on August 27, 2016.

Vien, C., 2015. "Research Spotlight: Stemming the faculty shortage with flexible doctoral programs." *AICPA*, 8 September, Accessed at <http://www.aicpa.org/interestareas/accountingeducation/newsandpublications/pages/flexible-doctoral-programs-for-accountants.aspx>.

BIOGRAPHY

Dustin M. Grant is a Lecturer of Accounting at Clayton State University. He can be reached at Clayton State University, 2000 Clayton State Blvd., College of Business, Morrow, GA 30260.

THE EFFECTS OF HERZBERG'S MOTIVATORS AND HYGIENE FACTORS ON JOB SATISFACTION IN THE MILITARY

Arlene McConville, Forbes School of Business & Technology (FSBT), Ashford University

Andree Swanson, FSBT, Ashford University

Paula Zobisch, FSBT, Ashford University

ABSTRACT

The purpose of this investigation was to determine which factors contribute to active duty military men and women's job satisfaction and dissatisfaction and their likely response to job dissatisfaction (exit, voice, loyalty, and neglect). Furthermore, this investigation was to determine whether military members' responses vary based on employee characteristics, such as age, gender, and employment longevity. Although a great deal of research exists on employee motivation, there appears to be limited studies conducted on men and women serving in the armed forces. As part of their duties, military men and women risk their lives to preserve this nation's way of life. Maintaining motivated personnel, who are committed to excellence in defense of the nation, is not only responsible but also necessary in order to maintain an effective and efficient military organization.

JEL: Z00

KEYWORDS: Job Satisfaction, Motivated Personnel; Herzberg's Motivators; Hygiene Theory

INTRODUCTION

Each employee, from executive to manager to the lowest level employee, plays an important role in the success of the organization. Therefore, building a motivated workforce is not only responsible but also a matter of survival in today's business environment. Research has shown that job satisfaction influences employees' level of motivation at work. For this reason, organizations spend a great deal of company resources developing motivation and incentive programs in hopes of enhancing job satisfaction. However, in spite of organizations' efforts, less than half of United States workers are satisfied with their jobs (The Conference Board, 2014). Accordingly, studies have shown that dissatisfied employees react in one of four ways: exit, voice, loyalty, and neglect. While job satisfaction has positive consequences both at the individual and organizational levels, the consequences of job dissatisfaction can be costly and detrimental to the success of the organizations. Much like all other organizations, military organizations operate with significant efforts to increase their effectiveness and efficiency. Retaining a motivated workforce is a priority in order for these organizations to maximize efficiency and effectiveness.

An extensive review of literature shows that the factors affecting employee motivation vary by industry and employee characteristics. Despite much controversy over Herzberg's two-factor theory, current research shows that Herzberg's hygiene factors - specifically supervision, company policy, working conditions, pay, relationship with peers, and personal life - affect employee motivation. This research supports studies that Herzberg's hygiene factors crowds out important intrinsic factors. Most studies have been focused on the presence of intrinsic motivators when studies similar to this show that extrinsic motivators (hygiene factors) are just as important in employee job satisfaction and retention. Herzberg's two-factor theory proposes that factors affecting job satisfaction and motivators are separate and distinct from those factors affecting job dissatisfaction and hygiene factors in the workplace.

LITERATURE REVIEW

Work is an important part of people's lives. It is a source of their livelihood and social network, and some find their own source of identity, self-esteem, and self-actualization at work (Vroom, 1964). For these and many other reasons, people dedicate a great amount of their limited time to work. To sustain one's effort at work, he or she must feel positively about his or her work. In other words, a person needs to be motivated.

The United States Armed Forces or military is an All-Volunteer Force (AVF) that plays a critical role in preserving this nation's way of life. Military men and women risk their lives as part of their duties in order to preserve this nation's way of life. According to the Office of the Under Secretary of Defense's (2014), this AVF is the "DoD's most prized asset – it enables the Department to have high quality, educated, motivated personnel who are committed to excellence in defense of the nation" and that volunteer force is central to strong future military (p. 1-3). However, a strong military defense is not without costs. In fiscal year 2015, the U.S. military's budget is nearly \$500 billion dollars (Office of the Under Secretary of Defense, 2014), which accounts for nearly 50% of the government's \$1.11 trillion discretionary spending for 2015 ("Military Spending," n.d.). One-third of the military's \$500 billion budget is spent on "military pay and allowances, combined with military health care...These costs have been growing rapidly in recent years, about 40 percent faster than growth in the private sector" (Office of the Under Secretary of Defense, 2014, p. 1-3). Maintaining motivated workforce is not only responsible, but also necessary in order to maintain an effective and efficient military organization.

Work motivation is critical to the success of any organization. According to Spector (1997), work motivation is important both from humanitarian and utilitarian perspectives. The humanitarian perspective suggests that maintaining a motivated workforce is responsible and the right thing to do. The utilitarian perspective argues that employee satisfaction ultimately affects the organization. Work motivation is important both at the organization and individual level. At the organizational level, work motivation is related to employee performance (Jones, 2006), productivity (Judge, Thoresen, Bono, & Patton, 2001), organizational commitment (Brown & Peterson, 1993), absenteeism (Hackett & Guion, 1985); and turnover and turnover intention (Hom & Kinicki, 2001). At the individual level, work motivation addresses the economic well-being of an individual from income, social contacts with other people (Quintanilla, 1990), greater happiness and self-realization (Herzberg, Mausner, & Snyder, 1959).

Work motivation is "a set of energetic forces that originate both within as well as beyond an individual's being, to initiate work-related behavior" (Pinder, 1984, p. 8). Based on the work of Maslow, Herzberg's two-factor theory proposes that human beings have two basic sets of needs, intrinsic and extrinsic, and different elements of the job serve to meet these two sets (Herzberg, 1959). Intrinsic factors such as achievement, recognition, work itself, responsibility, advancement, and growth are related to job satisfaction while factors that cause employee dissatisfaction include supervision, company policy, relationship with supervisor, working conditions, salary, relationship with peers, work/life balance, security, and status (Herzberg et al., 1959). Aligned with Herzberg's finding, Pinder (1984) categorizes job dissatisfaction as a specific form of frustration and cites external factors, such as policies, supervisor, and co-workers, are causes of frustration at work (p. 73), preventing an employee from meeting his or her needs, hence, lack of motivation. Research has shown that job satisfaction positively influences employee's level of motivation at work (Judge et al., 2001; Singh & Tiwari, 2011).

Countless studies attempt to answer the question of what fosters job satisfaction and dissatisfaction. The reasons for job satisfaction and dissatisfaction are diverse and very complex. Although a great deal of controversies surrounds Herzberg's two-factor theory, an extensive review of literature shows that Herzberg's hygiene factors, specifically, supervision (Dill, Morgan, & Kelly, 2008), company policy

(Durst, 1999; Newman & Mathews, 1999), working conditions (Oldham & Fried, 1997), pay (“Study Benchmarks Impact,” 2008), relationship with peers (Society for Human Resources Management, 2004; Wellman & Frank, 2001;), and personal life (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005; “Study Benchmarks Impact,” 2008) are related to work motivation. However, it is important to note that research shows that employees’ reasons for job dissatisfaction vary by industry. Studies have shown that dissatisfied employees react in several ways. Based on the work of Hirschman (1970), Withey and Cooper (1989) report that dissatisfied employees tend to respond in one of four ways: exit, voice, loyalty, and neglect. *Voice* is an employee’s attempt to “to change, rather than escape from, on objectionable state of affairs” (Hirschman, 1970, p. 30). *Loyalty* is an employee’s response to stay with the organization in silence, continuing to support the organization while waiting for the conditions to improve (Withey & Cooper, 1989). *Neglect* is putting in less effort, spending less time at work, such as lateness and absenteeism, and focusing attention to non-work interest (Withey & Cooper, 1989). *Exit* is permanent departure from the organization, voluntary separation, or turnover (Withey & Cooper, 1989). Employees’ responses have both direct and indirect costs both at the individual and organizational level.

RESEARCH METHODOLOGY

The research design of this study centers on the assumption that Herzberg’s motivators contribute to military men and women’s job satisfaction, and hygiene factors contribute to job dissatisfaction, and that responses vary based on employee characteristics. This argument is the basis for the following hypotheses:

H₁ Motivators (intrinsic factors) contribute to job satisfaction in the military

H₂ Hygiene factors (extrinsic factors) contribute job dissatisfaction in the military

H₃ Female military members will rate “personal life” as less satisfactory than male military members

H₄ Age is related to military members’ level of satisfaction with their “supervisor

H₅ Employment longevity is related to military members’ level of job satisfaction with the “company policy.”

H₆ Age is related to voice as a response to job dissatisfaction in the workplace

H₇ Employment longevity is related to loyalty as a response to job dissatisfaction in the military

The focus of the study was active duty military men and women currently serving in the U.S. Armed Forces. A self-report web-based survey of military members attending Hawaii Pacific University (HPU) Military Campus Program was conducted to collect primary data and measure active duty military members’ attitude toward intrinsic and extrinsic factors that contribute to their job satisfaction and job dissatisfaction. The questionnaire was structured so that respondents would choose from a list of alternative responses. The questionnaire is divided into three parts. The first three questions describe the participants’ characteristics - their gender, age, and employment longevity. The second part of the survey asks the participants their level of satisfaction with 24 work and workplace-related factors in their respective military organizations using a 5-point scale that ranged from 1 = very dissatisfied to 5 = very satisfied. The last part of the survey asks the participants to choose from a list of four likely responses when dissatisfied with work and workplace-related factors: voice, loyalty, neglect, and exit. The survey is designed to (a) determine the different factors that affect military members’ job satisfaction and dissatisfaction; (b) their likely response to job dissatisfaction – exit, voice, loyalty, or neglect; and (c) examine whether the factors that affect employee motivation and their responses vary based on personal characteristics (age, gender, employment

longevity). The data was analyzed using simple linear regression, t-test, one-way ANOVA, and chi-square test.

RESULTS AND DISCUSSION

Studies have shown that motivators contribute to job satisfaction while hygiene factors contribute to job dissatisfaction. The following analyses seek to determine to whether motivators (intrinsic factors) and hygiene factors (extrinsic factors), as defined by Herzberg's two-factor theory, contribute to employees' job satisfaction and job dissatisfaction in the military.

H1: The Effects of Motivators on Job Satisfaction

To determine whether respondents' level of satisfaction with motivator factors (independent variable) contribute to their overall job satisfaction (dependent variable) in the workplace, a simple linear regression analysis was conducted. A significant regression was found ($F(1, 72) = 585.84, p = .001$), with an R^2 of .891. Participants' predicted job satisfaction is equal to $-68.63 + 3.07$ (motivators). The participants' mean job satisfaction increased 3.07 for every point increase in motivators.

H2: The Effects of Hygiene Factors on Job Dissatisfaction

To determine whether respondents' level of satisfaction with hygiene factors (independent variable) contribute to their overall job dissatisfaction (dependent variable) in the workplace, a simple linear regression analysis was conducted. A significant regression was found ($F(1, 72) = 170.11, p = .001$), with an R^2 of .703. The participants' predicted job dissatisfaction is equal to $49.48 - .95$ (hygiene factors). For every point increase in job dissatisfaction, hygiene factors decrease by .95 points. Research has shown that employee motivation is related to different employee characteristics. Demographics data, specifically age, gender, and employments longevity, were collected and analyzed to determine whether these characteristics affect military personnel's level of satisfaction related to work-related factors, specifically work/life balance, supervision, and company policy.

H3: Work-Related Factor "Personal Life" and Gender

To determine whether female military respondents' level of satisfaction with work-related factor "personal life" is less satisfactory than male military respondents, an independent samples t-test was conducted. The sum of the participants' responses to both survey items related to personal life was used to test the relationship between gender (independent variable) and military members' level of satisfaction with work-related factor 'personal life' (dependent variable). On average, male military respondents were slightly more satisfied than female military members in balancing work and personal life (M (male) = 3.30, M (female) = 3.26), while female military members were slightly more satisfied with the support they receive to address family problems/issues (M (male) = 3.23, M (female) = 3.35). However, there were no statistically significant differences between male and female military members' level of satisfaction with work-related factor 'personal life' ($t = -.19, df = 72, p = .85$, two-tailed).

H4: Work-Related Factor "Supervisor" and Age

A one-way between groups ANOVA was performed to compare the effect of age on the participants' level of satisfaction with work-related factor "supervisor." The sum of the participants' responses to both supervisor-related survey items was used to test the relationship between age (independent variable) and respondents' level of satisfaction with work-related factor 'supervisor' (dependent variable). The

participants were divided into four groups based. On average, military members in age group 18-29 reported the highest level of satisfaction both in relationship with their supervisor and the overall supervisory support received while military members in age group 30-39 reported with the lowest level of satisfaction in relationship and support received from their supervisor. The military members' level of satisfaction with work-related factor "supervisor" shows an increase in age group 40-49, but never at the same level as the youngest group. Although the group means show differences between the different age groups, the one-way ANOVA test revealed no statistically significant differences between the three group means in their level of satisfaction with work-related factor "supervisor," ($F(2, 71) = 1.36, p = .26$).

H5: Work-Related Factor "Company Policy" and Employment Longevity

A one-way between groups ANOVA was performed to compare the effect of employment longevity on the participants' level of satisfaction with work-related factor "company policy." The sum of the participants' responses to both company policy-related survey items was used to test the relationship between employment longevity (independent variable) and the respondents' level of satisfaction with the work-related factor "company policy" (dependent variable). The participants were divided into four groups. On average, military members' level of satisfaction with "unit's policies and procedures" were fairly the same across all four groups, ranging from 3.08 to 3.48. The groups' level of satisfaction with the "unit's business practices," on the other hand, varied dramatically between military members with 1-4 years of service ($M = 3.82$) and those military members with 5-10 years ($M = 2.86$). Although the group means showed differences, the one-way ANOVA test revealed no statistically significant differences between the four group means in the respondents' level of satisfaction with work-related factor "company policy," $F(3, 70) = 2.85, p = .61$. Studies show that dissatisfied employees tend to respond in one of four ways: exit, voice, loyalty, and neglect (Farrell, 1983; Hirschman, 1970; Rusbult et al., 1988). Of the 74 participants, 61 reported their likely response to job dissatisfaction in the military.

H6: Age and Voice Response to Job Dissatisfaction

A chi-square test was used to examine differences among the different age groups and their likely response to job dissatisfaction. The age variable is divided into four groups (Group 1: 18-29 years; Group 2: 30-39 years; Group 3: 40-49 years; and Group 4: over 50 years) while the response to job dissatisfaction was divided into two groups (voice response, not voice response). A chi-square test of independence was performed to examine the relation between age and voice as respondents' likely response to job dissatisfaction. There was no significant relation between these variables, ($X^2(2, 74) = .72, p = .70$).

H7: Employment Longevity and Loyalty Response to Job Dissatisfaction

A chi-square test was used to examine the differences among the four employment longevity groups and their likely response to job dissatisfaction. The employment longevity variable is divided into four groups (Group 1: 1-4 years; Group 2: 6-10 years; Group 3: 11-20 years; and Group 4: over 20 years) while the response to job dissatisfaction was divided into two groups (loyalty response, not loyalty response). A chi-square test of independence was performed to examine the relation between employment longevity and loyalty as military member's likely response to job dissatisfaction. There was no significant relation between these variables, $X^2(3, N = 74) = .72, p = .93$.

CONCLUDING COMMENTS

The results of the study support Herzberg's theory that the motivators are related to job satisfaction, and hygiene factors are related to job dissatisfaction. It is not surprising that military members rated intrinsic factors as contributory to job satisfaction in the military. Intrinsic factors such as responsibility,

achievement, advancement, and growth are inherent in military service. For some, serving one's country is an honor and a responsibility (Moskos, 1977; Woodruff, Kelty, & Seagal, 2006). The results also revealed that hygiene factors such as supervisor, personal life, pay, peers, company policy, and work condition are related to job dissatisfaction. The results showed that military members are individuals influenced by the same external forces found in other industries.

Although the findings revealed that the causes of job satisfaction are related to job satisfaction and hygiene factors are related to job dissatisfaction, the hypothesized relationships between participants' level of satisfaction with specific work-related factors (personal life, supervision, and company policy) and employee characteristics (age, gender, and employment) were not statistically significant. However, a closer evaluation of the responses to specific survey questions revealed that participants' level of satisfaction with their supervisor, unit's business practices, and pay and incentives are related to employee characteristics age, employment longevity, and gender, respectively.

There are important implications that can be derived from the results of this study. Leaders may not be able to change the military's mission, however, there are work-related factors that they can affect to improve motivation in the workplace. In fact, the results of the study show that being part of the military's mission is the most important cause of job satisfaction for military members. However, Gallup studies find that "even the most exalted mission may not engage" employees when basic engagement requirements, which are work-related such as "know what is expected of them, have what they need to do their jobs, and feel their managers have their backs" are not met (Flade, Harter, & Asplund, 2014, para. 6). The military cannot rely on the intrinsic characteristics that are inherent in the military service such as responsibility, achievement, and growth, to sustain employee motivation. Just like civilian employees, military members are individuals affected by external forces such as other individuals (managers and co-workers), the need for work-life balance, etc.

The results of this study show that overall supervisory support and working with others in their units are important causes of job dissatisfaction among the military members who participated in the survey. The level of satisfaction with overall supervisory support varies among different age groups, which can be attributed on individual differences such as generational differences. Studies show that Gen X, those in age group 30-39, was significantly more likely than Boomers and Gen Y, the other two groups, to value freedom from supervision (Families & Work Institute, 2006; Jurkiewicz, 2000). A supervisor who does not recognize this difference may treat all his or her subordinates the same way, extending support when it is not needed nor desired. This misunderstanding can affect relationship between supervisor and subordinates.

The results of the study also found that military male respondents have lower level of satisfaction with the support they receive to address family problems/issues than female military respondents, and they are significantly less satisfied with pay and incentives. Recent changes in the Navy and Marines' maternity leave policy demonstrate the organizations' commitment and support to its female military members while married military men's entitlement remains unchanged. The changing role of men in modern society should also be reflected in the military's personnel policies. The current discussion on changing paternity leave for married military men to up to 30 days is a good start (McAvoy, 2015). However, this change does not extend any paternity leave entitlements to unmarried new fathers and other new parents. Although individuals with dependents entitlements are authorized to unmarried military men, they are not afforded the same paternity leave entitlements. Additionally, a review of entitlement policies should be multidimensional, so that changes affecting different groups are implemented simultaneously. Doing this may show fairness in the system and avoid division among the groups (military women, married military men, unmarried men, and other parents).

Another important finding is the level of satisfaction among military respondents showed a decline after their initial four-year service, and those in age group 18-29 were most likely to quit among the other groups.

An employee satisfaction survey similar to the one used in this study should be conducted in conjunction with re-enlistment or in the form of an exit survey for those who elect to leave the organization. A mid-career satisfaction survey should also be conducted to determine the level of satisfaction. Surveys are a good way to measure what is important to these military members who will more than likely serve for the next 10 years. It is also important that military organizations adopt meaningful exit interviews in the form of a survey to learn the reasons for the turnover, especially among those who are recommended to re-enlist. Providing military members various opportunities to voice their concerns makes individuals feel like valued members of the organization.

REFERENCES

- Brown, S. P., & Peterson, R. A. (1993). Antecedents and consequences of salesperson job satisfaction: Meta-analysis and assessment of causal effects. *Journal of Marketing Research*, 30 (1), 63–77. doi:10.2307/3172514.
- Dill, J., Morgan, J., & Kelly, C. (2008). The revolving door: Supervision, job satisfaction, and retention among nursing assistants. *The Gerontologist*, 48.
- Durst, S. L. (1999). Assessing the effect of family friendly programs on public organizations. *Review of Public Personnel Administration*, 19(3), 19-33.
- Eby, L., Casper, W., Lockwood, A., Bordeaux, C. & Brinley, A. (2005). Work and family research in IO/OB: Content analysis and review of the literature. *Journal of Vocational Behavior*, 66, 124-197.
- Farrell, D. (1983). Exit, voice, loyalty, and neglect as responses to job dissatisfaction: A multidimensional scaling study. *Academy of Management Journal*, (26)4, 596-607
- Flade, P., Harter, J., & Asplund, J. (2014, April 15). Seven things great employers do (that others don't). Retrieved from <http://www.gallup.com/businessjournal/168407/seven-things-great-employers-others-don.aspx>
- Hackett, R. D., & Guion, R. M. (1985, June). A reevaluation of absenteeism-job satisfaction relationship. *Organizational Behavior and Human Decision Processes*, 35(3), 340-381.
- Herzberg, F., Mausner, B., & Snyder, B. (1959). *The motivation to work* (2nd ed.). New York, NY: John Wiley.
- Hirschman, A. O. (1970). *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states*. Cambridge, MA: Harvard University Press.
- Hom, P. W., & Kinicki, A. J. (2001, October). Toward a greater understanding of how dissatisfaction drives employee turnover. *Academy of Management Journal*, 44(5), 975-987.
- Jones, M. D. (2006). Which is a better predictor of job performance: Job satisfaction or life satisfaction? *Journal of Behavioral and Applied Management*, 8, 20-42.
- Jurkiewicz, C. L. (2000). Generation X and the public employee. *Public Personnel Management*, 29, 55–74.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127(3), 376-407. doi: 10.1037/0033-2909.127.3.376

McAvoy, A. (2015, October 14). CNO: Service considering expanding paternity leave. *The Associated Press*. Retrieved from <http://www.navytimes.com/story/military/2015/10/14/navy-chief-service-considering-expanding-paternity-leave/73914060/>

Newman, M., & Mathews, K. (1999). Federal family-friendly workplace policies barriers to effective implementation. *Review of Public Personnel Administration*, 19(3), 34-48.

Office of the Under Secretary of Defense (Comptroller)/Chief Financial Officer. (2014). United States Department of Defense Fiscal Year 2015 Budget Request. Retrieved from http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2015/fy2015_Budget_Request_Overview_Book.pdf

Oldham, G. R., & Fried, Y. (1987). Employee reactions to workplace characteristics. *Journal of Applied Psychology*, 72, 75-80.

Pinder, C. C. (1984). *Work motivation: Theory, issues, and applications*. Glenview, IL: Scott, Foresman.
Quintanilla, S. A. (1990). Major work meaning patterns toward a holistic Picture. U. Kleinbeck, U., Quast, H., Thierry, H., & Hacker, H., *Work motivation*, 257-272.

Singh, S. K., & Tiwari, V. (2011, December). Relationship between motivation and job satisfaction of the white-collar employees: A case study. *Management Insight*, 7(2), 31-39.

Society for Human Resource Management. (2004). *Generational Differences Survey Report*, Society for Human Resource Management, Alexandria, VA.

Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences*. Thousand Oaks, CA: Sage Publications.

Study benchmarks impact of turnover on pay & skill levels. (2008). *IOMA's Report on Salary Surveys*, 8(3), 1-14.

The Conference Board. (2014). Job Satisfaction: 2014 Edition. Retrieved from <https://www.conference-board.org/topics/publicationdetail.cfm?publicationid=2785>

Vroom, V. H. (1964). *Work and motivation*. New York, NY: Wiley.

Wellman, B., & Frank, K. (2001). Network capital in a multi-level world: Getting support from personal communities. In N. Lin, K. Cook, & R. Burt (Eds.), *Social capital: Theory and research* (pp. 233-273). Chicago, IL: Aldine De Gruyter.

Withey, M. J., & Cooper, W. H. (1989). Predicting exit, voice, loyalty, and neglect. *Administrative Science Quarterly*, 521-539.

BIOGRAPHIES

Dr. Arlene McConville is a military veteran and educator. She served 20 years in the U.S. Coast Guard and retired as a Senior Chief Petty Officer Yeoman. In her 20 years of service, she served as a Seaman, Administrative Specialist, Budget Specialist, Lead Auditor, Training Manager, and Coast Guard Pacific Area Command Cadre Chief. She received countless personal and team awards for her dedication and service including three Coast Guard Commendation Medals, two Coast Guard Achievement Medals, and

three Coast Guard Commandant's Letter of Commendation Ribbons. After retiring in 2009, she continued her passion for serving others and began a career in education. Dr. McConville is an Associate Professor in the Forbes School of Business at Ashford University. She earned her Bachelor of Science in Business Administration and Master of Business Administration with an emphasis in Management from Hawaii Pacific University while still in active duty military. She later earned her Doctor of Education in Organizational Leadership from Argosy University. Dr. McConville maintains a home in Hawaii and Montana so that she can pursue her love of the great outdoors. She enjoys hanging out at the beach in Hawaii with her family and fishing the scenic rivers and hiking the tallest peaks in Montana.

Dr. Andree Swanson is a full-time Associate Professor and Program Chair for the Bachelor of Arts in Business Leadership at the Forbes School of Business and Technology at Ashford University. She earned a Bachelor's degree in Business Administration and Management from the University of Maryland European Division, a Masters of Human Relations from the University of Oklahoma, a Masters of Arts in Organizational Management from the University of Phoenix, and a Doctorate in Educational Leadership from the University of Phoenix. She has specialized in distance learning, and values teaching students with diverse backgrounds and schedules. "Having earned my degrees from both traditional classrooms and online learning systems, I value the interactive and responsive instructor." In addition to acting as an educator, Dr. Swanson has worked as a corporate trainer, at one point becoming the national training manager for a rental company. Andree and her husband, Craig, enjoy their family, genealogical research, Facebook, and travel. The couple has one son, a grandson with a new grandbaby on the way. They also own three champion Irish Setters, Wilson, Stewie, and Kamikaze Ozzie.

Dr. Paula J. Zobisch is a full-time Associate Professor and Program Chair for the Bachelor of Arts in Entrepreneurship at the Forbes School of Business and Technology at Ashford University. She earned her PhD in Adult Education from Capella University. Her Master of Business Administration with an emphasis in Marketing and her Bachelor of Science in Business are from the University of Central Oklahoma. Dr. Zobisch has over 20 years experience in the marketing field and has worked in business-to-business industrial sales and as a director of marketing for a 3M distributor. She teaches marketing management, consumer behavior, and marketing research courses at Ashford. Dr. Zobisch says, "I am a perfect example of how an adult can be successful and grow while attending school. I earned all of my degrees while working full time and raising a family, in addition to maintaining a home as a single parent. It seems the more I learn, the more I am aware how much there still is to learn." She resides in Broken Arrow, Oklahoma, and has two adult sons and four grandchildren. Dr. Zobisch enjoys outdoor activities, jumping the waves on her Sea Doo, is a certified Krav Maga instructor, and is currently working on her black belt, second level, in the Executive Black Belt Club in Tae Kwon Do.

CONFIGURATION ELEMENTS FOR RESTRUCTURING MANUFACTURING AND ASSEMBLY AREAS

Felix Bussemer, Leibniz University Hannover
David Herberger, Leibniz University Hannover
Peter Nyhuis, Leibniz University Hannover

ABSTRACT

Due to a turbulent environment, production enterprises have to regularly initiate restructuring projects so that they remain competitive. The planning involved with restructuring plants is frequently as complex as new building projects. Particularly for SMEs, such an undertaking represents a significant challenge: Due to their limited resources and lack of specialized and methodical expertise, there is little transparency about the pending project and thus about the related complexity. In order to finally resolve this problem of configuring a restructuring project, a model is required that allows the restructuring goals, planning task, responsibilities and planning methods to be set and defined before the project even begins. In this article we introduce the fundamentals of factory planning and restructuring projects, before reviewing the current state of techniques and research gaps. Following that we outline the goal and procedure for developing the proposed model. From there, we explain the procedure for identifying relevant configuration elements when restructuring manufacturing and assembly areas and present our results. This was accomplished in part by referring to the standardized factory planning guidelines found in VDI 5200 and by identifying relevant factory planning approaches found in already published research. Moreover, we analysed and evaluated 22 restructuring projects conducted by us.

JEL: L23, L60

KEYWORDS: Factory Planning, Restructuring Planning, Project Configuration

INTRODUCTION

Due to a turbulent environment, factory planning projects are increasingly required and are thus being initiated in shorter and shorter intervals, thus becoming a continual task for enterprises [1][2]. For factory planning projects with constructional changes, enterprises generally contract external planners (e.g., factory planners, logistics planner, architects). In comparison, projects that do not require constructional changes are frequently conducted under internal direction, so that costs related to a specialized, external planning team can be saved and because the complexity of re-planning is underestimated [3]. With smaller projects, such as integrating a new machine in an existing manufacturing or assembly structure, it is usually not necessary to hire an external planner. Due to the numerous links between production areas and equipment, however, more extensive projects, for example, increasing the factory output by introducing industry 4.0 technology or lean principles, can reach a planning complexity similar to new building projects [4][5]. Whereas, corporations with their larger workforces can employ and integrate workers with an array of competencies, SMEs have to concentrate their workforce on their key expertise [6]. Consequently, the majority of tasks in planning the restructuring of SMEs are conducted by ‘non-experts’ in addition to the day-to-day business [3][5]. SMEs thus often reach their limits in terms of capacities as well as content-wise and organizationally. As a result, the desired improvements are only seldom attained to the full targeted degree. In this article, we examine the fundamentals of factory planning and the problem of limited success in factory planning in general and in particular, in restructuring projects (Section 2). Based on that we then review current techniques and research gaps (Section 3). Following that we introduce the goals and

procedure of this research project (Section 4) as well as the initial results (Section 5). The paper then concludes with a summary (Section

Fundamentals of Factory Planning and Configuring Projects

“Factory planning is the systematic, target-oriented process of planning a factory, implemented in progressive stages and with the aid of various methods and tools” [7]. Publications differentiate cases into ‘new’, ‘expansion’ and ‘restructuring’ plans. A new plan corresponds to building a new factory on a so-called greenfield, while an expansion plan refers to extending an already existing building and a restructuring plan represents the modification of the production sequence and utilization of space without any constructional changes. Restructuring plans are by far the most frequent cases [8][9] and since the already existing premises can only be changed minimally, they are also the cases with the greatest restrictions [10]. Depending on the business strategy and given conditions, factory planning projects can orient on different goals e.g., changeability, supporting communication, sustainability [11]. Since the overall success of a factory planning project is measured among other things by the degree to which it fulfills the factory goals derived from the business strategy [7] and since the cost of changes in the proposed plan climbs exponentially over the course of the project, the initial phase of the project should already be oriented on the goals set for the factory and structured accordingly [10]. Further factors that signal the success of a factory planning project include schedule compliance and quality at the agreed upon costs. Factory planning projects today usually meet these targets only partially. Thus, according to REINEMA [12] an empirical study showed that completion dates are not met in 60 % of factory planning projects, that quality is insufficient in 12 % and that cost goals are exceeded in 72 % of projects.

According to a survey of enterprises, among the top five most frequent problems in projects are insufficiently defined goals, incomplete project resources plans as well as poorly defined roles and interfaces between the internal organization and external project partners [13]. The results of an another research survey also support that the short comings and incomplete configuration of projects have a strongly negative influence on the success of a project. Thus, among the factors that negate the success of a planning project are changes in project goals, unrealistic structural plans, inadequately cast teams and project teams that lack required competencies [14]. One of the key levers then for successfully conducting a factory planning project lays in the initial configuration of the project. This involves clearly defining all of the planning objects and areas relevant to attaining the project goal along with the manifold dependencies between them [15]. Moreover, the right planning tasks including suitable methods and tools need to be identified and the necessary responsibilities and resources for planning the factory have to be determined [16].

LITERATURE REVIEW

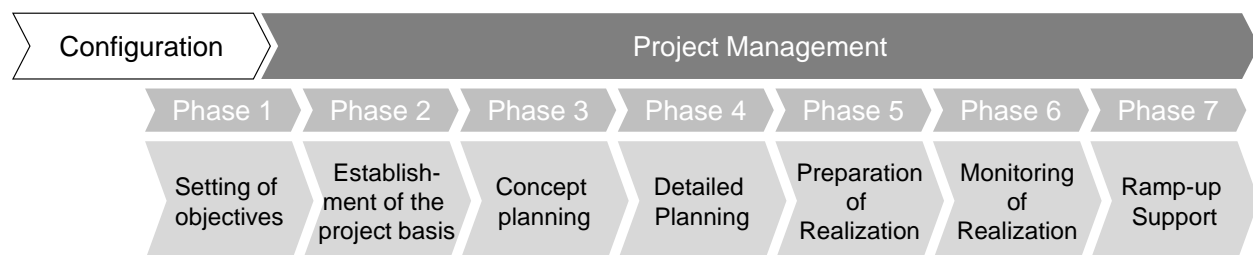
Numerous procedures for planning factory projects are described in professional publications [17]. Most notably are traditional approaches such as the factory planning stage model, developed in collaboration with the Institute of Factory Planning and Logistics (IFA) in accordance with VDI GUIDELINE 5200 [7]. The VDI guideline outlines a factory planning project in seven phases, which are conducted sequentially and partially iteratively. The completion of each phase is marked by a milestone, at which the results of the respective phase need to be available. The project manager can then approve the start of the next phase. Depending on the content and extent of the plan, all seven planning phases can be conducted or only a number of them [7]. The phase model is advantageous in that it is reproducible and transferrable to any planning situation. However, since the phase model according to VDI 5200 does not stipulate any standardized model for configuring projects, there is still the possibility for serious errors to be made before the project starts. Further approaches can be divided into ‘methods for designing changeable systems’ (e.g., fractal factories, WARNECKE [18]), ‘cooperative factory planning methods’ (e.g., synergetic factory planning, NYHUIS [1]), ‘digital factory approaches’ (e.g., PL@NET, ASLANIDIS [19]) and ‘configurable

factory planning methods' (e.g., state based factory planning, NÖCKER [20] and type-oriented planning with solution space management, HILCHNER [17]). Configurable factory planning methods were the first to consider project configuration as a discrete success factor. However, for example, they lack a consistent systematization of the configuration and too strongly limit the solution space. NÖCKER thus developed a procedural model that focuses on configuring factory planning tasks. With the specification of project goals and the selection and structuring of so-called planning modules, key elements of the project configuration are already identified. Nevertheless, the selection of the planning modules is not systematized and it lacks a detailed description of the planning tasks involved in the modules as well as the methods and competencies required for these. Based on Nöcker's planning modules, HILCHNER introduced a procedural model for type-oriented planning with solution space management in factory planning. The relevance, sequence and solution space is determined for each planning module and transferred to a project plan. The methods and competencies required for conducting the planning tasks are however not depicted in the model. Moreover, the procedural model limits the overall solution space to four types of reference models for factories, whose subsections strongly resemble each other. For example, all four factory types represent complete factories with medium degree of processing technology. Planning a factory or individual factory sections with more simple or complex processing technology can thus not be represented using this approach. An extensive review of research has shown that existing procedures do not yet allow factory planning projects to be holistically configured [21]. In summary, it can be said that the problem of how to configure a process for factory planning projects in SME producers is not yet resolved. This lack of a corresponding model poses a gap in application based research. In addition to the holistic nature, the challenge is to ensure universal applicability in terms of transferability to all planning situations (in particular the most frequent planning case i.e., restructuring) and suitability for SMEs.

METHODOLOGY

To close this research gap, a project configuration model is being developed for restructuring manufacturing and assembly divisions. The model should allow SMEs to properly define the project goals of the restructuring right from the start without the support of expert planners and to determine the planning tasks needed for attaining these goals. The model should result in a project plan which, depending on the selected project goals, represents all the planning tasks incurred in restructuring a manufacturing and assembly division. To do so, the proven and universal VDI guideline 5200 is expanded to include a preceding 'project configuration' phase, which is closely connected to the target definition phase and whose results ensure the basis for successfully conducting the project, see Figure 1.

Figure 1: Project Configuration Phase Extended Phase Model (Acc. [7][21])



The model will be developed in four progressive steps. First, the knowledge base for describing the complete system of restructuring manufacturing and assembly divisions will be compiled. To do so catalogues, containing all of the relevant configuration elements (restructuring goals, planning tasks; responsibilities and planning methods), will be developed. Subsequently, the acquired catalogues will be linked. This will be accomplished by identifying and describing the subsystems' internal and over-arching dependencies between the configuration elements. The results of the preceding work package will then be

transferred to a procedural model, which will then lead users step-by-step in the proper sequence through the project configuration. Following that the functionality and applicability of the demonstrator will be tested by applying it in SMEs using actual restructuring projects and if required, it will be modified once more.

RESULTS

In order to identify the fundamental elements when restructuring manufacturing and assembly areas, we will first introduce the framework of the analysis, before describing the procedure and results. To limit the realm of investigation, NYHUIS [22] and WIENDAHL [23] provide a factory framework using a matrix which comprises both the factory design fields such as technology, organization and space (horizontally) and factory levels such as plant, factory, division, workstation (vertically). Taking the factory framework into account, a literature search was carried out and restructuring goals, planning tasks, responsibilities and planning methods were collected and catalogued using existing factory planning approaches (see chapter two). In addition, 22 documentations on restructuring projects were analyzed and the catalogue entries were examined according to their practical relevance. Subsequently, seven expert interviews were conducted with cooperation partners from industrial companies and the catalog entries collected were verified with regard to their relevance for the successful implementation of restructuring measures. The seven main restructuring goals were catalogued as “*Profitability*”, “*Compliance with standards*”, “*Communication*”, “*Sustainability*”, “*Organizational compatibility*”, “*Transparency*” as well as “*Adaptability*” and described with corresponding criteria. In the subsequent course of the project, the criteria serve as a benchmark for the degree of goal achievement. For example, the restructuring goal “communication” is described as “reducing the length of communication distance between the single departments”. The 15 main planning tasks were catalogued as „*Designing workplaces*“, „*Dimensioning*“, „*Planning communication concept*“, „*Planning storage equipment*“, “*Planning the layout*“, “*Planning the logistics concept*“, “*Planning special equipment*“, “*Planning the production concept*“, “*Planning production equipment*“, “*Planning quality assurance concept*“, “*Organizational planning*” “*Planning transportation equipment*“, “*Planning of technical installations (distribution)*“, “*Planning information technology*” and “*Project management*”. The eight main responsibilities were catalogued as “*Production equipment planner*“, „*Factory planner*“, “*Facility Manager*“, „*Information technology planner*“, “*Storage equipment planner*“, “*Logistics planner*“, “*Production planner*” and “*Quality planner*”. The catalogue planning methods contains 32 methods (e.g. material flow matrix, value stream design).

Summary and Outlook

This paper shed light on the problem of limited success when planning factories and in particular, restructuring projects, while demonstrating the corresponding need for research. Following that, the initial results of the research project were presented. The developed catalogues (restructuring goals, planning tasks, responsibilities and planning methods) represent an important basis for configuring of restructuring projects. In the course of future research, the elements of the catalogues will be described further (e.g. input and output information for the planning tasks). This will allow data to be easily and systematically compiled. Moreover, by depicting input and output information, dependencies between the individual planning tasks can be shown. Furthermore the dependencies between the catalogues will be described. This allows determining the necessary planning tasks, methods and responsibilities according to the selected restructuring goal. Based on that a procedural method will be developed and the practicality of it will be verified by applying the method.

REFERENCES

Nyhuis, P.; Elscher, A.; Kolakowski, M. (2004): Prozessmodell der Synergetischen Fabrikplanung.

Ganzheitliche Integration von Prozess- und Raumsicht. In: wt Werkstattstechnik online 94 (4), S. 95–99.
Pawellek, G. (2008): Ganzheitliche Fabrikplanung. Grundlagen, Vorgehensweise, EDV-Unterstützung. Berlin, Heidelberg: Springer.

Köbler, J.; Pleuler, M. (2011): Digitale Fabrikplanung bei KMUs. In: IAF, Beiträge aus Forschung und Technik, S. 105–107.

Wiendahl, H.-P.; Reichardt, J.; Nyhuis, P. (2015): Handbook factory planning and design. Berlin Heidelberg: Springer.

Snow, D. A. (2002): Plant engineer's reference book. 2nd ed. Oxford: Butterworth-Heinemann.

Wirth, S.; Enderlein, H.; Förster, A.; Petermann, J. (1999). Zukunftsweisende Unternehmens- und Fabrikkonzepte für KMU. Tage des System- und Betriebsingenieurs, 15. - 16. September 1999, Chemnitz (Tagungsband TBI'99).

VDI 5200. Fabrikplanung Planungsvorgehen (2011)

Ireson, W. G.: Factory Planning and Plant Layout. 5. Aufl. Englewood Cliffs, New Jersey 1961

Lübke, J.; Richter, L.; Nyhuis, P.: Model-based Reorganization of Factory Structures. In: The Business and Economics Research Journal (2015) 8 (1), S. 69–74.

Tompkins, J.: Facilities planning. 4th ed. John Wiley & Sons, Hoboken, NJ, Chichester 2010

Eversheim, W.; Schuh, G. (Hg.): Produktion und Management 3. Springer, Berlin, Heidelberg 1999

Reinema, C.; Pompe, A.; Nyhuis, P.: Agiles Projektmanagement, Einsatzpotenziale und Handlungsbedarfe im Rahmen von Fabrikplanungsprojekten. In: ZWF 03/2013, Seite 113–117.

Rietiker, S.; Scheurer, S.; Wald, A. (2013): Mal andersrum gefragt: Ergebnisse einer Studie zu Misserfolgsk Faktoren in der Projektarbeit. In: Projektmanagement aktuell (4), S. 33–39.

Gasco, L. (2013): A Project manager's guide to the top 10 obstacles to project success. S. 1.: Lulu Com.

Hyer, N. L.; Wemmerlöv, U.: Reorganizing the factory. Competing through cellular manufacturing. Productivity Press, Portland, Oregon 2002

[Litke, H.-D.: Projektmanagement. Methoden, Techniken, Verhaltensweisen. 2., überarb. und erw. Aufl. Hanser, München, Wien 1993

Hilchner, R.: Typenorientiertes Lösungsraum-Management in der Fabrikplanung. Dissertation (2012). RWTH Aachen, Aachen. Laboratorium für Werkzeugmaschinen und Betriebslehre (WZL).

Warnecke, J.; Wiendahl, H.-P.; Brankamp, K.; Eversheim, W.; Henn, G.; Kühnle, H. et al. (1999): Fabrikplanung. In: Walter Eversheim und Günther Schuh (Hg.): Produktion und Management 3. Berlin, Heidelberg: Springer, S. 1–117.

Aslanidis, S.; Edelmann, C.; Schraft, R. D.; Bierschenk, S.; Kuhlmann, T. (2003): PI@Net - Integrierte Gestaltung der Produkt- und Produktionsentstehung. In: ZWF Zeitschrift für wirtschaftlichen Fabrikbetrieb 98 (6), S. 279–282.

Nöcker, J.: Zustandsbasierte Fabrikplanung. Dissertation (2012). RWTH Aachen, Aachen. Laboratorium für Werkzeugmaschinen und Betriebslehre (WZL)

Bussemer, F.; Herberger, D.; Richter, L. (2017): Konfiguration von Fabrikplanungsprojekten in KMU, Zeitschrift für wirtschaftlichen Fabrikbetrieb 112 (4), S. 215–217

Nyhuis, P.; Kolakowski, M.; Heger, C. L.: Evaluation of Factory Transformability. In: Tagungsband 3rd International CIRP Conference on Reconfigurable Manufacturing, University of Michigan, Ann Arbor, USA, 11.05.2005

Wiendahl, H.-P.: Die wandlungsfähige Fabrik: Konzept und Beispiel. In: Engel, K. H. (Hrsg.): Betriebsleiter. Ausgabe-Nr. III/2005, 5.9, WEKA MEDIA, Kissing, 2005, S. 1-16

ACKNOWLEDGEMENTS

The IGF project 19304 N of the German Research Association for Transportation Management and Logistics e. V. (GVB, Wiesenweg 2, 93352 Rohr) was financially supported by the Federal Ministry for Economic Affairs and Energy by the Program to Support Industrial Collective Research (IGF) based on a decision by the German Federal Parliament (duration 02/2017 – 10/2018).

BIOGRAPHY

Dipl.-Ing. Felix Bussemer (*1988) has been a research assistant in the factory planning division of Leibniz University Hannover's Institute of Production Systems and Logistics (IPA) since 2014. Prior to that, he studied mechanical engineering at TU Dresden.

David Herberger, M.Sc., (*1990) has been a research assistant in the factory planning division of Leibniz University Hannover's Institute of Factory Planning and Logistics (IPA) since 2016. Prior to that, he studied mechanical engineering at the Karlsruhe Institute of Technology (KIT).

Prof. Dr.-Ing. habil. Peter Nyhuis (*1957) has been the director of Leibniz University Hannover's Institute of Factory Planning and Logistics (IPA) since 2003.

COMMUNICATION INTERFACES IN INTERORGANIZATIONAL PRODUCTION NETWORKS

David Herberger, Leibniz Universität Hannover

Felix Bussemer, Leibniz Universität Hannover

Peter Nyhuis, Leibniz Universität Hannover

Joerg-Rainer Noennig, Technische Universität Dresden

Peter Schmiedgen, Technische Universität Dresden

ABSTRACT

When merging with production networks, companies are more frequently being faced with increasing industrial production requirements, such as greater competitive pressure and shorter product and technology life cycles. The main reasons for the constantly increasing importance of these interorganizational production networks lie in access to resources and new markets, concentration on core competencies, and increasing production capacity. Collaboration is thereby significantly influenced by communication between businesses. As a result, communication relations, which – as well as knowledge transfer – contribute greatly to knowledge generation, must be adapted to suit the changing framework conditions. In order to counteract this challenge, a method is required with which communication interfaces can be structured in interorganizational production networks. In addition, their barriers, such as different terminologies and time zones, and their success factors such as standardised forms, must be identified and quantified. Measures must then be developed to lower the barriers or even eliminate them, and promote the success factors. The following article provides an introduction into the subject matter, demonstrates the need for research, and represents the way to develop a method for the structuring of communication interfaces in interorganizational production networks.

JEL: L23, L60,

KEYWORDS: Factory Planning, Factory Assessment, Production Networks, Communication Interfaces, Communication Analysis

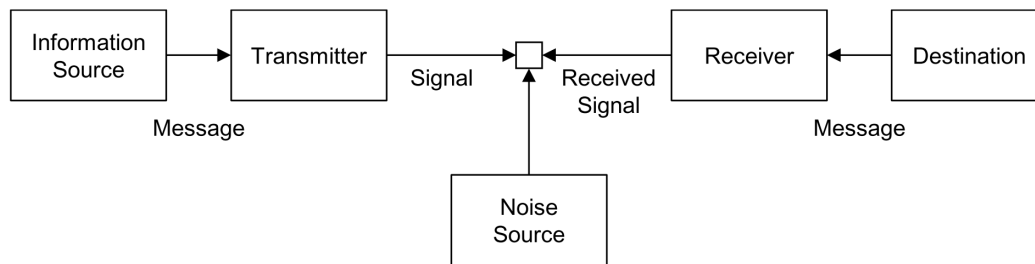
INTRODUCTION

In the literature, communication in an operational environment is defined as a process by which information is transferred from a sender to one or more recipients (Krumm, 1994; Birker, 2000). This model (see Figure 1) was first defined in 1948 by Shannon, and has since then been considered a basis for the description of communication processes. In this very technically shaped model, a message that originates from a sender is transformed into a signal by a transmitter. Via a channel, the signal reaches the recipient, where it is transformed again into a message. The entire transfer process can be influenced by interference sources of different types and forms.

When observing communication interfaces in interorganizational production networks, such a technical and abstract understanding of communication is not sufficient. As a result, the model will be revised in this paper and redefined with greater applicability. Communication is hereby defined (see Figure 2) using different elements that enable a clear allocation of the procedure, as well as the description of communication as a process. Like in the original model according to Shannon, information is sent from a sender to one or more recipients in the form of messages (Shannon, 1948). The content of this information being transmitted flows into the model as a communication object. The channel for transmitting the object is structured by a communication medium that can be technical or non-technical. The transmission process

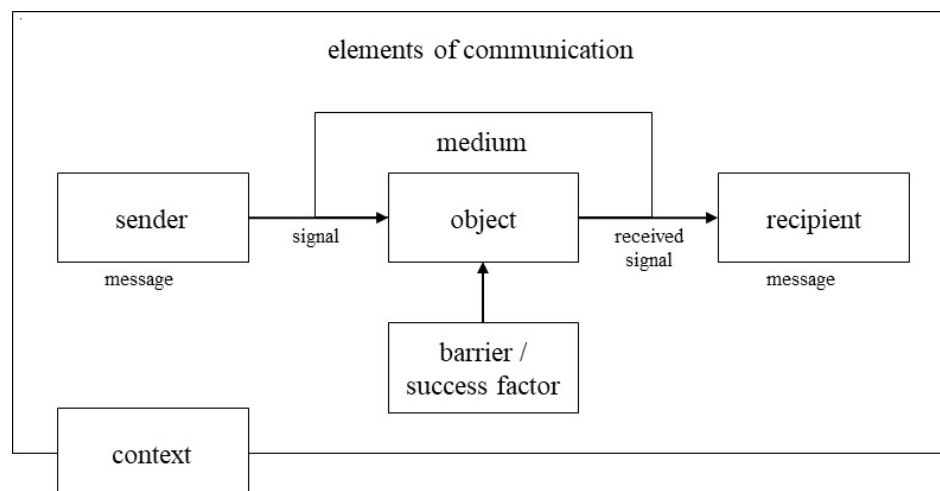
can be influenced by barriers, similar to interruption sources, or success factors that can have a significant effect on the efficiency and success of the communication process (Probst et al., 2013; Schmiedgen, 2015). The last element of communication describes the communication context that specifies the framework conditions for each communication process and that is required for a clear description of the communication process.

Figure 1: Schematic Diagram of a General Communication System



(source: Shannon, 1948, p. 380)

Figure 2: Simplified Representation of the Elements of a General Communication Process

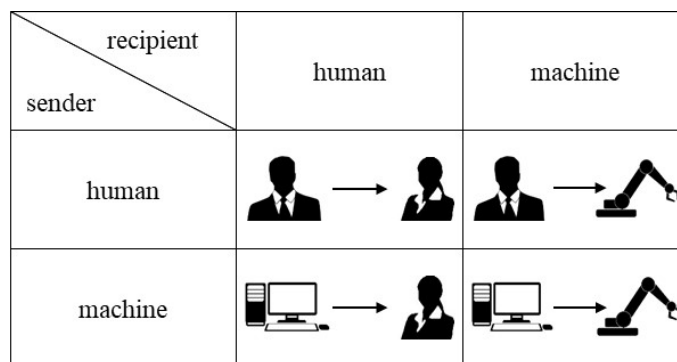


As well as the pure exchange of information, communication also serves to conserve and generate knowledge. For a fully comprehensive description of general communication processes, however, there are numerous, more important characteristics beyond these elementary features (Alshawi, 2001; Fleisch, 2002). Polanyi, for example, describes the transport of implicit knowledge and the associated issue that knowledge components are lost during every communication process (Polanyi, 1966). Communication interfaces themselves are defined by the sender and recipient elements and are free from contentual limitations. Three manifestations (Figure 3) can hereby be differentiated. Human-human communication, which represents the most original form of communication, human-machine communication, and machine-machine communication, which are becoming more and more significant – especially in the age of digitalisation and networking (BMW, 2012).

Communication processes, as high-quality and efficient knowledge preservation and transfer methods, represent the pillars of effective collaboration in interorganizational production networks, promote quality, dynamics and innovation, and are also considered an important part of change plans within companies (Alavi, 2001; Conner, 1993; Bose, 2004; Balland et al., 2015; Handley, 2015; Wubben, 2015). The "media

richness theory" describes the way in which the use of a certain communication medium should make decisions depending on the requirements of the situation and in conjunction with the characteristics of the medium (Daft and Lengel, 1986). Grant characterises the content of communication processes with the two manifestations of knowledge generation and knowledge application, whereby only human-human communication enables knowledge generation that leads to innovative power (Grant, 1996). All types of communication, such as face-to-face communication, have specific pros and cons, requirements and optimal uses (Jakobs, 2013). Despite the use of a suitable type of communication, however, it is possible for communication to be made more difficult by the occurrence of barriers in the communication interfaces. One of these barriers can be the occurrence of misunderstandings caused by using different specific terminologies in interdisciplinary interfaces. This barrier is defined by Chua as a subject distance, and can occur in human-human and human-machine interfaces (Chua, 2004).

Figure 3: Constellation Variants of General Communication Interfaces



If process optimisation has so far primarily been carried out within a factory, it is now important to understand the holistic network and synchronise its units. Increasing requirements placed on production, networks and communication have resulted in a need for current communication relations to be optimised (Prahinski and Benton, 2004). This is because joint, coordinated actions by the network players determine the specific performance, of which all parties involved benefit (Thomas, 2013; Inkpen, 2005; Modi and Mabert, 2007). In order to develop the full potential, cooperation-specific communication between all players must be analysed and structured proactively (Walker and Ellis, 2000). In addition, communication interests must be identified, structures developed and cultures established (Jones et al., 2006; Park, 2005). It is therefore necessary to gather the existing communication interfaces in detail, and identify barriers and success factors (Riege, 2005). If shortcomings are not remedied, efficiency and effectiveness will suffer, which will be reflected in defective process and product quality, high coordination costs and increasing development times – and ultimately weaken the company's entire general production network (Rauter, 2013).

Need for Research

Economic potential and competition-based necessity have continued to drive interorganizational cooperation and therefore communication from producing companies along shared value chains. So far, little scientific research has been conducted on communication in operative interfaces (Arnaud and Mills, 2012; Whitman and Panetto, 2006). There may be a variety of literature sources that are related to the topic of interorganizational relations, but it is fragmentary and mainly focused on the organisational level, and not the operative level (Bachmann and Inkpen, 2011; Bachmann and Zaheer, 2008; Grover and Saeed, 2007; Rauter, 2013; Rimkus, 2008; Schmid, 2013). In addition, severe shortcomings can be found in practical applicability (Riesch, 2013). The performance of interorganizational production networks depends

on how the companies involved and ultimately the individual communication interfaces keep the knowledge exchange (exploration and exploitation) that is necessary for the value chain processes balanced with other core processes (Lavie et al., 2011). However, the analysis of barriers and success factors in the individual interfaces, which influence dynamic, targeted and disruption-free cooperation, have so far not been the centre of the research (Riesch, 2013). Particularly in the case of fault management, cross-organisational coordination at operative level, which frequently abandons formal guidelines, is essential (Lavastre et al., 2014). Accordingly, factors such as information overload and different terminologies, which represent a classic communication barrier, can only be gathered at operative level and not at organisational level (Skytt and Winther, 2011). As well as the primary levels (organisational vs. operative), a shortcoming in the type of analysis must also be listed. The few approaches thus far, e.g. those of Arnaud et al. (2012), Gligor and Autry (2012), Kasouf et al. (2006) and Van De Vijver et al. (2011) may have investigated the operative levels of interorganizational production networks in terms of player communication, but they focused predominantly on qualitative methods. The findings provide an important basis, but due to the qualitative approach and consequent lack of scalability, this ultimately cannot be practically applied, or it can only be applied with great effort. In addition, there is a lack of effect models and comprehensive investigation of the factors in order to scientifically and measurably describe the communication interfaces and relations, and make them modifiable.

Outlook – Development of a Method to Structure Communication Interfaces

In order to close these gaps, by overcoming the challenges named, it is necessary to develop a standardised method for the quantitative analysis and structuring of communication interfaces within interorganizational production networks. This method is intended to enable businesses to independently and systematically scrutinise, structure and optimise their communication relations. In addition, the network of communication interfaces, so far only fragmentarily researched, should be exploited at operative level, and communication in interorganizational production networks described using, inter alia, the localisation of interfaces, the type of communication, and emerging barriers and success factors. Such a method is currently being developed at the Institute of Production Systems and Logistics (Leibniz Universität Hannover), together with the Wissensarchitektur – Laboratory of Knowledge Architecture (Technische Universität Dresden) in a research project sponsored by the German Research Foundation (DFG). The research project is building on the findings of two predecessor projects, and continuing them in a cross-company context and in light of current trends. In the past projects, the communication interfaces in individual factories and their dynamic alignment have already been researched. This project deals with the structuring of communication interfaces in interorganizational production networks, and consequently focuses on the challenge of communication between factories. The analysis methods created for this purpose are intended to enable factory planners and managers firstly to quantitatively measure the performance of their communication networks, in order to then use the outcomes to individually and specifically uncover weak points in their interorganizational communication, and improve the communication flows. Sets of measures will therefore be derived specifically for the interorganizational context, and all interim results validated multiple times with practice partners during the entire research project. Typologies identified in the research will also serve as a predictor for the emergence of potential communication barriers, helping to proactively avoid them and even initiate performance-increasing measures. The development of description, effect and process models for the collection and analysis of the necessary data will be made accessible to companies, where they will be widely applied. The research project will therefore close the research gap in the quantitative analysis of communication within interorganizational production networks at operative levels.

REFERENCES

Alavi, M. & Leidner, D. E. (2001). Review: Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues. In: MIS Quarterly 25 (1), S. 107. DOI: 10.2307/3250961.

Alshawi, S. (2001). Logistics in the Internet age: towards a holistic information and processes picture. In: Logistics Information Mngt 14 (4), S. 235–242. DOI: 10.1108/EUM0000000005718.

Arnaud, N. & Mills, C. E. (2012). Understanding Interorganizational Agency: A Communication Perspective. Group & Organization Management, 37(4), 452-485.

Bachmann, R. & Inkpen, A. C. (2011). Understanding institutional-based trust building process in inter-organizational relationships. Organization Studies, 32, 281-301.

Bachmann, R. & Zaheer, A. (2008). Trust in interorganizational relations. In Cropper, S., Ebers, M., Huxham, C. & Smith Ring, P. (Hrsg.), Oxford handbook of inter-organizational relations (S. 533-554). Oxford, UK: Oxford University Press.

Balland, P.-A., Boschma, R. & Frenken, K. (2015). Proximity and Innovation: From Statics to Dynamics. Regional Studies, 49(6), 907-920.

Birker, K. (2000). Betriebliche Kommunikation. Berlin: Campus.

BMWi - Bundesministerium für Wirtschaft und Technologie (2012). Machine-to-Machine-Kommunikation – eine Chance für die deutsche Wirtschaft. AG2 M2M Initiative Deutschland. Online verfügbar unter http://post-und-telekommunikation.de/PuT/1Fundus/Dokumente/7._Nationaler_IT-Gipfel_2012_Essen/24_it-gipfel-2012-machine-to-machine-kommunikation.pdf, zuletzt geprüft am 22.10.2017

Bose, R. (2004). Knowledge management metrics. In: Industr Mngmnt & Data Systems 104 (6), S. 457–468. DOI: 10.1108/02635570410543771.

Chua, A. (2004). Knowledge management system architecture: a bridge between KM consultants and technologists. In: International Journal of Information Management 24 (1), S. 87–98. DOI: 10.1016/j.ijinfomgt.2003.10.003.

Conner, D. (1993). Managing at the speed of change. How resilient managers succeed and prosper where others fail. 1st ed. New York: Villard Books.

Daft, R. L., Lengel, R. H. (1986). Organizational Information Requirements, Media Richness and Structural Design. Management Science, 32. Jg., Nr. 5, 1986, 554–571.

Fleisch, E. (2002). Das Netzwerkunternehmen. In: Business Networking in der Praxis. Beispiele und Strategien zur Vernetzung mit Kunden und Lieferanten (Business Engineering), S. 39–62.

Gligor, D. M. & Autry, C. W. (2012). The role of personal relationships in facilitating supply chain communications: a qualitative study. Journal of Supply Chain Management, 48(1), 24-43.

Grant, R. M. (1996). Toward a knowledge-based theory of the firm. Strategic Management Journal, Vol. 17 (Winter special Issue), 109-122.

Grover, V. & Saeed, K. A. (2007). The impact of product, market, and relationship characteristics on interorganizational system integration in manufacturer-supplier dyads. Journal of Management Information Systems, 23, 185-216

- Handley, S. & Gray, J. (2015). Managing Quality in a Heterogeneous Contract Manufacturing Environment. *Decision Sciences*, 46(6), 1011-1048.
- Inkpen, A. C. (2005). Learning through alliances: General Motors and NUMMI. *California Management Review*, 47(4), 114-137.
- Jakobs, E.-M. (2013). Kommunikation in Netzwerken. In: Milberg, J. und Schuh, G. (Hrsg.): *Erfolg in Netzwerken*. Springer, S. 313–323.
- Jones, M. C., Cline, M. & Ryan, S. (2006). Exploring knowledge sharing in ERP implementation: an organizational culture framework. *Decision Support Systems*, 41(2), 411-434.
- Kasouf, C. J., Celuch, K. G. & Bantham, J. H. (2006). An examination of communication behaviors as mediators in individual-level interorganizational exchanges. *Psychology & Marketing*, 23(1), 35-56.
- Krumm, S. (1994). Bewertung des Ressourceneinsatzes bei prozessorientierter Informationsbereitstellung. Ein Beitrag zur Optimierung der technischen Auftragsabwicklung. Als Ms. gedr. Aachen: Shaker (Berichte aus der Produktionstechnik, Bd. 94,28).
- Lavastre, O., Gunasekaran, A. & Spalanzani, A. (2014). Effect of firm characteristics, supplier relationships and techniques used on Supply Chain Risk Management (SCRM): an empirical investigation on French industrial firms. *International Journal of Production Research*, 52(11), 3381-3403.
- Lavie, D., Kang, J. & Rosenkopf, L. (2011). Balance Within and Across Domains: The Performance Implications of Exploration and Exploitation in Alliances. *Organization Science*, 22(6), 1517-1538.
- Modi, S. B. & Mabert, V. A. (2007). Supplier development: Improving supplier performance through knowledge transfer. *Journal of Operations Management*, 25(1), 42-64.
- Park, H. (2005). Critical attributes of organizational culture promoting successful KM implementation. In Gervasi, O., Gavrilova, M. L., Kumar, V., Lagana, A., Lee, H. P., Mun, Y., Tanir, D. & Tan, C. J. K. (Hrsg.), *Computational Science and Its Applications - Iccsa 2005, Pt 3* (Vol. 3482, S. 1316-1325). Berlin: Springer-Verlag Berlin.
- Polanyi, M. (1966). *The tacit dimension*. Garden City N.Y.: Doubleday.
- Prahinski, C. & Benton, W. C. (2004). Supplier evaluations: communication strategies to improve supplier performance. *Journal of Operations Management*, 22(1), 39-62.
- Probst, G. J. B., Raub, S., Romhardt, K. (2013). *Wissen managen, wie Unternehmen ihre wertvollste Ressource optimal nutzen*. Wiesbaden: Springer Gabler.
- Rauter, R. (2013). *Interorganisationaler Wissenstransfer: Zusammenarbeit zwischen Forschungseinrichtungen und KMU*. Wiesbaden: Springer Gabler.
- Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of Knowledge Management*, 9(3), 18-35.
- Riesch, F. (2013). *Dynamische Steuerung von interorganisationalen Produktionsnetzwerken*. München: TCW.

Rimkus, M. (2008). Wissenstransfer in Clustern: eine Analyse am Beispiel des Biotech-Standorts Martinsried (1. Auflage). Wiesbaden: Gabler.

Schmid, H. (2013). Barrieren im Wissenstransfer: Ursachen und deren Überwindung. Wiesbaden: Springer Gabler.

Schmiedgen, P. (2015). Barrieren im interorganisationalen Wissensaustausch. Dresden: TUDpress

Shannon, C. E. (1948). The mathematical theory of communication. The Bell System Technical Journal, Vol. 27, pp. 379–423, 623–656.

Skytt, C. B. & Winther, L. (2011). Trust and local knowledge production: Inter-organisational collaborations in the Sønderborg region, Denmark. Geografisk Tidsskrift-Danish Journal of Geography, 111(1), 27-41.

Thomas S. (2013). Produktionsnetzwerkssysteme: Ein Weg zu effizienten Produktionsnetzwerken (Dissertation). Bamberg: Difo-Druck GmbH.

Van De Vijver, M., Vos, B. & Akkermans, H. (2011). A tale of two partnerships: Socialization in the development of buyer–supplier relationships. Journal of Supply Chain Management, 47(4), 23-41.

Walker, A. & Ellis, H. (2000). Technology transfer: strategic, management, process and inhibiting factors – a study relating to the technology transfer of intelligent systems. International Journal of Innovation Management, 4(1), 97-122.

Whitman, L. E. & Panetto, H. (2006). The missing link: Culture and language barriers to interoperability. Annual Reviews in Control, 30(2), 233-241.

Wubben, E. F. M., Batterink, M., Kolypiris, C., Kemp, R. G. M. & Omta, O. (2015). Profiting from external knowledge: the impact of different external knowledge acquisition strategies on innovation performance. International Journal of Technology Management, 69(2), 139-165.

AUTHOR BIOGRAPHY

David Herberger, M.Sc. (*1990) has been a research assistant in the specialist factory planning group at the Institute of Production Systems and Logistics (IFA) at Leibniz Universität Hannover since 2016. He previously studied mechanical engineering at the Karlsruhe Institute of Technology (KIT).

Dipl.-Ing Felix Bussemer (*1988) has been a research assistant in the specialist factory planning group at the Institute of Production Systems and Logistics (IFA) at Leibniz Universität Hannover since 2014. He previously studied mechanical engineering, amongst other subjects, at Technische Universität Dresden (TUD).

Prof. Dr.-Ing. habil. Peter Nyhuis (*1957) has been head of the Institute of Production Systems and Logistics (IFA) at Leibniz Universität Hannover since 2003.

Prof. Dr.-Ing. Jörg Rainer Noennig, (*1973) is director of the Wissensarchitektur – Laboratory of Knowledge Architecture at Technische Universität Dresden, and Professor for Digital City Science at the CityScienceLab at HafenCity Universität Hamburg.

Dr.-Ing. Peter Schmiedgen (*1984) is Head of Research and Unit Leader Innovation & Entrepreneurship in the Wissensarchitektur – Laboratory of Knowledge Architecture at Technische Universität Dresden.

THE ALIGNMENT BETWEEN STRATEGIC PLANNING AND HUMAN RESOURCE PROCESSES: A QUALITATIVE STUDY

Patricia A. Lapoint, McMurry University

ABSTRACT

The United States Congress in 1987 voted to enact the Malcolm Baldrige National Quality Award (MBNQA) with the goal of encouraging U.S. businesses and other types of organizations to approach and deploy effective quality processes in the delivery of their products and services. The MBNQA provides a framework of internal assessment for companies to use in their planning and implementation of quality initiatives. Through this internal assessment process, company leadership gains a better understanding of the alignments/linkages within its operations in order to modify its processes for meeting or exceeding customer expectations and requirements. The purpose of the research is to examine the extent of the alignment between strategic planning processes and human resource processes. Eleven manufacturing companies were selected for a site visit. Each of these eleven companies represents a different industry sector, geographical location, and organizational size. A survey, documents search, and personal interviews were used to collect the data. The initial observations of the alignment between the two variables suggest that a moderate to weak alignment is present when the data source is the survey questionnaire. When the data source is the documents search, the results yield a strong/moderate alignment between these respective variables.

JEL: M1

KEYWORDS: Strategic Planning, Human Resources

INTRODUCTION

The highly competitive global environment in the 1980's spurred a major quality revolution for companies in the United States. In response, the United States Congress in 1987 voted to enact the Malcolm Baldrige National Quality Award (MBNQA) with the goal of encouraging U.S. businesses and other types of organizations to approach and deploy effective quality processes in the delivery of their products and services. The MBNQA provides a framework of internal assessment for companies to use in their planning and implementation of quality initiatives. Through this internal assessment process, company leadership gains a better understanding of the alignments/linkages within its operations in order to modify its processes for meeting or exceeding customer expectations and requirements. The underlying philosophy for these quality-driven companies is a strong passion to continuously improve.

LITERATURE REVIEW

The literature detailing the implementations of quality improvement programs discuss “systems thinking” as part of their process (Conti, 2009, 2010; Tate, 2009). Conti’s research identifies a model of the organizational as a social system, subsystems, and transactional and independent environments. Within the organizational systems, interrelations among elements and groups of elements are represented and where value generation takes place (Conti 2009). The Malcolm Baldrige National Quality Award framework emphasizes the systems approach through the alignment of the seven Criteria for Performance Excellence categories (U.S. Department of Commerce--NIST, 2017). Criteria 2.0 of the framework focuses on Strategy (strategic planning and deployment); Criteria 5.0 focuses on Workforce specifically workforce management

aligned to the strategic planning Category 2.0 (U.S. Department of Commerce—NIST, 2017). Figure 1 identifies the seven categories of the Malcolm Baldrige framework.

Figure 1: Malcolm Baldrige National Quality Award Framework



Category 1.0 (Leadership) asks how senior leaders' personal actions and the organization's governance system guide and sustain the organization. Category 2.0 (Strategy) asks how the organization develops strategic objectives and action plans, implements them, changes them if circumstances require, and measures progress. Category 3.0 (Customers) asks how the organization engages customers for the long-term marketplace success, including how the organization listens to the voice of the customer, serves and exceeds customers' expectations, and builds customer relationships. Category 4.0 (Measurement, Analysis, and Knowledge Management) identifies the alignments of the organization's operations to the strategic objectives. Category 5.0 (Workforce) addresses key workforce practices, and reinforces the alignment of workforce management with the overall strategy. Category 6.0 (Operations) asks how the organization focuses on work, product design and delivery, innovation, and operational effectiveness. Category 7.0 (Results) provide systems focus that includes all results to sustain an organization: key processes and product results, customer-focused results, workforce results, leadership and governance system results, and overall financial and market performance.

METHODOLOGY

The sample for this research study is manufacturing companies who have either won the Malcolm Baldrige National Quality Award or their respective state award based upon the Malcolm Baldrige criteria. Within the constraints of time and financial resources, eleven manufacturing companies were selected for a site visit. Each of these eleven companies represents a different industry sector, geographical location, and organizational size. Table 1 identifies the breakdown across sector, location, and size.

Table 1: Breakdown of Organizations According to Sector, Location, and Size

Sector	Location		Size	
Foods	2	East	1	Large
Automotive	3	Midwest	4	Small
Electronics	3	West	1	
Chemicals	2	South	5	
Health Care	1			

This table identifies the frequencies of organizations in each sector, in each geographical location, and size.

For the large and small manufacturing companies, 30 and 20 employees respectively were systematically randomly selected from each plant's employee list. Site visit data was collected from several sources: documents, personal interviews, questionnaire, and observation. These multiple sources of information were used primarily as a means of cross validation of data as well as mutually exclusive sources of data. The survey instrument contained 41 items representing the 34 independent variables studied and respondent demographic data. To determine which of these companies were large and which were small, I applied the same standard as stated in the national or state award application eligibility. Measurement and scoring procedures vary according to the source of information used. For example, data collected from surveys are measured on a five-point Likert scale; information from personal interviews are measured using content analysis procedures; and data from both documents and observation are measured using frequencies. Frequencies are used as the method for collecting data from documents and first-hand observations. The basis used for the percentage calculations of these frequencies was determined as a function of the total presence and absence of alignments for the specific variables examined.

RESULTS AND DISCUSSIONS

The qualitative analysis will be limited to the areas of strategic planning and human resources for the companies in the study. The approach I have elected to take is to report in what ways each of the companies are similar in their strategic planning processes and their approaches to human resources management.

As a point of comparison, the most significant and obvious similarity for all companies in the study is their strategic planning process itself. In all eleven companies, strategy development and policy deployment processes serve as the foundation for all company activity and effort. More than simply foundation, however, the strategic planning processes actively drive resource allocation, performance measures, rewards and recognition, continuous improvement, information and analysis, fact-based decision making, and performance-oriented results.

All eleven companies in the study developed a vision and mission statement, and established core values to which strategy development and deployment were derived. The vision, mission and core values were the philosophical guiding principles by which the companies operated. Although different terminology is used to describe each company's core values, there are common themes amongst them. For example, customer focus, teamwork, integrity, quality-driven, respect, trust, empowerment, partnerships, and continuous improvement appear as stated core values.

The key performance indicators become the mechanisms/tools for translating vision, mission, and strategy into more concrete concepts that can be measured and understood. For the most part, between four and ten clearly defined key measures, developed and selected by senior leadership in conjunction with unit leadership, representing a wide range of organizational interests, were identified by these companies as true indicators of success or failure within their respective organizations. These key measures then become the foundation for all subunits to define performance measures that are directly related to that specific subunit's responsibility. Strong alignment occurs through the process of bottom-up strategy planning and deployment. At each level of bottom-up strategy planning, each unit and subunit are connected vertically,

and at the organization level, each unit segment is connected horizontally. Through linkages and alignment within these companies' operations, there is a strong belief by leadership that each function, role, and process must be designed and implemented for internal consistency and integrity. The human resource focus for this particular study included the specific variables HR policies, training, development, selection practices, job design, monetary compensation, termination practices, performance appraisals, and HR plans.

In 10 out of 11 companies, teams/teamwork is a stated core value. In 8 of the 11 companies, teams manage their own work systems including scheduling, work assignments, time off, peer review, and work flow. Compensation systems are aligned with team-based work activities by rewarding individuals for team-based performance. The performance appraisal process includes a significant percentage of peer assessment as input providing a documented record for rewarding merit increases for the achievement of goals and the demonstration of skills.

Education and training are linked to unit strategies through the strategic planning and deployment processes, and are developed as part of the HR plans to meet operational, administrative, and technical needs of each functional area. These elements are linked to the performance review process and to the recruitment and selection processes.

The initial observations of the alignment between strategic planning and human resource processes for those companies in this study suggest that a moderate to weak alignment is present when the data source is the survey questionnaire. When the data source is the documents search, the results yield a strong/moderate alignment between these respective variables. The inconsistency from two independent data sources on alignment presents confusing and conflicting findings; therefore, no clear conclusions can be made on the alignment issue at the present time.

CONCLUSION

All of the companies in the research study use their strategic planning process cycle as the primary alignment mechanism and driver toward the deployment of human resources planning and activities. The cascading effect of the strategic planning process links to the human resources strategic planning process and activities for timely, accurate input and feedback.

REFERENCES

Conti, T. (2009). Systems Thinking: The New Frontier in Quality Management. Organizational Systems Fitness.

_____. (2010), "Systems Thinking in Quality Management". *The TQM Journal*, vol. 22 (15 June), p. 352-368.

Tate, W. (2009). "The Basic Principles of Systems Thinking as Applied to Management and Leadership". Institute for Systematic Leadership extracted Chapter 12, *The Search for Leadership: An Organizational Perspective*, Triarchy Press.

U.S. Department of Commerce, NIST (2017). *Baldrige Excellence Framework: A Systems Approach to Improving Your Organization's Performance*, accessed at: www.nist.gov/baldrige

LOGISTIC EVALUATION OF DIFFERENT ASSEMBLY ORGANIZATIONAL FORMS

Carolin Felix, Leibniz Universität Hannover

ABSTRACT

Industrial enterprises are facing a strong increase in competitive pressure because of globalization. A key factor for competitiveness is the logistic performance and, particularly, the schedule reliability. Assembly, as a convergence point for upstream processes, is of central importance for the logistic performance of a company's internal supply chain. Many process failures in previous processes are only uncovered in the assembly process. The supply processes influence the logistic performance of the assembly process significantly. As a process with high manufacturing costs, assembly is thus not only an important parameter for the overall logistic performance, but also contributes to the company's profitability. The presented paper describes research on the quantitative description of logistic cause-effect relationships in the assembly. Different assembly organizational forms are evaluated by logistic objectives. The characterization and evaluation enables the modeling of assembly processes and their respective supply processes. It supports the appropriate selection of organizational forms for the required production program.

JEL: D 200, L 230, M 110

KEYWORDS: Logistic Controlling, Assembly, Modelling

INTRODUCTION

Today, delivery reliability has become one of the most important requirements of companies. It is not enough, though, to provide the product in a short delivery time. Rather, it has to be provided in the moment the client needs it (Wiendahl, 2002). A competitive position of a company is only possible if punctual provision of all the parts required along the supply chain can be ensured (ibid.). A punctual provision of parts does not exclusively refer to external costumers but also to internal processes. Delays in delivery or in production processes lead to delays in consecutive processes, and therefore to a deterioration of the logistic performance. At the same time, the logistic costs rise, since parts not made in time will result in higher inventory and handling costs, especially within assembly processes. Assembly processes are described as “[...] the aggregation of all the processes by which various parts and subassemblies are built together to form a complete, geometrically designed product [...]” (Nof et al., 1997). Furthermore, the assembly process is usually the last step of the value chain of a company. Due to this fact, it becomes an accumulation of organizational, deadline and qualitative errors of the preceding production processes. Any errors in product design, procurement, production, or the delay of processes affect the logistic performance and the delivery reliability. It can be determined that assembly has a central position within a company's supply chain, and, thus, an optimal supply and design of the assembly process is essential to achieve short delivery times and a high delivery reliability. Recent surveys determine that it accounts for 50% of the total unit production cost and 40% of the total labor force within manufacturing (Boothroyd, 2005). Every process disruption within the assembly has a direct and significant impact on the profitability of companies. Therefore, assembly must be the focus for a continuous improvement of the logistic performance.

Overview of Assembly Organizational Forms

Assembly organizational forms have been a field of study since the 1980s. Several researchers and industry experts have proposed different methods of structuring assembly systems. One of the first and most widespread proposals was presented by Eversheim (1981). He describes five different assembly organizational forms. The principles of this classification are the movement variable, which can be the assembled object or the workstation, and the motion parameters, which refer to the periodicity and the direction of the motion (Eversheim, 1989). What is more, other methods or further developments can, for instance, be found in (Spur et al., 1986, and Petersen, 2005). A brief overview of the main assembly organizational forms is given.

Assembly at individual workstations: is considered the basic assembly organizational form. The entire assembly process is performed at a single workstation. The main characteristics of this organizational form are that all the necessary resources must be installed at the assembly site and that all the required components must be available before starting the process. It is suitable for medium workloads of small volume products. Having all the resources at one workstation provides high flexibility. Nevertheless, it also causes a low equipment utilization. This type of organization is related to long working hours and not suitable for complex assembly tasks (Lotter et al., 2006).

Fixed position assembly : is a variation of the assembly at individual workstations. This kind of assembly organization is suitable for very heavy and complex products and is used specially in a one-item production. This assembly organization is related to long processing times (Lotter et al., 2006).

Workshop assembly: is divided into several operations, which are performed at different workstations. This type of organizational form is process-oriented, i.e. operations are fixed to the workstations and the product is being moved. The operations do not have a specific order, thus its material flow is non-directional. Remote- and time-intensive transportation of parts is required due to the distance between workstations. Therefore, the assembly process is interrupted by the transport of the assembly object to the next workstation. In addition, the products are usually processed in lots. This means that every product is stored at a buffer after being processed. Once the lot is completed, it is transported to the next workstation, where it is stored again waiting to start the next operation. For this reason, inventories (WIP) between workstations are required. Material input is allowed at every workstation. Therefore, not all the components required by the final product must be available at the beginning of the process. This can cause disruptions between workstations and long waiting times. Furthermore, due to its changing sequences, automation is limited (Nof et al., 1997).

Group assembly: is also divided into several operations performed at different workstations. It is product-oriented. Therefore, the location of the workstations is designed in order to reduce transportation time. Workstations are arranged to suit the assembly orders. Nevertheless, the material flow is non-directional. While workshop assembly is process-oriented, and therefore the operation performed at every station is fixed, in group assembly the location of operations can change depending on the assembly order. However, both assembly organizational forms have the same material input conditions. Workstations can start processing a product when the components required to perform the operation are available (Petersen, 2005). Group assembly organization is divided in two subcategories. Both differ in the movable factor: the assembly object or the assembly resource.

Sequential assembly: is divided into several consecutive operations, which are performed at different workstations. This organizational form is product-oriented. It is based on the product requirements. The material flow is directional. Therefore, the sequence of operations is fixed and there is precedence between operations. Nevertheless, the assembled object or resources are not continuously moving. Waiting time between workstations is possible, and thus inventories (WIP) between workstations are required (Petersen,

2005). Sequential assembly organizations is also classified by two subcategories depending on the movable factor, either the assembly object or the assembly resources.

Flow assembly is: product-oriented. The material flow is directional and the assembly process is divided into several operations each performed at different workstations. The assembled object must pass through all workstations. Material input is allowed along the process but all material should be available before the start of assembly to ensure a good performance of the assembly system. Buffers between the workstations are not allowed. This type of assembly organization is ideal for automatic material flow systems but also related to low flexibility (Nof et al., 1997, and Lotter et al., 2006). For flow assembly the classification also depends on the moving factor. However, changing the moving factor does not affect the relevant logistical characteristics of this organizational form of assembly.

Logistical Characteristics

To classify the different organizational forms of assembly logistically it is necessary to define the criteria. For this reason, relevant logistic characteristics of assembly systems have been chosen to differentiate the existing assembly organizational forms from a logistic point of view. The characteristics are lot size, work content of each operation, number of workstations, sequence of operations, connection between operations, start conditions, and material input points (see Table 1). The lot size refers to the number of parts processed at one workstation before the transportation to the next workstation. The work content of each operation relates to the processing time of every operation. It can be either identical work content (homogeneous) or various work content (heterogeneous). If there is variation between the processing times of operations within the assembly process, buffers between workstations are required. The number of workstations is necessary to indicate whether tasks can be performed at the same time or whether they can be split. The sequence of operations evaluates the procedure of the operations. It identifies if a certain organizational form of assembly follows a fixed sequence of operations. The connection between operations describes how the operations are connected, e.g. by buffers or without. The start condition indicates if all the components should be available to start the assembly process or if merely some of them are needed, e.g. the necessary components to perform the first operation. Material input points are considered supply points where new components are introduced to the assembly process. If only one input point is allowed, it will always be at the beginning of the assembly process. If more input points are allowed, one is at the beginning of the process and the others, located along the process.

Table 1: Overview of Logistic Criteria for Assembly Organizational Forms

Criteria	Description	Values
Lot size	Number of products processed by a workstation before being transported	=1 Single product lot Lot size equals or bigger than 1
Work content of each operation	Processing time of each operation	≠ Heterogeneous work content Homogeneous work content
Number of workstations	Amount of workstations in an assembly system	=1 Single workstation Several workstations
Sequence of operations	Existence of a fixed sequence of operations in an assembly system	no Unfixed sequence of operation Fixed sequence of operations
Connection between operations	Capacity of the buffers between operations	=0 No buffers between operations Buffers between operations
Start conditions	Components required to start processing an order	all All components should be available Some components should be available
Material input points	Number of material input points that are allowed in an assembly system	=1 Single input point Several input points

This table shows criteria for the characterization and logistical evaluation of different assembly organizational forms.

Evaluation of Organizational Forms by Logistic Characteristics

All the logistical aspects have been evaluated for each assembly organizational form in Table 2. The resulting values depend on the description of the assembly organizational forms. The evaluation of these logistical characteristics provides a method to assess the differences and similarities of the various assembly organizational forms.

The assembly at individual workstations only has a fixed lot size of one, because one product cannot be assembled until the previous product is finished. Operations cannot be divided. In addition, at every workstation only one operator is performing the complete assembly process. Furthermore, to start the process all components should be available. The components are introduced at one single input point at the beginning of the process. Fixed position assembly varies from assembly at individual workstations. First, the number of operators working on the assembly process is larger. Second, the provision of material input can be along the assembly process. The reason of this is the lack of storing space at the assembly locations. Therefore, the process can be started without the necessity of having all required components available. This kind of assembly is related to large-dimension products and long processing times. For flow assembly, the lot size is one single product. After every operation, the product is transported to the next workstation. Every workstation needs to have the same work of content. Evidently, the process is divided into several workstations and the sequence of operations is fixed. There are no buffers between the workstations. For this reason, all the components should be available before starting the process.

Table 2: Logistic Evaluation of Different Assembly Organizational Forms

		Lot Size	Work Content of Each Operation	Number of Workstations	Sequence of Operations	Connection Between Operations	Start Conditions	Material Input Points
Assembly at individual workstations		=1	--	=1	--	=0	all	=1
Fixed position assembly		=1	--	=1	--	=0	some	≥1
Flow assembly		=1	=	>1	yes	=0	all	≥1
Workshop assembly		≥1	≠	>1	no	≥1	some	≥1
Group assembly	Non-stationary object	≥1	≠	>1	no	≥1	some	≥1
	Non-stationary resource	=1	≠	>1	no	=0	some	≥1
Sequential assembly	Non-stationary object	≥1	≠	>1	yes	≥1	some	≥1
	Non-stationary resource	=1	≠	>1	yes	=0	some	≥1

This table shows the main six assembly organizational forms evaluated by the logistic criteria.

At workshop assembly, more than one product can be processed at one workstation before transporting the lot to the next workstation. The work content per operation is heterogeneous. The sequence of operations is not fixed and can be changed depending on the product's requirements. Due to the possibility of processing lots, buffers between workstations are required. To start the process only the components required by the first operation need to be available. Therefore, more than one input point is required. Group assembly is divided in two specifications. However, both have logistic characteristics in common: The work content is heterogeneous, the operations take place at several workstations, and the order of operations can change depending on the product. Only the components required by the first operation need to be available to start the process. And finally, there are material input points at every workstation. On the other hand, there are some differences depending on the movable factor. Group assembly with non-stationary


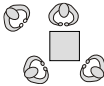
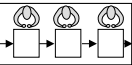
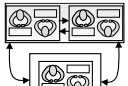
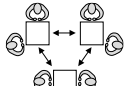
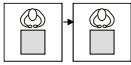
assembled objects can have a lot size larger than one. Therefore, buffers between workstations are required. Concerning group assembly with non-stationary assembly resources, the product is steady at the workstation and operators move from one workstation to another. For this reason, buffers between workstations are not required.

Sequential assembly variants have several aspects in common: operation processing time is not homogeneous, the operations are divided, more than one operator can be working at one workstation, and the order of operations is fixed and cannot be changed. Only the components required by the first operation should be available at the beginning. For this reason, several input points are allowed. The differences between the two variants are the same as in group assembly. If the assembled object is non-stationary, lot sizes can be bigger than one and buffers between workstations are required. Otherwise the lot size is one and there is no buffer within the assembly system.

CONCLUSION

Observing Table 3, it can be noticed that some of the organizational forms of assembly have logistical aspects in common. Therefore, an aggregation of the organizational forms can be done for further logistic assessment. The first group is characterized by similar logistic characteristics, which allow the analysis of the lateness of the components' provision by the Supply Diagram. The second group is characterized by varying conditions, which limit the application of the Supply Diagram (e.g. multiple material input points). The variants of group assembly and sequential assembly are both included in the second group

Table 3: Summary of Assembly Organizational Forms

Group 1			Group 2		
Assembly at individual workstations	Fixed position assembly	Flow assembly	Workshop assembly	Group assembly	Sequential assembly
					
<ul style="list-style-type: none"> - Single product lot - No storage of the assembled object between operations - All components required to start 			<ul style="list-style-type: none"> - Several workstations - Heterogeneous work content - Several input points - Storage of the assembled object between operations 		

This table shows two groups of assembly organizational forms based on their specific logistic characteristics.

Assembly at individual workstations is considered the basic organizational form. The punctual and synchronic provision of components can be analyzed by the Supply Diagram (Beck, 2013). It helps to evaluate the logistic performance of the converging point. In case of the fixed position assembly, not all the components are required at the beginning of the process. Components will be introduced into the system during the assembly process. Taking into account the long processing times and large product dimensions, it is necessary to have the components scheduled to a specific date. Therefore, the lateness of each component can be measured. This organizational form is considered a special variant of the assembly at individual workstations. This is why this organizational form is included in the first group. Flow assembly is also included in the first group. Based on the logistical evaluation, this organizational form shows similar characteristics as the assembly at individual workstations. An assembly order cannot be processed until all components required by every operation are available. Flow assembly is an organizational form with very low flexibility. If one of the operations of the flow line does not have all the required components, the process will be interrupted. The completion of the assembly orders will be delayed. However, the lateness of each component can be measured and analyzed by the Supply Diagram. The second group is characterized by a heterogeneous work content, operations at several workstations, and buffers between the

workstations. Multiple material input points can also exist. According to those organizational forms, the assembly process can start whenever all components required by the first operation are available. The completion of the assembly order is achieved, when all components have arrived at the respective workstation. The Supply Diagram is not suitable to evaluate the lateness of the supply process. Necessary preconditions such as statistical independence of the supplying processes are not fulfilled.

The six different organizational forms have been studied and their logistic performance has been analyzed. An insight into assembly organizational forms is useful to arrange them in logistic groups with similar logistical characteristics. Focusing on logistics criteria, two groups have been derived. The first group joins all assembly organizational forms that can be evaluated by the Supply Diagram. The second group includes the organizational forms that require a different model to be evaluated. This logistic model is currently being developed at the Institute of Production Systems and Logistics.

REFERENCES

- Beck, S. (2013) „Modellgestütztes Logistikcontrolling konvergierender Materialflüsse,“ Garbsen. *Berichte aus dem PZH*, vol. 3, PZH-Verlag.
- Boothroyd G. (2005) “Assembly Automation and Product Design, 2nd Edition” Boca Raton. Taylor & Francis Group, vol. 2.
- Eversheim W., K.-W. Witte and K.-H. Peffekoven (1981) „Montage richtig planen – Methoden und Hilfsmittel zur rationellen Gestaltung der Montage in Unternehmen mit Einzel- und Serienfertigung,“ Düsseldorf. *Fortschrittsberichte VDI*, vol. 2, issue 45.
- Eversheim W. (1989) „Organisation in der Produktionstechnik: Fertigung und Montage,“ Düsseldorf. *VDI-Buch*, vol. 4.
- Nof, S. Y., W. Wilhelm and H. Warnecke (1997) „Industrial Assembly,“ Springer US.
- Lotter, B. and H.-P. Wiendahl (2006) „Montage in der industriellen Produktion – Ein Handbuch für die Praxis,“ Garbsen. *VDI-Buch*, Springer Verlag.
- Petersen T. (2005) „Organisationsformen der Montage: Theoretische Grundlagen, Organisationsprinzipien und Gestaltungsansatz,“ Aachen. Shaker Verlag.
- Spur G. and H.-J. Helwig (1986) „Montieren – Einführung in die Montagetechnik Handbuch der Fertigungstechnik,“ München. Carl Hanser, vol. 5.
- Wiendahl, H.-H. (2002) „Situative Konfiguration des Auftragsmanagements im turbulenten Umfeld,“ Stuttgart. *IPA-IAO Forschung und Praxis*, Jost-Jetter Verlag.

ACKNOWLEDGMENTS

This paper presents the research project entitled “Development of a model for the quantitative description of logistical cause-effect relationships for different organizational forms of assembly”. This project is currently being conducted at the Institute of Production Systems and Logistics, Leibniz Universität Hannover. The project is funded by the German Research Foundation (DFG).

BIOGRAPHY

Carolin Felix, M.Sc. was born in 1988 and studied mechanical engineering with a specialization in control engineering at the University of Stuttgart. Since 2014, she has been working as a research assistant in the field of production management at the Institute of Production Systems and Logistics (IFA), Leibniz Universität Hannover.

A STUDY OF THE IMPACTS OF PMIS QUALITY ON PROJECT MANAGEMENT PERFORMANCE

So-Hyun Park, Konkuk University, Seoul, Korea
Seung-Chul Kim, Hanyang University, Seoul, Korea

ABSTRACT

The use of Project Management Information System (PMIS) is increasing in project management industries such as construction, defense, manufacturing, software development, telecommunication, etc. It is generally known that PMIS helps to improve the quality of decision making in project management, and consequently improves the project performance. However, how much and which parts of project management performance are affected by PMIS still need to be studied further. The purpose of this study is to investigate the impact of PMIS on project management performance. In our research model, the PMIS quality affects project management performance, and in turn user satisfaction and repurchase or reuse intention. We collect data from various project related industries such as construction, defense, manufacturing, software development and telecommunication by using survey questionnaire. Analyses are done to find out the answers to the research questions, and the implications for the practitioners are suggested.

JEL: M11, M15

KEYWORDS: Project Management Information System (PMIS), Project Performance, System Quality

INTRODUCTION

The use of Project Management Information System (PMIS) is increasing in project management industries such as construction, defense, manufacturing, software development, telecommunication, etc. It is generally known that PMIS helps to improve the quality of management control and decision making in project management, and consequently improves the project performance. However, how much and which parts of project management performance are affected by PMIS still need to be studied further. The review of the previous research on PMIS reveals that the research was done on the relatively limited areas of discipline such as construction industry (Froese, 2010; Lee and Yu, 2012; Love and Irani, 2003; Stewart, 2007). Also, most research focused on the system performance from the perspectives of information system (Braglia and Frosolini, 2014; DeLone and McLean, 1992 and 2003; Jaafari and Manivong, 1998; Liberatore and Pollack-Johnson, 2003). However, PMIS seems to affect the project management performance before it has any impact on user satisfaction and other benefits. Then, the adoption of the PMIS by the users will be based on the PMIS effect on the project management performance. Thus, the assessment and evaluation of the PMIS must consider how PMIS affect project management performance, and it is necessary to examine the effects of PMIS from the perspectives of project management participants who are concerned about project management performance such as scope, time, cost, quality, communication, integration, etc. The purpose of this study is to investigate the impact of PMIS on project management performance, and further on the user evaluation of the PMIS in terms of user satisfaction and reuse intention.

The research questions are as follows:

Does PMIS quality positively affect the project management performance?

Are the impacts of PMIS quality on the PM performance different depending on the industry types and project characteristics

Does the PM performance affect user satisfaction about the PMIS?

Does the PM performance affect the user's intention to reuse/recommend about the PMIS?

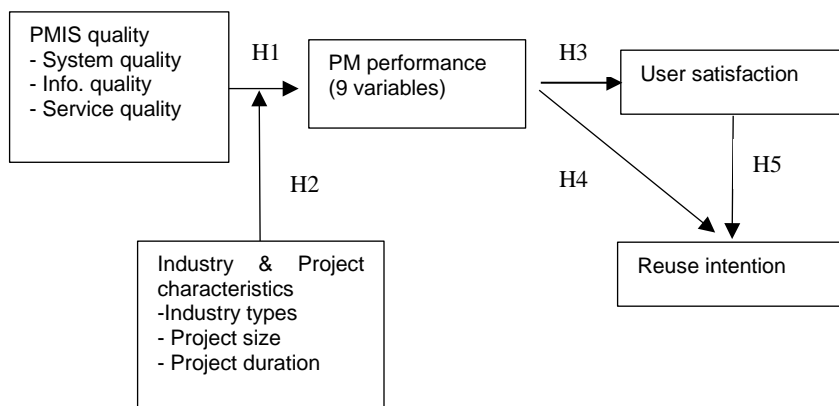
Is user satisfaction related with the user's intention to reuse/recommend about the PMIS?

METHODOLOGY

Research Model and Hypothesis

In our research model, the PMIS quality affects project management performance, and in turn user satisfaction and reuse intention. Also, we set industry and project characteristics as moderating variables such as industry types, project complexity and size (e.g., duration, budget size, number of participants, etc). The effects of the moderating variables are tested on the relationship between the PMIS quality and the PM performance. The research model is constructed as Figure 1.

Figure 1: Research Model



Hypotheses are developed to investigate the impact of the PMIS quality on the PM performance and user satisfaction, and they are set as follows:

H1. The three dimensions of PMIS quality will have positive impacts on the PM performance.

H1a. System quality of PMIS will have a positive impact on the PM performance

H1b. Information quality of PMIS will have a positive impact on the PM performance.

H1c. Service quality of PMIS will have a positive impact on the PM performance.

H2. The impacts of PMIS on the PM performance will be different depending on the project environment and project characteristics.

H3. PM performance will have positive impacts on user satisfaction.

H4. PM performance will have positive impacts on reuse intention.

H5. User satisfaction will be positively related with reuse intention.

Data Collection and Variables

The measurement tool in the form of questionnaire to measure the degree of PMIS quality, PM performance, and other variables were developed based on the theories developed in the previous research (DeLone and McLean, 1992 and 2003; Petter et al., 2008 and 2013; PMI, 2013) PMIS quality is measured by three dimensions in 24 questions, and PM performance is measured by 9 questions. 5 point Likert scale is used for most of the variables except for the industry and project characteristics. The variables are defined in Table 1 as follows:

Table 1: Definition of Variables

Variables	Sub Variables	Contents
PMIS quality	System quality (11)	availability, stability, processing speed, functionality, security, fool proof, screen design, easy to input, easy to learn, interface,
	Information quality (7)	accuracy, contemporariness, timeliness, richness, usefulness, sufficiency, relevance
	Service quality (6)	quickness, reliability, training provided, user manual, professionalism, supplier reputation
PM performance	- time reduction - work accuracy - cost management - team communication - stakeholder communication - decision making - risk management - progress management - overall control	represents the performance by the project management team.
Industry & project characteristics	Industry types	represents the project environment that might affect the impacts of PMIS on the project management performance.
	Project size (participants, budget)	
	Project duration (in months)	
user satisfaction	user satisfaction	indicates the degree of satisfaction recognized by the PMIS users.
reuse intention	reuse intention	represents the intention to reuse the PMIS by the users, and/or the intention to recommend the PMIS to other people.
	recommend to others	

PMIS quality variables are adopted from DeLone and McLean (1992, 2003) and they are system quality, information quality, and service quality. The first dimension of PMIS quality is system quality. System quality is the quality of the information system processing which includes availability, stability, processing speed, functionality, security, etc. The second dimension is information quality. PMIS is a special purpose information system that is created to provide useful information for project managers and participants to make effective and efficient decision making. The objectives of PMIS can be accomplished when the information provided by PMIS is accurate, timely, relevant, rich, sufficient and so on. Thus, the information quality aspect of PMIS refers to the quality of information produced by PMIS, and they can be in the form of report and data either printed or on the screen.

The third dimension is service quality. PMIS is often developed by outsourced service which is separate from project management team and participants. Various services are required to operate the PMIS properly such as installation, maintenance, training, update, etc. Project management performance variables are

adopted and modified from the PMBoK by PMI (2013) which include 10 knowledge areas that are considered necessary to manage projects successfully. Industry and project characteristics are used to test the environmental effect on the use and efficiency of PMIS by the users, and include industry types, project size and project duration. We assume that the effects of PMIS will be different depending on the industry types and will be greater, i.e., more useful, as the project size becomes bigger and the duration longer. Dependent variables are set to include user satisfaction and reuse and recommendation intention. Data were collected by using survey questionnaire from those people who had experience of using PMIS in various project related industries such as construction, defense, manufacturing, software development and telecommunication. The survey questionnaire were distributed through e-mails and google network. Although the survey was conducted in Korea and all of the respondents are Korean, some of the respondents have experience in working in overseas projects. A total of 181 responses were collected, and 137 were used for analysis after excluding those responses which contained missing items. Statistical techniques such as factor analysis and multiple regression, analysis of variance are used to analyze the data, and the results are drawn up and discussions are made in the following sections.

RESULTS AND DISCUSSIONS

Profile of Respondents

The profile of respondents is shown in Table 2. It includes the characteristics of the projects for which the PMIS was used by the respondents such as industry types, project duration, number of project participants, and project budget.

Table 2: The Profile of Respondents

Item	Value	Frequency	Ratio
Industry types	Construction	56	
	Manufacturing/Defense	31	
	Information & Communication Tech.	36	
	Research & Development	9	
	Others	5	
	Total	137	
Project duration	0 - 6 months	17	
	7 - 12 months	34	
	13 - 24 months	25	
	25 - 36 months	20	
	37 - 48 months	15	
	49 + months	22	
	no response	4	
	Total	137	
Project participants	0 - 10 persons	52	
	11 - 20	28	
	21 - 30	11	
	31 - 50	11	
	51 - 100	11	
	101 +	19	
	no response	5	
	Total	137	
Project budget (in USD, approximate)	0 - 1 million	38	
	1 - 5	23	
	5 - 10	12	
	10 - 50	19	
	50 - 100	9	
	100 +	30	
	no response	6	
	Total	137	

Test of Hypothesis 1

Multiple regression analyses are performed to test the hypotheses presented with the research model, and the results are shown in tables. All the independent variables are tested for multicollinearity and all of them seem to be within acceptable level in terms of tolerance and variance inflation factor (VIF).

H1. The three dimensions of PMIS quality will have positive impacts on the PM performance.

Hypothesis 1 investigates the impact of PMIS quality on the overall PM performance. Two of the three dimensions of PMIS quality are found to have statistically significant impact on the overall PM performance at $\alpha = 0.05$ level. Both system quality and information quality positively affect the overall PM performance.

Table 3: Regression Results for H1 Tests (PMIS Quality -> PM Performance)

Model	Unstandardized Coefficients		Standardized Coefficients Beta	T	P-Value	Multicollinearity Statistics Tolerance	
	B	S.E				VIF	
(Constant)	.581	.216		2.691	.008		
System quality	.409	.129	.362	3.182	.002	.242	4.129
Info. quality	.514	.112	.514	4.575	.000	.249	4.024
Service quality	-.083	.099	-.090	-.830	.408	.265	3.775

$F = 62.139$ ($p = 0.000$) *adjusted R square* = 0.574

Test of Hypothesis 2

H2. The impacts of PMIS on the PM performance will be different depending on the project environment and project characteristics.

As a part of the test of Hypothesis 2, it is tested whether industry types affect the relationship between the PMIS quality and the PM performance. Four industries are compared to examine the impacts of the three dimensions of PMIS quality on the nine measures of PM performance, and the results are presented in Table 4. In the table, the PMIS quality dimensions with statistically significant impact on the PM performance measures are marked with asteriks for $\alpha = 0.01$ through $\alpha = 0.10$ respectively. From the results in Table 4, it is very obvious that the impact of PMIS quality on the PM performance is different depending on the industry where PMIS is used. Overall, the two dimensions of PMIS quality, system quality and information quality, seem to have more impact on the PM performance than service quality. Notable is that the two industries of construction and manufacturing show very different pattern. System quality seems to be more important for improving the PM performance for construction industry while information quality seems more important for manufacturing industry. As for the ICT and R&D industries, PMIS seems to have relatively lesser impact compared to construction and manufacturing industries. A possible explanation is that many different types of information systems are already in use in ICT industry, and therefore there is relatively little value PMIS can add additionally to the project management. Also, for R&D industry, projects are relatively small in size in terms of project budget and the number of participants, and there is little need for a systematic control in a large scale which PMIS can provide. PMIS can have greater impact as the project size becomes bigger since it serves as a nerve system of a project. When a project is small in scale, the management control can take a more informal format.

Test of Hypothesis 3

H3. PM performance will have positive impacts on user satisfaction.

The impacts of PM performance on user satisfaction are tested and the results are presented in Tables 5 and 6. Table 5 shows the impact of overall PM performance on user satisfaction and Table 6 shows the impacts by individual PM performance measures. The overall PM performance has a positive and significant impact on user satisfaction at $\alpha \leq 0.01$ level. Examining the impact of PM performance in detail, only two PM performance measures seem to have significant impacts on user satisfaction, and they are 'processing time reduction' and 'communication within PM team'. This result seems to be rather disappointing for the purpose of proving the PMIS usefulness. However, this analysis is done for the entire sample that contains all the industry types. There might be different picture coming out if the analysis is conducted for each individual industry.

Table 4: The Impacts of PMIS Quality on the PM Performance by Industry Types

Industry	PM Performance Variables	System Quality	Information Quality	Service Quality
Construction	1. reduction in processing time	***		
	2. improve in work accuracy	***	*	
	3. improve in overall project control	***		
	4. improve in budget & cost control	***	*	*
	5. communication within PM team	***		
	6. communication with stakeholders	***		
	7. prompt in decision making	**	*	
	8. efficiency in risk management	**	**	
	9. improve in progress management	**	***	**
Manufacturing /Defense	1. reduction in processing time		***	*
	2. improve in work accuracy		***	**
	3. improve in overall project control		***	
	4. improve in budget & cost control		***	
	5. communication within PM team			
	6. communication with stakeholders			
	7. prompt in decision making		***	
	8. efficiency in risk management		**	
	9. improve in progress management		*	
Information & Communication Technology (ICT)	1. reduction in processing time			
	2. improve in work accuracy			
	3. improve in overall project control			
	4. improve in budget & cost control			
	5. communication within PM team			
	6. communication with stakeholders			
	7. prompt in decision making		**	
	8. efficiency in risk management		*	
	9. improve in progress management			
Research & Development (R&D)	1. reduction in processing time			
	2. improve in work accuracy			
	3. improve in overall project control			
	4. improve in budget & cost control			
	5. communication within PM team	*		
	6. communication with stakeholders	*		
	7. prompt in decision making	*		*
	8. efficiency in risk management		*	
	9. improve in progress management			

*, $\alpha \leq 0.10$, **, $\alpha \leq 0.05$, ***, $\alpha \leq 0.01$

Table 5: Regression Results for H3 Tests (Overall PM Performance -> User Satisfaction)

Model	Unstandardized Coefficients		Standardized Coefficients Beta	T	P-Value	Multicollinearity Statistics	
	B	S.E.				Tolerance	VIF
(Constant)	-.088	.235		-.374	.709		
PM performance	.945	.068	.768	13.952	.000	1.000	1.000

$F = 194.653$ ($p = 0.000$) adjusted R square = 0.587

Table 6: Regression Results for H3 Tests by Individual Performance Variables (Individual PM Performance Measures -> User Satisfaction)

Model	Unstandardized Coefficients		Standardized Coefficients Beta	T	P-Value
	B	S.E			
(Constant)	-.018	.233		-.078	.938
reduction in processing time	.399	.108	.389	3.693	.000
improve in work accuracy	.019	.123	.018	.157	.876
improve in overall project control	.025	.091	.024	.277	.783
improve in budget & cost control	.113	.083	.115	1.371	.173
communication within PM team	.179	.095	.182	1.882	.062
communication with stakeholders	.082	.086	.086	.960	.339
prompt in decision making	.117	.096	.115	1.217	.226
efficiency in risk management	.141	.097	.137	1.449	.150
improve in progress management	-.136	.094	-.133	-1.449	.150

$F = 24.191$ ($p = 0.000$) adjusted R square = 0.605

Test of Hypothesis 4

H4. PM performance will have positive impacts on reuse intention.

The impacts of PM performance on reuse intention are tested and the results are presented in Table 7. Here, the value for the dependent variable of reuse intention is an averaged score of two measures, that is the reuse intention and the intention to recommend to others. The PM performance is found to have a very strong and positive impact on the reuse intention by PMIS users. Intuitively, this result seems to confirm the common sense that users become more satisfied and also wants to recommend its adoption to other people when a PMIS helps to improve the project management performance. Further analyses are necessary to find out which individual measures of PM performance are considered important for the users in terms of affecting reuse and/or recommendation intention.

Table 7: Regression Results For H4 Tests (PM Performance -> Reuse Intention)

Model	Unstandardized Coefficients		Standardized Coefficients Beta	T	P-Value	Multicollinearity Statistics	
	B	S.E				Tolerance	VIF
(Constant)	1.079	.243		4.440	.000		
PM performance	.800	.070	.701	11.426	.000	1.000	1.000

$F = 130.564$ ($p = 0.000$) adjusted R square = 0.488

Test of Hypothesis 5

H5. User satisfaction will be positively related with reuse intention.

In many research on service quality, user satisfaction is considered to be related and/or to affect the reuse intention by the customers. User satisfaction and reuse intention is assumed to be positively related in this study and the relationship is tested. As shown in Table 8, the two variables are found to be positively and significantly related with each other at $\alpha \leq 0.01$ level. Also, it is thought that higher user satisfaction leads to higher reuse intention rather than the other way around.

Table 8: Regression Results for H5 Tests (User Satisfaction -> Reuse Intention)

Model	Unstandardized Coefficients		Standardized Coefficients Beta	T	P-Value	Multicollinearity Statistics Tolerance	
	B	S.E.					VIF
(Constant)	2.062	.209		9.880	.000		
User satisfaction	.554	.064	.597	8.646	.000	1.000	1.000

$F = 74.757$ ($p = 0.000$) *adjusted R square* = 0.352

Test of Hypothesis 3, 4 and 5 Together (Mediating Effect of User Satisfaction)

In the previous sections, PM performance is found to affect both user satisfaction and reuse intention. Also, higher user satisfaction seems to lead to higher reuse intention. Naturally, there arises a question whether user satisfaction must exist as a mediating variable between PM performance and reuse intention, or whether PM performance can affect reuse intention regardless of the existence of user satisfaction as a mediating variable. Thus, we tested whether user satisfaction plays a mediating role between PM performance and reuse intention. In Table 9, the model 1 shows the result of regression where PM performance alone is tested against reuse intention. In the model 2, user satisfaction is added to the model 1 regression together with PM performance.

Model 1: $Y = b_0 + b_1X_1$ where Y = reuse intention; X_1 = PM performance

Model 2: $Y = b_0 + b_1X_1 + b_2X_2$ where X_2 = user satisfaction

The increase in r^2 is very small from the model 1 to the model 2, and also user satisfaction turns out insignificant in the model 2. Therefore, it seems that PM performance directly affects reuse intention without the intervention of user satisfaction as a mediating variable. However, user satisfaction also affects reuse intention, and seems to have the effect of increasing reuse intention in addition to the impact by PM performance.

Table 9: Regression Results for the Mediating Effect of User Satisfaction Between PM Performance and Reuse Intention

Model 1	Unstandardized Coefficients		Standardized Coefficients Beta	t	P-Value	Multicollinearity Statistics Tolerance	
	B	S.E.					VIF
(Constant)	1.079	.243		4.440	.000		
PM performance	.800	.070	.701	11.426	.000	1.000	1.000
$F = 130.564$ ($P = 0.000$) <i>Adjusted R Square</i> = 0.488							
Model 2	Unstandardized Coefficients		Standardized Coefficients Beta	t	P-Value	Multicollinearity Statistics Tolerance	
	B	S.E.					VIF
(Constant)	1.091	.242		4.505	.000		
PM performance	.676	.109	.592	6.201	.000	.410	2.442
User satisfaction	.132	.089	.142	1.488	.139	.410	2.442

$F = 66.977$ ($p = 0.000$) *adjusted R square* = 0.492

CONCLUSION

This study initially investigated the impact of PMIS quality on the PM performance, and extended its investigation into the further effects on user satisfaction and reuse intention. The hypotheses presented in the research model are mostly found to be statistically significant although some of the variables different

pictures depending on the industry types. Among the three dimensions of PMIS quality, the two dimensions of system quality and information quality seem to be more important to the users than the remaining service quality dimension. On the whole, the overall PM performance is found to have positive and significant impacts on both user satisfaction and reuse intention. However, examining the details reveals that only a few individual PM performance measures seem to affect user satisfaction and reuse intention. Further investigation will be necessary to find out whether this phenomenon is general for all the industries, or whether it will be different depending on the industries. User satisfaction is found to have a positive and significant influence on reuse intention although it does not play a mediating role between PM performance and reuse intention. The contribution of this research is that it helps to clarify the logical relationship from PMIS quality to the PM performance, and to user satisfaction and reuse intention, and helps us to understand what aspects of PMIS are considered beneficial and important to the users. These findings can help the PMIS developers to design a better information system by reinforcing the important quality factors which PMIS users regard highly.

REFERENCES

- Ahlemann, F. (2008) "Towards a conceptual reference model for project management information systems," *International Journal of Project Management*, vol. 27(1), p. 19-30.
- Ali, A. S. B., F. T. Anbari, and W. H. Money (2008) "Impact of organization and project factors on acceptance and usage of project management software and perceived project success," *Project Management Journal*, vol. 39(2), p. 5-33.
- Braglia, M., and M. Frosolini (2014) "An integrated approach to implement Project Management Information Systems within the Extended Enterprise," *International Journal of Project Management*, vol. 32(1), p. 18-29.
- Caniels, M. C. J., and R. J. J. M. Bakens (2012) "The effects of Project Management Information Systems on decision making in a multi project environment," *International Journal of Project Management*, vol. 30(2), p. 162-175.
- DeLone, W. H., and E. R. McLean (1992) "Information systems success: the quest for the dependent variable," *Information Systems Research*, vol. 3(1), p. 60-95.
- DeLone, W. H., and E. R. McLean (2003) "The DeLone and McLean model of Information systems success: a ten-year update," *Journal of Management Information System*, vol. 19(4), p. 9-30.
- Froese, T. M. (2010) "The impact of emerging information technology on project management for construction," *Automation in Construction*, vol. 19, p. 531-538.
- Jaafari, A., and K. Manivong (1998) "Towards a smart project management information system," *International Journal of Project Management*, vol. 16(4), p. 249-265.
- Lee, S. K. and J. H. Yu (2011) "Assessment of ASP-PMIS Quality in Korea," *KICEM Journal of Construction Engineering and Project Management*, vol. 1(3), p. 9-17.
- Lee, S. K. and J. H. Yu (2011) "Critical Success Factors for Project Management Information System in Construction," *KICEM Journal of Construction Engineering and Project Management*, vol. 1(1), p. 25-30.

- Lee, S. K., and J. H. Yu (2012) "Success model of project management information system in construction," *Automation in Construction*, vol. 25(May), p. 82-93.
- Liberatore, M. J., and B. Pollack-Johnson (2003) "Factors influencing the usage and selection of project management software," *IEEE Transactions Engineering Management*, vol. 50(2), p. 164-74.
- Love, P. E. D., and Z. Irani (2003) "A project management quality cost information system for the construction industry," *Information & Management*, vol. 40(7), p. 649-661.
- Petter, S., W. Delone, and E. McLean (2008) "Measuring information systems success: models, dimensions, measures, and interrelationship," *European Journal of Information Systems*, vol. 17(3), p. 236-263.
- Petter, S., W. Delone, and E. R. McLean (2013) "Information Systems Success: The Quest for the Independent Variables," *Journal of Management Information Systems*, vol. 29(4), p. 7-62.
- Pollack-Johnson, B. and M. J. Liberatore (1998) "Project management software usage patterns and suggested research directions for future developments," *Project Management Journal*, vol. 29(2), p. 19-28.
- Project Management Institute (2013), A Guide to the Project Management Body of Knowledge, 5th ed., Newtown Square PA, 2013.
- Raymond, L., and F. Bergeron (2008) "Project management information systems: An empirical study of their impact on project managers and project success," *International Journal of Project Management*, vol. 26(2), p. 213-220.
- Stewart, R. A. (2007) "IT enhanced project information management in construction: Pathways to improved performance and strategic competitiveness," *Automation in Construction*, vol. 16, p. 511-517.

BIOGRAPHY

So-Hyun Park is Adjunct Professor of Management Information System at Konkuk University in Korea. Her research appears in journals such as *Information System Review*, *Journal of the Korea Industrial Information Systems Research*, *Journal of Information Technology and Architecture*, *Entrue Journal of Information Technology*, *Journal of Information Technology Applications and Management*, etc.

Seung-Chul Kim is Professor of Operations & Service Management at Hanyang University in Korea. His research appears in journals such as *Journal of Operations Management*, *International Journal of Production Research*, *Omega*, *Production and Operations Management*, *European Journal of Operational Research*, *International Journal of Production Economics*, *International Journal of Business Excellence*, *International Journal of Productivity and Quality Management*, *Production Planning and Control*, and others.

A CASE STUDY: THE TREATMENT OF LEASES AND THE IMPACT ON FINANCIAL RATIOS UNDER THE PROPOSED NEW US GAAP LEASE REQUIREMENTS PER ASU 842

Peter Harris, New York Institute of Technology
Michael Benjamin, New York Institute of Technology

CASE DESCRIPTION

Lease accounting has arguably been the most controversial issue facing the SEC since its passage in 1973. At the center of the controversy is the treatment of most lease contracts as off Balance Sheet transactions. For over four decades, the controversy has continued to escalate. Finally, in 2016, the FASB overhauled the lease rules by the passage of ASU 842, which effectively treats all long-term non-cancellable leases as balance sheet items. This change will take effect for periods ending after December 15, 2019. The student will take GAAP financial statements under current lease rules and prepare a balance sheet, cash flow statement and income statement based on the new proposed lease rule pronouncements. The student will then analyze the difference and implications in financial reporting by comparing selected financial ratios. It is necessary to understand both; current GAAP as well as proposed GAAP rules regarding leases to adequately address this case study. This case study is suitable for use at both the undergraduate and graduate levels. It may be used in an Intermediate Accounting II, Accounting Theory, as well as an Financial Statement Analysis course. The case can be offered as an individual case study or as a group project.

JEL: M4, M41, M42, M48, M49

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

CASE INFORMATION

ACE Corporation (ACE), a publically traded NASDAQ company (symbol ACE), is a manufacturer of electrical automobiles. It 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 clients are Ford, General Motors and Toyota. ACE 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, 2018 has been prepared using present US GAAP rules. The controller would like to see the effect of the proposed lease rules on the financial statements; you have been assigned this task. In particular, the controller would like to see the impact these differences have on the balance sheet, income statement, cash flow statement and selected financial ratios. The controller is especially concerned that the treatment of leases under the new pronouncements may have a negative effect on their debt covenants. She is worried that the new lease rules may violate those covenants, and that renegotiating the debt covenants will be costly to ACE. Table 1 shows the Balance Sheet of Ace Corporation for the years ended 12/31/18 and 12/31/17 presented under present US GAAP reporting.

able 1: US GAAP Balance Sheet for ACE Corp. At 12/31/2018 And 12/31/17

Ace Corporation Balance Sheet (In 000 Except Par Value) As of December 31, 2018 and 2017			
ASSETS	2018	2017	
Current Assets			
Cash	\$33,000	\$19,000	
Accounts Receivable (net)	25,000	17,000	
Inventory (FIFO)	50,000	21,000	
Total Current Assets	108,000	57,000	
Noncurrent Assets			
Security Available for Sale	\$10,000	0	
Property, Plant and Equipment	100,000	\$136,000	
less Accumulated Depreciation	(30,000)	(28,000)	
	80,000	108,000	
Intangible Assets			
Trademark	5,000	7,000	
Goodwill	7,000	7,000	
Total Noncurrent Assets	12,000	14,000	
Total Assets	\$200,000	\$179,000	
LIABILITIES AND SHAREHOLDERS' EQUITY			
LIABILITIES			
Current liabilities			
Accounts payable	\$18,000	\$17,000	
Accrued interest	2,000	2,000	
Accrued operating expenses	13,000	19,000	
Income taxes payable	7,000	6,000	
Total current liabilities	40,000	44,000	
Noncurrent Liabilities			
Deferred income taxes	\$5,000	\$4,000	
Bonds Payable	45,000	45,000	
Total noncurrent liabilities	50,000	49,000	
Total Liabilities	90,000	93,000	
SHAREHOLDERS' EQUITY			
Common stock (\$1 par)	20,000	18,000	
Additional paid in capital	30,000	17,000	
Retained earnings	60,000	51,000	
Total Shareholders' Equity	110,000	86,000	
Total Liabilities and Shareholders' Equity	\$200,000	\$179,000	

Table 1 shows the Balance Sheet of Ace Corporation for the years ended 12/31/18 and 12/31/17 presented under present US GAAP reporting.

Table 2 presents a statement of income for the year ended 12/31/18 prepared under present US GAAP reporting. Also included is the earnings per share amount which is derived by taking net income and divided by the number of common shares outstanding.

Table 2: ACE Corp. US GAAP Income Statement for the Year Ended December 31, 2018 ACE Corporation

Income Statement (In 000, Except Per Share Data) for the Year Ended December 31, 2018		
Sales		\$270,000
Cost of goods sold		(175,000)
Gross profit		95,000
Selling and administrative expenses	\$ 31,000	
Amortization and depreciation expense	10,000	(41,000)
Income from operations		54,000
Other Income /(Losses)		
Interest expense	(4,000)	(24,000)
Loss on retirement of equipment	(20,000)	30,000
Income before income taxes		
Income tax expense		(9,000)
Net Income		\$21,000
Earnings per share:		\$1.05

Table 2 presents a statement of income for the year ended 12/31/18 prepared under present US GAAP reporting. Also included is the earnings per share amount which is derived by taking net income and divided by the number of common shares outstanding.

Table 3 presents the Statement of Cash Flows for Ace Corp. for the year ended 12/31/18 under present US GAAP. The cash flow presented is the indirect method. Alternatively, the Direct method-not presented here is also the other acceptable cash flow statement under US GAAP. The Direct Method is illustrated in the solution for question 5C where the Direct Method is presented in the solution.

Table 3: ACE Corp. US GAAP Cash Flow Statement for the Year Ended December 31, 2018 ACE Corporation

Cash Flow Statement (In 000) for the Year Ended December 31, 2018		
Cash from Operating Activities		
Net income		\$21,000
Adjustments for noncash items:		
Loss from hurricane	\$20,000	
Depreciation expense	8,000	
Amortization expense	2,000	
Increase in accounts receivable	(8,000)	
Increase in inventory	(29,000)	
Increase in accounts payable	1,000	
Change in accrued operating expenses	(6,000)	
Change in income taxes payable	1,000	
Increase in deferred income taxes	<u>1,000</u>	<u>(10,000)</u>
Net Cash from Operating Activities		11,000
Cash from Investing Activities		
Insurance proceeds	\$10,000	
Purchase securities available for sale	<u>(10,000)</u>	
Net Cash from Investing Activities		-0-
Cash from Financing Activities		
Issue common stock	\$15,000	
Pay dividends	(12,000)	
Net Cash from Financing activities		<u>3,000</u>
Net increase in cash		\$14,000
Cash December 31, 2017		<u>19,000</u>
Cash December 31, 2018		<u>\$33,000</u>
Additional supplemental disclosure:		
Cash paid for income taxes		\$7,000
Cash paid for interest		\$4,000

Table 3 presents the Statement of Cash Flows for Ace Corp. for the year ended 12/31/18 under present US GAAP. The cash flow presented is the indirect method. Alternatively, the Direct method-not presented here is also the other acceptable cash flow statement under US GAAP. The Direct Method is illustrated in the solution for question 5C where the Direct Method is presented in the solution.

Table 3 presents the Statement of Cash Flows for Ace Corp. for the year ended 12/31/18 under present US GAAP. The cash flow presented is the indirect method. Alternatively, the Direct method-not presented here is also the other acceptable cash flow statement under US GAAP. The Direct Method is illustrated in the solution for question 5C where the Direct Method is presented in the solution.

Additional Information

ACE entered into a non-cancelable lease on January 2, 2018 with the following terms: ACE leased specialized machinery manufactured by the lessor, Bell Corp., which enables 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 an annual lease payment of \$10,000. Payment is due on December 31 of each year, with the first payment due on December 31, 2018. At the end of the lease term, ownership reverts to the lessor. There is no option for ACE to buy the equipment. The lessee will pay all executor costs of \$1,500/year which is included in 2018 selling and administration expenses.

The estimated useful life of the lease is 49 months (4 1/12 years.)
The fair market value of the equipment is \$30,000 on January 1, 2018.
The implicit rate of Bell Corp. is 6 percent, and the lessee, ACE, knows this.
ACE's incremental borrowing rate is 7 percent.

On January 1, 2018 AXE signed a 5 year lease with the lessor, PH Corp. for the rental of ACE's major office premises. The lease is noncancelable and the imputed rate is not known to ACE. Lease payments are \$6,000 per year. There are no option provisions relating to the extension of the lease past 5 years. Payments are due at the beginning of each year.

On December 31, 2018, ACE signed a one year cancellable lease with BA Inc. for the rental of equipment for the 2019 calendar year in the amount of \$2,000. This amount will be paid during 2019.

Assume that all lease payments are recorded as Selling and Administrative expenses.

ACE Corporation did not sell any plant assets; however, plant assets with a cost of \$36,000 and accumulated depreciation of \$6,000 were destroyed in a hurricane. Insurance proceeds of \$10,000 were collected by the company.

Two million shares of common stock were issued at the beginning of 2018.

Securities available for sale were purchased on December 31, 2018.

Cash dividends were paid during 2018.

ACE's bonds payable have several covenants that involve net income and cash from operating activities. The controller is especially concerned that the treatment of leases under the new pronouncements does not violate those covenants. She is concerned that renegotiating the debt covenants will be costly to ACE.

QUESTIONS

Differentiate between an operating lease and a capital/ financing lease for financial reporting purposes. 6 points

Under current GAAP-ASU 840, discuss how the lease contract has been treated by ACE? Why?

Under the new proposed US GAAP pronouncements-ASU 842, discuss how the three lease contracts will be treated by ACE? Why?

Describe the different reporting results between current US GAAP and proposed US GAAP and make the necessary adjusting entries to conform the financial statements to the proposed ASU-842 requirements for 2018.

In answering the following parts, keep in mind companies usually prefer to report lower liabilities, higher net income and higher cash from operating activities (although accounting research has identified exceptions to this). 12

Prepare an income statement under ASU 842 for 2018.

Prepare balance sheet under ASU 842 on December 31, 2018.

Prepare a cash flow statement under ASU 842 for 2018.

Compute the following ratios for 2018, under both current lease and proposed lease US GAAP reporting:

Current Ratio

Quick Ratio

Cash Ratio

Times Interest Earned

Debt to Capital Ratio

Debt to Shareholder Equity Ratio

Comment on your findings in 6 above.

INVENTORY COSTING: A COMPREHENSIVE CASE STUDY

Peter Harris, New York Institute of Technology
Umapathy Ananthanarayanan, Peter Harris, New York Institute of Technology

ABSTRACT

Under ASU 330, Inventory requires an entity to measure inventory at lower of cost or market. Market could be any one of three outcomes: replacement cost, net realizable value or net realizable value less profit margin. The FASB received comments from users that the current guidance on the measurement of inventory is unnecessarily complex because there are three potential outcomes to determine market. In response to these concerns, FASB issued ASU 2015-11 to simplify the measurement of inventory as part of the FASB's Simplification initiative. In this paper, we outline the new mechanism proposed by FASB for measuring inventory and how it would impact entity's financial statements. We provide a series of comprehensive questions relating to Lower of Cost and Net Realizable Value, and Lower of Cost or Market at the end of the paper. This case study is best suited for the Intermediate Accounting 1 course.

JEL: M48, M49

KEYWORDS: ASU 2015-11, ASC 330, Lower of Cost or Market, Lower of Cost or Net Realizable Value, Net Realizable Value, FIFO, LIFO, Replacement Cost, Inventory Floor.

INTRODUCTION

The FASB issued final guidance that simplifies the subsequent measurement of inventory requiring inventory to be measured at the lower of cost or net realizable value. Entities will continue to apply existing impairment models to inventories that are using Last In First Out (LIFO) and Retail Inventory Method (RIM). Currently GAAP rules require reporting organizations to measure inventory at the lower of cost or market. Market is generally the replacement or reproduction cost of the inventory; however, market cannot exceed net realizable value, which is the selling price less the cost to complete, dispose, and transport the inventory item (known as the “ceiling”) and cannot be lower than the net realizable value less a normal profit margin (known as the “floor”). The proposed guidance would require inventory to be measured at the lower of cost and net realizable value. Thus, under the proposed ASU “market” would be replaced with “net realizable value”. GAAP defines this concept as the “estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation.” Once implemented, with the exception of LIFO and retail Inventory methods, one will no longer have to consider replacement cost or net realizable value less a normal profit margin when measuring inventory.

Key Considerations

For inventory covered within the guidance of ASU 2015-11, organizations would be required to compare the cost of ending inventory with only one measure (i.e. the net realizable value), and not the three measures required by today's guidance. When evidence exists that the net realizable value of inventory is less than the cost due to damage, deterioration, changes in price, obsolescence, etc., entities will recognize the difference as a loss in earnings in the period in which it occurs. For raw materials and work in progress, companies will still need to perform an extra step as they do today. Manufacturer's using FIFO or Average cost method to value their inventory will face challenges while applying the ASU because the computation is based on the lower of cost and net realizable value. The only way to perform the test is to do so in total

for the entire inventory, either by segment or in total. Performing a lower of costs and net realizable value on an individual item basis is not possible if there are raw materials. The prime reason is because replacement cost is no longer used in computation. Thus, an entity must compute net realizable value. To determine the net realizable value for these inventories, entities will need to consider the costs to complete and sell finished goods, including direct selling costs such as transportation costs and sales commissions. Given the operational difficulty in measuring the net realizable value for raw materials, the larger question is whether a manufacturer can ignore the test of lower of cost or net realizable value on raw materials if those materials are immaterial? At the outset, it is essential to understand that test of raw materials of cost or net realizable value may not be required when those materials will be ultimately part of finished goods inventory. Going further, there are two possible scenarios which could be envisaged here:

*Materials cost is not significant in comparison to the total inventory as a whole; or
Materials cost is significant in comparison to the total inventory as a whole.*

In scenario (a) above, a company should be able to test lower of cost of net realizable value for finished goods and work in process inventory only, and exclude any raw material inventory in that test. The assumption here is that if raw materials are not significant, any possible write down would not be significant. In scenario (b) above, wherein the value of raw material is significant - a company would need to apply the test to raw materials of cost or net realizable value except an evidence exists that the finished goods and work-in-process inventory has no write-down when tested. The reason here is that if an entity first tests work in process and finished goods inventory for lower of cost or net realizable value and there is no write-down that would suggest that a component of that inventory (raw materials) should have no impairment as well. FASB has excluded inventories accounted for using LIFO and RIM from the scope of this guidance because it could result in significant transition costs, produce outcomes that are not intended, would not increase comparability improvements, and provide limited benefits due to the complexity inherent in these methods. Interestingly, the guidance does not amend the measurement of cost of inventory and hence, the companies may continue to apply LIFO, FIFO or average cost to determine the cost of inventory. From a tax perspective, there are specific requirements with respect to the valuation of inventory. Generally, normal goods may be value at lower of cost or market, with market determined based on reproduction or replacement cost or actual offering price in some cases. Subnormal goods are measured at genuine selling prices less cost of disposition (similar to the GAAP net realizable value concept). Despite the similarity of the tax rules, for normal goods with the current GAAP rule and the tax rules for subnormal goods to the proposed GAAP rule, there are further qualifications within the GAAP and tax rules that generally prevent a tax payer from following the GAAP market valuation for those goods for tax purposes. As such, any change in inventory valuation for GAAP purposes will likely impact only the determination of book tax differences and deferred taxes.

Application of Lower of Cost and Net Realizable Value

Under the new US GAAP rules, the lower of cost and net realizable value can be calculated, and presented by three various valuation calculations:

By the lower of cost and net realizable value on a Total Inventory basis,
Directly to each individual inventory unit , and,

To the total of the components of each major inventory category; i.e. groupings of inventory by homogeneous factors.

Of the three approaches, the total inventory lower of cost and net realizable value method will present the highest inventory amount, while the unit per unit approach will present the lowest inventory amount. Under US GAAP, when a loss / write-down occurs due to a lower inventory net realizable value, this new value

becomes the new cost of the inventory purposes. Further, under SAB 5.BB-Inventory Valuation Allowance (ASC 330.10-S99-2), specifically states that there cannot be a reversal of this loss, regardless as to whether the net realizable value increases in a subsequent period. IFRS however, allows for a reversal of such losses; up to the amount of the inventory's original cost.

The journal entry to record the Lower of Cost and Net Realizable Value Loss will be:

Dr. Cost of Goods Sold-inventory-write0down

Cr. Allowance for inventory write-down

If reversed, under IFRS only, the journal entry is:

Dr. Allowance for inventory write-down – (limited to the amount of the original cost)

Cr. Cost of Goods Sold-inventory write-down

Tax Treatment of Lower of Cost or Market

IRC Regulation 1.471-4 permits, but does not require an entity to use the lower of cost or market to value its inventory. Lower of cost or market however is not allowed for the LIFO inventory method. Further, if an entity chooses to use the Lower of Cost or Market (LCM) for tax purposes, the IRC requires that a unit per unit inventory application of LCM be applied. The IRC defines market differently than US GAAP and IFRS. Under the IRC 471.4, market is defined as the aggregate of the current bid prices prevailing at the date of the inventory valuation. US GAAP and IFRS use the Lower of Cost and Net Realizable Value in its reporting basis. Net realizable Value defines as the sales price of the inventory item less the cost of completion, disposal, and transportation. Thus, the difference in the lower of cost vs. a market based matrix differs between the tax code and accounting regimes, which may result in a tax timing difference on the balance sheet. Finally, if a company uses LIFO for tax purposes, under the mandatory tax compliance rule, it is also required to use LIFO for financial reporting purposes.

Effective Date, Transition and Disclosure

The guidance is effective for public business entities for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. For all other entities, it is effective for fiscal years beginning after December 15, 2016, and interim periods within fiscal years beginning after December 15, 2017. Early adoption is permitted. The new guidance must be applied prospectively after the date of adoption. An entity that has recorded a lower of cost or market adjustment in a previous period will use the adjusted amount as the new cost basis of that inventory when it adopts the new guidance. An entity that adopts the new guidance in an interim period will not be able to reverse interim adjustments during the same fiscal year as otherwise allowed under ASC 270-10-45-6.5 Therefore, any net realizable value test applied in subsequent periods would compare the lower of cost or market adjusted amount to net realizable value. The only new disclosures required at transition are the nature of and reason for the change in accounting principle.

What Next?

While doubts still exist as to whether the ASU actually simplifies the measurement of inventory, there are a few inherent positives such as elimination of the three outcome approach, avoiding the determination of floor based on a normal profit margin and the new model simplifies the test for the non-manufacturers who now can easily compute net realizable value instead of replacement cost and normal profit. On the other hand, the ASU results in creation of two different approaches for measuring inventory (one for LIFO and RIM), while another one for FIFO and average cost. The split approach also is inconsistent with the international standards which apply the net realizable value approach to all inventories. The FASB defends this two tier approach on the basis that application of the Lower of Cost and Net realizable Value Method for companies utilizing LIFO and the Retail Inventory Methods would be too costly to conform, as well as the

overwhelming complexities involved in estimating the write-downs. Additionally, the FASB has stated that such a move would not help comparability in any meaningful way. As a practical matter, except in very few rare cases, one would expect that the Net Realizable Value will exceed the LIFO inventory costing methods, making the application of the Lower of Cost and Net Realizable method impractical for LIFO. Further, as previously discussed, LIFO is not an allowable method under IFRS. The new model also places great reliance on selling price which is subject to internal manipulation and subjectivity, particularly if an item is sold within an inactive market. This can be the focus of a recommended future paper concerning the Lower of Cost and Net Realizable value rule. Presented below are 3 comprehensive questions which are recommended for class use. The solutions presented are recommended, and there may be other, acceptable solutions to the questions.

Comprehensive Questions

Comprehensive Question 1:

Corp. X started selling widgets (one product only) on January 1, 2017. They are unsure which inventory method it will choose to report their financial reporting; however, they will use the periodic method to account for its inventory. During 2017 it made purchases of inventory as follows:

January 2, 2017	1000 units at \$5 per unit
June 19, 2017	2,000 units at \$5.05 per unit
December 1,	500 units at \$5.10 per units

At year end, an inventory count reveals that there are 800 units of inventory left. Additionally, the replacement cost of inventory is \$4.95 per unit. The company can sell the units at \$6.00 per unit and expects a 5 percent cost of selling/disposing each item. The normal gross profit margin on each unit sold is 10 percent.

Required

Calculate the following –per inventory unit: A) Net Realizable Value, B) Replacement Cost, C) Floor Value=NRV Less normal profit margin.

Assume that Corp. X adopts the Lower of FIFO and Net Realizable value method to account for its inventory costing, what is the December 31, 2017 inventory value for financial reporting purposes?

Prepare the journal entry to record the loss-if any.

Assume that Corp. X adopts the Lower of LIFO or Market Value to account for its inventory costing, what is the December 31, 2017 inventory value for financial reporting purposes?

Prepare the journal entry to record the loss-if any.

Which method would you recommend Corp to choose? What factors should be taken into account?

Assume that in year 2, the inventory value increases above its original cost. What is the IFRS versus US GAAP position treating this reversal? Prepare journal entries, if required.

Recommended Answers-Comprehensive Question 1

A) Net realizable value=Selling price less costs to sell/dispose=\$6-5 percent cost to sell/dispose= 6-.30=\$5.70

B) Replacement cost =given at \$4.95

Floor=NRV-normal profit margin=5.70 less 10 percent of sales price=5.7-.60=\$5.10. Lower of cost and net realizable value under FIFO;

FIFO cost= 800 units; comprised of 500 units at5.10 plus 300 units at 5.05 (per unit). This will equal 500 times 5.1 plus 300 times 5.05=\$4065.

NRV=800 times \$5.70 per unit-per 1A above=\$4560.

Thus, Lower of cost and net realizable value=\$4065==cost. No inventory loss/write-down.

No entry as there is no loss

LCM for LIFO=market value will equal the floor value of \$5.10 per unit. Cost under LIFO will be 800 units at \$5 per unit. Thus, cost under LIFO is \$4,000 and market value is 5.10 times 800=-4080. LCM thus equals cost of \$4,000. Thus, no loss.

No entry as there is no loss/write-down

In this case LIFO is preferable as the ending inventory is lower resulting in a lower taxable income amount; thus saving Corp. X income tax payments. The difference in income before tax will be FIFO vs. LIFO ending inventory=4065-4000=65.This lower income will have to also be reflected in the financial statements of Corp. X by virtue of the LIFO tax compliance rule.

If the tax rate is low, or the company will generate a Net Operating Loss, the tax savings may be immaterial; thereby reducing any advantage of LIFO use.

Since there is no write-down/loss in year 1, the fact that inventory value increase in year 2 will have no effect on financial reporting in year 2. In year 2, Cop X has to still utilize a lower of cost or market/NRV value. Given the facts, in year 2 , coat will continue to be the presented inventory value.

Comprehensive Question 2

Corp. X started selling widgets (one product only) on January 1, 2017. They are unsure which inventory method it will choose to report their financial reporting; however, they will use the periodic method to account for its inventory. During 2017 it made purchases of inventory as follows:

January 2, 2017	1000 units at \$5 per unit
June 19, 2017	2,000 units at \$5.05 per unit
December 1,	500 units at \$5.10 per units

At year end, an inventory count reveals that there are 800 units of inventory left.

Additionally, the replacement cost of inventory is \$4.95 per unit. The company can sell the units at \$6.00 per unit and expects a 5 percent cost of selling/disposing each item. The normal gross profit margin on each unit sold is 15 percent.

Required

Calculate the following –per inventory unit: A) Net Realizable Value, B) Replacement Cost, C) Floor Value=NRV Less normal profit margin.

Assume that Corp. X adopts the Lower of FIFO and Net Realizable Value method to account for its inventory costing, what is the December 31, 2017 inventory value for financial reporting purposes?

Prepare the journal entry to record the loss-if any.

Assume that Corp. X adopts the Lower of LIFO or Market Method to account for its inventory costing, what is the December 31, 2017 inventory value for financial reporting purposes?

Prepare the journal entry to record the loss-if any.

Which method would you recommend Corp to choose? What factors should be taken into account?

Assume that in year 2, the inventory value increases above its original cost. What is the IFRS versus US GAAP position treating this reversal? Prepare journal entries, if required.

Recommended Answers-Comprehensive Question 2

A) Net realizable value=Selling price less costs to sell/dispose=\$6-5 percent cost to sell/dispose= 6-.30=\$5.70

B) Replacement cost =given at \$4.95

C) Floor=NRV-normal profit margin=5.70 less 15 percent of sales price=5.7-.60=\$4.80.

Lower of cost and net realizable value under FIFO;

FIFO cost= 800 units; comprised of 500 units at 5.10 plus 300 units at 5.05 (per unit). This will equal 500 times 5.1 plus 300 times 5.05=\$4065.

NRV=800 times \$5.70 per unit-per 1A above=\$4560.

THUS Lower of cost and net realizable value=\$4065==cost. No inventory loss/write-down.

No entry as there is no loss

LCM for LIFO=market value will equal the replacement value of \$4.95 per unit. Cost under LIFO will be 800 units at \$5 per unit. Thus cost under LIFO is \$4,000 and market value is 4.95 times 800=\$3960. LCM thus equals market value of \$3,960. Thus, there is a loss of \$40, resulting in the following journal entry:

Dr. Cost of Goods Sold 40

Cr. Inventory 40

In this case LIFO is preferable as the ending inventory is lower resulting in a lower taxable income amount; thus saving Corp. X income tax payments. The difference in income before tax will be FIFO vs. LIFO ending inventory=\$4065-\$3960=\$105. This lower income will have to also be reflected in the financial statements of Corp. X by virtue of the LIFO tax compliance rule. If the tax rate is low, or the company will generate a Net Operating Loss, the tax savings may be immaterial; thereby reducing any advantage of LIFO use.

Since there is no write-down/loss in year 1, under FIFO use, the fact that inventory value increase in year will have no effect on financial reporting in year 2.

However, this will affect LIFO use as LIFO has presented its inventory valuation under the LCM rule. Under US GAAP, such losses are never reversed; as such this increase in market value will not affect inventory reporting in year 2 under US GAAP. Under IFRS, this loss of \$105 can be reversed (up to the amount of the write-down) in a subsequent period. As such, in year 2 under IFRS Corp. X can reverse this loss in by the following journal entry:

Dr. Inventory	105	
Cr. Cost of Goods Sold		105

Note that Inventory under IFRS (with few industry exceptions) can never be recorded above cost.

Comprehensive Question 3

Corp. X started selling widgets and electric outlets (two different products on January 1, 2017; thus, two major inventory categories). They are unsure which inventory method it will choose to report their financial reporting; however, they will use the periodic method to account for its inventory.

During 2017 it made purchases of inventory as follows:

Product number 1-Widgets;

January 2, 2017	1000 units at \$5 per unit
June 19, 2017	2,000 units at \$5.05 per unit
December 1,	500 units at \$5.10 per units

Product Number 2-electric outlets:

January 2, 2017	1000 units at \$10 per unit
June 19, 2017	2,000 units at \$10.05 per unit
December 1,	500 units at \$10.10 per units

At year end, a periodic inventory count reveals that there are 600 units of widgets, and 800 units of electric outlets. Additionally, the replacement cost of inventory component number 1-widgets is \$4.95 per unit. The company can sell these units at \$6.00 per unit and expects a 5 percent cost of selling/disposing each item. The normal gross profit margin on each unit sold is 15 percent. The replacement cost of inventory component number 2-electric outlets is \$9 per unit. The company can sell each electric outlet unit for \$11, before incurring a 5 percent selling/disposal cost. The normal gross margin on each unit sold is 10 percent.

Required

Calculate the following –per inventory component number 1- widgets and number 2-electrical outlets: A) Net Realizable Value, B) Replacement Cost, C) Floor Value=NRV Less normal profit margin.

Assume that Corp. X adopts the Lower of FIFO and Net Realizable value method to account for its inventory costing. What is the December 31, 2017 inventory value for financial reporting purposes? Assume that this is applied on: A) To the total inventory approach, and B) to the total of the components of each major category approach (i.e. two major -1-widgets , and 2-electrical outlets).

Prepare the journal entry to record the loss-if any under case A, and under case B above.

Assume that Corp. X adopts the Lower of LIFO or Market Value to account for its inventory costing. What is the December 31, 2017 inventory value for financial reporting purposes? Assume that this is applied on: A) To the total inventory approach, and B) to the total of the components of each major category approach (i.e. two major -1-widgets, and 2-electrical outlets).

Prepare the journal entry to record the loss-if any, under case A, and under case B above.

Which inventory accounting method would you recommend Corp to choose? What factors should be taken into account?

Assume that in year 2, the inventory value increases above its original cost. What is the IFRS versus US GAAP position treating this reversal? Prepare journal entries, if required.

Recommended Answers-Comprehensive Question 3

Unit 1-Widgets

A) Net realizable value=Selling price less costs to sell/dispose
 $=\$6-5 \text{ percent cost to sell/dispose} = 6-.30=\5.70

B) Replacement cost =given at \$4.95

C) Floor=NRV-normal profit margin= $5.70 \text{ less } 10 \text{ percent of sales price} = 5.7-.60=\5.10 .

Unit 2: Electrical outlets

A) Net realizable value=Selling price less costs to sell/dispose
 $=\$11-5 \text{ percent cost to sell/dispose} = 11-.55=\10.45

B) Replacement cost =given at \$9.00

C) Floor=NRV-normal profit margin= $10.45 \text{ less } 10 \text{ percent of sales price} = 10.45-1.1=\9.35 .

Lower of cost and net realizable value under FIFO;

To the total Inventory approach:

FIFO Ending Inventory Cost for Inventory 1-widgets plus Inventory 2-electrical outlets =

FIFO cost inventory 1-widgets = 600 units; comprised of 500 units at \$5.10 plus 100 units at \$5.05 (per unit).
 $=500 @\$5.10 \text{ plus } 100 @\$5.05=\$3,055$.

FIFO Ending inventory cost For Inventory 2-electrical outlets =800 units; comprised of 500 units at \$10.10 plus 300 units at \$10.05 , which equals 8065.

As such, FIFO ending inventory-cost is $3050 \text{ plus } 8065 = \$11,115$. NRV=800 ending inventory of widgets times \$5.70 (NRV per widget unit) $=\$4,560 \text{ plus } 800 \text{ units of ending inventory of electrical outlets times } 10.45 \text{ (NRV per electrical outlet unit)} =8,360$. The total net realizable value of the total inventory is \$12,920 ($4560+8360$). LCM total inventory is cost of 11,115 vs market value of 12,920=Cost of 11,115. Thus-No loss. LCM per the total of the components of each major category is $3050=\text{cost of widgets plus } 8065-\text{cost of electrical outlets}=\$11,115=\text{Cost}$. Thus-No Loss. No entry as there is no loss

LCM for LIFO=market value. This will equal the floor value of \$5.10 per unit-for inventory group 1-widgets. For Inventory group 2-electrical outlets, the market value is the floor value of 9.35. Cost under LIFO will be 600 units at \$5 per unit for inventory 1-widgets , and 800 units at \$8 per unit for inventory 2-electrical outlets .Thus we have the following:

A) LCM Total Inventory

Cost	Market
------	--------

1-widgets	600 times \$5 per unit	=	\$3,000	3,060	=	600 times \$5.15 per unit
2-outlets	800 times 10 per unit	=	8,000	7,480	=	800 times \$9.3 per unit
Totals			\$11,000	\$10,540		

The Write -Down is as Follows:

Inventory at cost	\$11,000
Inventory at Market –Total Inventory Basis	10,540
Write-down	460
LCM= \$10,540; resulting in a Loss of \$460	

B) LCM per the total of the components in each major inventory category:

Inventory Major Category number 1-widgets	=	\$3000	(cost)
Inventory Major category number 2	=	7480	(market)
Total LCM-Components of each Major Inventory		\$10,480	
Category Classification			

The write down is as follows:

Inventory at cost	\$11,000
Inventory at Market-total of the components of each major category	10,480
Write-down	520

LCM= \$10,480; resulting in a loss of \$520

Journal Entry:

A) Total Inventory Method -LCM

Dr. Cost of goods sold -inventory write-down	460	
Cr. Allowance for inventory mark-down		460

B) Components of Major Category Method-LCM

Dr. Cost of goods sold-inventory mark-down	520	
Cr. Allowance for inventory mark-down		520

In this case, LIFO, is preferable, when compared to FIFO, as the ending inventory is lower resulting in a lower taxable income amount; thus saving Corp. X income tax payments. For tax purposes, LCM cannot be adopted if LIFO is the chosen inventory method under IRC 471. As such, inventory will have to be valued under LIFO cost. Other inventory methods such as FIFO may utilize the lower of cost or market method for tax purposes; in which case the LCM has to be applied on an inventory unit by inventory unit basis. utilize the lower of cost or market method, for tax purposes.

In this situation, LIFO cost is \$11,000. The difference in income before tax will equal the FIFO vs. LIFO ending inventory amounts:=\$11,115 -11,000= \$115 On the Income Statement, the Lower of Cost or Market will need to be utilized. This will reflect a LIFO LCM inventory valuation of \$10,540 (Part A) or \$10,480(Part B); creating an income before income tax loss when compared to FIFO by \$575, and \$635

respectively. The difference in taxable income and accounting income under LIFO use in the amounts of \$460 (part A), and \$520 (part B) will create a timing tax difference in the balance sheet. This will result in a Deferred Tax Asset-Current Balance Sheet Account. The question remains whether LIFO should be adopted? Generally, if the LIFO would be chosen if we expect an inflationary pattern of inventory pricing-i.e. commodities; and non LIFO methods (in order to obtain the LCM tax benefit) for deteriorating in value and use inventory items, i.e. food, flowers. Since there is no write-down/loss in year 1 under FIFO, the fact that inventory value increases in year 2 will have no effect on financial reporting in year 2. In year 2, Corp X has to still utilize a lower of cost or market/NRV value. Given this fact, cost will continue to be the presented inventory value in year 2. Regardless of whether there is a loss/write-down of inventory value below cost, US GAAP does not allow for a reversal of such write-downs in subsequent periods. However, IFRS does allow for a reversal up to the amount of the original inventory cost. In no case (absent some specific industry cases) may inventory be reflected above cost. Finally, in this case, IFRS reversals for LIFO inventory amounts do not apply as IFRS prohibits the use of LIFO. For information purposes, the journal entry to reflect a reversal of an inventory loss/ write-down under IFRS, in a subsequent period will be:

Dr. Allowance for inventory write-down
Cr. Cost of goods sold-inventory write-down.

This aspect of IFRS can lead to income management and potentially manipulate the timing of income (losses). US GAAP prohibits any reversal of inventory write-downs.

REFERENCES

<http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176156316498> 2.

<http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1218220137102>

<https://www.pwc.com/us/en/tax-accounting-services/newsletters/accounting-methods/assets/pwc-fasb-guidance-irs-court-rulings-address-tax-accounting-methods.pdf>

IRC 471

ASU 2015-11

BIOGRAPHY

Peter Harris is a professor at New York Institute of Technology. He serves on the editorial board of several refereed journal where he is also an ad hoc reviewer. Prior to teaching, he worked at Ernst and Young, LLP. He has published in a variety of research journals and makes presentations at international, national and regional conferences. His research interests include; LIFO Inventory, IFRS coverage, corporate malfeasance and fair value accounting.

Dr. Umapathy Ananthanarayanan is an assistant professor at the New York Institute of Technology, New York. He teaches managerial accounting, financial accounting, auditing and advanced topics in financial accounting. His primary research areas include auditing, corporate governance, and earnings management and he has published in *Auditing: A Journal of Practice & Theory*.

CHIAPANECA HANDICRAFT AS A DRIVER OF SUSTAINABLE LOCAL DEVELOPMENT

Karla Liliana Haro-Zea, Benemérita Universidad Autónoma de Puebla
Yadira Rosbinelly Haro-Zea, Benemérita Universidad Autónoma de Puebla
Gudiel Roblero-Mazariegos, Universidad Linda Vista
Samanta Sánchez Sánchez, Benemérita Universidad Autónoma de Puebla

ABSTRACT

This research aims to study the perception of Chiapaneca handicraft as a driver of sustainable local development by artisans; since the activity that most contributes to the Gross Domestic Product of Chiapas is commerce, and within is the sale of handicrafts. The Chiapaneca handicraft has a wide variety of products, styles, and designs which represent the art and culture of Chiapas, hence the importance of carrying out this research. In this research we study the perception of artisans regarding the contribution to sustainable local development that their products have and the difference with respect to gender and age. This is a quantitative, descriptive, and cross-sectional research. Selection of the sample was done for convenience to meet certain criteria. 40 artisans were surveyed within their work area, 20 are located in Chiapa de Corzo and 20 are located in San Cristobal de las Casas, both municipalities are in the State of Chiapas, Mexico. For data collection, an instrument based on the ESTEMPLE model was used. The instrument consisted of 11 items and 9 constructs. The study showed that the artisans consider technology not to be useful in their craft work and they determine the cost price to establish the price of their products.

JEL: M21, O180, R11

KEYWORDS: Sustainable Development, Handicraft, Strategy

INTRODUCTION

In Mexico, artisanal activity important, according to the National Survey of Cultural Consumption in Mexico (Instituto Nacional de Estadística, Geografía e Informática y Consejo Nacional para la Cultura y las artes, 2012), the number of people aged 12 and over, who responded that they had made a craft was 11,791,856. Traditional craftsmanship means the creation of unique pieces, based on traditional knowledge and technologies, using hand tools and natural products (Lukić et al., 2015). Worldwide Mexico, is the third most important country as far as artisan activity, because of its quality, its variety, and its beauty (Romero Medina, 2017). Handicrafts improve the economy of the country in general. The Satellite Account of the Culture of Mexico (CSCM) state that handicrafts generate 20.3% of the Gross Domestic Product of the culture sector. Also handicrafts and traditional toys are the largest productive activity in the cultural sector. In 2012, they generated 339,349 jobs (Instituto Nacional de Estadística, Geografía e Informática y Consejo Nacional para la Cultura y las artes, 2012). As stated before, this research study aims to know the Chiapanecan artisan's perception towards their products, as far as being a driver of sustainable local development. This research is organized as follows: in the first section, a literature review is carried out that has allowed us to contextualize the richness of Chiapas, emphasizing craftsmanship and its role in the local development. Later the methodology is revealed and the results and conclusions are presented.

Theoretical FrameworkHandicraft Paper in Chiapas

Chiapas is among the top states which produce a variety of handicrafts in Mexico, for plethora reasons. The first and most important reason is its great cultural diversity which is reflected in the towns proud of their origins, their aesthetic sense and, an identity that is reaffirmed in handmade products which are known worldwide. As a fundamental part of the intangible heritage of Chiapas, Mexico and the world, you can find knowledge, techniques, and life experiences of the artisans of Chiapas. The Master Artisans have contributed to the enrichment and development of people, and they are a role model for the next generation. For centuries, the people of Chiapas have developed a great ability to create products that they use in their daily lives (Instituto Casa de las Artesanías de Chiapas, 2017). Therefore, this activity for artisans, handicraft merchants, and Chiapanecans in general, does not only help economic activity, which generates direct and indirect jobs, but represents the culture and pride of being from Chiapas.

Additionally, the artisanal activity in Chiapas is one of the most diverse, rich in colors, textures, designs, styles, and materials. The Instituto Casa de las Artesanías de Chiapas (2017) classifies this activity into two groups: 1) artisan branches and 2) handicraft products. Within the handicraft branches we can find: pottery, basket weaving, weaving, toy making, chisseling, Mexican lacquerware, wood instrument making, maskmaking, metalworking, saddlery, wood and textile carving; In the artisanal products can be: jewelry and amber, and edible products. Therefore this is where we see that artisanal activity in the State of Chiapas is an invaluable treasure, as well as being a fundamental element in enhancing tourism. That is to say, it is an activity that generates direct and indirect jobs, mainly in tourist areas. Highlights the indicator of receptive tourism consumption in the first quarter of 2017 in Mexico was 16.2 (Instituto Nacional de Estadística, Geografía e Informática, 2017); and Chiapas in 2015 had 620,214 visitors (DATATUR, 2017). Therefore, the Instituto Casa de las Artesanías de Chiapas affirms that this entity is one of the largest varieties of handicrafts in Mexico, and said variety is influenced by the diverse culture (Instituto de las Artesanías, 2007-2012). The handicrafts created in this entity give life to the daily chore, the heritage of the original cultures and religious symbolism, which translates into true works of art.

Chiapaneca Handicraft as a Driver of Sustainable Local Development

As is already known, the craftsmanship is an intangible heritage of the State of Chiapas because of its colors, texture, variety of textiles, designs, embroidery styles, which represent the traditions and customs of Chiapas. Therefore, craftsmanship can be considered an art from the perspective of Tartarkiewicz (1987), who affirms that art, like human creation, can be an artistic creation, and therefore, all art will be considered an artistic creation that provokes delight, emotion or shock. The craft tradition is an expressive representation of regional creativity. Its richness and singularity is expressed through the different techniques, materials, and formal systems used. It is an exponent of the region's history and culture, revealing its positive features. In this process between the local and the global, previously unimaginable connections and possibilities emerge. The term "glocal" is applied to a perspective which extolls the capacity of the "local/traditional" to compete at a global level. This affirmation exposes a vast range of opportunities for traditional craft production (Giulio, 2008). Ahamad and Yasmin (2012) support the idea that the handicraft sector has an enormous potential to generate profitable employment opportunities to the unemployed, and has an unlimited potential for economic development of a country/region.

Kappus (2012) contributes to the debate on the poverty-reducing potential, by identifying that, through handicraft cooperative membership, crafters are able to access livelihood assets, mostly the economic, social and human capital. The relevance of artisanal activity in Chiapas is justified because currently there is a greater awareness of the use of traditional textiles, more spaces for marketing, an increase of educational

programs related to textile production and more development alternatives for producers (Martinez Miranda 2017, cited by Amanoarte, 2017), in addition artisan groups (mainly women) have risen, because the government has promoted the creation of organizations for the granting of financial resources (Pérez Mérimo, 2017, cited by Amanoarte, 2017). It has been documented that craftsmanship is transcendent for many families of artisans, Ramos Muñoz, Pablos Tuñon and Calderon Cisneros, (2000) found that this allows the existence of the peasant economy and the payment of agricultural inputs; it is also essential for the organization of family work (Ramos Maza, 2004).

Artisanal production in Chiapas has a high participation of women; a study carried out in the highlands of Chiapas, found that there was a traditional feminine production (Ramos Muñoz, Pablos Tuñon and Calderon Cisneros 2000). The foregoing is consistent with that reported by Bartra (1998) who affirms that women often dedicate themselves to art while men work in the field, trading or as employees. In the same sense, embroidery, weaving on the backstrap loom has been an activity that defines the role in the history of Mayan culture (Gil Corredor, 2016). In this regard Campillo (1994) states that women possess traditional knowledge that empowers them to propose environmental solutions, and yet are excluded in making decisions about the environment (cited by Martinez Corona, 2003). Female participation has several advantages for woman, such as the perception and recognition of the development of individual abilities, trust, and appreciation as a person. With this idea the empowerment transcends the domestic group into the community (Martinez Corona, 2016).

It is important to point out that Chiapas handicrafts are the product of sensitivity, dedication, and the talent of women and men who, within the cultural plurality, reflect their emotion before life and the search for beauty. There are emblematic handicrafts such as lacquer, which for Chiapas possess the strength of an integrating symbol beyond the local sphere from which it comes or of textiles whose symbolism goes beyond the need for attire (Instituto Casa de las Artesanías de Chiapas, 2017). Then starting from the benefits of the artisanal sector, it is possible to point out that the activity itself and the materials they use to produce the products are sustainable. From this point of view, sustainability is defined as a permanent process towards higher stages of human development (Serrano-Barquín, Serrano-Barquin and Osorio-Garcia, 2011, cited by Korstanje, 2013) involves sustainable tourism; and it must be able to sustain local economies, without harming the environment on which they depend, and give the people economic opportunities, without negatively affecting the structure of economic activity and must not interfere with existing forms of social organization (Payne, 1993, cited by Arroyo 2012).

Despite the importance of handicrafts, they are still poorly valued and sold at a very low price, in this regards, Bartra (1998) reports that the economy of the popular artists of Mexico is so precarious and their products are sold inexpensively. There is no doubt that Chiapas handicraft has the potential to become an engine of sustainable local development in Chiapas. Within the framework of the objectives of sustainable development, in its objective 12, notes that sustainable consumption and production modalities must be guaranteed, understanding that consumption and sustainable production consist of promoting the efficient use of resources and energy, the construction of infrastructures that do not harm the environment, the improvement of access to basic services, and the creation of environmentally friendly jobs, fair wages and good labor conditions. All this translates into a better quality of life for all and also this helps to achieve general development plans with reduce economic, environmental, and social costs, increase competitiveness, and reduce poverty (United Nations, 2017).

METHODOLOGICAL ASPECTS

Sample

This research is quantitative, descriptive, and transversal. For this research a convenient sample was selected to meet certain criteria. For data collection, an instrument based on the ESTEMPLE (Economic,

Social, Technological, Environmental, Media, Political, Legal, Ethical) model was used. The target group for the current study consisted of 40 artisans and they were surveyed in their work areas, in which 20 were located in Chiapa de Corzo, and 20 were located in San Cristobal de las Casas, both municipalities are in the State of Chiapas, Mexico.

Table 1: Operational Definition of Research Variables

Variables	Definition	Item	Unit of Measurement
Dependent	Sustainable local development	1). Economic 2). Social 3). Technological 4). Ecological 5). Media 6). Political 7). Legal 8). Ethical 9). Cultural	Instrument designed on the basis of 11 items
Independent	Chiapaneca handicraft as a driver of sustainable local development	Analysis of the sustainability of handicrafts from the perspective of artisans	

For the data collection an instrument consisting of 11 items and 9 constructs was used.

RESULTS

General Data

Table 2: Gender

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Female	32	80.0	80.0	80.0
	Male	8	20.0	20.0	100.0
	Total	40	100.0	100.0	

80% are women and 20% are men. The average age of the artisans is 32 years.

Economic

Table 3: Economic Indicators - Product Price

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Rarely	1	2.5	2.5	2.5
	Occasionally	15	37.5	37.5	40.0
	Often	10	25.0	25.0	65.0
	Always	14	35.0	35.0	100.0
	Total	40	100.0	100.0	

When evaluating whether artisans take into account economic indicators and calculate the cost price of their product to determine the final price, 2.5% responded rarely, 37.5% occasionally, 25% sometimes and 35% as always.

Social

Table 4: Product Segmentation

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Never	40	100.0	100.0	100.0

100% of artisans say that the segment to which their products are directed is not defined, they say that most people who visit Chiapa de Corzo and San Cristóbal de las Casas, in Chiapas, buy at least one product.

Table 5: Potential Buyers

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Occasionally	3	7.5	7.5	7.5
	Often	1	2.5	2.5	10.0
	Always	36	90.0	90.0	100.0
	Total	40	100.0	100.0	

100% of the artisans affirm that their potential buyers are domestic tourist; this explains the Mexican custom of always taking a souvenir from the place to family, friends and coworkers.

Table 6: Product Differentiation

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Occasionally	2	5.0	5.0	5.0
	Often	9	22.5	22.5	27.5
	Always	29	72.5	72.5	100.0
	Total	40	100.0	100.0	

95% of artisans are convinced that the craftsmanship of the municipalities in Chiapas is clearly differentiated by their type of embroidery, colors, designs, materials, shapes and styles.

Technological

Table 7: Utility of Technology

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Never	10	25.0	25.0	25.0
	Rarely	6	15.0	15.0	40.0
	Occasionally	17	42.5	42.5	82.5
	Often	3	7.5	7.5	90.0
	Always	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

There isn't consensus among craftsmen about the usefulness of technology in the artisanal market, 25% say they never use and 15% express that it is rarely used, but on the contrary other people earn more money selling the products that they produce. The majority who represents 42.5% indicates that occasionally it has used it. Only 17.5% say frequently and always, because it is a way to advertise their products.

Ecological

Table 8: Environmental Sustainability

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Never	5	12.5	12.5	12.5
	Occasionally	13	32.5	32.5	45.0
	Often	16	40.0	40.0	85.0
	Always	6	15.0	15.0	100.0
	Total	40	100.0	100.0	

When evaluating the sustainability of artisanal activity, 55% of artisans consider that their products are friendly to the environment, 32.5% almost always and 12.5% said never.

Media

Table 9: Influence of Media

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Never	40	100.0	100.0	100.0

Table 9 shows, that 100% of the artisans believe that the media does not have an influence on the general aspects of their activities, such as the production, distribution, and commercialization of their product.

Political

Table 10: Influence of the Political Environment

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Never	21	52.5	52.5	52.5
	Rarely	4	10.0	10.0	62.5
	Occasionally	8	20.0	20.0	82.5
	Often	5	12.5	12.5	95.0
	Always	2	5.0	5.0	100.0
	Total	40	100.0	100.0	

62% of artisans say that the political environment does not influence the development and sale of artisan products, 20% said occasionally, 12.5% said often always and 5% said always.

Legal

Table 11.:Influence of Legislation

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Never	26	65.0	65.0	65.0
	Rarely	4	10.0	10.0	75.0
	Occasionally	4	10.0	10.0	85.0
	Often	6	15.0	15.0	100.0
	Total	40	100.0	100.0	

Table 11 shows that 70% think that the laws do not influence the decisions to produce and market their product, 10% said occasionally and 15% said always.

Ethical

Table 12: Labor ethics

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Never	7	17.5	17.5	17.5
	Rarely	3	7.5	7.5	25.0
	Occasionally	9	22.5	22.5	47.5
	Often	16	40.0	40.0	87.5
	Always	5	12.5	12.5	100.0
	Total	40	100.0	100.0	

Table 12 shows, that there is an influence of the work ethic in the artisanal activity from the perspective of the artisan, because they consider that the designs are constantly copied and there is unfair competition, as we can observe the results indicated 22.5% said occasionally, 40% said frequently, 12.5% said always.

Cultural

Table 13: Cultural Influence

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Never	3	7.5	7.5	7.5
	Often	3	7.5	7.5	15.0
	Always	34	85.0	85.0	100.0
	Total	40	100.0	100.0	

92.5% of artisans consider that the handicrafts reflect their culture and can be seen in the type of embroidery, designs, textiles, colors, and different materials with which the pieces are made.

CONCLUSIONS

The craft work of the municipalities in Chiapas is clearly differentiated by its type of embroidery, colors, designs, materials, shapes, styles, so they can be identified by regions, municipalities, or ethnic groups. Most artisans find little use in technology to market their products. On the contrary, yet they consider that it has been an opportunity for others to copy their designs and generate greater profits with their work. However, this could represent the opportunity for artisans to promote their products in other markets and technology may become a sustainable marketing medium. From this point of view they also consider that the media does not have influence on the general aspects of their activity. As far as the political and legal aspect, the majority of artisans point out that these aspects do not influence the development and commercialization of their products. There is an influence of the work ethic in the artisan activity from the perspective of the artisan, they believe that their designs are constantly being copied and there is an unfair competition. It is true that the income received by artisans directly impacts their family income, but unfortunately artisanal work is not valued and not well paid. Therefore, in Chiapas, sustainable strategies must be created to strengthen the artisanal sector, where spaces are created for commercialization. Also there is a need for an increase in educational programs related to textile production, and more development alternatives for artisans, as well as design programs that grant financial support for the purchase of inputs and distribution of products, considering that 80% the participate in this activity are women. The results showed that artisans fully know their potential buyers which are tourists. However they emphasize that domestic tourists are the ones who consume their products the most, this explains the Mexican custom of always bringing a souvenir to family, friends, colleagues. Another view may be that the domestic tourist knows more about the origin and the way in which the pieces were made.

Thus, it is necessary to promote and disseminate the cultural wealth that exists in this activity through campaigns that seek to make consumers aware of the impact of valued artisan pieces and make a fair payment to the artisans, at the national and international level. This study confirms the high participation of women in this activity, which responds to a traditional female production according to a study conducted by Ramos Muñoz, Pablos Tuñón and Calderón Cisneros in 2000. These results open new lines of research ranging from studies of gender in the artisanal activity until tackling it by artisan branch or artisanal production from different perspectives. As a result of the present investigation, it is possible to point out that the artisanal production in Chiapas is an activity of low impact for the environment and has the potential to become a generator of local development in the State. The richness of Chiapas and its craftsmanship can be seen in different ways in its products, which go beyond just a piece made by hand. These represent traditions, cultural heritage, customs, religious symbolism, ethnic diversity, nature, talent, creativity, imagination, dedication and sensitivity of its people; through textiles, colors, types of embroidery, designs, shapes and different materials with which the pieces are made. In spite of this, it is necessary to implement actions that guarantee the improvement of access to basic services to their producers, fairly remunerated and with good working conditions, which translate into a better quality of life, greater competitiveness, local development, that reduce economic, environmental and social costs and have a positive impact on poverty indicators.

REFERENCES

Ahamad, F., & Yasmin, E. (2012). Impact of turmoil on the handicraft sector of Jammu and Kashmir: An economic analysis. *International NGO Journal* , 76-83.

Amanoarte (2017). Retrieved from <http://amanoarte.org/amanoarte-asistio-al-festival-anual-de-textiles-en-xalapa-veracruz/>

Arroyo Cavazos, J. (2012). El Turismo Orientado a Los Pobres: Una Alternativa Estratégica Para Los Países En Desarrollo Olimpia Jiménez López. *Pasos: Revista de Turismo Y Patrimonio Cultural* 10: 451–65.

Bartra, E. (1998). Neozapatismo, Arte Popular Y Género: De Humildes Muñecas de Trapo a Zapatistas. Retrieved from <http://lasa.international.pitt.edu/LASA98/Bartra.pdf>.

DATATUR (2017). Sistema nacional de información estadística del sector turismo en México. Retrieved from. http://www.datatur.sectur.gob.mx/ITxEF/ITxEF_CHIS.aspx

El Instituto Casa de las Artesanías de Chiapas (19 de 11 de 2017). Retrieved from Artesanías: <http://casadelasartesaniaschiapas.gob.mx/alfareria>

Gil Corredor, C. (2016). La Estética Textil Como Intersubjetividad de Los Pueblos Originarios : Caso de Las Tejedoras Mayas. *Revista San Gregorio* 1 (11): 58–69.

Giulio, V. (2008). Artesanía + Innovación la herramienta del futuro. *Craft and Design, Accomplices in Local Development* (pág. 91). Toledo, España: Fundación Española para la Innovación de la Artesanía.

Instituto de las Artesanías. (2007-2012). Programa Institucional . Chiapas: Gobierno del Estado.

Instituto Nacional de Estadística, Geografía e Informática (INEGI, 2017). PIB y Cuentas Nacionales de México. Indicadores trimestrales de actividad turística. Retrieved from: <http://www.inegi.org.mx/est/contenidos/proyectos/cn/itat/default.aspx>

Instituto Nacional de Estadística, Geografía e Informática y Consejo Nacional para la Cultura y las artes (2017). Encuesta Nacional de Consumo Cultural en México. México: SEDESOL, FONART, INEGI.

Kappus, M. (2012). Understanding the Impact of Handicraft Cooperative Participation on Livelihood Strategy (Asset Accumulation and Resiliency) among Women: A Qualitative Case Study From Kigali, Rwanda. Unpublished Master's thesis. Lund University.

Korstanje, Maximiliano E. (2013). Turismo, Desarrollo Y Sustentabilidad. Reflexiones Teórico-Metodológicas. Pasos: Revista de Turismo Y Patrimonio Cultural 11: 247–50.

Lukić, T., T. Stojanović, B Đerčan, M. Živković, and J. Živković. (2015). “The Geographical Aspects of Traditional Handicrafts in Serbia.” *European Researcher*, no. 100: 747–59. doi:10.13187/er.2015.100.747.

Naciones Unidas (19 de noviembre de 2017). Retrieved from *Objetivos de Desarrollo Sostenible*: <http://www.un.org/sustainabledevelopment/es/sustainable-consumption-production/>

Ramos Maza, T. (2004). Artesanas y Artesanías: Indígenas y Mestizas de Chiapas Construyenco Espacios de Cambio. *LiminaR Estudios Sociales Y Humanísticos II* (1): 50–71.

Ramos Muñoz, D, E Pablos Tuñon, and A Calderon Cisneros. (2000). Artesanía, Una Producción Local Para Mercados Globales. El Caso de Amatenango Del Valle, Chiapas México. Pontificia Universidad Javeriana.

Romero Medina, L. (2017). ¿Por qué festejamos a los artesanos en México? Retrieved from <https://fonart.gob.mx/web/index.php/sala-de-prensa/comunicados?id=189&Itemid=15>

Secretaría de Turismo. (2009). Plan de estrategia y Competitividad Turística para los Clústers de Tuxtla Gutiérrez, San Cristóbal de las Casas, Palenque, Comitán de Domínguez y Chiapa de Corzo. Chiapas: SECTUR.

Tatarkiewicz, W. (1987). Historia de las seis ideas. Madrid: Tecnos.

BIOGRAPHY

Karla Liliana Haro-Zea, is a Research Professor of the Benemérita Universidad Autónoma de Puebla (BUAP), Phd in Strategic Planning and Technology Management by the Universidad Popular Autónoma del Estado de Puebla (UPAEP). Candidate for National Researcher. Postdoc in Sustainable Development.

ACKNOWLEDGMENT

Thank you the Vice-rectory of Research and Postgraduate Studies of the BUAP, for granting their facilities in order to develop this study.

EUROPEAN STATE-BUILDING: NATIONAL SELF-DETERMINATION VS. POLITICAL ECONOMIC STABILIZATION IN THE EUROPEAN UNION'S COMMON SECURITY AND DEFENSE POLICY

Benedict E. DeDominicis, Catholic University of Korea

ABSTRACT

EU capabilities for conflict prevention include opportunities it offers to procure national security and prosperity for established states. The EU enjoys an advantage in competition with Moscow for influence in southeastern Europe. The EU is a multinational political entity that effectively projects an image of not being under the national dominance of a particular member state, i.e. Germany. The EU's institutional policy-making complexity and authority dispersion suppress perceptual patterns suspecting it as a vehicle for neo-colonial projection of the power of a member state or coalition of states. The EU's conditionality for loans to address the sovereign debt crisis is thus less prone to be seen as erasing the national sovereignty of a debtor state through capitulation to particular national dominance. A challenge lies in the EU's perceived relationship with the US. Moscow's prevailing view of the EU assumes it to be a vehicle for expansion of Euro-Atlantic influence at the expense of Russian national security. It intensifies suspicion of pro-Euro-Atlantic nationalities existing also as national minorities and in diaspora in Europe and in North America. The EU's emphasis on state building and stabilization through economic development is problematic because of resistance to sovereign national self-determination for these national minorities.

JEL: F02, F5, P3

KEYWORDS: Nationalism, European Union, Russia

INTRODUCTION

The Euro-Atlantic approach to minority policy is to focus on state stabilization and state building. It does not place primary emphasis on self-determination as a human right when self-determination requires redrawing state borders. It is evident today in the Catalonia crisis but it has been the overriding political strategic imperative since the collapse of east European communism. The North Atlantic alliance opposed the creation of new sovereignties in the Balkans until nationalistic local actors created political facts to which leading NATO members acquiesced. Nevertheless, stabilization, while primary, is not the only EU objective; so is expanding North Atlantic hegemony. In this case, the Ukrainian nationalist Greek Catholic minority in western Ukraine is supportive of rollback of Moscow given its salient and intense antipathy to Moscow's influence in Ukraine. The paper first presents a theoretical framework for analyzing the intensifying competition for influence between Moscow and EU-NATO in Eastern Europe. It then applies it to highlight how national Catholic groups and minorities enjoy political opportunities and dangers. Their political opportunities stem partly from their association with the Roman Catholic Church as a cultural representation of Western Europe, politically represented by Euro-Atlantic structures. Their dangers stem from their vulnerability to suspicions of disloyalty on behalf Euro-Atlantic opposition to Moscow's influence. The paper then critiques the EU's CSDP as it has been applied to southeastern Europe since the end of the Cold War, followed by concluding comments.

LITERATURE REVIEW

The Complexity of Social Comparisons

According to Cottam and Cottam, the four central propositions of social identity theory are the following: 1) maintaining a positive self-image is a striving of people; 2) a person's identity and self-image receives contributions from membership in groups; 3) by comparing their own group with other groups, people evaluate their own groups; 4) a positive comparison of a person's own group with other groups significantly determines this person's self-concept and hence gives it a positive social identity (2001, 90). Cottam and Cottam note that individuals have several alternatives available to them if they evaluate their group's position as negative in relation to other relevant groups. Their evaluation of their own group must satisfy two prerequisites in order to spark them to action. Firstly, they must see their own group in positive terms. People often accept inferior status or unfair treatment on an individual level, and on a group level, they may accept inferiority when their self-image of their own group is negative. In terms of identifying and recognizing alternatives to their inferior situation, such groups will be cognitively unable to do so. If they feel that their group's status is just and this status satisfies them, then conflict with higher-status groups will be unlikely to occur. The social context partially creates the specific nature of the comparison. When the community addresses high intensity issues in the political system, then political-group identifications will become highly salient and influential on behavior. At other times, political identities will be dormant and do not influence behavior. Secondly, the comparisons must be in terms of relevant group comparisons. If one's own group does not view the comparison group as similar, meaning, not as a relevant comparison group, then a group will accept inferiority and disadvantage. The acceptance of inferiority is perplexing but not inexplicable and the "colonial-imperial" relationship would characterize the operative cognitive images in these political circumstances. Maintaining a form of positive self-image is not impossible in this context, despite the presence of a negative evaluation of one's own group (2001, 91).

Cottam and Cottam note that once an actor makes a social comparison and finds the comparison to be unsatisfactory, the actor generally has three alternative strategies. One strategy is social mobility: they can sometimes abandon their group and join the one which they perceive to be superior. In societies in which groups are permeable, this strategy is possible. This alternative results in individual instead of collective action and it requires an individual belief in social mobility. Examples are prevalent in the US, where we see that classes are permeable but races are not in most cases. For the selection of this strategy to occur, the salience of group identity is crucial. People are less likely to pursue this alternative when a) they have a strong emotional investment in a group; b) they perceive the group as a whole to suffer from some disadvantage. Social creativity strategies are another approach to relative disadvantage as a result of an unfavorable social comparison. In social creativity strategies, people a) choose different comparative dimensions. For example, they may change comparison of wealth to comparison of political power. Or, they may b) change the comparison group. For example, rather than comparing themselves to long-term citizens, members of an immigrant group might instead compare themselves to other immigrant groups. They may also c) redefine the basis of comparison from negative to positive.

For example, racial minorities may come to view their own cultural heritage and customs positively. With regard to their own group, each of the above three social creativity approaches will enhance the positive assessment (Cottam and Cottam, 2001, 91). Finally, Cottam and Cottam note that social competition is yet another approach to addressing relative disadvantage resulting from a negative social comparison. It can lead to a questioning of the existing political conditions as the prevailing view emerges that existing group social relations are essentially zero-sum. It can therefore lead to development of severe political conflict. These conflicts can include rebellions and secession movements. People's subjective perceptions of the nature of the relations between groups will heavily influence the way in which people strive for or maintain positive social identity. Particularly important is how stable and legitimate, i.e. how secure, the outcomes of intergroup comparison are perceived to be.

With regard to provoking social competition, unfavorable group comparisons are not sufficient. Identifying achievable alternatives to the existing relationship must also be feasible by group members. Factors which contribute to the identification of alternatives include the following: 1) the perception of the illegitimacy and injustice of status differences; 2) the perception of the instability of the status system. Both 1 and 2 are necessary, and when they occur, then the comparisons become “insecure.” Enhancement of group self-image, with an increase in the salience of group membership, leading to an increase in mutual ethnocentrism flows from this awareness of alternatives. Perceptions that a relationship is just and legitimate and that the status quo is stable can change due to the impact of political events and trends, as the analysis of the history of colonial-imperial relationships demonstrates. In response to an unacceptable comparison, through social creativity and social competition strategies the identity of a group among its members becomes necessarily stronger and more distinct (Ibid., 92-93).

Opportunities for individual and national community social mobility and social creativity should ideally increase through integration in the European Union. The relative success in projecting the European Union as a community that is not a cloak for a particular national European imperial project is an essential prerequisite. Various Eurosceptic national political parties claim that the EU is in fact a cloak in effect for German neocolonialism due to the economic predominance of Germany. The role of the German economy as the foundational base for the Eurozone risks reinforcing the persuasiveness of this claim. The question is how pervasive, salient and intense is this perception among and within the different national constituencies of EU public opinion. Clearly, some violent individual actors in Greece do perceive Germany and their supposed Greek collaborators in this manner (Kitsantonis, 2017). The cooperative behavior of the Athens government with the European Central Bank-European Commission-International Monetary Fund so-called troika indicates this perception does not today prevail.

Following the start of the global financial crisis in 2008, at least one prominent analyst publicly expressed his doubts regarding the survival of the Eurozone (Brittan 2010). German willingness to devote the resources necessary to keep sovereign debt crisis countries particularly Greece within the Eurozone show the centrality of Germany's role. The Eurozone's survival indicates that politically prevailing perceptions in focal polities of the crisis, i.e. Greece, Portugal, Spain and Ireland, do not perceive their relationship with Germany as insecure. The extent of German national polity influence, concomitantly with perceived German intentions have not led to prevailing inferences of an implicit but real German neo-colonialist project (Rupnik, 2016, 83). The vaunted complexity and convolution of EU policy making processes allegedly contribute to the so-called EU democratic deficit (Kanter, 2017b). Yet, this same perceived complexity serves to shape prevailing EU general and particular national perceptions to accept EU oversight in the Greek national policy making process. EU political controls over German economic resources appear to suffice significantly to undermine collective perceptions of threat of German neo-colonialism. Greek, as well as Portuguese, Spanish, and Irish polity tolerance of EU influence over their policy making processes are much higher than would be the case otherwise. This EU democratic deficit due to its policy making process complexity and authority dispersal may be the price for obviating arousal of traditional nationalist stereotypical perceptions of the intentions of others. Paradoxically this daunting policy making complexity may in fact be the key to the success of the EU integration project; it avoids provoking latent nationalist sentiments. The democratic deficit derives from a lack of EU perceived transparency because of a perceived lack of democratic accountability of EU officials. The question is from where does this perception of transparency and democratic accountability derive in nation state polities.

This analysis points to the tendency of the national public to equate the government apparatus at the pinnacle of the democratic nation state as representing the sovereign national demos (Cottam and Cottam, 2001, 2). A critical Marxist observer regarding claims of democracy may argue that the widespread perception of a democratic deficit should exist in a nation state such as the US, France or Germany. Nevertheless, the public in these nation states tends to acknowledge the authority of the governing elite as

representing and wielding the nation's sovereignty. The EU democratic deficit may never be overcome until a prevailing self-identification with a EU/European demos attains primacy, i.e. European nationhood. It would need to supersede the currently prevailing respective national community self-identifications of the EU national publics. Until that distant time, perceptions of an EU democratic deficit will remain prevalent, and even desirable. Care is necessary to avoid making salient intense but generally latent traditional nationalist suspicions that the EU is a cloak for the neo-colonial interests of a particular nation state or group of states. The Brexit vote indicates that they may not remain latent under certain conditions, albeit unique to the multitudinous circumstances of each nation state.

This imperative is to avoid the EU appearing to serve disguised particular national neo-colonialist intentions as so perceived. This obligation indicates that imperialism has an essential connection to national identity sovereignty concerns of self vis-a-vis other. Russian concern over EU influence over neighboring Ukraine and Slavic polities in southeast Europe as well as over Russian politics and policy itself has its basis in Russian nationalism. The EU is not a nation state, but the prevailing view in Moscow, correctly or not, is that it is an unstable "vassal" of Washington (Duleba, 2016, 125).

The EU-US Relationship and European Identity

One social strategy by which to generate social creativity in the perception of a relationship is to mobilize around perception of a common adversary. The adage, the enemy of my enemy is my friend, captures this dynamic. Image simplifications can be positive, in the form of the ally stereotype (Cottam and Cottam 2001, 97-98). European peoples with a history of difficult relations can more readily put aside those psychological obstacles to integration by focusing on a common enemy. The Cold War-era national security establishment which NATO represents is a challenge to the European Union as a European peace strategy. It is also a test of the extent to which European integration is dependent upon the Cold War and its vast legacy in the form of Euro-Atlantic bureaucratic instruments, public and private, for containment of Moscow. The European Union undergoes additional stresses and strains as represented by Brexit. Reemphasizing the common challenge from Moscow can be a tempting route to generate countervailing pressures to these oppose centripetal tendencies. Perhaps not surprisingly, Estonia, holding the presidency of the Council of the European Union for the second half of 2017, emphasizes NATO-EU security cooperation (Raik and Järvenpää, 2017). To avoid this perceptual dynamic, the EU's Common Security and Defense Policy (CSDP, previously the European Security and Defense Policy (ESDP)) needs to establish a credible delineation from US-led NATO. This prerequisite, however, is unlikely to materialize, although the EU's reaction to the US Trump administration may instill greater urgency to do so.

Despite its rhetoric, the Trump administration is likely to be politically constrained in its decisional latitude by the vast array of vested interests in the US national security establishment. The rise of three US generals to stabilize the chaotic, new administration illustrates the political influence of these interests within the US polity. Among these 3 individuals: US Secretary of Defense James Mattis, US National Security Adviser H.R. McMaster and Trump's chief of staff, John Kelly, the latter two replaced their predecessors. These predecessors were seen as either enabling, or at least were unable to manage, populist political pressures that threatened the vested interests of this national security establishment. These same vested interests dominate the security aspects of the European Union due to their emergence and development during the Cold War. Their compatriot forces include the private economic interests that emerged around them, to supply and support them, interests which are essential to European Union integration.

The European Union allows for social creativity in thinking but it exists within subordination to US hegemonic leadership (Layne 2008). It is vulnerable to this perceived social role in global affairs including engagement in social competition with nation states such as Russia. The prevailing view in Moscow today is that the EU is the civilian power handmaiden of US-led NATO (Roberts, 2017). The Roman Catholic

Church endorsed the founding of the EU and west European Christian democratic party leaders predominated among the founders (Murdov, 2014 509-10). Protestant Christian European institutions, however, preceded the Catholic Church in publicly supporting immediate postwar west European integration initiatives (Leustean 2011, 298). The Vatican's request for an explicit reference to "Christian roots" of Europe to be included in the draft EU Constitution treaty was rebuffed (Maillard, 2015, 7). The EU Constitutional Convention decided that the draft EU Constitution would not include a reference to God in the preamble (ten Napel 2014, 131). The perception that the EU is a civilizational political project for Euro-Atlantic hegemony expansion remains a danger. The Donald J. Trump administration explicitly discusses the US role in Western civilizational leadership in these terms, albeit the shared, stereotyped threat is from political Islam.

Reinforcing a European identity community is necessary in order to create amenable political conditions to allow for sufficiently pervasive opportunities for public social mobility and social creativity. Resort to social mobility, creativity or competition policies is "context dependent" (Wohlforth, 2009, 36). Creating the appropriate context equates with creating this new identity through the European integration project. Its normative objective is to avoid or circumvent the emergence of social competition internally. Europe is a liberal community in that it may not rely upon coercion as a significant mechanism for control, as was critical in the old multinational USSR and Yugoslavia. When the coercive control apparatus disintegrated in these two states, democratic elections produced elected leaders supporting national self-determination. Competitive electoral politics also resurrected heretofore suppressed stereotypes, fears and hatreds regarding the other, resentments which constitutional provisions particularly of the old Yugoslavia had exacerbated. The liberal ideological necessity to avoid reliance upon coercion as a control mechanism mandates that the EU not claim and enforce sovereignty over its member nation states. In the old USSR, the Russian community constituted the de facto foundational core community that provided the leadership personnel for the coercive bureaucratic control mechanism. No such community can or may play such a role in the EU, i.e. it must remain confederal in the foreseeable future.

This necessity applies except insofar as the EU acquires narrow technocratic authority in a particular policy area, indicating a move towards de facto EU sovereignty in that area (Story and Saltmarsh, 2011). This authority may imply de facto EU federal sovereignty constraining a particular member state's national policy option range, for example, over the parameters of fiscal policy (Spiegel, 2014). Meanwhile de facto confederalism prevails in EU relations with its member states in other policy areas (McCormick, 2015). The ongoing EU supervision over the Greek national budget does not imply the right of the EU to use coercive force to enforce its sovereign authority. With the satisfaction of this prerequisite, the construction of a new, nascent self-identity can conceivably be built to support social mobility and social creativity. In contrast, in the prewar past, the globally ambitious citizen of a small Balkan country, for example, faced pressure to choose a de facto great power allegiance. Acquiring an international career often required a commitment to the influence and policies of one of the European Great Powers, intensively competing with each other in the Balkans. Vladimir Putin's Moscow responses include its own social creativity strategies to the challenge of Europe's attraction and influence. Moscow has assumed a position as standard bearer of traditional nationalist conservative positions. These include hostility to gender minority rights, promotion of the influence of a state-affiliated church, and promotion of traditional patriarchal family roles (Roberts, 2017, 38). The European Union in promoting the advocacy of the rights of minorities may not focus only on national minority rights; it aims to promote intersectionality. The aim is to encourage social creativity, i.e. developing and promoting new identities, if the individual is receptive, but heretofore suppressed, thereby deemphasizing national identity. It appears to be successful insofar as it appeals to youth. Putin's Russia is a reaction against it, appealing to conservative nationalists perceiving a threat from the EU and globalization. The Russian authorities assert an alternative form of polity integration: a "Russian World" concept of Moscow's hegemony extending into Soviet-era areas of control (Laruelle, 2015, 94-95).

Discussion

The appeal of European Union association is important. The social mobility attraction of visa-free travel throughout the EU for Ukraine citizens to go into diaspora would seem to be strong (“EU Approves Visa-Free Travel for Ukrainians,” 2017). The possibility of EU member state public political resistance and impediment to provision of economic opportunities to Ukrainians is a complicating factor. Although legally nonbinding, the 2016 rejection by the Dutch electorate of the EU association agreement with Ukraine highlights this resistance (“Dutch referendum” 2016). The EU responded by adopting a “provisional” application of the free-trade agreement in 2016, which was finally approved by the Dutch Senate with stipulations in May 2017 (Kanter, 2017a). Moscow may seek to undermine this EU appeal by emphasizing EU policy as a mask for Western imperialism while portraying Ukrainian nationalist aspirations as reminiscent of Nazi-era collaborationist designs (“Putin Says,” 2014, Cunningham 2016). One interpretation of the Russian authorities’ public encouragement of this characterization in the midst of the violence is that it increases Moscow’s influence capability. Influence capability would increase over actual and potential supporters of Russophile separatism. It would thereby increase influence over the Kiev authorities. It would also increase Moscow’s social competition bargaining leverage over Euro-Atlantic authorities as well. The European Union has arguably succeeded in supporting a prevailing view in Kiev as well as within the EU member states that the EU is not a cover mask for German neo-colonialism. Germany economically has benefitted greatly from European integration (Lankowski, 2015).

Germany accounts for slightly more than 20% of the EU GDP, and 29% of the Eurozone GDP (Ibid., 38). Taming German power has been one of the aims of the European integration process since it started after the Second World War (Ibid., 51). West European-centered European integration may be conceptualized as a value trend affecting relations between Russia and the Euro-Atlantic alliance, i.e. the international system. The existence of the European Union pools member state capabilities. Underpinning the Euro-Atlantic alliance is the incremental, de facto collective assumption that a comparatively greatly diminished, post-Soviet Moscow will attempt to reassert hegemony over the former Soviet space (Larivé and Kanet, 2013). Whether NATO expansion created in effect a self-fulfilling prophecy is not an issue seriously investigated by the proponents of the prevailing political views in Western capitals. What is self-evident, however, is that a vast array of organizational and economic vested interests emerged to implement the 45-year containment strategy towards Moscow. Those political interests continue to advocate for a collective worldview that justifies their continued existence, including receipt of government and private budget allocations (Ikenberry, 2004, 610–11, Carpenter 1994). It manifests itself in a policy thrust supporting containment of a resurgent Russia, encouraging nationalism vis-à-vis Russia at least in Ukraine.

A Path Forward

State building through development is the perspective on security the EU’s Common Foreign and Security Policy (CFSP)/CSDP emphasizes. Development cooperation allows for reliance upon the European Community’s extensive diplomatic bargaining leverage capabilities with their basis in economic resources and trade. Merket characterizes this policy direction as the reciprocal “securitization” of development and the “developmentalization” of EU security policies. An example of this blurring of the borderline between the two areas is the 2001 movement of demining operations from the CFSP policy-making mechanism to the European Community. It thereby joined the EU’s efforts to combat the spread of small arms and light weapons in the same framework. The European Commission and Parliament have an institutional interest in defining initiatives under development thereby to fall under the Community framework. CFSP initiatives, in contrast, favor the member states (2012, 634-35).—According to Merket, the development of the EU’s conflict prevention strategy is basically a state stabilization strategy. In the field of development cooperation, the EU disposes of three long-term geographical assistance instruments (the European Neighbourhood and Partnership Instrument (ENPI), the European Development Fund (EDF) and the Development Cooperation Instrument (DCI)) and two sectoral instruments (the European Instrument for

Democracy and Human Rights (EIDHR) and the *Instrument for Stability* (IfS)) (emphasis BD) to deal with various aspects of the security- development nexus (2012, 630).

The “security-development nexus” is Merket’s characterization of the EU’s effort to intertwine its foreign aid development and European security policies. The EU thereby aims to promote more effectively its CFSP objectives. In Merket’s portrayal, the creation of the European External Action Service under the 2009 Treaty of Lisbon is the institutional embodiment of this effort. Merket notes that “the ENPI offers co-funding for the promotion of good governance and social and economic development to the EU’s partner countries of the European Neighbourhood Policy (ENP)” (Ibid.) Merket’s outline came out well before the outbreak of the ongoing Ukrainian crisis on November 21, 2013. The trigger was popular protest against then-Ukrainian President Viktor Yanukovych’s suspension of negotiations to sign a long-heralded EU Association Agreement. Subsequent events include covert intervention to dismember post-Soviet Ukraine, leading first to Russian annexation of Crimea, with civil war in the Donbass region quickly following. As of mid-2017, thousands are dead, hundreds of thousands are refugees, and hostility between the US and Russia risks escalation, despite the election of Donald J. Trump as US president.

The 2011 Luxembourg Foreign Affairs Council meeting reaffirmed the EU’s commitment to “conflict prevention” (Council of the European Union, 2011, para. 1-4). It recalled that ten years earlier the 2001 European Council in Gothenburg, Sweden adopted the “EU Programme for the Prevention of Violent Conflicts” (Ibid. para. 2). For the EU’s claim to be a “peace process” to be valid, it would require particular assumptions regarding the foreign policy motivations of Putin’s Russia. It implies that Russia today is an imperialistic, aggressive actor that is the guilty party for the tragedy that continues to unfold in eastern Ukraine. On the other hand, Moscow’s motivation for intervention may be ultimately defensive as John Mearsheimer (2014) and Stephen Cohen (2014) argue. They claim that Moscow sees the expansion of the EU’s influence into Ukraine as ultimately an American-instigated imperialist threat to Russian national security. If the latter is true, then the European Union authorities may be committing a major strategic mistake. The Davis, Habbida and Penfrat study does note that EU policies may make a potentially violent conflict worse (Davis, Habbida and Penfrat 2017, 11 fn. 27). It notes that “a general lack of evidence on the EU’s impact on populations in non-EU countries” characterizes analyses of the EU’s positive or negative impact (Ibid. 11). Proof of the EU’s contribution is typically counterfactual, and EU “conflict prevention” behavior becomes “a matter of faith” and “fuzzy” (Ibid., quoting an EEAS official interviewed on August 10, 2016). Studies note the importance of the perception of EU motivation as a critical factor in determining the perceived legitimacy of EU demands, phrased as normative arguments. In relation to a different part of southeastern Europe, Noutcheva states,

It may well be that the conditions in the Western Balkan countries are not very conducive to the socialisation of their political elites to European ways of governance and state behaviour. Such an analysis, however, misses an important aspect of the dynamics of EU conditionality – Balkan compliance, namely the perceptions of the political elites in these countries of the motivation behind the EU’s policy and the related impact on compliance decisions (2009, 11).

Target political actors at times suspect that norms of liberal democratic regional cooperation that the EU espouses are a disguise for the EU’s pursuit of “its own security interests.” Consequently, compliance with EU conditionality in the Western Balkans has often been “fake or partial or imposed” (Ibid., 12). This analysis characterizes the EU’s security interests towards the former Yugoslavia manifested themselves in an ill-fated stabilization strategy. For example, as Noutcheva notes, in order not to encourage separatist sentiment in the Balkans and elsewhere, the EU favored maintenance of the “State Union of Serbia and Montenegro.” The popular demands of the people of Montenegro to separate from Serbia in a 2006 referendum with 55% in support forced the EU to acquiesce to what it did not favor (2009 3, 9-10). The EU deployed legal arguments for this acquiescence to former Yugoslav republic self-determination. Various EU member states, but not Spain, deployed different legal arguments for the recognition of the

former Yugoslav autonomous province of Kosovo as a sovereign state in 2008. The EU has been unwilling to recognize separatist local sentiments in Abkhazia, South Ossetia, and Crimea in the name of stability. Davis, Habbida and Penfrat critique current EU conflict prevention directives for continuing to display a reactive orientation to conflict (2017, 15). Nevertheless, Davis, Habbida and Penfrat portray the EU's current mediation efforts in the Belgrade/Pristina processes to be, along with the Iran nuclear agreement, successes (2017, 18).

CONCLUDING COMMENTS

Social psychology offers insights into comprehending national identity conflict in terms of social competition, social mobility and social creativity. Propagation of a perception of zero-sum social competition among national member-groups is the political dynamic to avoid. The EU offers substantive opportunities for individual social mobility, particularly for those with more formal education. The construction of Europe requires inputs from the contributing member states. National self-identifiers can adopt a wide range of evaluation criteria to maintain a positive self-image. For example, Germany has the best national European economic performance, while Italy excels in offering regional security and luxury recreational opportunities and consumption goods to Europe. Social mobility and creativity incentives are deployed to southeastern Europe, where different national groups have a history of traditional alliances with respective European major powers. Post-Cold War Croatian and Slovenian sympathy among Catholic German and Italian public opinion has been politically salient. Serbia's historical affiliation with France and Russia is problematic because of Russia's portrayal as an adversary to the European Union. Nevertheless, the EU's diplomatic bargaining leverage appears substantively to outweigh that of Moscow in influencing Belgrade and Kiev. Pan-Slavism may not be able to compete successfully with Euro-Atlanticism on a soft power level. Yet, this escalating clash of civilizations risks increasing the likelihood of more violence in Europe as the Ukrainian case illustrates.

REFERENCES

Brittan, S. (2010) "The Futile Attempt to Save the Eurozone," *Financial Times*, November 4, Retrieved November 5, 2010 from <http://www.ft.com/cms/s/0/def42cae-e84b-11df-8995-00144feab49a.html#axzz14MBpqrf>

Carpenter, T.G. (1994) *Beyond NATO: Staying Out of Europe's Wars*. Cato Institute, Washington.

Cohen, S.F. (2014) "Transcripts," Fareed Zakaria GPS CNN, March 2, Retrieved August 1, 2017 from <http://transcripts.cnn.com/TRANSCRIPTS/1403/02/fzgps.01.html>

Cottam, M.L. and Richard W. (2001) *Nationalism and Politics: The Political Behavior of Nation States*, Lynne Rienner, Boulder

Cunningham, F. (2016) "EU-Nazi Furore, Putin and British Hypocrisy" *Sputnik*, May 18, Retrieved October 28, 2017 from <https://sputniknews.com/columnists/201605181039829247-boris-johnson-nazi-europe/>

Davis, L., N. Habbida and A. Penfrat (2017) "The EU's Capabilities for Conflict Prevention", EU-CIVCAP Report DL 3.2. Retrieved July 31, 2017 from http://www.eu-civcap.net/files/2017/02/EUs_Capabilities_Conflict_Prevention.pdf

Duleba, A. (2016) "The 'New Normal' in Russian Foreign Policy Thinking" In "Forum: Responses to Russia and the World: 2016 IMEMO Forecast" *New Perspectives*, 24(1), p. 103-133.

“Dutch Referendum Voters Overwhelmingly Reject Closer EU Links to Ukraine” (2016) *The Guardian*, April 7. Retrieved October 28, 2017 from <https://www.theguardian.com/world/2016/apr/06/dutch-voters-reject-closer-eu-links-to-ukraine-in-referendum>

“EU Approves Visa-Free Travel for Ukrainians” (2017) *Schengen Visa Info*, May 11. Retrieved November 4, 2017 from <https://www.schengenvisainfo.com/eu-approves-visa-free-travel-ukrainians/>

Ikenberry, G.J. (2004) “Liberalism and Empire: Logics of Order in the American Unipolar Age,” *Review of International Studies* 30(4) p. 609–630

Kanter, J. (2017) “Dutch Lawmakers Approve E.U. Trade Deal with Ukraine,” *New York Times*, May 30, Retrieved October 21, 2017 from ProQuest

Kanter, J. (2017) “E.U. Leader Urges Simplifying Bloc,” *New York Times*, September 14. Retrieved September 15, 2017 from ProQuest

Kitsantonis, N. (2017) “Arrest Made in a String of Bombings in Greece,” *New York Times*, October 29. Retrieved October 30, 2017 from ProQuest

Lankowski, C. (2015) “Germany: Architect of Europe” In *The European Union and the Member States*, p. 37–56. edited by E.E. Zeff and E.B. Pirro, Lynne Reinner, Boulder

Larivé, M., H. Andre and R.E. Kanet (2013) “The Return to Europe and the Rise of EU-Russian Ideological Differences,” *The Whitehead Journal of Diplomacy and International Relations* 14 (1) p. 125–138

Laruelle, M. (2015) “Russia as a “Divided Nation,” from Compatriots to Crimea: A Contribution to the Discussion on Nationalism and Foreign Policy,” *Problems of Post-Communism* 62 (2) p. 88–97

Layne, C. (2008). “It's Over, Over There: The Coming Crack-Up in Transatlantic Relations.” *International Politics*, 45(3) p. 325–347

Leustean, L.N. (2011) “Representing Religion in the European Union. A Typology of Actors,” *Politics, Religion & Ideology*, 12(3, Sept) p. 295–315

Maillard, S. (2015) “The Vatican’s Outlook on Europe: From Firm Encouragement to Exacting Support,” *Notre Europe*, Policy Paper 135 (June 2), p. 1–14. Retrieved October 31, 2017 from <http://www.institutdelors.eu/media/vaticaneu-maillard-jdi-june15.pdf?pdf=ok>

McCormick, J. (2015) “What is the European Union?” In *The European Union and the Member States*, p. 17–36. edited by Eleanor E. Zeff and Ellen B. Pirro, Lynne Reinner, Boulder

Mearsheimer, J.J. (2014) “Why the Ukraine Crisis Is the West's Fault,” *Foreign Affairs* 93(5), p. 77–89

Merket, H. (2012) “The European External Action Service and the Nexus between CFSP/CSDP and Development Cooperation,” *European Foreign Affairs Review*, 17(4) p. 625–52

Murdov, S.A. (2014) “Religion and the European Union: Attitudes of Catholic and Protestant Churches toward European Integration,” *Journal of Church and State* 57(3), p. 507–528

Noutcheva, G. (2007) “Fake, Partial and Imposed Compliance: The Limits of the EU's Normative Power in the Western Balkans,” CEPS Working Document No. 274, July 2007, [Working Paper]. Retrieved August 1, 2017 from <http://aei.pitt.edu/7575/>

“Putin says situation in Ukraine reminds him of WW2 - BBC News (:43)” (2014) August 2. Retrieved June 11, 2016 from <http://www.youtube.com/watch?v=DwRSMH-7oDU>

Raik, K. and P. Järvenpää (2017) “A New Era of EU-NATO Cooperation: How to Make the Best of a Marriage of Necessity” International Centre for Defence and Security, May. Retrieved October 14, 2017 from https://www.icds.ee/fileadmin/media/icds.ee/doc/ICDS_Report_A_New_Era_of_EU-NATO.pdf

Roberts, K. (2017) “Understanding Putin: The Politics of Identity and Geopolitics in Russian Foreign Policy Discourse” *International Journal* 72 (1) p. 28-55

Rupnik, J. (2016) “Surging Illiberalism in the East.” *Journal of Democracy* 27 (4) p. 77-87

Spiegel, Peter (2014) “If the Euro Falls, Europe Falls” *Financial Times*, May 16.

Story, L. and M. Saltmarsh (2011) “Europeans Talk Of Sharp Change In Fiscal Affairs” *New York Times*, September 6.

ten Napel, H.M. (2014) “Joseph H. H. Weiler’s Approach to the Democratic Legitimacy of the European Union: Is There a Message for Neo-Calvinists?” *Journal of Markets & Morality* 17(1, Spring), p. 125–141.

Wohlforth, W.C. (2009) “Unipolarity, Status Competition, and Great Power War” *World Politics* 61(1, Jan), p. 28–57

ACKNOWLEDGEMENTS

This paper was produced with the support of the Research Fund of the Catholic University of Korea. Walden University provided additional research resources.

BIOGRAPHY

Benedict E. DeDominicis, Ph.D. (University of Pittsburgh, BA Ohio State) is an associate professor of political science at the Catholic University of Korea in the International Studies Department. He can be reached at the Catholic University of Korea, International Studies Department, 43 Jibong-ro, Bucheon-si, Gyeonggi-do 14662, Republic of Korea.

HETEROGENEOUS BELIEFS OR UNCERTAINTY

Yi Zhang, Prairie View A&M University

ABSTRACT

Williams (1977) and others argue that heterogeneous beliefs reflect uncertainty and are associated with higher returns. Heterogeneous beliefs and uncertainty are two different concepts but difficult to distinguish empirically. Proxy variables typically capture both uncertainty and belief differences. We combine eight commonly used proxy variables to conduct a factor analysis. Two latent factors are identified: one captures belief differences and the other captures uncertainty. The factor for belief differences is negatively related to future stock returns, consistent with the prediction of Miller (1977). The factor for uncertainty is positively related to short term future stock returns and has no incremental effect after controlling for risk factors, consistent with the risk theory.

JEL: G40; G12

KEYWORDS: Heterogeneous Beliefs, Uncertainty, Risk, Dispersion of Opinion, Optimism, Pessimism, Factor Analysis

INTRODUCTION

Williams (1977) and others argue that investor heterogeneous beliefs reflect uncertainty that a high level of belief differences (or disagreement) implies a higher level of uncertainty. Therefore an increase in belief differences requires a higher rate of return on a stock. Investor belief differences and uncertainty are different concepts, but both of them are unobservable and difficult to measure directly. Therefore in empirical studies, proxy variables are used. However, belief differences and uncertainty are commonly confounded in proxy variables. For example, the dispersion in financial analysts' forecasts is the commonly used proxy variable for belief differences (e.g. Diether et al. 2000) and information uncertainty (e.g. Zhang, 2006). Similarly we would expect small firms have more disagreement among investors and more uncertainty about their true values. That's why firm size is another proxy for both belief differences and uncertainty. Studies on distinguishing disagreement from uncertainty are sparse. Barron et al. (1998) show that the dispersion in analysts' earnings forecasts captures both the uncertainty in analysts' forecasts and the diversity in analysts' information and propose a decomposition using analysts' forecasts.

A few studies (e.g. D'Amico and Orphanides, 2008) use survey data to construct disagreement and uncertainty measurement. Our paper proposes a new approach to implicitly distinguish disagreement from uncertainty. We combine multiple proxy variables to conduct factor analysis to identify latent variables for belief differences and uncertainty. While uncertainty and belief differences are correlated (greater uncertainty generally produces greater dispersion in investor beliefs, *ceteris paribus*), they are distinct. If proxy variables capture both belief differences and uncertainty, the factor analysis will enable us to distinguish a latent variable for belief differences from a latent uncertainty variable. We combine eight variables used in previous studies to proxy for heterogeneous beliefs and uncertainty, including the dispersion in analysts' forecasts, stock idiosyncratic volatility, stock trading volume, firm size, the earnings-to-price ratio, the book-to-market ratio, option open interest and the risk neutral skewness. Factor analysis produces two latent factors. Analysis of the factor loadings on each latent factor suggests that the first factor is related to belief differences and the second factor is related to uncertainty.

Using the latent factor estimated from factor analysis, we examine the effect of both belief differences and uncertainty on future stock returns. The impact of heterogeneous beliefs or uncertainty on stock returns is

also under debate. Miller's (1977) overvaluation theory predicts that the greater the disagreement, the lower the future returns. On the opposite, risk theory first proposed by Williams (1977), argues that heterogeneous beliefs among investors reflect risk so that an increase in belief differences requires a higher rate of return on a stock. A growing body of empirical research suggests that heterogeneous beliefs significantly impact stock returns. However, the precise nature of this relationship is still unclear. Similarly in the literature of uncertainty, a negative relationship between information uncertainty and stock return is shown in Jiang et al. (2005); while a positive relationship between uncertainty and stock returns are shown in Anderson et al. (2009). We find the factor for belief differences is negatively related to future returns. This relationship persists at least six month even after controlling for size, book-to-market and momentum effects. This indicates that larger belief differences are correlated with lower future returns, consistent with Miller's (1977) overvaluation theory. The uncertainty factor is positively related to future returns at the short time horizon (up to three months), but this relationship disappears after we control for risk using the Carhart (1997) four-factor model. This is consistent with the risk theory. However, stocks with high uncertainty underperform at the six-month and twelve-month horizon.

DATA AND METHODOLOGY

This section describes the proxy variables used to identify the latent variables representing uncertainty and belief differences in the factor analysis. The first proxy is the dispersion in financial analysts' earnings forecasts, a widely used proxy for dispersion of opinion (e.g., Diether et al., 2002; Anderson et al., 2003; and Doukas et al., 2004). Goetzmann and Massa (2003) find dispersion of opinion among investors correlates with the dispersion in financial analysts' earnings forecasts. Barron et al. (1998) show that the dispersion in analysts' earnings forecasts captures both the uncertainty in analysts' forecasts and the diversity in analysts' information. Anderson et al. (2009), Zhang (2006) and Jiang et al. (2005) use the dispersion in analysts' forecast to proxy for uncertainty. Qu et al. (2004) also show that analyst forecast dispersion embodies a measure of information risk. The second proxy for heterogeneous beliefs is stock idiosyncratic volatility. Shalen (1993), He and Wang (1995) and Biais and Bossaerts (1998) suggest a positive link between heterogeneous beliefs and volatility. Empirically, Harris and Raviv (1993) and Diether et al. (2000) find stocks with a higher dispersion of opinion have higher volatility. Stock volatility is also a commonly used proxy for information uncertainty (e.g. Jiang et al., 2005 and Zhang, 2006).

The third proxy is stock trading volume. Stock trading volume is suggested to proxy for heterogeneous beliefs by Harris and Raviv (1993), Kandel and Pearson (1995), Odean (1998), Bamber et al. (1999), and Hong and Stein (2003). Since differences in beliefs induce trading, stocks with more divergent beliefs among investors tend to have higher trading volume. Stock trading volume has been used to proxy for belief differences by Garfinkel and Sokobin (2006), and Xu (2007). Jiang, Lee and Zhang (2005) use stock volume (turnover) to proxy for information uncertainty. The fourth proxy is firm size. Many empirical studies on dispersion of opinion, such as Diether et al. (2002), find the dispersion of opinion among investors tends to be greater for small firms than large firms. Most financial analysts only follow large firms and small firms may be unable to bear high disclosure preparation costs. The lack of disclosed information induces both divergent beliefs and uncertainty about the value of small firms. Zhang (2006) uses firm size to proxy for information uncertainty. In addition, Fama and French (1992) suggest firm size is a proxy for risk. The fifth proxy is the earnings-to-price ratio. Growth stocks have low earnings-to-price ratios and tend to induce divergent beliefs about their dividend growth rates. This leads to divergent beliefs about the value of growth stocks. Furthermore the lack of pricing signals such as dividends make the value of growth stocks harder to predict. Baik and Park (2003) find stocks with lower earnings-to-price ratios have more dispersion in analysts' earnings forecasts, consistent with the idea that growth stocks have greater belief heterogeneity than income stocks.

Previous studies have shown the earnings-to-price ratio is a risk factor for stock returns (e.g. Campbell and Shiller, 1988). The sixth proxy is the book-to-market ratio. Diether et al. (2002) and Doukas et al. (2004)

find that stocks with high book-to-market ratios have larger dispersion in analysts' earnings forecasts than stocks with low book-to-market ratios. They argue that the dispersion in analysts' earnings forecasts is a proxy for differences of opinion about a stock among investors. Therefore heterogeneity in beliefs is related to the book-to-market ratio. Jiang et al. (2005) use the price-to-book ratio for information uncertainty. Also Fama and French (1992) show book-to-market is a risk factor. The seventh proxy is the open interest on out-of-the-money (hereafter OTM) stock options. Buraschi and Jiltsov (2006) and Zhang (2017) show that open interest on OTM options reflects heterogeneous beliefs: the greater belief heterogeneity, the more open interest. Furthermore, the put/call open interest ratio is a commonly used measure to represent investor sentiment (e.g. Dennis and Mayhew, 2002). The last proxy is option risk neutral skewness. Buraschi and Jiltsov (2006) show heterogeneous beliefs can explain the risk neutral skewness: the greater the dispersion in beliefs, the more negative the skew. Friesen, Zhang and Zorn (2010) find stocks with greater belief heterogeneity have more negative risk neutral skews, suggesting that the risk neutral skew can be another proxy for heterogeneous beliefs. Xu (2007) shows that disagreement about information precision increase stock skewness.

The sample period in this study is from January 1996 to December 2014. Data are measured at monthly frequency. Following Diether et al. (2002), the dispersion in analysts' earnings forecasts is measured as the standard deviation of forecasts for quarterly earnings scaled by the absolute value of the mean earnings forecast. The data on analysts' earnings forecasts are taken from the Institutional Brokers Estimate System (I/B/E/S) summary history dataset. Stock return and volume data are obtained from the Center for Research in Securities Prices (CRSP). The idiosyncratic volatility is calculated by regressing daily returns over the last 200 days on the daily returns of value-weighted index (including distributions) using the market model. We scale trading volume by the number of outstanding shares to get the stock turnover. Firm-specific variables are constructed each month using the data from the CRSP and the Compustat Industrial Quarterly File. Firm size is measured as the natural logarithm of market capitalization (stock price multiplied by the number of outstanding shares) as of the last day of the previous month. Earnings-to-price ratio is measured as the earnings per share (12-month moving average excluding extraordinary items) divided by the stock price as of the last day of the previous month.

The book-to-market ratio is measured as the book value of total common equity divided by the market capitalization as of the last day of the previous month. Option open interest and price data are obtained from Option Metrics. Open interest is measured as the sum of daily open interest on out-of-the-money options (both puts and calls) averaged over each month. We use the risk neutral skewness metric of BKM (2003) and follow the empirical methodology of Dennis and Mayhew (2002) to construct the skewness measure. If the eight proxies capture both belief differences and uncertainty, underlying latent variables can be identified using factor analysis. Factor analysis is a statistical technique used to determine whether there exists a smaller set of uncorrelated underlying variables, called latent factors, that can explain the relationships between the original variables. Following Friesen et al. (2012), we use the principal factor method and the maximum likelihood method to extract factors. The estimated latent factors are used to study their relationship with future stock returns. Monthly return data are obtained from the CRSP. To perform multifactor time-series tests, we obtain the Fama-French three factor data and the momentum factor data from the WRDS database: market risk premium ($R_m - R_f$), SMB (difference between the return on a portfolio of small stocks and the return on a portfolio of large stocks), HML (difference between the return on a portfolio of high book-to-market stocks and the return on a portfolio of low book-to-market stocks) and UMD (the difference between the return on a portfolio of stocks with high returns from $t-12$ to $t-2$ and the return on a portfolio of stocks with low returns from $t-12$ to $t-2$). Following Diether et al. (2002), each month we sort stocks into five quintiles based on the variable of interest (e.g., the latent factor) as of the previous month. After forming portfolios, stocks are held for one month, three months, six months or twelve months. The mean portfolio monthly return is computed as the equal-weighted average of returns of all stocks in the portfolio.

EMPIRICAL RESULTS

Factor analysis using eight proxies for heterogeneous beliefs produces two latent factors. The rotated factor loading pattern shows that Factor 1 is highly positively loaded with the dispersion in analysts' earnings forecasts and idiosyncratic volatility, and highly negatively loaded with firm size and the earnings-to-price ratio. The loadings on the proxy variables suggest that Factor 1 captures belief differences. The dispersion, idiosyncratic volatility, stock turnover, the book-to-market ratio and open interest have positive loadings on Factor 1, consistent with the prediction that stocks with greater belief differences have more dispersion in analysts' earnings forecasts, greater idiosyncratic volatility, higher turnover, higher book-to-market ratios and more open interests. Firm size, the earnings-to-price ratio and skewness have negative loadings on Factor 1, consistent with the idea that small stocks and growth stocks generate more belief heterogeneity while stocks with more belief differences have more negatively risk neutral skewness. Factor 1 explains 51.6% of common variance. Factor 2 is highly positively loaded on stock turnover, size and open interest, but highly negatively loaded on the book-to-market ratio. This factor is associated with *less* uncertainty. Large firms tend to have less uncertainty than small firms. When there is more uncertainty about future price movements, risk-averse investors may be reluctant to trade given the higher potential risks. Therefore high stock turnover is associated with less uncertainty. Similarly investments in OTM options may be low in the case of more uncertainty. Value firms with high book-to-market ratio tend to have more uncertainty about their future prospects. The signs of all the loadings are consistent with the uncertainty-based interpretation for Factor 2. For example, the dispersion in analysts' earnings forecasts has a negative loading on Factor 2 which represents less information uncertainty, consistent with most empirical findings that the dispersion in forecasts is positively related to uncertainty. Factor 2 explains 48.4% of common variance.

Using the two latent factors, we examine their relation with stock returns (one-month, three-month, six-month and twelve-month). We construct portfolios by sorting stocks into five quintile groups each month based on latent factors. On average, stocks in the high belief heterogeneity quintile earn lower future returns than stocks in the low quintile. The underperformance of high belief heterogeneity quintile portfolios increases with the investment horizon. All these return differentials are statistically significant at 1% level. On average, stocks in the high uncertainty quintile earn higher future returns than stocks in the low uncertainty quintile. When the holding period of portfolios becomes longer, the gap increases. However, the mean (median) return differential between the lowest quintile and the highest quintile is insignificantly different from zero except for three-month returns.

We further employ the multifactor model to test if return patterns in quintile portfolios can be explained by risk factors. The risk-adjusted returns (alphas) indicate that the four-factor model leaves positive unexplained returns for the lowest belief heterogeneity quintile portfolio and negative unexplained returns for the highest two belief heterogeneity quintile portfolios. Alphas monotonically decrease from the lowest quintile to the highest quintile. The difference in the risk-adjusted returns between the highest and lowest quintile portfolios is significantly negative for one-month return (-1.37%), three-month return (-2.72%) and six-month return (-3.44%), but is insignificant for twelve-month return. Results suggest that even after controlling for differing exposure to risk factors, stocks with greater belief differences earn lower future returns for at least six month, which supports the argument of Miller (1977) and consistent with the finding of Diether et al. (2002) and Feng et al. (2015). Regression results based on latent variable of uncertainty show no significant pattern for the risk-adjusted returns across quintiles for one-month return and three-month return. However, high uncertainty quintile portfolio earn lower risk-adjusted returns for six-month return and twelve-month return.

CONCLUSION

Differences in beliefs and uncertainty are unobservable therefore empirical studies use observable proxy variables. However, proxy variables do not clearly capture investor belief differences or uncertainty and often embody both belief differences and uncertainty. In this paper we propose a method to separate the belief difference component and uncertainty component of proxy variables. We use factor analysis to analyze a number of proxy variables. A latent factor for uncertainty and a latent factor for heterogeneous beliefs are identified. The latent factor for heterogeneous beliefs is a cleaner measure because it is free from the confounding effect of uncertainty. We use the estimated latent factor for heterogeneous beliefs to shed light on the debate about the effect of heterogeneous beliefs on future cross-sectional stock returns. Our results show that stocks with greater belief heterogeneity earn lower future returns, supporting Miller's (1977) overvaluation theory. This finding is robust to controlling for size, book-to-market and momentum effects. Moreover, a long-short portfolio formed on the basis of the latent factor has significantly higher returns than the portfolios formed using individual proxy variables for belief differences. The latent factor for uncertainty represents the risk factor. We find that stocks with more uncertainty earn higher future one-month and three-month returns than stocks with less uncertainty; but this effect disappears once we control for the size, book-to-market and momentum effects. However, stocks with high uncertainty have lower risk-adjusted six-month and twelve-month return. By recognizing that many of the proxies commonly used to measure belief differences are also correlated with uncertainty and risk, our study helps to reconcile the results of previous empirical studies that have obtained conflicting results when estimating the relationship between the individual proxy variables and future returns. As predicted by theory, greater belief differences decrease future returns while uncertainty increase risk in the short run and then decreases future returns.

REFERENCES

- Anderson, E. W., Ghysels, E., and Juergens, J. L. (2005) "Do heterogeneous beliefs matter for asset pricing?" *Review of Financial Studies*, 18 (3), 875-924.
- Anderson, E. W., Ghysels, E., and Juergens, J. L. (2009) "The impact of risk and uncertainty on stock returns" *Journal of Financial Economics*, 94 (2), 233-263.
- Baik, B., and Park, C. (2003) "Dispersion of analysts' expectations and the cross-section of stock returns," *Applied Financial Economics*, 13, 829-839
- Barron, O. E., O. Kim, S.C. Lim, and D.E. Stevens, (1998) "Using analysts' forecasts to measure properties of analysts' information environment," *Accounting Review*, 73, 421-433
- Bollen, N. P., and Whaley, B., R. (2004) "Does net buying pressure affect the shape of implied volatility functions?" *Journal of Finance*, 59 (2) 711-753
- Buraschi, A., and Jiltsov, A. (2006) "Model uncertainty and option markets with heterogeneous beliefs," *Journal of Finance*, 61 (6) 2841-2897
- Campbell, J. Y., and Shiller, R. J. (1988) "Stock Prices, Earnings, and Expected Dividends," *Journal of Finance*, 43 (3), 661-76
- Carhart, M. (1997) "On Persistence in Mutual Fund Performance," *Journal of Finance*, 52, 57-82
- Diether, K. B., Malloy, C. J., and Scherbina, A. (2002) "Differences of opinion and the cross section of stock returns," *Journal of Finance*, 57 (5), 2113-2141

- Doukas, J. A., Kim, C., and Pantzalis, C. (2004) "Divergent opinions and the performance of value stocks," *Financial Analysts Journal*, 60 (6), 55-64
- Fama, E. F. and French, K. (1992) "The cross-section of expected stock returns," *Journal of Finance*, 47(2), 427-465
- Feng, S., Geoffrey, C. and Y. Zhang (2015) "The relationship between the option-implied volatility smile, stock returns and heterogeneous beliefs" *International Review of Financial Analysis*, 41, 62-73
- Friesen, G. C., Zhang, Y and Zorn, T.S. (2012) "Heterogeneous Beliefs and Risk Neutral Skewness," *Journal of Financial and Quantitative Analysis*, 47(4), 851-872
- Garfinkel, J, A, and Sokobin, J. (2006) " Volume, opinion divergence, and returns: a study of post-earnings announcement drift," *Journal of Accounting Research*, 44, 85-112
- Goetzmann, W. N., and Massa, M. (2005) "Dispersion of opinion and stock returns," *Journal of Financial Markets*, 8 (3), 324-349.
- Harris, M., and Raviv, A. (1993) "Differences of opinion make a horse race," *Review of Financial Studies*, 6 (3), 475-506
- Kandel, E., and Pearson, N. (1995) "Differential interpretation of public signals and trade in speculative markets." *Journal of Political Economy*, 103, 831-872
- Jiang, G., Lee, C. M. C., and Zhang, Y. (2005) "Information Uncertainty and Expected Returns," *Review of Accounting Studies*, 10 (2-3), 185-221
- Miller, E. M. (1977) "Risk, uncertainty and divergence of opinion," *Journal of Finance*, 32, 1151-1168
- Odean, T. (198) "Volume, volatility, price and profit when all traders are above average," *Journal of Finance*, 35, 1887-1934
- Williams, J. T. (1977) "Capital asset prices with heterogeneous beliefs," *Journal of Financial Economics*, 5, 219-239
- Xu, J. (2007) "Price convexity and skewness," *Journal of Finance*, 62(5), 2521-2552
- Zhang, X. F. (2006) "Information Uncertainty and Stock Returns," *Journal of Finance*, 61 (1), 105-137
- Zhang, Y. (2017) "Heterogeneous Beliefs and Volatility Smile", *Academy of Accounting and Financial Studies*, Forthcoming

BIOGRAPHY

Yi Zhang, Prairie View A&M University.

THE RELATIONSHIP BETWEEN MIGRATION AND THE FOOTWEAR INDUSTRY IN GUANAJUATO

Karla Liliana Haro-Zea, Benemérita Universidad Autónoma de Puebla

ABSTRACT

This research aims to study the perception of workers in the footwear industry in the State of Guanajuato, relative to the relationship between migration and investment in the industry. The shoe industry (footwear manufacturing) employs an average of 112,727 people, contributing to 2.4% of the total employment of all manufacturing industries in Mexico. Furthermore, when purchasing footwear manufacturing supplies, it is estimated that this industry generates 17,000 extra jobs with their suppliers. also the most important region in Mexico for its footwear production is the State of Guanajuato, and it is among the States with the highest migration, hence the importance of carrying out this research. This research is quantitative, descriptive, and transversal. For this research a convenient sample was selected to meet certain criteria. Moreover, fifty workers were surveyed in footwear distribution and sales centers, which are all located in the municipality of León Guanajuato, Mexico. It is worth mentioning that Guanajuato generates 68.4% of the footwear production in Mexico and the municipality of León produces 57.8% of it. For the data collection an instrument consisting of 21 items and 3 constructs was used. The study shows that only a third of migrants invest in the footwear industry, and that the difference is invested in agriculture, in the construction of their homes, and in the maintaining of their families.

JEL: O150, R59

KEYWORDS: Migration, Local Development, Sustainability, Industry

INTRODUCTION

Mexican migration is the result of a historical & unique relationship between the United States and Mexico. In fact, Mexicans inhabited California and Texas before the territory was even American. In turn, the Bracero Program stimulated the entry of thousands of Mexicans and, later, through family reunification policies, the entry of women and children was allowed, consolidating a definitive settlement of the population (Portes, 1998). The different dimensions of migration, which are economic, social, political and cultural, reveal the complexity of this phenomenon. Therefore, the investigation of this topic proposes many challenges. Also it is important to remember that in 1993 Migration Survey in the Northern Border of Mexico began. The general objective was to obtain knowledge about the labor migration phenomenon between the northern border of Mexico and southern border the United States, highlighting its nature, volume and trends, its effects on the labor market and the impacts on both societies (Colef, 2007). An element of interest within the economic dimension of migration and of increasing importance for some economies of countries that have emigration is the sending of remittances. It is a fact that remittances have an impact on the families that receive them and on the increase in their consumption levels (United Nations, 2016). Therefore, since remittances and the footwear industry in Guanajuato are two important generators of income in the State, the question arises: is it possible that the receiving of these revenues are related and have an impact on local development?

So then, the purpose of this research study is to analyze the perception of workers in the footwear industry in the State of Guanajuato, as far as the relationship between migration and investment in the industry, as Guanajuato has traditionally been considered a state of strong migratory expulsion because it is recognized nationally and internationally for its footwear production. This article has been structured into four sections. The first is based on a brief but thorough review of the literature which has allowed us to gain insight and

the impact of remittances, such as the shoe industry in the State of Guanajuato. The methodology is explained later. Finally, the results and the conclusions are presented.

Theoretical Framework

Migration and its importance within the economy of Guanajuato. The impact of migration is analyzed by Binford (2006) from two major aspects in relation to the impact of remittances, the functionalist, and the historical structuralist. The first assumes that remittances have the power to reduce poverty and income inequality and help stabilize families financially, as they are used for basic expenses such as food, education, health, and housing. Finally, they mean greater well-being for families and have a multiplying effect on the country's economy. On the other hand, the historical structuralist view considers that emigration has a negative effect on the economy and on the social structure of their communities. Within this view, emigration and remittances create a series of structural distortions that are reflected in an exacerbation of social conflict, economic differences, and inflation, which fosters a vicious cycle that distorts the local economy and deteriorates its social structures. One of the problems faced by these communities is that they become dependent on remittances, which leads to greater emigration, because only the remittances can help maintain the standard of living. According to this view, family remittances have very little chance to initiate development since they are used for basic education, family maintenance, health, home construction, productive investments, etc., yet these not generate jobs, and the limited productive projects have little benefit.

At the same time, Canales (2006) supports the theory that remittances have a very limited and restricted impact on the development promotion and in the reduction of poverty, for they are essentially, a salary fund which is transferred among families in similar socioeconomic conditions. As a matter of fact, remittances are usually sent by precarious and vulnerable migrant workers to their relatives who live in poverty and socially marginalized. In this way, remittances are able to improve the standard of living of the receiver's homes, but they are far from representing a strategy which permits them to solve the structural problems that perpetuate poverty. In addition diverse studies coincide in pointing out that remittances are basically destined to finance the material reproduction in the migrants' homes, being a very low proportion destined to productive projects (Papail, 2002; Lozano, 2005). Papail (2002) also states that the remittances received by urban households in the central-western region of Mexico are very important resources for the reproduction of numerous families. However, during the nineties, the productive investments made thanks to these remittances seem to have intensified, which allowed a significant amount of employees to become micro entrepreneurs at the end of their migration cycle in the United States, in an attempt to increase their incomes in their places of origin in Mexico.

Thus, remittances contribute to the economy of the families that remain in within the communities of origin of the migrants, but what is not clear is to what extent they help their economic development. It is known that families use them for maintenance and to acquire, repair, or house addition. Yet we must know to what extent they affect the development of the community, if with their surplus productive businesses are created which employ other people or have multiplier economic effects. In the third instance, we need to know how they affect the creation of goods and service companies in major urban centers in the region where the communities and how much of the remittances leaves the immediate region and is concentrated in large cities that produce and sell the products and services demanded by the communities that expel migrants (Arroyo Alejandro & Rodríguez, 2008). Highlight that 2016 remittances to Mexico set a new record of US\$26,970 million, worldwide remittances could reach US\$606.4 million in 2017, up by 3.6%. In addition in 2016, remittances to Mexico reached an all-time high of US\$ 26,970 million, which represents an 8.8% growth at an annual rate, being also the largest growth in this flow since 2006. It thus surpasses the record set in 2007, when US\$26,059 million were received (Fundación BBVA Bancomer, Secretaría de Población, & Consejo Nacional de Población, 2017).

It is worth mentioning that the states with the largest numbers of returnees were in the Western, Central-South and Northern regions of Mexico. 38.6% returned to towns with more than 100,000 inhabitants and 29.0% to towns with fewer than 2,500 inhabitants. The state of Guanajuato had from 2010 to 2015, 32,147 (6.5%) Mexican return migrants (Fundación BBVA Bancomer, Secretaría de Población, & Consejo Nacional de Población, 2017). Also it adds that emigrants from Guanajuato between 2005-2009 were 142,691 and 2009-2014 66,001; women (28.9%) with average age 33.9; Men (71.1%) with average age 36, top states of residence Texas (33.25), California (24.3%), Illinois (8.2%), North Carolina (3.7%) and Georgia (3.7%), top municipalities of birth, León (8.8%), Celaya (7.2%), Irapuato (7.0%), Acambaro (4.6%), Penjamo (4.6%) and repatriated by United States in 2016 were 10,511; adults 95.5% and children 4.5% (Fundación BBVA Bancomer, Secretaría de Población, & Consejo Nacional de Población, 2017) .

Figure 1: Absolute Migration Intensity Index (IAIM), 2000-2010

Índex	2.17
% houses with	21,857,601
Remittances	3.6
Emmigrants to US	1.9
Circular Migrants	0.9
Returning Migrants	2.2

Source: CONAPO estimates based on INEGI, ten percent sample of Census 2010. *Guanajuato has a very high Absolute Degree of Migration Intensity (4.86) and had with the biggest remittance receipts in 2016.*

As far as we can see, Guanajuato is one of the states that receives the most remittances and according to data from the National Institute of Statistics and Geography (INEGI, 2010), the activity that contributes the most to the Gross Domestic Product of the State is commerce and they are recognized nationally and internationally for its footwear industry. Importance of Footwear Industry in Guanajuato. The footwear industry in Mexico employed 112,727 people in 2014, contributing 2.4% of the total occupation of manufacturing industries, according to the Economic Census (2009). Additionally, when acquiring supplies for the manufacture of footwear, it is estimated that this industry generates 17 thousand extra jobs with its suppliers. The national production of Footwear is located in eight municipalities of the country mainly: a) León, Guanajuato contributes 57.8% of the total value of production, b) Guadalajara, Jalisco 10%, c) San Francisco del Rincon, Guanajuato 6.7% d) Purisima del Rincon, Guanajuato 3.9% e) Zapopan, Jalisco 3.1%, f) Iztapalapa, Federal District 1.4% g) Toluca, Mexico 1.3%, and h) San Mateo Atenco, Mexico 1.2%. This means that Guanajuato generates 68.4% of the footwear production in the country (INEGI, Statistics regarding the footwear industry, 2014).

Figure 2: the most Important Municipalities in Mexico for Their Footwear Production.

	Economic Units		Busy Staff		Production (Millions Of Pesos)	
	Absolute	%	Absolute	%	Absolute	%
National	7,398	100	112,727	100	26,146	100
Leon, Guanajuato	2,330	31.5	57,064	50.6	15,119	57.8
Guadalajara, Jalisco	486	6.6	11,172	9.9	2,605	10
San Francisco del Rincon, Guanajuato	447	6.0	8,429	7.5	1,747	6.7
Purisima del Rincon, Guanajuato	176	2.4	4,448	3.9	1,018	3.9
Zapopan, Jalisco	60	0.8	2,791	2.5	810	3.1
Iztapalapa, Distrito Federal	7	0.1	551	0.5	353	1.4
Toluca, Mexico	6	0.1	1,069	0.9	347	1.3
San Mateo Atenco, Mexico	1,337	18.1	6,795	6.0	304	1.2
Total of the 8 municipalities	4,849	65.6	92,319	81.8	22,302	85.4
Rest of the municipalities	2,549	34.4	20,408	18.2	3,844	14.6

Source: Economics Census 2009. The municipalities were ordered according to the value of the production they contributed to the national total.

30.8% of the economic units that are mainly engaged in the manufacture of footwear obtained financing in 2014, a figure that is higher than that of the manufacturing sector (INEGI, Economic Censuses, 2009). Exports of footwear as of 2010 registered a growing behavior. In fact, from 2010 to 2012 the growth rate was above 20%. In the first five months of 2014, exports decreased (-) 10.3% with respect to the same period of 2013 (INEGI, Tax Administration Service, & Ministry of Economy, Exports of footwear, 2013-2014). 94.1% of external sales of footwear products were exported to 10 countries in 2013, yet 82.6% of the footwear were exported to the United States in the same year. Exports of footwear from Mexico represented 0.5% of world exports, representing 24th place (International Trade Center, 2012). Derived from the above, we can see the importance of both the remittances sent to the State of Guanajuato and the footwear industry, so then this research work focuses on studying whether remittances impact the footwear industry, mainly in the creation of companies and in the local development of the State.

METHODOLOGICAL ASPECTS

This research is quantitative, descriptive, and transversal. For this research a convenient sample was selected to meet certain criteria. Fifty workers were surveyed in footwear distribution and sale centers, all located in the municipality of León Guanajuato, Mexico. It is worth mentioning that Guanajuato generates 68.4% of the footwear production in the country and the municipality of León produces 57.8% of it.

Table 1: Operational Definition of Research Variables

Variables	Definition	Item	Unit Of Measurement
Dependent	Type of need	a) Lack of job opportunities, b) low wages in Mexico, c) find a better job, d) economic need, e) improve their quality of life, f) insecurity in Mexico, g) family lives in the United States.	Instrument designed on the basis of 21 items
	Remittance expense	a) Family maintenance	
	Investment of remittances in the State of Guanajuato	a) Agriculture b) Footwear Industry c) Properties	
Independent	Impact of remittances in the footwear industry of León Guanajuato	Analysis of the relationship between migration and the footwear industry	

For the data collection an instrument consisting of 21 items and 3 constructs was used; demographic data of the sample, remittances and investment in the footwear industry.

RESULTS

Sample

The sample was taken in the municipality of León Guanajuato, because it is considered one of the municipalities with the highest number of migrants in the State of Guanajuato and also it is the most important in terms of production of footwear and leather products in Mexico.

Table 2: Gender.

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Male	22	44.0	44.0	44.0
	Female	28	56.0	56.0	100.0
	Total	50	100.0	100.0	

Table 2, shows that 56% of the respondents are women, 44% men; 34% of them are married, 58% single, 2% live in a free union, 1% separated, 1% widowed. 32% are 15 to 22 years old, 40% are 23 to 44 years old, 16% are 35 to 50 years old and 8% are over 50 years old.

Table 3: Place of Origin

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Celaya	24	48.0	48.0	48.0
	Leon	24	48.0	48.0	96.0
	Estado de México	1	2.0	2.0	98.0
	Salamanca	1	2.0	2.0	100.0
	Total	50	100.0	100.0	

In Table 2 we can see that 96% of the respondents come from the municipalities of Celaya and León Guanajuato.

Table 4: Type of Entrepreneur

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Manufacturer	31	62.0	62.0	62.0
	Distributor	14	28.0	28.0	90.0
	Both	5	10.0	10.0	100.0
	Total	50	100.0	100.0	

62% of respondents are manufacturers, 28% are distributors and 10% are both manufacturer and distributor.

Table 5: Academic degree

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	None	2	4.0	4.0	4.0
	Elementary school	2	4.0	4.0	8.0
	Middle School	15	30.0	30.0	38.0
	High school	22	44.0	44.0	82.0
	Bachelor's degree	9	18.0	18.0	100.0
	Total	50	100.0	100.0	

4% of respondents do not have academic training, another 4% elementary school, 30% middle school, 44% high school and 18% bachelor's degree, however 56% have an average of 3 years of experience in the industry, 20% 4 to 9 years, 16% from 10 to 15 years and 8% more than 15 years.

Table 6: Current Position

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Receptionist	2	4.0	4.0	4.0
	Sales	37	74.0	74.0	78.0
	Owner	6	12.0	12.0	90.0
	Manager	5	10.0	10.0	100.0
	Total	50	100.0	100.0	

In table 6 we can observe that 4% are receptionists, 74% are in sales, 12% are owners and 10% are managers.

Remittances in the economy of the State of Guanajuato

Table 7: do you Have Family Members Working in the United States?

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Yes	35	70.0	70.0	70.0
	No	15	30.0	30.0	100.0
	Total	50	100.0	100.0	

70% of respondents claim to have family members working in the United States.

Table 8: Places Where Mexican Migrants Work in the United States

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Texas	10	20.0	20.0	50.0
	California	6	12.0	12.0	66.0
	Illinois	3	6.0	6.0	74.0
	New York	2	4.0	4.0	80.0
	Washington	2	4.0	4.0	88.0
	Arkansas	1	2.0	2.0	90.0
	Tennessee	1	2.0	2.0	92.0
	Ohio	1	2.0	2.0	94.0
	Undecided	9	18.0	18.0	100.0
	Without family	15.00	30.00	30.00	
	Total	50	100.0	100.0	

Texas, California, and Illinois are the largest destinations for relatives of the Guajuatenses with 20%, 12% and 6% respectively. This means that 18% do not have clarity as to where their relatives live within the United States.

Table 9: What Jobs Do Your Family Members Have in the United States?

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Agriculture	10	20.0	20.0	84.0
	Construction	4	8.0	8.0	92.0
	Nanny	2	4.0	4.0	96.0
	Mechanics	2	4.0	4.0	100.0
	Waiters	2	4.0	4.0	
	Carpentry	1	2.0	2.0	
	House keepers	1	2.0	2.0	
	Undecided	13	26.0	26.0	
	No family	15	30.0	30.0	
	Total	50	100.0	100.0	

Family members of migrants from Guanajuato point out that the activities where they work are mainly, agriculture 20% and construction 8%, the rest of them work mainly in activities such as waiters, nannies, mechanics, carpenters, and house keepers.

Table 10: Why do Mexicans Emigrate to the United States?

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Lack of employment opportunities	11	22.0	22.0	22.0
	Low wages in Mexico	9	18.0	18.0	40.0
	Searching for better employment	8	16.0	16.0	56.0
	Economic necessity	14	28.0	28.0	84.0
	Improve their quality of life	6	12.0	12.0	96.0
	Mexico's insecurity	1	2.0	2.0	98.0
	Their families live in the US	1	2.0	2.0	100.0
	Total	50	100.0	100.0	

According to the opinion of the respondents, there are several reasons why respondents migrate to the United States, mainly 28% because economic necessity, 22% for lack of employment opportunities, 18% searching for better employment and 12% and to improve their quality of life, however, they also found factors that influence, to a lesser extent, the decision to migrate, like Mexico's insecurity, and some are motivated because their families live in the United States(US).

Table 11: do you Think the Mexican Government Is Doing Something to Reduce Migration?

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Yes	8	16.0	16.0	16.0
	No	42	84.0	84.0	100.0
	Total	50	100.0	100.0	

84% of respondents believe that the Mexican government does not do enough to reduce migration to the United States. Additionally, 46% indicated that the last year, even with the restrictive immigration policies of the United States Government, migration has not diminished.

Table 12: How do you Think Migrants Returning Should Be Supported?

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Válido	Create business	3	6.0	6.0	6.0
	Competitive salaries	6	12.0	12.0	18.0
	More job opportunities	22	44.0	44.0	62.0
	Support with settling in Mexico	2	4.0	4.0	66.0
	Lower taxes	2	4.0	4.0	70.0
	Legal support	6	12.0	12.0	82.0
	Raise awareness of the Mexican life style	1	2.0	2.0	84.0
	No discrimination	2	4.0	4.0	88.0
	Support them to create projects	4	8.0	8.0	96.0
	Security to return	2	4.0	4.0	100.0
	Total	50	100.0	100.0	

Among the actions that must be carried out to support return migrants from the perspective of the respondents are: create more job opportunities, pay competitive salaries, legal support, support them to create projects and create more businesses.

Table 13: do you Know People Originally from Guanajuato Deported In 2017?

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Yes	22	44.0	44.0	44.0
	No	28	56.0	56.0	100.0
	Total	50	100.0	100.0	

44% of respondents know at least one person deported and believe that many of them will try to cross the border again out of necessity.

Relationship between migrant remittances from Guanajuato and the footwear industry in the State. We should remember that these represent two of the most important revenues of the State.

Table 14: Industry in Which Migrants Invest in Guanajuato

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Agriculture	26	52.0	52.0	52.0
	Footwear industry	16	32.0	32.0	84.0
	Commerce	3	6.0	6.0	90.0
	Home construction	5	10.0	10.0	100.0
	Total	50	100.0	100.0	

Migrants from Guanajuato mostly invest in agriculture with 52%, 32% in the footwear industry, 10% in home construction and 6% in commerce, that is to say only one third of remittances are related to investment.

Table 15: Municipalities in Guanajuato with the Largest Number of Migrants

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Dolores Hidalgo	16	32.0	32.0	32.0
	San Felipe	10	20.0	20.0	52.0
	Acambaro	2	4.0	4.0	56.0
	Silao	3	6.0	6.0	100.0
	Irapuato	2	4.0	4.0	82.0
	Paseo	1	2.0	2.0	94.0
	Undecided	11	22.0	22.0	78.0
	The whole State	5	10.0	10.0	92.0
	Total	50	100.0	100.0	

The respondents identify mainly two municipalities with the highest number of migrants: Dolores Hidalgo and San Felipe, however, 10% think that the entire State has a significant number of migrants.

Table 16: Employers of the Footwear Industry who Were Migrants

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Yes	11	22.0	22.0	22.0
	No	39	78.0	78.0	100.0
	Total	50	100.0	100.0	

22% of respondents know a footwear industry entrepreneur who was a migrant.

Table 17: Occupation of Family Members of Migrants

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Vendor	15	30.0	30.0	54.0
	Unemployed	9	18.0	18.0	72.0
	Footwear industry worker	7	14.0	14.0	24.0
	Farmer	5	10.0	10.0	10.0
	Housekeeper	5	10.0	10.0	90.0
	Construction worker	4	8.0	8.0	98.0
	Other	4	8.0	8.0	80.0
	Undecided	1	2.0	2.0	100.0
	Total	50	100.0	100.0	

30% of the families of migrants work as vendors, however they believe that 18% unemployed and basically use the money they receive from remittances to maintain themselves. In addition 14% work in the footwear industry worker, 10% farmer and 10% housekeeper.

Table 18: Destination of Migrant Remittances in Guanajuato.

		Frequency	Percentage	Valid Percentage	Accumulated Percentage
Valid	Expenses	20	40.0	40.0	40.0
	Investment	3	6.0	6.0	46.0
	Both	27	54.0	54.0	100.0
	Total	50	100.0	100.0	

40% of the respondents believe that 40% of remittances are spent, 6% is invested and 54% is used for both maintenance and investment in the agriculture, the footwear industry, construction of a property or for maintenance of the family.

CONCLUSIONS

Guanajuato has been considered a source of migratory expulsion, since it is among the top states with the highest migration in Mexico. According to the results of the present investigation, 70% have relatives working in the United States, although not in all cases are they direct relatives. The reasons for migration differ, ranging from the economic need that the families have, the desire to find better jobs, improving their quality of life, an adventure as a migrant in the municipalities that are recognized for the migration of their young people. Likewise, a significant number migrate to reach their families residing in the United States, even if this means risking their own safety and lives. The predominant jobs in the United States are: vendor, farmer, construction workers, and a minority work mainly in activities such as waiters, babysitters, mechanics, carpenters, and housekeepers.

Among the most frequent destinations of Mexican migrants are Texas, California, and Illinois; the Guajuatenses aren't the exception, they predominantly reside in the aforementioned States, as well as in New York and Washington. On the other hand, most of the respondents (84%) think that the Mexican government does not do enough to reduce migration to the United States. Even with the restrictive immigration policies of the United States Government, migration has not diminished for a primary reason: the economic necessity of families is latent. Therefore regardless of the restrictions, they continue to risk their lives to achieve a better standard of living. It is possible to affirm that is a relationship between the remittances sent to the families of the migrants in Guanajuato and the footwear industry of said State, because according to the results obtained, only 14% work in the footwear industry. Therefore, the results suggest that 60% of the remittances sent are used for both maintenance and investment in agriculture, the footwear industry, construction of a property or for family maintenance, particularly 6% of this is invested in the industry under study, and 22% of respondents say they know an owner in the footwear industry who was a migrant. Migration is a complex phenomenon, which can be studied from different perspectives, and opens a wide range of opportunities for research. Therefore it would be important to study in greater depth the ability for migrant families to save money, because there is a lot of talk about investment, but migration scholars agree that migrants come from low-income families and even from families with extreme poverty. Furthermore, remittances are for solution to the maintenance problem but the income of the migrant is not always enough to pay for the cost of living in the United States and their family in Mexico. Another view suggests that the lack of savings of migrant families is due to the culture.

REFERENCES

- Arroyo Alejandro, J., & Rodríguez, A. D. (2008). Migración a Estados Unidos, remesas y desarrollo regional. *Papeles de la Población*, 43.
- Binford, L. (2006). Remesas y el Subdesarrollo en México. *Coloquio de Antropología Social e Historia Regiones. Desde los colores del Maíz*. México: El Colegio de Michoacán.
- Canales, C. A. (2006). Remesas y desarrollo en México. Una visión crítica desde la macroeconomía. *Papeles de la Población*, 175.
- Colef. (2007). *Encuesta Sobre Migración en la Frontera Norte de México*. México: El Colegio de la Frontera Norte.
- EPCH. (01 de 12 de 2011). Export Promotion Council for Handicrafts. Retrieved from: Export Promotion Council for Handicrafts: [http:// www.epch.in/circulars/circulars/definition.pdf](http://www.epch.in/circulars/circulars/definition.pdf)
- Fundación BBVA Bancomer, Secretaría de Población, & Consejo Nacional de Población. (01 de Junio de 2017). *Anuario de Migración y Remesas*. Retrieved from: https://www.gob.mx/cms/uploads/attachment/file/250390/Anuario_Migracion_y_Remesas_2017.pdf

INEGI. (2009). Censos económicos. México: Estudios INEGI.

INEGI. (2010). Cuentame INEGI. Retrieved from:
<http://cuentame.inegi.org.mx/monografias/informacion/gto/default.aspx?tema=me&e=11>

INEGI. (2010). Estimaciones Emigración. México: Consejo Nacional de Población.

INEGI. (2014). Estadísticas a propósito de la industria del calzado. México: INEGI.

INEGI, Servicio de Administración Tributaria, & Secretaría de Economía. (2013-2014). Exportaciones de calzado. México: Grupo de Trabajo de Estadísticas de Comercio Exterior.

International Trade Center. (2012). Principales países exportadores de calzado. En INEGI, Estadísticas a propósito de la industria del calzado (pág. 24). México: Contenidos INEGI.

Lozano, A. F. (2005). Hogares receptores de remesas en México: limitantes y posibilidades para el desarrollo local y regional. Centro Regional de Investigaciones Multidisciplinarias-Universidad Nacional Autónoma de México, CMD Working Paper.

Naciones Unidas. (2016). Migración internacional,. República Oriental del Uruguay : Comisión Económica para América Latina y el Caribe.

Papail, J. (2002). De asalariado a empresario: la reinserción laboral de los migrantes internacionales en la región centro-occidente de México. Migraciones Internacionales, 34.

Peteraf, M., & Barney, J. (2003). Unraveling the resource-based tangle. Managerial and Decision Economics, 23.

Portes, A. (1998). From South of the Border: Hispanic Minorities in the United Status. En D. Jacobson, The Immigration Reader. America in a Multidisciplinary perspective. Massachussets: Blackwell Publisher.

ACKNOWLEDGMENT

Thank you to the Program for the Professional Development of Teachers (PRODEP), for supporting the incorporation of new full-time professors, for financing the field research. Also, to the Vice-rectory of Research and Postgraduate Studies of the BUAP, for financing the presentation results, as well as the Public Accounting Faculty of the BUAP for granting their facilities in order to develop this study.

BIOGRAPHY

Karla Liliana Haro-Zea, is a Research Professor of the Benemérita Universidad Autónoma de Puebla (BUAP), Phd in Strategic Planning and Technology Management by the Universidad Popular Autónoma del Estado de Puebla (UPAEP). Candidate for National Researcher. Postdoc in Sustainable Development

EXPLORING THE IMPACT OF LEADER STATUS-RELATED BEHAVIORS ON ORGANIZATIONAL OUTCOMES IN FINANCIAL SERVICE FIRMS

Kelly C. Mullen, Trinity Christian College

ABSTRACT

The U.S. financial services industry has been in a state crisis for three decades, precipitated by ethical misconduct within the industry. Regulatory and legislative changes have been introduced, yet the industry's ethical climate remains largely unchanged. Industry participants have acknowledged the limitations of external intervention and have called for change at the organizational level that specifically targets organizational leadership and culture to promote ethical and organizational citizenship behavior (OCB) outcomes. Deming proposed that firms may improve quality through comparative performance assessment with outside industries. This study is modeled after research conducted by Nembhard and Edmondson (2006) to determine whether significant organizational findings from the healthcare industry are reproducible in the financial services industry. It examines the relationship of professional status and psychological safety on OCB outcomes, while incorporating the moderating effect of leader inclusiveness. The results indicate that professional status influences perceptions of psychological safety moderated by leader inclusiveness, that leader inclusiveness has a direct influence on OCB-voice, and that psychological safety directly mediates OCB helping and organizational commitment outcomes, providing managerial insights on how organizational leaders in the financial services industry might effectively manage professional status differences to enhance employee perceptions of psychological safety and stimulate OCB.

JEL: L290, M140, M190

KEYWORDS: Professional Status, Leader Inclusiveness, Team Leader Coaching, Psychological Safety, Financial Services Firms, Organizational Citizenship Behavior, Ethical Outcomes

INTRODUCTION

From the late 1970s to the present, troubles in the financial services industry have unfortunately made headline news. Potential remedies to halt these crises have typically relied on forces outside of the financial firms themselves (e.g., regulatory/SEC intervention). Despite ongoing indications from industry insiders that broad-based behavioral lapses in ethics have been a concern for financial services firms for years, few organizational considerations, including a need to revamp the leadership, management, and organizational dynamics of these firms have been prescribed. Until recently, limited attention has been paid to how ethical behavior is developed and fostered within these organizations. Over the past few years, new attention has been devoted to how organizational behavior may influence financial crises. For example, the leader-team member dynamic in financial services firms has not been studied, nor have the potential moderating influences of professional status, leader inclusiveness, and team leader coaching been examined. The possible mediating effect of psychological safety has not been examined or measured in conjunction with OCB. In addition, virtually no research has explored the effect of professional status differences on psychological safety and organizational citizenship behaviors. This study was primarily a quantitative study with factors generated from qualitative research (Guba & Lincoln, 1994). The research questions derived for the qualitative component of the study were built in conjunction with the hypotheses and both sets of inquiries are rooted in the academic literature that corresponds to this study. Because this study is modeled after the Nembhard and Edmondson (2006) research on healthcare organizations, this study has

incorporated hypotheses adapted from that original research for the quantitative portion. The qualitative research questions incorporated into the study were focused on gaining understanding of how financial professionals at various levels in their organizational hierarchies have experienced professional status differences in the workplace and of how financial professionals characterize the ethical behaviors and conduct of their superiors.

This study seeks to provide new insight regarding possible antecedents to organizational citizenship behavior and is designed to answer the question: “Is professional status in financial services firms associated with employee perceptions of psychological safety and does this influence organizational citizenship behavior of employees?” Leader influence on follower behaviors has generated a considerable amount of scholarly activity (Yukl, 1999). The usefulness of such a study is, therefore, twofold: 1) the project addresses a gap in the existing body of management literature, and 2) the results of the study may generate managerial insights regarding how leaders and managers in the financial services industry might effectively manage professional status differences to enhance employee perceptions of psychological safety and to generate stronger organizational citizenship behaviors.

LITERATURE REVIEW

Both the financial services and the healthcare industries are characterized by notable professional status differences within work groups that influence organizational dynamics and employee behavior (Ho, 2009; Nembhard & Edmondson, 2006). Status characteristic theory, social identity theory, social exchange theory, and leader-member exchange theory provide insights into the impact of professional status on organizational life and on member social dynamics. Status characteristic theory was conceived by social scientists as a paradigm through which to facilitate understanding of status organizing processes that occur in social groups (Berger, Cohen, & Zelditch, 1972; Berger, Rosenholtz, & Zelditch, 1980). A consideration of the influence of professional status is valuable because related organizational research has also demonstrated that unequal status among organizational members can influence organizational members to withhold information in the workplace and can influence workplace participants to speak less (Argyris, 1986; Kirchner & Davis, 1986; Pagliari & Grimshaw, 2002; Vinokur, Burnstein, Sechrest, & Wortman, 1985; Weisband, Schneider, & Connolly, 1995).

In understanding how employees self-identify with social groups in organizational environments, social identity theory offers important insights regarding how status perceptions shape interpersonal and group dynamics in workplace settings. Social identity theory explores intra-group relations, i.e., how people come to perceive themselves as “members” of a particular social group (Tajfel & Turner, 1979; Turner, Oakes, Haslam, & McGarty, 1994). Developed by Blau (1964), social exchange theory examines interpersonal relationships and makes the claim that relationships fall into two general categories: economic exchanges and social exchanges (Blau, 1964; Bishop, Scott, & Burroughs, 2000). The theory suggests that people develop transactional (economic) or trust (social) relationships based on their experiences with others. Leader-Member Exchange Theory (LMX) was initially presented by Graen (1976) and is commonly referred to as a relationship-based approach to leadership. Since its introduction, LMX theory has generated considerable interest in the academic community and has gone through four notable shifts in its development to the current understanding of LMX (Graen & Uhl-Bien, 1995) in order to arrive at the current perspective on the theory. The LMX theory is a theory of leadership that focuses on dyadic or “two-way” working relationships that develop between supervisors and subordinates.

Both industries have turned in poor quality and poor performance significant enough to have been labeled as system-based crises (Dudley, 2014; IOM, 1999). Healthcare, according to Nembhard and Edmondson (2006), needed the benefit of greater employee willingness to engage in continuous improvement efforts. Financial services firms, according to industry leaders, would benefit from stronger pro-social, ethical

behavior (Dudley, 2014). Though the issues facing these industries appear to be different, they find a common foundation in the area of organizational citizenship behavior.

Organizational citizenship behavior is a multidimensional construct that was initially explored by Organ (1977), who introduced the idea of discretionary contributions from workers, and Bateman and Organ (1983), who developed the idea of qualitative performance (Organ, Podsakoff, & MacKenzie, 2006). Organ, Podsakoff, and MacKenzie (2006) defined organizational citizenship behavior as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and, in the aggregate, promotes the efficient and effective functioning of the organization” (p.8). This definition of organizational citizenship behavior is non-specific and encompasses any and all behaviors that promote the efficient and effective functioning of an organization. Podsakoff, MacKenzie, Paine, and Bacharach (2000) supported this idea that organizational citizenship behavior is expansive; in a review of the academic literature on OCB, these authors distinguished over thirty different forms of organizational citizenship behavior that have been studied and measured. Organ, et al. (2006) identified seven common “themes” or dimensions to OCB, which are presented in the table below: Helping, Sportsmanship, Organizational Loyalty, Organizational Compliance, Individual Initiative, Civic Virtue, and Self-Development (p. 297).

Leader inclusiveness and psychological safety provide additional insights into the Nembhard and Edmondson study results as well as substantiate the inclusion of these variables in this study’s research design. Leader inclusiveness is a construct that was introduced by Nembhard and Edmondson in conjunction with their 2006 study on leader behaviors in interdisciplinary healthcare teams working in neonatal intensive care units. The authors evaluated the words and actions of leaders with high professional status with the intent of understanding how these words and behaviors informed leader-team member interactions and employee willingness to engage in quality improvement efforts. Leader inclusiveness was then defined as: “Words and deeds exhibited by leaders that invite and appreciate others’ contributions that occur in environments characterized by status or power differences” (Nembhard & Edmondson, 2006, p. 947). Leader inclusiveness also incorporates attempts made by high-status leaders to include those team members in decisions and discussions who might otherwise be left out of the discussion or discouraged from sharing. The hallmark of this construct rests on the notion that leader inclusiveness occurs in environments characterized by notably unequal status distribution among members. Leader inclusiveness may incorporate coaching, participative leadership, consultation, and feedback. Nembhard and Edmondson (2006) stated that the goal of their research involved the contribution of knowledge regarding the role of status in shaping perceptions of psychological safety and, more broadly, the conditions that support improvement and learning in cross-disciplinary teams (p. 944). Empirical research suggests that when the insights and expertise of team members at varying levels is ignored or overlooked, group and organizational goals suffer (Littlepage, Robinson, & Reddington, 1997). Specifically, organizational innovation and improvements do not flourish as they might if lower-level employees invited to share opinions and have those opinions incorporated (Nemeth, 1986).

Psychological safety was first conceptualized by Kahn (1990) as a finding from an exploratory qualitative research study he conducted on personal engagement and disengagement at work. In this study, he identified three contributing psychological conditions that influence employee psychological engagement: meaningfulness, safety, and availability. He also asserted that psychological safety was an important antecedent to psychological engagement. According to Kahn (1990), “Supportive, resilient, and clarifying management heightens psychological safety” (p. 711). Argyris (1986; 1993) alluded to this idea when he wrote about the defensive posturing that goes on in within organizations. He suggested that an individual’s tacit beliefs regarding interpersonal exchanges in the workplace ultimately inhibit learning behaviors and promote organizational ineffectiveness and he asserted that leaders, by being consistent across espoused values, words, and actions, could reduce these defensive orientations in workplace settings. Altering leadership behavior in order to reduce status discrepancies and create psychologically safe work environments may stimulate greater employee engagement and “helping” behaviors from employees.

DATA AND METHODOLOGY

The primary research question of this study is: “Is professional status in financial services firms associated with employee perceptions of psychological safety and does this influence employee organizational citizenship behaviors (OCB)?” This study is modeled after Nemhard and Edmondson’s 2006 study in healthcare that found that a leader’s handling of his/her own professional status can have a decisive influence on employee engagement and improvement efforts. Nemhard and Edmondson’s research affirmed that high-status leaders use of encouraging and invitational words and behaviors contributed to stronger employee perceptions of psychological safety. Psychological safety, in turn, resulted in notably higher employee engagement in quality improvement efforts. This study attempts to determine whether these findings are reproducible in another industry and a different type of organization, namely a financial services organization (Deming, 1986). In lieu of improvement efforts, the output (dependent variable) in question in this study is organizational citizenship behavior, a construct that incorporates, among other things, improvement. Organizational citizenship behavior (OCB) was selected because it specifically addresses pro-social and moral obligation aspects of employee organizational behavior (Organ, Podsakoff, & MacKenzie, 2006). This study was conducted as a quantitative research study with a qualitative component and, therefore, included hypotheses derived for the quantitative portion of the study and research questions related to the qualitative portion of the study. The Nemhard-Edmondson 2006 study that inspired this project was a mixed-method study. Because this study is modeled after Nemhard and Edmondson’s (2006) research, this study has incorporated several hypotheses adapted from that original research for the quantitative portion and has introduced an additional hypothesis. The research questions derived for the qualitative component of the study were built in conjunction with these hypotheses and both parts of the survey are rooted in the academic literature that corresponds to this study.

The benefit of including the quantitative portion of the research is that this method permits the use of multiple variables; it can help to identify the strength of relationships between variables, and it permits the researcher to generalize from a sample to the larger population (Creswell, 2003, p. 18). The benefit of the qualitative portion of the research is that it offers the researcher an opportunity to understand how individuals make sense of their environments and their experiences (Lincoln, 2005). Following Nemhard and Edmondson, the present study also included a three-phase data collection process, structured somewhat differently: 1) In phase one, two preliminary 20-minute interviews with senior managers in financial services were conducted in order to confirm the topic and wording presented in the qualitative portion of the survey. 2) In phase two, a pilot study was conducted with 16 professionals working in various financial services firms (commercial banking, private equity, credit union, and financial consulting). 3) In phase three, the actual survey instrument was distributed electronically to the targeted sample, with the intent of collecting a total of 270 responses.

RESULTS AND DISCUSSIONS

The financial services industry has suffered from professional misconduct due to participants (individuals/groups/and firms) in every sphere of the industry whose behavior has broken trust with the public and brought harm to customers and employees alike (Black, 2010; Dudley, 2014; EIU, 2013; Tenbrunsel & Thomas, 2015; Santoro & Strauss, 2013). The healthcare industry, dealing with the consequences of thousands of avoidable errors and avoidable deaths, has been attempting to remedy similar concerns about its performance (Nemhard & Edmondson, 2006; IOM, 1999). Deming (1986) noted, comparative performance assessment across industries may provide insight into how organizations might advance quality improvement efforts. Though dissimilar in context, when these two industries’ performance failures are viewed through the lens of organizational behavior, similarities between their crises begin to emerge. With this in mind, the current study was modeled after Nemhard and Edmondson’s 2006 study exploring professional status, psychological safety, and engagement in quality improvement efforts in

healthcare. This study was designed to provide new insight into potential antecedents to both psychological safety and organizational citizenship behavior (OCB) as well as to answer the question: “Is professional status in financial services firms associated with employee perceptions of psychological safety and does this influence organizational citizenship behavior of employees?”

Within the existing body of research on antecedents to OCB, the potential moderating influences of professional status, leader inclusiveness, and team leader coaching have not yet been examined, nor has the possible mediating effect of psychological safety on OCB been explored. In Nembhard and Edmondson's original 2006 study, job titles were utilized by the authors in order to ascertain status-level of their survey respondents. In the current study, this approach was not utilized due to the ambiguity and disparate meanings of equivalent job titles (e.g., financial analyst, senior analyst, etc). For this reason, a latent class analysis was conducted in order to determine whether homogenous status-based subgroupings might emerge within the sample population. The latent class analysis results confirmed that there were homogeneous subgroupings within the sample population that were distinctly “higher status” and “lower status” in nature. Based on the model fit criteria, ease in interpretability, and parsimony, the sample population (Lanza & Rhoades, 2013; Nylund, Asparouhov, & Muthen, 2007) was divided into one of two distinctive status classes.

The statistical results of the path analysis indicate that for this sample population, professional status was significantly associated with employee perceptions of psychological safety, which supports the Nembhard and Edmondson 2006 findings. At a slightly higher p value (in the “exploratory” range) years in current work group ($p < .071$) was also positively associated with psychological safety. The path analysis results also suggest that the interaction between professional status and leader inclusiveness and between professional status and team leader coaching is significantly associated with OCB. In the case of leader inclusiveness, the interaction effect of professional status on leader inclusiveness was positively associated with organizational commitment ($p < .023$). The interaction effect of class and team leader coaching showed a negative and statistically significant association with OCB-Voice and with organizational commitment, suggesting that every unit of change in team leader coaching for high status (class = 1) results in a negative change in OCB-Voice relative to the low status (class = 0) people. Higher responses in OCB-Voice were evidenced in low status people as team leader coaching increases and less for the higher status people. In other words, the higher the person's status, the less TLC is able to predict OCB-Voice or organizational commitment. Professional status interacts with team leader coaching differently for the low professional status class than for the high professional status class.

This study makes an important contribution and both directly and indirect supports several important empirical studies which explored the relationships between ethical leadership, leader behaviors, work climate/psychological safety, and OCB. The most novel contribution pertains to the findings that affirm the relationships between leader inclusiveness and team leader coaching and OCB. In addition, the interaction effect of professional status on these leader behaviors provides specific managerial insight regarding how managers and organizational leaders might better navigate discrepancies in professional status to draw out and elicit stronger organizational citizenship behaviors from employees. This study found a significant association between employee perceptions of psychological safety and OCB and demonstrated support for the mediating effect of psychological safety on every type of OCB evaluated in this study. Finally, this study is unique in the body of existing research in that it explores the respective relationships between professional status, leader behaviors (inclusiveness and team leader coaching), psychological safety, and OCB within the domain of financial services firms.

CONCLUSION

The financial industry, like the healthcare industry, has been fraught with performance issues. It is also, like the healthcare industry, is an industry deeply influenced by status and hierarchy (Ho, 2009; Groysberg,

Polzer, & Eiftenbein, 2011). The present study confirmed the hypothesis that higher status professionals are likely to experience greater psychological safety in the workplace. The findings from this study suggest that leader inclusiveness and team leader coaching, either directly or when moderated by professional status, can influence both employee perceptions of psychological safety and organizational citizenship behavior outcomes. The findings provide managerial insight regarding dispositions that managers can take towards work group members to foster both a greater sense of psychological safety and organizational citizenship behaviors. Two important caveats to this study, however, are that higher psychological safety has been demonstrated to elicit higher levels of unethical behavior in certain environments (Pearsall & Ellis, 2011) and that OCB may be more closely associated to counterproductive work behaviors than has been understood in the management literature (Klotz & Bolino, 2013). Future studies that explore the relationship between psychological safety and OCB measures may be enhanced with consideration of these two phenomena.

REFERENCES

- Argyris, C. (1986). Reinforcing organizational defensive routines: An unintended human resources activity. *Human Resource Management*, 25(4), 541-555. doi:10.1002/ hrm.3930250405
- Bateman, T. S., & Organ, D. W. (1983). Job satisfaction and the good soldier: The relationship between affect and employee "citizenship." *Academy of Management Journal*, 26, 587-595. doi: 10.2307/255908
- Berger, J., Cohen, B. P., & Zelditch Jr., M. (1972). Status characteristics and social interaction. *American Sociological Review*, 37, 241-255.
- Berger, J., Rosenholtz, S. J., & Zelditch Jr., M. (1980). Status organizing processes. *Annual Review of Sociology*, 6, 479-508. Retrieved from jstor.org/stable/2946017
- Bishop, J. W., Scott, K. D., & Burroughs, S. M. (2000). Support, commitment, and employee outcomes in a team environment. *Journal of Management*, 26, 1113-1132. doi: 10.1177/014920630002600603.
- Black, W. K. (2010), Epidemics of 'control fraud' lead to recurrent, intensifying bubbles and crises. doi: 10.2139/ssrn.1590447
- Blau, P. (1964). *Exchange and power in social life*. New York, NY: Wiley.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Deming, W. E. (1986). *Out of the Crisis*, Cambridge, UK: Cambridge University Press.
- Dudley, B. (2014, October, 20). Enhancing financial stability by improving culture in the financial services industry. Remarks presented at the Workshop on Reforming Culture and Behavior in the Financial Services Industry, Federal Reserve Bank of New York, NY.
- Graen, G. B. & Uhl-Bien, M. (1995). Relationship-based approach to leadership: development of leader-member exchange (LMX) theory of leadership over 25 years: applying a multi-level multi-domain perspective. *Leadership Quarterly*, 6(2), 219-247.
- Graen, G. B. (1976). Role making processes within complex organizations. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1201-1245). Chicago, IL: Rand-McNally.

- Groysberg, B., Polzer, J. T., & Elfenbein, H. A. (2011). Too many cooks spoil the broth: How high-status individuals decrease group effectiveness. *Organization Science*, 22(3), 722-737. doi: 10.1287/orsc.1100.0547
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 105-117). Thousand Oaks, CA: Sage.
- Ho, K. (2009). *Liquidated: An Ethnography of Wall Street*, Durham and London: Duke University Press.
- Kirchler, E., & Davis, J. H. (1986). The influence of member status differences and task type on group consensus and member position change. *Journal of Personality and Social Psychology*, 51(1), 83-91.
- Klotz, A., & Bolino, M. (2013). Citizenship and counterproductive work behavior: A moral licensing view. *Academy of Management Review*, 38(2), 292-306. doi:10.5465/amr.2011.0109
- Lanza, S., & Rhoades, B. L. (2013). Latent class analysis: An alternative perspective on subgroup analysis in prevention and treatment. *Prevention Science*, 14, 157-168. doi: 10.1007/s11121-011-0201-1.
- Lincoln, Y. A. (2005). Content, lived experience, and qualitative research. In R. A. Swanson and E. F. Holton, III (Eds.), *Research in Organizations: Foundations and Methods of Inquiry* (pp. 221-231). San Francisco: Berrett Koehler.
- Littlepage, G., Robison W., & Reddington, K. (1997). Effects of task experience and group experience on group performance, member ability, and recognition of expertise. *Organizational Behavior and Human Decision Processes*, 69, 133-147.
- Nembhard, I., & Edmondson, A. (2006). Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organizational Behavior*, 27(7), 941-966. doi: 10.1002/job.413
- Nylund K. L., Asparouhov T., & Muthén B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A monte carlo simulation study. *Structural Equation Modeling*, 14(4), 535-569.
- Organ, D. W. (1977). A reappraisal and reinterpretation of the satisfaction-causes-performance hypothesis. *Academy of Management Review*, 2(1), 46-53. doi: 10.5465/AMR.1977.4409162
- Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational Citizenship Behavior: Its nature, antecedents, and consequences*. Thousand Oaks, CA: Sage Publications.
- Pagliari, C., & Grimshaw, J. (2002). Impact of group structure and process on multidisciplinary evidence-based guideline development: an observational study. *Journal of Evaluation of Clinical Practice*, 8(2), 145-153. doi: 10.1046/j.1365-2753.2002.00333.x
- Pearsall, M., & Ellis, A. (2011). Thick as thieves: The effects of ethical orientation and psychological safety on unethical team behavior. *Journal of Applied Psychology*, 96(2), 401-411. doi: http://dx.doi.org/10.1037/a0021503
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26(3), 513-563. doi:10.1177/014920630002600307

Santoro, M. A., & Strauss, R. J. (2013). *Wall Street Values: Business Ethics and the Global Financial Crisis*. New York, NY: Cambridge University Press.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. *The Social Psychology of Intergroup Relations*, 33, 47.

Tenbrunsel, A., & Thomas, J. (2015). The street, the bull, and the crisis: a survey of U.S. and U.K. financial services industry. New York, NY: University of Notre Dame & Labaton Sucharow.

Turner, J. C., Oakes, P. J., Haslam, S. A., & McGarty, C. (1994). Self and collective: cognition and social context. *Personality and Social Psychology Bulletin*, 20(5), 454-463. doi: 10.1177/0146167294205002

Vinokur, A., Burnstein, E., Sechrest, L., Wortman, P. M. (1985). Group decision making by experts: Field study of panels evaluating medical technologies. *Journal of Personality and Social Psychology*, 49, 70-84.

Weisbad, S. P., Schneider, S. K., & Connolly, T. (1995). Computer-mediated communication and social information: Status salience and status differences. *Academy of Management Journal*, 38, 1124-1151. doi: 10.2307/256623.

Yukl, G. (1999). An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *The Leadership Quarterly*, 10, 285-305. doi: 10.1016/S1048-9843(99)00013-2.

BIOGRAPHY

This case was written by Kelly Mullen, Assistant Professor of Business and Finance at Trinity Christian College in Palos Heights, Illinois. Her research interests include real estate tax-credit and municipal finance, leadership, and business ethics, with a special interest in managerial ethics in the financial services industry. Mullen has a doctorate in business administration from Anderson University in Anderson, Indiana, an MBA in finance and an MS in real estate and urban land economics from the University of Wisconsin.

NEW PRODUCT DEVELOPMENTS BY A NEW COMBINATION OF EXISTING TECHNOLOGIES AND OPEN INNOVATION STRATEGY: A CASE STUDY OF BATTERYLESS AUTO ALERT FIRE EXTINGUISHERS

Hiroshi Yamamoto, Keio University

Satoshi Tomita, Rikkyo University

Yoshiyasu Takefuji, Keio University

ABSTRACT

This is a proposal for the world's first prototype system of batteryless smart fire extinguisher and it was implemented such that the water flow can produce electricity while extinguishing fires. This is a real successful case by combining the existing technology according to the concepts of "New Combination" and "Open Innovation". Generated electronic power is used for broadcasting the location from the fire extinguisher and sensed data to receivers or sending the signal directly to cloud. Because the proposed system has no batteries, battery maintenance is not required at all. During severe environmental circumstances including power outages and dead batteries, the proposed fire extinguisher functions for messaging the fire department about the detailed fire location. In our experiment, the message can be sent to the cloud through the proposed system while electric power is being generated from the water flow. The proposed system is an innovative product developed with low cost and rapid prototyping by using off-the-shelf parts and open source modules, and proposes a solution to the problem that a fire alert should be called rapidly. It is quite a successful case study and leads to the academic contribution toward studies in open innovation and management of technology.

JEL: O32

KEYWORDS: New Combination, New Product Development, Open Innovation, IoT (Internet of Things), Auto Alert System

INTRODUCTION

In order to cope with fires, we must not only inform the minute location to the fire department as we should, but also extinguish the fire as soon as possible. Without communicating with the fire department, we may be able to achieve early extinction of a fire with the proposed system. In existing systems, they require electric power or batteries for messaging the fire department. During a power outage and/or if the battery is dead, the existing systems cannot function as intended. Furthermore, in the existing systems, battery maintenance is a cumbersome task. In the proposed system, battery maintenance is not required. Without GPU technology and open-source framework, we have never achieved the AI advances these days. In this paper, we have created an innovative prototype using the existing technology. The proposed system is a batteryless fire extinguisher with automated alert capability. It is based on the followings: 1. an energy harvesting technology for achieving batteryless system, 2. low power wide area networking (LPWAN) technology for low power and long distance networking, and 3. cloud technology for the automated alert system.

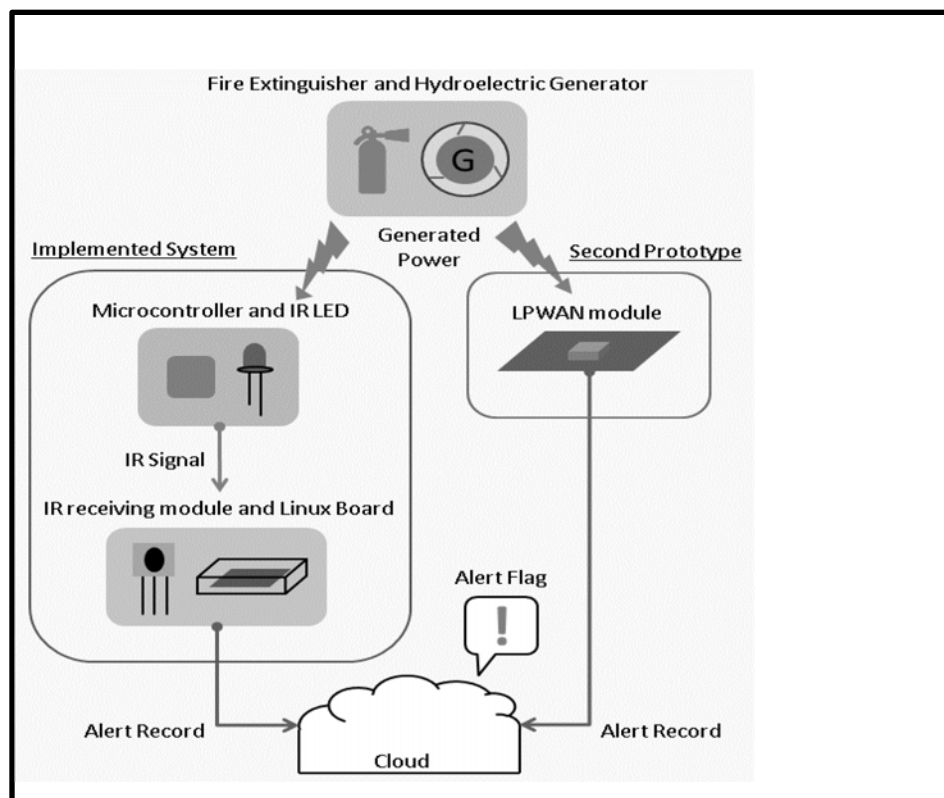
LITERATURE REVIEW

In existing systems, the messaging capability includes the age of the fire extinguisher, the time of fire, and the fire location, which are all informed to the fire department. In the IoT Maker Challenge, Guillaume Chabas has proposed an idea of the connected fire extinguisher (Kube, 2015). His idea needs batteries for proper operations. Mark Jarman and Brendan McSheffrey have developed wireless sensors network for fire extinguisher monitoring (en-Gauge Technologies, Inc., 2007). However, they also require power or batteries for possible operations. It is indispensable to embed messaging capability to the fire department in the existing smart fire extinguishers. The fire evacuation alarm is extremely important to save lives. During a power outage and/or with dead batteries, in the existing fire extinguishers systems, this expected functionality cannot be achieved (Chubb Fire & Security Pty Ltd t/a Quell, 2015). The proposed system does not require any power to message to the fire department. Additionally, the system is designed by compound of open source hardware which is low rates and simple development. Schumpeter (1912) said new knowledge is created by new combinations of already existing knowledge and Chesbrough (2003) said the strategy of Open Innovation is so useful and significant for new product developments in these days. Additionally, Takefuji and Shoji (2017) explained the function, usage, and history of open source hardware. These are prior important literatures for this research.

DATA AND METHODOLOGY

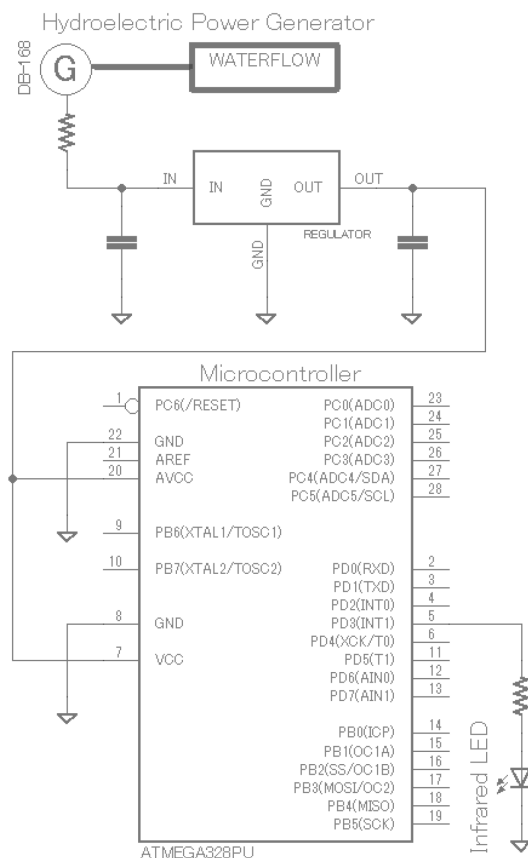
In this study, we developed a self-reporting system on a fire extinguisher which is powered by a small hydraulic power generator driven by the water flow exerted from the fire extinguisher, and is powered without a battery. The implemented system and the second prototype system are shown in Figure 1.

Figure 1: Diagram of the Implemented System and the Second Prototype



First, the fire extinguishers used in the experiment were those for fire prevention training (ST10A, manufactured by Morita Holdings Corporation) which were filled with 3.0 L of water and air pressure of 0.9 MPa. This is a fire extinguisher capable of exerting the same pressure as a commonly used fire extinguisher. Next, the transmitter consists of a small hydroelectric generator, microcontroller, and high brightness infrared Light Emitting Diode (LED). The circuit diagram of the transmitter is shown in Figure 2 below.

Figure 2: Circuit Diagram of the Hydroelectric Generator and Infrared Transmitter with the Fire Extinguisher



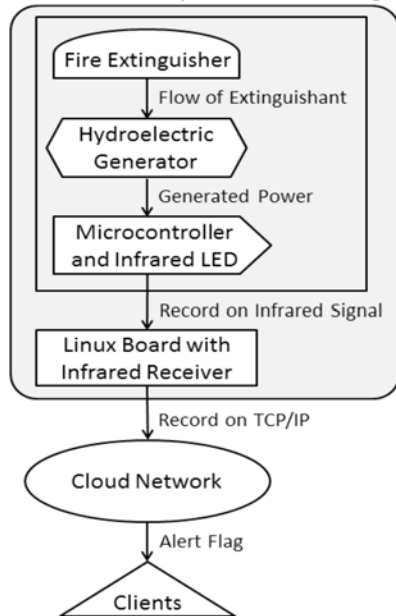
The implemented system is detailed:

A hydroelectric generator produces a maximum output of 5V, 150 mA. A Raspberry Pi 2B (Linux board), equipped with an infrared receiver module is used as the receiver. The infrared LED was adopted because it consumes less power. When the fire extinguisher is in use, the pressure at which the fire extinguishant is discharged is converted into electric power by the hydroelectric power generator. This powers the microcontroller using firmware provided by Arduino, an open-source electronics platform, which sends an infrared signal. The signal is received by a receiver installed in the vicinity. When receiving the infrared signal, the receiving device creates a record that summarizes the ID of the fire extinguisher that sent the infrared signal, the date and time when the signal was received, and the information on the location of

where the receiving device is installed. The receiving device is connected to the Internet, and uploads the record to the cloud network. The system connected to the cloud network identifies the time and location of the fire occurrence by signals from the fire extinguisher and reports it to the fire department, and so forth. Figure 3 shows the block diagram of the implemented system.

Figure 3: Block Diagram of Implemented System (The First Prototype).

[Alarm Transmission System with Fire Extinguisher]



By adopting energy harvesting methods in such a mechanism, this idea of a high-performance fire extinguisher is a world's first. By the automatic power generation from the water flow of the fire extinguisher's discharge, we have built a smart fire extinguisher that can give alarm notifications as well. Although the first prototype proposed here can realize the batteryless implementation of the transmitting device, the receiving device still requires a power infrastructure. For the second prototype, it uses 'low power, wide area (LPWA)' network module, which is a low power and low cost communication system such as SIGFOX, a French system recently introduced to Japan, as opposed to an infrared system to transmit signals from the transmitting device directly to the cloud network in order to upload information. Figure 4 shows the complete-batteryless Internet of Things (IoT) device without the receiving device. Our hydroelectric generator can provide sufficient and enough electric power to the IoT device.

Figure 4: Block Diagram of Second Prototype System

【Alarm Transmission System with Fire Extinguisher】

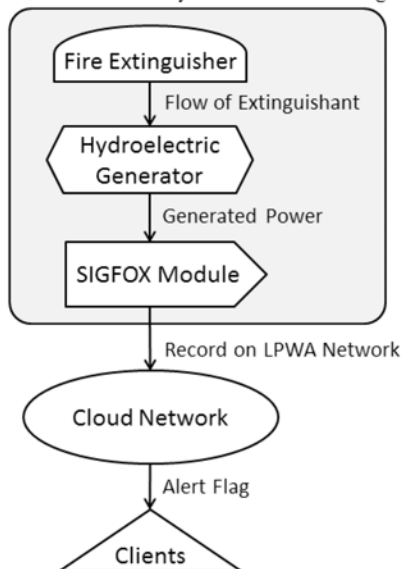
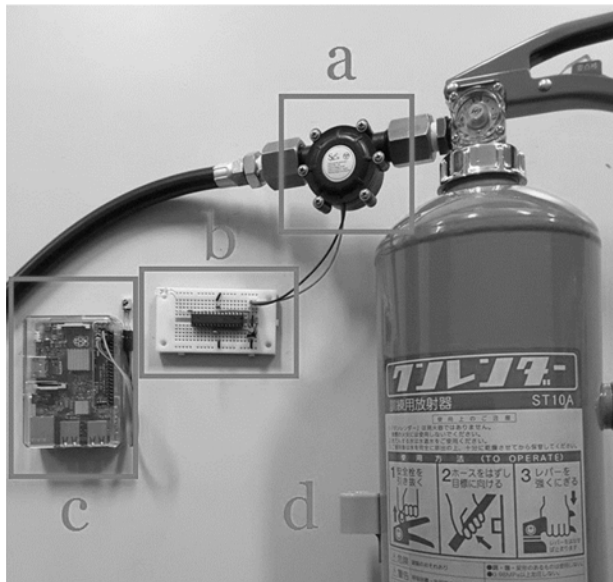


Figure 5 shows the first prototype system. The system is composed of a hydroelectric generator, an infrared transmitter, a Linux board, and a fire extinguisher.

Figure 5: Implemented System (The First Prototype)



a Hydroelectric Generator

b Infrared Transmitter composed of microcontroller and infrared LED

c Linux Board (Raspberry Pi 2B) and IR Receiver

d Fire Extinguisher (Morita ST10A)

RESULTS AND DISCUSSION

We actually conducted experiments in Japan in December 2016 using the proposed system and devices as shown in the previous section. When the extinguishant is discharged from the fire extinguisher capable of discharging the internal contents (water in this experiment) at the same time and at the same pressure as a common fire extinguisher, electricity, 0.5 Watt is generated by the water flow. There is a small hydroelectric power generator attached to the fire extinguisher that conducts energy harvesting. With that power, we attempted to drive the infrared signal transmitter and upload alert information to the cloud network. As a result, it was possible to generate power by discharging the contents continuously for 10 seconds, and to operate the transmitting device. We were also able to receive the infrared signal at the receiver 3 meters away. Even without a continuous discharge of only 10 seconds, which is a standard determined by law for fire extinguishers in Japan, we were able to check alarm information sent from a batteryless fire extinguisher on the cloud network. We also confirmed that the second prototype system described in the above section functioned as intended. As a result, energy harvesting was conducted by the hydraulic power of the extinguishant discharge, and we were able to post a warning flag automatically on the cloud network. In this experiment, fire extinguishers with the same performance as fire extinguishers commonly used were utilized, so it is sufficiently practical.

CONCLUDING COMMENTS

In this research, we built the new system by using off-the-shelf hardware parts and open source software modules. This research hasn't shown any original technology except for the new innovative product idea. The proposed system is the world's first prototype implemented with low cost. As this paper has shown, a small hydroelectric power generator attached to a fire extinguisher generates electricity using hydraulic power from the discharged extinguishant. This electric power is used to drive the infrared Linux board such as Raspberry Pi and the transmitter that uploads alert information to the cloud network. Until presently, similar systems and devices requiring a power infrastructure or batteries existed, but for this experiment no electric power infrastructure was necessary. Now that batteryless has been achieved, fire extinguishers can be freely installed at any location, and problems with dead batteries are irrelevant so maintenance is no longer necessary. Furthermore, it works without issue even in severe environmental circumstances or a power outage. According to Japanese law, fire extinguishers are regulated to continue discharge for more than 10 seconds, and most common fire extinguishers can only be in continuous use for 10 seconds. It was necessary to flag the alarm in the cloud network within this limited time, which was left as is a very difficult task. However, this problem was solved by the system and device proposed in this research. Hence, this batteryless automatic alert transfer system by fire extinguishers is a world first.

This issue is not specific to Japan. It is a worldwide one, and the device proposed in this paper makes a very important contribution to world firefighting. Recently R&D activities in the manufacturing and IT industries are growing more mature and competitive. Also, it is getting more difficult for companies including large ones listed in Tokyo Stock Market to innovate new products only by taking closed innovation strategy, which limits R&D activities inside their companies or only makes use of their present hold technologies. In actuality, companies must pay high cost and long term for their R&D of new innovative products if they are standing on the strategy of closed innovation. This imposes a limitation for their invention of new products and exploring their new business opportunities.

Namely in new product developments, closed innovation which uses only owned technologies has high costs and technical limitations in order to develop new products. Conversely, open innovation which acquires existing technologies and combines them reaches low cost and high speed development capability. Therefore, present companies should use or acquire the existing technologies, off-the-shelf parts, or open source modules outside their organization by the strategy of open innovation. It must lead to new product developments with low cost and rapid prototyping respectively. At that time the open source modules as

documented in this paper should be used. This trend is related to the concept and theory by Schumpeter in the early 19th century, that new knowledge is created by new combinations of already existing knowledge. We can understand that the concept of “New Combination” is a functional theory even today, although the new combination of existing technologies is not a fresh concept. The auto alert system proposed in this paper is exactly the real typical case of Schumpeter’s theory. Consequently, the proposed system in the paper implied that a new innovative system or product that was invented from combining existing technologies as a typical case study. It has an academic contribution to studies in management of technology, R&D activities, and open innovation.

REFERENCES

Chesbrough, Henry (2003) *Open Innovation*, Harvard Business School Press.

Chubb Fire & Security Pty Ltd t/a Quell (2015) “Storm-related power outages can significantly increase the chance for a house fire or carbon monoxide (CO) poisoning”,
<https://www.quell.com.au/blogs/news/18734895-storm-related-power-outages-can-significantly-increase-the-chance-for-a-house-fire-or-carbon-monoxide-co-poisoning>, May 11 2015

en-Gauge Technologies, Inc. (2007) “Electronically Monitored Fire Extinguishers”, en-Gauge Product Sheets, form no. SB-01-08-Rev 2.

Kube, Manfred (2015) “From the IoT Maker shortlist: The Connected Fire Extinguisher,”
<https://blog.gemalto.com/>, 27 January 2015.

Takefuji, Yoshiyasu and Koichiro Shoji (2017) "How will open source hardware influence our business and education in the future?", proceedings of 2017 Hawaii International Conference on Education

Schumpeter, Joseph A. (1912) *The Theory of Economic Development*, English Version published 1934, Routledge.

BIOGRAPHY

Hiroshi Yamamoto received his Master’s Degree at the graduate school of media and governance, Keio University in 2008. He is presently a Ph.D. candidate in the same research field. Along with the guidance of Dr.Yoshiyasu Takefuji in the research lab, he focused on IoT research. At the same time, he established a business for IoT system development, and focuses on system design and development.

Satoshi Tomita is a professor at the Graduate School of Business Administration, Rikkyo University, who teaches Strategy for Technological Solutions. He received his Ph.D. in Media and Governance from Keio University. He is also the President & CEO of TC Consulting Co., Ltd., which provides consulting services of business development primarily in the IoT field.

Yoahiyasu Takefuji is a tenured professor at the Faculty of Environment and Information Studies at Keio University. His research interests focus on neural computing, security, IoT and machine learning.
http://neuro.sfc.keio.ac.jp/staffs/takefuji/yoshi_biography.html

INDUSTRY-AVERAGE EARNINGS MANAGEMENT AND IPO PRICING

Joseph R. Rakestraw, Florida Atlantic University
Raman Kumar, Virginia Tech
John J. Maher, Virginia Tech

ABSTRACT

The pricing of initial public offerings (IPOs) garners a great deal of attention from researchers, investors, and the media due to substantial first-day gains averaging over 20 percent in recent years. Favorable information revealed to issuers and underwriters during the pre-issuance registration period of the IPO should positively influence the offer price of the IPO. However, this information does not appear to be fully incorporated in the offer price as evidenced by high initial returns once the IPO begins trading on an exchange (e.g., Bradley and Jordan, 2002; Loughran and Ritter, 2002; Lowry and Schwert, 2004). The tendency of underwriters and issuers to partially incorporate public information in the offer price of an IPO is known in the literature as the partial adjustment phenomenon (Hanley, 1993). The partial adjustment phenomenon is often considered a mechanism to reward initial IPO investors for revealing their private information regarding the investment suitability of the IPO (Benveniste and Spindt, 1989). Initial investors are not likely to fully reveal their private information about the investment suitability of the IPO without being compensated. The underwriter can reward more fully-revealing initial investors by offering them larger allocations of popular IPO issues which are likely to be underpriced and thus have significant first-day returns.

Relative to stocks already traded in the public domain, investors have comparatively little information prior to issuance of an IPO to judge the IPO's investment suitability. Thus, investors are likely to search for alternative information sources such as those available regarding other firms in the same industry in order to evaluate the informationally opaque IPO firm (Lowry and Schwert, 2004). Investors can look at various attributes of their peers which are likely to be common to their industry in order to gain insight regarding the value of the new IPO firm.

This general strategy is espoused in business valuation textbooks which often suggest investors assess the profitability of the industries in which the firm is competing because profitability of industries can vary over time (e.g., Palepu et al., 2004). One attribute typically considered important in valuation is a firm's earnings quality which is commonly measured via the degree of earnings management. We propose that the ability and propensity of a firm to manage their earnings is at least partially a function of the industry to which they belong because there are likely to be industry factors which both limit and allow earnings management and create a motivation to manage earnings under certain circumstances. For example, the presence and relative size of certain types of assets and liabilities along with earnings and expenses found in a particular industry's financial statements can restrict or facilitate certain types of earnings management. Consistent with this, we show the variation in the firms' earnings management is related to the industry average earnings management, and therefore, the current level of the industry average earnings management provides useful information concerning the earnings quality and the valuation of IPO firms. This argument is developed further in Section II of this paper.

Our research examines the influence and effects of industry-average earnings management on initial pricing of IPOs. Our results are consistent with investors using the earnings management information available for publicly traded firms within the same industry to help determine a value for the IPO firm. Firms entering industries with relatively low (high) earnings management experience a larger (smaller) effect on the price

update which is the change in price from the expected price range to the final offer price of the IPO. Furthermore, subsequent to the determination of the initial offer price, our examination finds low (high) industry-average earnings management has a larger (smaller) effect on the initial first day return in the secondary market. These results are robust to the inclusion of industry and time fixed effects as well as other common factors correlated with discretionary accruals. Our results also remain robust to the inclusion of an alternative earnings quality proxy for the IPO firm, as well as for different data transformations of the earnings management variable.

Earnings management has been shown to have wide-ranging effects for firms and a great deal of research has been conducted regarding these effects (for a review of earnings quality, see Dechow et al., 2010). However, little research exists regarding how earnings management affects informationally opaque firms such as IPO firms. Research has found the accrual component of earnings has a negative association with future returns and stock prices tend not to incorporate this information. This tendency is often referred to as the accrual anomaly. Prior research suggests investors do not recognize and do not profit from the accrual anomaly (Sloan, 1996). However, more recent research indicates sophisticated investors, such as institutions, recognize and profit from the accrual anomaly (Battalio et al., 2012; Erturk et al., 2012).

Institutional investors dominate the initial market for an IPO before the IPO begins trading in the secondary market. This period of time immediately before an IPO begins trading in the secondary market is referred to as the registration period. We propose that sophisticated investors, participating in the IPO registration period, utilize the earnings management activities of firms in the same industry as the IPO to help determine a value for the IPO. Furthermore, we also propose secondary market investors continue utilizing the earnings management activities of related firms in the same industry as the IPO to evaluate the IPO after it has begun trading on an exchange. If these proposals are true then this would lend support to the partial adjustment phenomenon of IPO pricing (Hanley, 1993) which indicates publicly-available information during the registration period is only partially incorporated in the offer price and can be used to predict the initial returns of the IPO.

We provide insight into these research questions by examining two stages of the IPO pricing process, i.e. the pre-issue price update and the subsequent first day return. First, we investigate the effects of industry-average earnings management on the price update process by observing the change in price from the midpoint of the initial price range disclosed in the IPO prospectus to the actual offer price. The price update occurs during the registration period after the IPO firm files the initial registration prospectus, but before the IPO begins trading in the secondary market. During the registration period, the issuer and investment bank market the IPO to prospective investors and determine an appropriate offer price. Investors participating in this process during the registration period of the IPO are primarily sophisticated investors such as institutions. Second, we investigate the effects of industry-average earnings management on the first-day return of the IPO firm in the secondary market in which both sophisticated and unsophisticated investors participate. Our results indicate both stages of the IPO pricing process are negatively affected by higher industry-average earnings management. That is, lower (higher) industry-average earnings management leads to a larger (smaller) price update and, correspondingly, higher (lower) proceeds for the IPO firm. Subsequently, lower (higher) industry-average earnings management leads to a larger (smaller) first day return for investors in the IPO which is consistent with the partial adjustment phenomenon of IPO pricing. These results contribute to relatively recent research which finds sophisticated investors recognize the accrual anomaly (e.g., Battalio et al., 2012).

Our research contributes most directly to the existing earnings management literature by examining a unique aspect of the earnings management phenomenon on IPO pricing. Earnings management research in the IPO realm has traditionally examined the capital market effects of estimated earnings management of the IPO firm itself on the pricing of the firm's initial offering. Ball and Shivakumar (2008) investigate earnings management tendencies of IPO firms using a sample from the United Kingdom (UK) where

multiple years of data for private firms are available. Cecchini et al. (2012) investigate earnings management tendencies of IPO firms by analyzing two accounts – allowance for uncollectible accounts and bad debt expense. Both studies find IPO firms are more conservative in their financial reporting as the IPO date approaches. We extend this research stream by focusing on how IPO pricing is influenced by the earnings management practices of the IPO firm's publicly traded *industry peers*, as opposed to the earnings management practices of the IPO firm itself.

BIOGRAPHY

Joseph R. Rakestraw, School of Accounting, Florida Atlantic University Kaye Hall (KH) 119, Boca Raton, FL 33431.

Raman Kumar, R.V. and A.F. Oliver Professor of Investment Management Department of Finance, Virginia Tech, 306 NOVA, Blacksburg, VA 24061.

John J. Maher, John F. Carroll, Jr. Professor Dept. of Accounting, Virginia Tech, 3007 Pamplin Hall, Blacksburg, VA 24061.

THE MILITARY'S NEW BLENDED RETIREMENT SYSTEM, WILL THE NEW BRS PENSION PLAN ACHIEVE THE EQUITABLE BENEFITS AND FINANCIAL INCENTIVES TO RETAIN LONG-TERM SERVICE MEMBERS?

Michael Mahoney, Wagner College, Staten Island, New York, USA

ABSTRACT

The United States Military will receive a new pension plan starting in January 2018. Referred to as the Blended Retirement System it is the first significant change to our military retirement system since World War II. The objective is to encourage military personnel to save for retirement early in their career. The new system will ensure the majority of military members will receive a portable retirement benefit.

This paper examines:

The history of the military defined retirement system

The key components of the new BRS retirement system

The strengths and limitations of placing decision-making of saving for retirement on the service members

Conclusions and cost estimates of the BRS

INTRODUCTION

The present military retirement system is a government-funded non-contributing, defined benefit system. This retirement plan was designed to provide a distinct incentive to retain a qualified active military force. Currently active military personnel receive a retirement after completing 20 years of service. Until the 20th year there is no vesting. A service member becomes fully vested at 20 years. The amount of retirement benefit is based on the time served and the basic pay at the retirement date. The evolution of the military retirement system consistently promoted four goals:

The maintenance of a young and vibrant military force while securing promotion opportunities.

A competitive retirement system in relationship to the federal civil service and private sector.

The foundation for a pool of experienced military personnel to be ready for war or national emergency.

The economic security for the retired members of the armed services.

The History of the Military Defined Retirement System

The Reagan Administration initiated the CSB/REDUX pension system in 1986. Members of the service who started their career after July 31st, 1986 were given a choice of two retirement plans when they reached 15 years of service.

High – 3 Year Average

Career Status Bonus (CSB)/REDUX

Military members who elect (CSB)/REDUX are also eligible to receive \$30,000.00 bonus when they reach 15 years of service.

The high – 3 model has also provided a benefit of 50% base pay after 20 years of service.

The Key Components of the new BRS retirement System

The BRS consists of three major components

Defined – Benefit Plan has a multiplier of 2.0 percent times the number of years of service. An example of a 20 year career and retirement would produce 40% of final base pay.

Defined-Contribution through a Thrift Savings Plan, the government will contribute 1% of your base pay while also matching up to 5% of your contribution. Vesting in TSP takes place after two years

Confirmation Pay is a new component under the BRS. The contribution pay is a multiple of monthly base pay. An example would be a service member with 10 years of service and who commits to four additional years will receive a bonus equal to 2 months of base pay.

The Strengths and limitations of placing decision – making of saving for retirement on the service members

The military is moving to the BRS for same reasons the private sector has replaced defined benefit plans with portable 401k plans.

The biggest short coming of the HIGH-3 is cliff vesting. If you do not serve the 20 years then you do not receive a retirement benefit. The result was that 80 percent of enlisted members and 50 percent of officers never received a retirement benefit.

The challenge for the BRS is to encourage contributing as much as the service members can commit to maximize the government matching. Similar to the private sector the positive effects of the BRS will encourage military personnel to be knowledgeable of financial markets and various investments. Each participant in the plan has the responsibility to actively oversee the plans results.

CONCLUSIONS AND COST ESTIMATES OF THE BRS

IT is expected that the BRS can sustain the same military personnel size as the previous legacy system. Costs are actually higher under the BRS for continuation pay and the thrift savings plan. Initial projects show that in the later years there will be a government savings due to a decrease in the defined – benefit retirement costs.

REFERENCES

Asch, Beth J., James R. Hosek, Jennifer Kavanagh, and Michael G. Mattock, Retention, Incentives, and DOD Experience Under the 40 year pay Table, Santa Monica, Calif.: Rand Corporation, RR-1209-OSD, 2016. As of December 14, 2016: [Http://www.rand.org/pubs/research_reports/RR1209.html](http://www.rand.org/pubs/research_reports/RR1209.html)

Asch, Beth J., James R. Hosek and Micheal G. Mattock, The Blended Retirement System, Santa Monica, Calif.: Rand Corporation, RR-1887-OSD, 2017. [Http://www.rand.org/pubs/research_reports/RR1887.Html](http://www.rand.org/pubs/research_reports/RR1887.Html)

Reforming Military Retirement: Analysis in Support of the Military Compensation and Retirement Modernization Commission, Santa Monica, Calif.: RAND Corporation, RR-1022-MCRMC, 2015. As of November 21, 2016: [Http://www.rand.org/pubs/research_reports/RR1022.html](http://www.rand.org/pubs/research_reports/RR1022.html)

Bell,P., and Davies, E., (2017,27 March). 5 Key Points about the Military’s New Blended Retirement System. Retrieved From: [Https://www.militarytimes.com/pay-benefits/military-retirement/2017/03/27/5-key-points-about-the-military-s-new-blended-retirement-system/](https://www.militarytimes.com/pay-benefits/military-retirement/2017/03/27/5-key-points-about-the-military-s-new-blended-retirement-system/)

Hull, Mark, (2017, 20 June) Important Updates to the Military's Blended Retirement System, <http://www.doughroller.net/retirement-planning/blended-retirement-system/>

Norman, D., (2016, 17 October). 9 Things to Consider before Choosing the Military's New Blended Retirement System. Retrieved from: <http://the-military-guide.com/new-military-blended-retirement-system/>

Office of the Secretary of Defense, "The U.S. Uniformed Services Blended Retirement System: Active Component," revised September 2016. As of May 18, 2017: <http://militarypay.defense.gov/Portals/3/Documents/BlendedRetirementDocuments/>

Philpoy, T., Blended Retirement's Lump Sum Feature Enticing – But is it Fair? Retrieved from: <http://www.moaa.org/Content/Publications-and-Media/news-Articles/2017-Military.>

Plan Element	Legacy	BRS
Defined-benefit vesting	20 years	20 years
Defined-benefit multiplier	2.5%	2.0%
Defined-benefit payment working years		Full annuity or lump-sum option (50% or 25%); RC lump-sum based on annuity from age 60 to retirement age
Defined-contribution agency contribution rate		1% automatic; plus up to 4% matching (max = 5%)
Defined-contribution rate YOS		1%: entry + 60 days until 26 YOS Matching: start of 3 YOS-26 YOS
Defined-contribution member contribution rate		3% automatic; full match requires 5% contribution
Defined-contribution vesting		Start of YOS 3
Continuation pay multiplier (months of basic pay)		Minimum 2.5 for AC, 0.5 RC; with additional amount varying
Continuation pay YOS/additional obligation		At 12 YOS with 4-year additional obligation
Opt-in		Must be serving on 1/1/2018 and have less than 12 YOS as of 12/31/17; opt-in period is 1/1/18-12/31/2018

Comparison of the Legacy and Blended Retirement Systems, Source: Office of the Secretary of Defense (2017)

LIFE CYCLE ASSESSMENT (LCA), SUSTAINABILITY, AND INNOVATION OF TOURISTS DESTINATIONS

Rodolfo Delgado, Tokai University

ABSTRACT

This paper aims to discuss the Life Cycle Assessment and its relationship and importance for sustainability and innovation of tourists' destinations. "Tourism is globally responsible for 5% of all carbon dioxide emissions, the most important greenhouse gas causing climate change (UNEP, 2008). However, in terms of radiative forcing, the direct measure for contribution to climate change, tourism even could have share of up to 12.5%" (Scott et al., 2010). The development and increasing demand of tourism as a mass industry continue to increase an Environmental impact on natural and cultural heritage sites. Therefore, it is necessary to take into account sustainability aspects to contribute to the preservation of the growing demand for tourism in these destinations. Economic, social and environmental sustainability must be taken into consideration by generating employment for people in the tourism industry, human well-being, and security while preserving the natural and cultural environment of tourists' destinations. "Even if mass consumption is endangering the future of our world in many different ways - and tourism has significantly contributed to this situation - tourism development can also bring extensive benefits to society. In an attempt to promote sustainable practices, different kinds of eco-labelling have been developed in this sector" (Arcene, Merli, Lucchetti, 2013). The Life Cycle Sustainability Assessment (LCSA) can help entrepreneurs and established tourists' companies to analyze the sustainability of tourist destinations considering the environment, business costs, local economy and the social benefits of the communities where the tourism products and services' activities are provided.

New tourists' destinations diversification, specialization and innovation play an important role in reducing the impact on mass tourism in natural and cultural heritage sites.

JEL: D2, F9, L1, L2, O3, O4, Q5, Z3

KEYWORDS: LIFE, Cycle, Assessment, Entrepreneurs, Sustainability, Innovation, Tourists, Destinations

INTRODUCTION

The Life Cycle Assessment analysis must take into consideration all processes involved in the production of products as well as the material for production. It considers several aspects as processes, for example: Goal and Scope Definition, Inventory Analysis, Impact Assessment and Interpretation. The Life Cycle Assessment collects and analyzes the environmental impact of production of products and services to a specific industry. In terms of this study, implies investigating how the Life Cycle Assessment can help the tourism industry to increase sustainable development and reduce environmental degradation. Entrepreneurs play an important role in developing and applying the Life Cycle Assessment and providing innovative tourist services, products and to increase sustainable development and reduce environmental impact. "The World Tourism Organization (WTO) defines tourism as the activity the comprises the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business, and other purposes not related to the exercise of an activity remunerated from within the place visited" (Vanhove, 2012).

Tourism planners design natural areas for the enjoyment of recreational activities, like hiking, cycling and sightseeing in a national park. Recreational managers are able to preserve the land and increase the sustainable development by creating an entrance fee to cover the cost of maintenance of the natural area and determine the number of people that can be in a designated national park at the same time. Therefore, they carry out a building capacity analysis to determining the number of people that can be at a national park at a specific time. “International tourism has become an important part of modern life styles, while it is now one of the largest and fastest growing economic sectors worldwide, even though it appears vulnerable to the occasional economic or global socio-political shocks over the last decade (UNWTO, 2010). Tourism’s contribution to the worldwide gross domestic product (GDP) is estimated at some 5% (ibid)” (De Camillis, Peeters, & Petti, L., 2012).

LITERATURE REVIEW

The Life Cycle Assessment analysis in the tourism industry can contribute to increase sustainable development and reduce environmental impact in the communities and countries where the recreational activities take place. Tourism companies, entrepreneurs, public executives are responsible of maintaining the ecological balance of the tourist attraction with the participation and inclusiveness of the community; participation of public offices who will monitor, manage, and guide the tourism governance of the recreational project by conducting research relevant to the tourist policy in place and sustainability of the environment of the recreational area by guaranteeing and creating harmony between the players: the community, the tourist companies, the public tourist organizations and the recreational areas communities. “Human health can be affected through a shift in disease distributions. With increased temperatures certain parasites will be able to survive in areas where they previously were not able to live. Furthermore, the increased amount of energy in the atmosphere will give rise to more extreme weather in the form of coastal or inland flooding or droughts, all of which have an adverse effect on human health” (Steinmann, Z., & Huijbregts, M. A. J., 2015).

“The climate models, which are used to predict the impact on human health, assume an increase in global temperature of 0.5 to 0.68 degrees in the year 2030 relative to the average global temperature in the reference year 2000. The 0.18 degree difference between the two scenarios is used to derive the final CF, this is a relatively small change in temperature and hence a marginal approach. A temperature change of 1-3.5 degrees is modelled for terrestrial ecosystems, while a change of 1.9 to 4.4 degrees is used for the aquatic ecosystems, making these approaches more similar to a mix between a marginal and an average approach. Ideally, one would use the same model with the same temperature increase for both human health and ecosystem damage effect factors. However, because both models have been developed independently of each other, such synchronization was not possible. Because climate change is modelled as a global increase in radiative forcing there is no need to provide location-specific emission factors. Regardless of the emissions location the impact will be the same” (Steinmann & Huijbregts, 2015).

“Tourism is globally responsible for 5% of all carbon dioxide emissions, the most important greenhouse gas causing climate change (UNEP, 2008). However, in terms of radiative forcing, the direct measure for contribution to climate change, tourism even could have share of up to 12.5%” (Scott et al., 2010). “Although many definitions exist, LCA essentially comprises a systematic evaluation of environmental impacts arising from the provision of a product or service. The original International Organization for Standardization (ISO) definition provides some indication, although it is self-referencing: ‘compilation and evaluation of the inputs and outputs and the potential environmental impacts of a product system throughout its life cycle’ (ISO 1997, p. 2). (Horne et al., 2012).” “According to ISO 14040:2006 and ISO 14044:2006, the procedure to apply LCA is composed of four steps: goal and scope definition, Life Cycle Inventory analysis (LCI), Life Cycle Impact Assessment (LCIA), and Life Cycle Interpretation” (De Camillis, Peeters & Petti, 2012).

“Recently, new technologies and innovations regarding the residuals and the organic waste fractions have been developed. These new technologies generate one of the following results: Energy, useful organic materials, volume reduction, stabilization of the organic fraction and/or toxins. The LCA can provide information about how waste management technology will affect the waste management system, and the environment impact either positive or negative. Technologies to manage and treat waste have been introduced including: “reprocessing facilities, composting facilities, waste-to-energy technologies and anaerobic digestion” (Horne et al., 2012). “Right after the goal and scope definition step, LCA practitioners compile an inventory of the environmental loads potentially occurring along the product life cycle phases. These environmental loads basically consist of: consumption of resources, waterborne and airborne emissions, releases into the soil, and waste streams. In this context, such an inventory is called Life Cycle Inventory (LCI). Collecting and elaborating data in LCIs, and define-tuning LCIs form the second LCA application step called Life Cycle Inventory analysis (LCI)” (De Camillis, C., Peeters, P., & Petti, L., 2012). “Economic activity is closely associated with depletion of resources and pollution of the environment. This can be studied at the level of single processes or activities, but also at a higher systems level of networks of processes. At this higher level, structural pathways are investigated that connect consumption of products to many segments of the industrial web. By doing so, one enters the field of chain analysis, where several analytical tools are available for decision-support, like life-cycle assessment (LCA), environmental input–output analysis (env- IOA) and material flow analysis (MFA).

The main aim of LCA is to quantify potential environmental impacts of products over their full life-cycle. A life-cycle approach is also called a “cradle-to-grave” approach. Such an approach enables a fair comparison between products, which fulfil the same function, with respect to their environmental burdens. First of all, this is true for finalized products, that is, for products which are already on the market. In this context, a life-cycle approach helps to avoid problem shifting between the different processes which are part of the life cycle of a product. Materials may be quite harmless in their use phase and may therefore be preferred, but they may imply toxic emissions during their production or waste management. A well-known example concerns PVC. Secondly, LCA can also contribute to product design. It can help to design products which have a minimal environmental burden over their life cycle. For instance, during the design of products, attention can be paid to the reuse of the product, or at the recycling of its constituting materials in the waste-management stage.

LCA is a quantitative tool. The results of LCA are as much science based as possible, and aim to inform stakeholders in a production–consumption chain, thus contributing to rational decision-making. At the same time, LCA can also be of use inside a company. By implementing an LCA study on a product, the processes of the product system can be identified which largely appear to contribute to its total environmental burden. This may help to guide environmental management of a company, for instance to support its investment decisions or to influence its supply management. This reasoning can be particularly true for decisions in the energy sector. At the same time, however, it is clear that the use of LCA in this sector is not sufficiently in line with international methodological development. An overview of the history and state-of-the-art of LCA and its application can therefore be of interest (Udo de Haes et al., 2007). “To ensure that a full life cycle perspective is taken into account when designing and producing products or policies which comply with sustainable development principles. LCM can be viewed as a means by which the economic, technological and social aspects of products are integrated and continuously optimized (Weidema n.d.). Improved product quality, new technological innovations, opportunities to reduce costs, new or enhanced laws and regulations or pressure from customers and suppliers for products and services with improved environmental” (Horne et al., 2012).

“Performance are examples of factors by which an organization may decide to integrate LCM within their core activities. Furthermore, the successful implementation of LCM will require agreement on corporate

policies and strategies to reduce impacts, the development and use of environmental assessment tools to guide decision-making, the integration of eco-design into product development processes, the implementation of supply chain management, and environmental communications and reporting of processes, products and deliverables (James 2004)". (Horne et al., 2012) "The essential logic of LCM is that if LCAs could be undertaken quickly, simply and reliably, and the information systematically collated and used in an active management system, then LCA information could be more widely used in decision-making, leading to improved environmental performance" (Horne et al., 2012) LCA information through the design process. The history of the design and development of such tools is relatively recent and extends back to the application of ecologically sustainable design ('eco-design') (Horne et al., 2012).

"Alcan, uses LCM for various applications including benchmarking aspects of environmental performance of their products with competitors, improving their internal and supply chain environmental performance, providing marketing information, and for strategic planning (Rebitzer and Buxmann 2005). Rebitzer and Buxmann (2005) state that five indicators are typically reported from Alcan LCA studies: primary energy demand, global warming potential, eco-indicator score (without energy and global warming), waste generation, and water consumption. These have been selected as the most relevant to the company, while being easily communicated to other parties and decision-makers" (Horne et al., 2012).

"The development of LCA and cleaner production techniques and processes has led to a range of resource efficiencies in manufacturing processes, from raw materials production to fabrication of complex consumer goods" (Horne et al., 2012). "Although cost and price are important issues for consumers, they are not the only ones. Purchases are often guided by quality or habit (Gallastegui 2002). Other key factors include (Hemmelskamp and Brockman 1997): consumer satisfaction values identification cost availability social pressure and consumer boycotts" (Horne et al., 2012).

Discussion

Life Cycle Assessment can help the tourism industry to reduce carbon dioxide emissions by finding more suitable sustainable solutions to achieve this goal. For example, the development of solar planes and airplanes. The Solar Impulse Foundation has developed the first airplane to be able to fly across the ocean with clean technologies. It flew "40,000 km to promote the use of renewable energies and energy efficiency on the ground, for a better quality of life" (Solar Impulse Foundation). "An historic aviation first as well as a premiere for renewable energies and clean technologies. Bertrand Piccard's vision of an airplane of perpetual endurance, able to fly day and night without fuel is now realized. André Borschberg, leaving Nagoya and landing in Hawaii 5 days and nights later, proved we can achieve incredible things with clean technologies" (Solar Impulse Foundation). In the Life Cycle Analysis is also important to take into consideration the ten key factors that Vanhove (2012) describes important for a destination to become a competitive destination: Attractions; Macro-economic factors; Innovation; Strategic planning; Positioning and Branding; Destination Management; Strategic alliances; Make tourism a lead sector; Quality management; Accessibility.

These aspects are important for increasing the competitive advantage of a destination. Meanwhile, it compromises the human and environmental carry capacity of a destination. Cities and famous destinations like: Madrid, Rome, Florence, Venice, New York, Kyoto and Tokyo are some of the examples of places that fulfill the ten key factors explained by Vanhove and as a result of its competitiveness these cities are heavily overcrowded with international and domestic tourists; where the transportation systems and vehicles like: cars, trains, and buses are constantly competing with each other to attract people. Therefore, competitiveness of destinations need to consider a human and environmental carrying capacity. Companies should take into consideration the following aspects when thinking about LCA and corporate social responsibility because it will help humans and organizations transform into sustainable consumers:

The economic, technological, and social aspects.

Improved products quality based on the LC analyses and reduction of environmental impact.
 Costs reduction, laws, and reductions. 4- Environmental taxations.
 Corporate policies in tune with existing policies.

Propose strategies to reduce environmental impacts. 7- Use of environmental assessment tools.
 Reporting the processes of LCA for corporate social responsibility.

The LCA can be used for management and implementations systems of the organization.

Improving their internal and supply chain environmental performance. 11- Providing marketing information for strategic planning.

Tourism entrepreneurs and established tourism companies should consider developing slow tourism, it has low environmental impact, like hiking and cycling to increase diversity of tourism activities in the recreational areas of destinations and increase the economic development of the region.

METHODOLOGY

The methodology used during this research analysis has taken into consideration the United Nations Environmental Framework on sustainable development and its has been apply to innovation and competitiveness of tourists' destinations. "International Organizations, such as the UN or the OECD, have been working on sustainability since a long time, but also the European Environment Agency that deal with the monitoring of environmental phenomena and to design strategies for mitigation of impacts worked on the creation of indicators such as HDI (Human Development Index) or the ones presented in the local Agenda 21, or the international sustainability indexes, such as indices related to financial performance of sustainable businesses. Both in management and environmental literature, three principles were however defined, related to the sustainable management of resources: 1.renewable resources utilization rates must not exceed their rates of regeneration; emissions of pollutants shall not exceed the assimilative capacity of ecosystems; non-renewable resources should be used in a "nearly sustainable" way, limiting the rate of their use at the rate of creation of renewable substitutes" (De Camillis, C., Peeters, P., & Petti, L., 2012)

CONCLUSION

The Life Cycle Sustainability Assessment (LCSA) can help entrepreneurs and established tourists' companies to analyze the sustainability of tourist destinations considering the environment, business costs, local economy and the social benefits of the communities where the tourism products and services' activities are provided. New tourists' destinations diversification, specialization and innovation play an important role in reducing the impact on mass tourism in natural and cultural heritage sites. Companies should take into consideration the economic, social, and environmental aspects when thinking about LCA and corporate social responsibility because it will help humans and organizations transform into sustainable consumers. Business need to promote and market sustainable behavior in their consumers to bring sustainability and growth to the tourist destinations.

Three major findings have been achieved during the research analysis:

The need for development of solar planes and airplanes to maximize the use of clean technologies.

Competitiveness of destinations need to consider a human and environmental carrying capacity assessment.

Tourism entrepreneurs and established tourism companies should consider developing slow tourism, it has low environmental impact, like hiking and cycling to increase diversity of tourism activities in the recreational areas of destinations and increase the economic development of the region.

REFERENCES

- Arcene, G., Merli R., Lucchetti M.C., (2013) Life Cycle Approach: A Critical Review in The Tourism Sector. Academia. Edu. Retrieved from: http://www.academia.edu/17203597/Life_Cycle_Approach_A_Critical_Review_in_the_Tourism_Sector
- De Camillis, C., Peeters, P., & Petti, L. (2012) Tourism Life Cycle Assessment (LCA): Proposal of a New Methodological Framework for Sustainable Consumption and Production, Visions for Global Tourism Industry - Creating and Sustaining Competitive Strategies, Dr. Murat Kasimoglu (Ed.), InTech, DOI: 10.5772/23550. Retrieved from: <https://www.intechopen.com/books/visions-for-global-tourism-industry-creating-and-sustaining-competitive-strategies/tourism-life-cycle-assessment-lca-a-new-methodological-framework-for-sustainable-consumption-and-pro>
- Horne, Ralph; Verghese, Karli; Grant, Tim., 2012. Life Cycle Assessment: Principles, Practice and Prospects. CSIRO PUBLISHING. Kindle.
- Steinmann, Z., & Huijbregts, M. A. J., (2015) LC-Impact A Spatially Differentiated Life Cycle Impact Assessment Method. (2017) Retrieved from: http://www.lc-impact.eu/downloads/documents/Overall_report_Batch_1_FINAL.pdf
- Scott, D., Peeters, P., & Gossling, S. (2010). Can tourism deliver its “aspirational” greenhouse gas emission reduction targets? *Journal of Sustainable Tourism*, Vol. 18, No.3, pp.393-408.
- Solar Impulse Foundation. (2017). Historic Flight. Retrieved from: <http://aroundtheworld.solarimpulse.com/adventure>
- Udo de Haes et al., (2007). Life-cycle assessment for energy analysis and management. *Applied Energy*. Volume 84, Issues 7–8, July–August 2007, Pages 817-827. Elsevier. Retrieved from: <http://www.sciencedirect.com/science/article/pii/S0306261907000153>
- United Nations Environmental Development (UNED) et al., (2008) Climate Change Adaptation and Mitigation in the Tourism Sector: Frameworks, Tools and Practices. Paris: UNEP, University of Oxford, UNWTO, WMO.
- Vanhove, H. (2012). *The Economics of Tourism Destinations*. London: Routledge: Taylor & Francis Group

ACKNOWLEDGEMENT

The author acknowledges funding received from Professor Reiko Fujita from her Japan Society for the Promotion of Science fund and Tokai University.

BIOGRAPHY

Presently, Rodolfo Delgado is teaching at Tokai University as a Junior Associate Professor. He is a holder of a Master degree in Business Administration from Anaheim University (2008), a Master of Science in Environmental Science from the University of Tsukuba (1999), and Bachelor degree in Advertising from

Latina University of Costa Rica (1995). His present research interests are teaching English for Specific Purposes, specialty topics related to business, intercultural communication, tourism, and the environment. He is also interested in cross-cultural communication, international education, education policy and critical thinking.

DRIVING WORKFORCE DEVELOPMENT WITH CREDENTIALLED CERTIFICATE PROGRAMS

Jason Caudill, King University

ABSTRACT

Rapid changes in technology and markets are a hallmark of the modern business environment. This dynamic environment demands not only innovative practice from institutions, but also lifelong learning, with frequent updates, from employees. Traditional degree programs are not effective answers to this as they are generally too broad and require too much time to serve the immediate, targeted needs of employees and their firms. Credentialed certificate programs are a growing option that provide opportunities to pursue short-term, targeted learning to improve workplace performance and, by extension, the competitive advantage of an organization and that organization's capacity to achieve strategic goals. This paper will introduce certificate programs and their role in partnering with business organizations to develop and deliver as-needed training to maintain the capacity of the workforce.

JEL: I00

KEYWORDS: Workplace Learning, Certificate Programs, Workforce Development, Lifelong Learning

INTRODUCTION

The highly dynamic environment of almost every industry today is complicating the traditionally stable timeline of education followed by work. Technological changes, the reduction of product life cycles, and increased competition from easy market access and expanding globalization, along with other factors, have combined to demand more skills and more frequent updating of skills from the workforce. This environment means that people no longer have the option of ending their formal education or credentialing with a formal degree.

Holzer (2014) explains that the current system is not creating the right number of skilled people nor are the people that are being produced necessarily skilled in the correct things, revealing a need for better cooperation between education and the workplace. This lack of properly skilled workers is compounded by the developing loss of skilled, experienced employees in the workforce. The baby boom generation, all of whom are getting close to retirement, make up 38 percent of the U.S. workforce today and are retiring in increasing numbers (Neumark, Johnson, & Mejia, 2013). The combination of these factors means that there is a growing need to effectively develop skilled employees for the workforce.

Aithal and Kumar (2015) explain that certificate programs targeting skill development can address the need to improve the employability of workers. This is more than just a repackaging of the traditional system of higher education; certificates provide the opportunity of shorter term, more targeted skill development that is also credentialed. These credentials are tied to competencies, which allows students or workers to demonstrate specific abilities related to their academic or professional pursuits (Cavanaugh, 2013). This paper will explore this growing trend by discussing the pace of change in today's employment market, the growth and delivery of certificate programs, and the value that these certificates provide to both employees and employers.

Pace of Change

Today's workers, and by extension their employers, are forced to deal with frequent, rapid changes in the work environment that require changes to employee knowledge and skills. These continual changes mean that professionals, even those with one or more degrees, need frequent, short-term updates and expansions of their skills to adapt to new technologies and other change forces in the workplace (Bailey & Belfield, 2017). This change, in part, is reflected in the very nature of the workplace itself. Barabas and Schmidt (2016) explain that because workers more frequently change jobs today compared to previous generations, with one result being that employers have shifted training and development that was the responsibility of the firm onto the individual employee, both trusting and requiring them to seek their own lifelong learning opportunities. This shift of training responsibility is also visible in the changing job market. There is an increasingly close link between worker skill sets and quality employment, particularly as manufacturing has become more technical and many of the good jobs have shifted away from manufacturing and into other, more technical disciplines (Holzer, 2014). Joh and Li (2015) explain that in the transportation sector the coming retirement of baby boom workers will take as much as half of the industry's skilled workforce out of the workplace and there is a recognized lack of skilled employees to take the jobs as they are vacated. The lack of skilled workers in transportation is repeated across industries, in part due to the financial necessities of doing business in dynamic markets. Short-term returns have become such a priority for many industries that internal investment, including training and development for employees, has been sacrificed, which decreases the creation and availability of skilled workers (Olson, 2015).

Growth of Certificates

These change forces acting on employees and their possession and acquisition of valuable skills are the underlying motivation for the movement to certificates as a credentialed learning activity for professionals. Certificates are the fastest-growing educational award in the U.S. with many professionals pursuing this route to improve their skills and their employment opportunities (DeRenzis & Hirsch, 2016). A driving force behind this growth is the ever-expanding need for technical skills in the workplace across many industries and the lack of skill development in this area that occurs in much formal, degree-based education (Olson, 2015). The role of certificates thus serves dual purposes, both to enhance the skills of workers and also to correct the misalignment between what educational institutions package as degrees and the needs of the modern workplace. DeRenzis and Hirsch (2016) describe the growth of certificate programs as amazing, with certificates growing from six percent of U.S. postsecondary awards in 1980 to over 25 percent in 2016. Much of this growth can be attributed to the fact that a growing number of jobs demand skills that are not aligned with the content of traditional four-year degrees and investing in certificates improves the outcomes of both individuals and the broader economy as high-skill jobs are filled with qualified workers (Bailey & Belfield, 2017). To effectively serve this growing demand certificate providers have to effectively deliver the training and credentialing that supports the certificate process.

Delivery of Certificates

The delivery of certificate programs varies broadly and there are many questions that an awarding body must ask when launching a program. The foundation of a successful program is sound learning gap analysis, a process to establish what a student knows versus what they need to know to efficiently deliver the necessary information for the credential (Cavanaugh, 2013). Following this initial identification of need higher education institutions need to adapt to new demands from working adults and change their delivery modes to provide value to the certificate seeking workforce (Aithal & Kumar, 2015).

The structure of how institutions deliver this value can be very different across locations and programs. Joh and Li (2015) found that admissions criteria such as a prior degree, previous Grade Point Average (GPA), and the detail of the application to the program varied across institutions. They also discovered that the

credit structure of the certificates was different depending on program, with some having a set of required courses, others offering learners the choice of electives, and still others having a required set of core courses with the certificate completed by the selection of a certain number of electives. Beyond the credit structure of the certificate program there is also the question of the delivery mode. Digital platforms offer unique opportunities to identify and credential learners' skills over time, providing a portfolio of credentials that can be built over the course of a career to demonstrate skills and progress (Barabas & Schmidt, 2016). There are also real benefits to working in a face to face environment, particularly if the program delivery is facilitated by a large employer as an on-site benefit.

Regardless of other factors the final design consideration is that of accessibility to learners. This is in part a question of institutional design, but it also includes utilizing successful partnerships between educational institutions and employers. One of the identified factors in individual engagement in lifelong learning is organizational climate; the support and enabling atmosphere of an employee's workplace in pursuing a certificate program or other learning opportunity (Head, Van Hoeck, & Garson, 2015). Another element to consider is the affordability of a program for the participant. For certificates delivered by higher education institutions this may include designing the program with financial aid access as a consideration. While the details of the federal Pell grant and other aid programs are beyond the scope of this paper, there are strict considerations of program duration and credit awarded that determine whether or not a student can apply for and use aid in their pursuit of the credential (DeRenzis & Hirsch, 2016). These accessibility factors can directly impact the ability of a program to provide value to those seeking the new skills.

Value to Learners and Employers

A well-designed certificate program benefits both learners and employers. The most immediate impact is that by engaging in lifelong learning employees stay up to date with changing technology and changing workplaces and remain valuable contributors to the workplace (Head, Van Hoeck, & Garson, 2015). By utilizing credentialed certificates as their choice of lifelong learning mode, employees create meaningful benefits for themselves. Barabas and Schmidt (2016) explain that by using digitally credentialed learning experiences employees can build a portfolio of their skills and present a detailed picture of their abilities to employers, which helps employers understand the potential contributions of the individual. This is quite different from the traditional degree process that certifies a body of work but provides little insight as to what a degreed individual has actually experienced or learned. The result of a detailed record of development that is matched with the needs of employers is better employment outcomes and higher earnings for the individual (Holzer, 2014).

The benefits to employees by developing their portfolio of targeted credentials also improves outcomes for the employers. Holzer (2014) explains that organizations see higher productivity and lower turnover from employees with the right skills for the positions, which reduces employer cost and, by extension, improves overall financial performance. These advantages are in large part driven by the companies themselves. To have reliable access to skilled employees, today's employers must take action to push educational opportunities beyond traditional degree based higher education and take an active role in guiding more effective educational outlets (Olson, 2015).

CONCLUSION

The core lesson that comes from examining the needs of the modern workplace and the education of employees is that education, like everything else in today's world, has to be dynamic and responsive. Over the course of a career an individual is going to need multiple skill sets, and for the millennial generation they are likely to go through multiple career changes, all of which require refreshing or expansion of skill sets. By successfully engaging in activities that not only develop skills but also credential those skills to

showcase for employers, individuals can enhance their employability and improve their income. These forces impacting individual also impact organizations.

Today's companies are caught in a difficult position. Because their business models are so focused on efficiency, and so tolerant of a transient workforce, they have largely abandoned their role in training and developing employees in-house. While less of this in-house development is occurring the need for lifetime learning and frequent skill refreshing has become more important. This puts companies in the position of having to depend on, or better partner with, outside entities to properly develop their employees. By creating a supportive corporate environment, firms can motivate this behavior among employees and drive improved performance and higher efficiencies.

Ultimately today's environment begins and ends with dynamic change. In strategic management, much of the focus is on innovation; in working with human assets that focus is on training that prepares employees to effectively work and innovate. Changing needs are motivating changing educational models and both employees and their employers need to be well versed in this new path for learning and development that is the certificate model.

REFERENCES

- Aithal, P. S., & Kumar, P. M. (2015). How Innovations and Best Practices can Transform Higher Education Institutions: A case study of SIMS. *International Journal of Management*, 6(2), 83-98.
- Bailey, T., & Belfield, C. R. (2017). Stackable Credentials: Awards for the Future?. CCRC working paper no. 92, Community College Research Center, New York, Retrieved from: <https://ccrc.tc.columbia.edu/publications/stackable-credentials-awards-for-future.html>
- Barabas, C., & Schmidt, P. (2016). Transforming Chaos into Clarity: The Promises and Challenges of Digital Credentialing. *The Roosevelt Institute*, August 2016.
- Cavanaugh, J. (2013). The coming personalization of postsecondary education competencies. In *2013 Forum & News Competency-Based Education*.
- DeRenzis, B., & Hirsch, R. (2016). Job-Driven Financial Aid Policy. *National Skills Coalition*.
- Head, A. J., Van Hoeck, M., & Garson, D. S. (2015). Lifelong learning in the digital age: A content analysis of recent research on participation. *First Monday*, 20(2).
- Holzer, H. (2014). Raising job quality and skills for american workers: Creating more-effective education and workforce development systems in the states. *Members-only Library*.
- Joh, K., & Li, W. (2015). Developing and interdisciplinary transportation certificate program for today's transportation workforce. In *Proc., 94th Annual Meeting*.
- Neumark, D., Johnson, H., & Mejia, M. C. (2013). Future skill shortages in the US economy?. *Economics of Education Review*, 32, 151-167.
- Olson, M.P. (2015, May 8). A multilateral approach to bridging the global skills gap. *Cornell HR Review*. Retrieved from: <http://digitalcommons.ilr.cornell.edu/chrr/74>

BIOGRAPHY

Jason Caudill is an Associate Professor of Business at King University. He also serves on the review board for the British Journal of Educational Technology and the Online Journal of Distance Learning Administration. His recent publications include articles in the *Journal of Strategic and International Studies*, *Internet Learning*, and the *Journal of Academic Administration in Higher Education*.

STRATEGIES FOR PUBLISHING RESEARCH SUCCESSFULLY

Terrance Jalbert, The University of Hawaii-Hilo

ABSTRACT

GETTING AN IDEA

1. Maintain a running list of your ideas.
2. Every time you have a few minutes, go to your list and ask yourself, in the next 30 minutes how can I advance one of these ideas.

RESEARCH PARTNERS

Selecting a Partner

1. There are advantages to working on your own.
2. Select someone with the right characteristics
 - a. Hard Worker
 - b. Willing to do their share of the work
 - c. Someone with time to conduct research
 - d. Intelligent
 - e. Mutual Interests
 - f. Cooperative
 - g. Likely to reciprocate
3. Good research partners are hard to find. Don't abuse a good research partner.

Working with a Partner

1. Start only one paper at a time with a new research partner.
2. Be patient with your research partner. They have a life and due to births, illnesses and other life events, they may not be on your schedule.
3. Recognize on some projects you will do most of the work. On others, your partner may do most of the work.
4. Use caution when selecting one of the professors from your Ph.D. program as a research partner.

How Many Authors on a Paper?

1. Two or three authors are good.
2. Four authors is not good but can be ok.
3. More than four authors looks bad.

WRITING YOUR MANUSCRIPT

Writing your Manuscript

1. Use only Microsoft Word to type your document.
2. Using free Word clones causes significant problems in the publication process.
3. Files created in another program and copied or saved as a Microsoft Word file cause significant problems in the publication process.
4. Unless the journal specifically requests otherwise, use the standard Microsoft Word equation editor.
5. Use only Microsoft spreadsheets and Microsoft
6. drawing programs.
7. Back up your files on a daily basis.

Organizing your paper

1. Organization
2. Abstract
3. Introduction
4. Literature Review
5. Data and Methodology
6. Results
7. Concluding Comments

Title

1. Descriptive and no more than 15 words.
2. Write a strong title
 - a. Strong Words:
 - i. Empirical, Evidence
 - b. Weak Words:
 - i. Analysis, Case
 - ii. Use Key Words from your Discipline
3. Think about what will look good on your vita.

Abstract

1. General Introduction to your paper
2. The goal is to precisely communicate to the reader what the paper is about.
3. Not more than 200 words
4. Do not use acronyms
5. Generally do not cite other papers in the abstract

Introduction

1. A brief introduction to the problem being addressed.
2. Include some summary statistics of the magnitude of the problem.
3. One paragraph discussion of the general state of the literature.
4. What you are going to do in the paper to advance the literature.
5. A few lines indicating how the remainder of the document is organized.

Literature Review

1. As a general rule do not cite magazines.
2. Use scholar.google.com
3. Narrow your literature review down to those articles that directly relate to the issue you are addressing in your paper.
4. Make sure that everything that you cite in the text is included in your reference section.
5. Make sure that everything you reference is cited in the body of the text.

Data and Methodology

1. Where the data was obtained from?
2. Time period covered in the analysis?
3. Frequency of the data observations?
4. Variables that the data were collected for?
5. Summary statistics.
6. Hypotheses that are being tested.
7. For regressions, specify the equation being estimated in the text of the document.
8. For Surveys indicate
 - a. Questions included in your survey? (Consider including the survey instrument as an appendix to the paper)
 - b. When was the survey conducted?

- c. Where was the survey conducted?
- d. What was the response rate?
- e. What are the total number of usable observations?
- f. Did you receive human subject research permission from your University?

Results

1. Make sure to introduce each table and figure you present in the text of your document.
2. Walk the reader through the results.
3. Select an observation in your table and explain that observation to the reader.
4. Incorporate data into MS Word tables.
5. Segregate your data when possible to get additional results,
 - a. by gender, age, country, region, year, industry, before and after a crises.

Tables

1. Don't create small one or two line tables.
2. Include information directly in the document text.
3. Combine several small tables into a single table with multiple panels.
4. Do not use exponential notation (3.2E-5).
5. Display appropriate precision
 - a. 0.0021, 1.134, 10.22, 100.6, 1,049.1, 10,432

Table Description

1. Make sure to include a 3-6 line description below your tables. The reader should be able to understand what is contained in the table without referring back to the text of the document.
2. This description is not to replace the discussion in the text, but to supplement the discussion in the text.
3. Redundancy is ok in this case.
4. Example of Table Description

*This table shows the results of the regressions on CEO compensation using data from 2004. The estimated equation is: $CEO\ Compensation = a + b_1(CEO\ age) + b_2(years\ with\ company)$. The first figure in each cell is the regression coefficient. The second figure in each cell is the t-statistic. ***, ** and * indicate significance at the 1, 5, and 10 percent levels respectively.*

Concluding Comments

1. Reiterate the goal of your paper.
2. Briefly describe the test methodology and data.
3. Briefly summarize your major findings.
4. Discuss how managers might benefit from the results.
5. Discuss any limitations of your work.
6. Provide suggestions for future research.

Acknowledgements

1. Do acknowledge anyone that has helped you with the paper.

Colleagues, Administrators, Funding Agencies, Assistants, Reviewers, Editors.
It is a nice courtesy to the reviewers and editor.
2. It subtly communicates to colleagues the journal is peer reviewed.
3. Few people will be insulted if you acknowledge them but should not have.
4. Many will be insulted if you do not acknowledge them but should have.
5. Acknowledgments-Make sure to indicate that any remaining errors are the authors responsibility.
6. If someone has contributed substantially to your paper consider making them a co-author on the paper rather than just acknowledging them.

Biography

1. Your biography should indicate your employer, your publication history, contact information and any other important information.

Tom Tetertall, Ph.D. is Professor of Management at the University of East Hawaii. He is also an arbitrator for the Human Ethics Commission. His research appears in journals that include: Diversity Review, Management Styles, and Latino Business Review. He can be contacted at: University of East Hawaii, COB, 400 W. 2nd St., Kauai Hawaii, 96333, USA, email: tomt@NHI.edu.

2. Do not make your biography excessively detailed.

FORMATTING

1. Editors are looking for papers that are high quality. But they also look for papers that will not add an excessive burden to their work load.
2. They look for authors that will be pleasant to work with on revisions and in the publication process.
3. A properly formatted and written paper communicates to the editor that you will be pleasant to work with, thereby increasing your chance of publication.
4. Check the journal style guidelines to make sure you have the paper formatted properly.
5. Be sure figures and tables are editable in Word
6. Anything created or imported as an image is problematic.
7. Anything that is scanned needs to be recreated.
8. Make sure that figures and tables are legible.
9. If you are unable to edit it in MS Word it should be recreated.
10. When copying from Excel into word make sure to use the "Paste Special", "Paste as Chart" Command so it can be edited in MS Word.
11. Avoid one-sentence paragraphs.
12. Avoid one-paragraph sections.
13. If you have subsections underneath a main section, start the main section by indicating how the subsections are laid out.
14. Bullet lists do not appear well in journals.
 - a. Longer lists should be placed in a table. Then reference the table in the text of the document.
 - b. Shorter lists should be incorporated directly into the text.
15. Make sure your references are formatted according to journal guidelines.
16. Do not use text boxes
17. Do not use section breaks.
18. Do not use text levels

WRITING QUALITY

1. Use the grammar checker in MS Word.
2. Use an advanced writing editor:
 - a. Stylewriter **
 - b. Whitesmoke.
3. Write in third person active voice when possible.
4. Give it to a friend to read.

WORKING WITH THE EDITOR

Submissions

1. Leave your document set for 1-2 weeks between completion and submission. Give the document a final read before submission.

2. Indicate in your submission correspondence that the paper is not under review elsewhere and has not been published elsewhere.
3. Never EVER submit a document to two journals simultaneously.

Correspondence

1. Don't ask the editor every week for a status update. (every 2-3 months is sufficient)
2. If you are close to a tenure or promotion decision, do let the editor know. Editors are human and will commonly try to get the review completed prior to the promotion decision date.
3. Use submission numbers in all correspondences.
4. Be courteous when corresponding with the editor.
5. Publishing is to a certain degree political. Be willing to review papers for the journal.

Reputation

1. Our industry is small. Editors remember if you were especially easy or especially hard to work with.
2. Your reputation is very important, so make sure you leave the best possible impression, even if your paper is rejected.

Nonresponsive Editors

1. After 3 months, ask if there is any additional information you can provide.
2. After 6 and 9 months request that the editor send a reminder to the reviewers.
3. After 1 year send the editor a status check email.
4. After one year and two weeks, if the editor has not responded, send them a letter withdrawing your paper from publication consideration and try elsewhere.

REVIEWER AND EDITOR COMMENTS

1. Respond to revise and resubmit requests as quickly as possible, but take sufficient time to complete the requested changes.
2. Set the revised manuscript down for a week and reread the paper before submitting it.
3. Do not send the exact same version back to the editor without having addressed the concerns of the reviewers.
4. Do not respond rudely.
5. Prepare a document that indicates how you have addressed each of the reviewers concerns.
6. Your document should review each change that the reviewer has requested and your response to each request individually.

Reviewer Comment: In your data section please indicate the number of observations.

Author Response: Thank you for your suggestion. We have incorporated a sentence indicating the number of observations on page 22 as follows. "The data included 2,436 usable observations."

7. In the event that you are not able to address a reviewers concern. Explain carefully why you are not making the changes, and request the reviewers understanding. Acknowledge the issue in the paper and note it as a limitation, or area for future research.

ACCEPTANCES

1. Make sure to read the page proofs carefully.
2. Pay any fees due. Publishing is expensive, but it is a necessary evil. You have invested a great deal of your time in the research, the publication fee is a small part of your total investment in the project.
3. Expect some time between acceptance and publication.

REJECTIONS

1. Rejections happen.
2. Don't be discouraged by a rejection. Rejections are part of the process.
3. Make any changes that the editor and reviewers suggest and submit the paper to a different journal.

EMOTIONAL INTELLIGENCE AND ENTREPRENEURS

Andree Swanson, Forbes School of Business & Technology (FSBT), Ashford University

Paula Zobisch, FSBT, Ashford University

Efiong Akwawao, FSBT, Ashford University

Richard Leventhal, FSBT, Ashford University

ABSTRACT

The concept of whether emotional intelligence contributes to entrepreneurial success has been explored. The emotional intelligence skills examined were intrapersonal skills, the ability to recognize and manage one's emotions, and interpersonal skills, and the ability to recognize emotions and their effect on others. The findings from the studies analyzed in the literature verify that a high level of emotional intelligence has a positive and significant impact on personal and business relationships.

JEL: Z00

KEYWORDS: Emotional Intelligence, Entrepreneurs, Intrapreneurs

INTRODUCTION

The purpose of this qualitative study was to provide a detailed review of emotional intelligence (EI) and its impact on entrepreneurs. From previous research conducted by the primary researcher, it has been found that EI is relevant to the fields of real estate, financial planners, and even students (Braidfoot & Swanson, 2012; Braidfoot & Swanson, 2013; Hill, Swanson, & Kirwan, 2016; Swanson & Braidfoot, 2013; Swanson & Zobisch, 2014; Swanson, Hamilton, & Zobisch, 2015). The researchers believed that successful entrepreneurs will have high EI and they would like to conduct research to identify this connection and the gaps in the literature. The researchers began by conducting a systematic literature review.

LITERATURE REVIEW

Systematic Literature Review

Swanson, Zobisch, Akwawao, and Leventhal conducted a systematic literature review. Systematic literature reviews are typically used in the medical arena, however, the researchers chose this approach to take a deep dive into the literature on the topic of EI and entrepreneurship. Davis (2016) stated, "In a systematic review, all of the literature on a particular topic is systematically identified, appraised and summarised (Rw 2011)" (p. 60). Five steps exist in the systematic review process (Khan, Kunz, Kleijnen, Angles, 2003). Steps are: 1) Framing questions clearly for a review, 2) Identifying all relevant work from month to years ago, 3) Assessing the quality of studies, 4) Summarizing the evidence, and 5) Interpreting the findings. Swanson et al., researchers of this study, used this technique previously with success. The basic question that Swanson et al. sought to answer was: Does high EI improve entrepreneurial success? The structured question for the research study was designed as shown below:

The populations – global entrepreneurs

The interventions or exposures – the concept of EI and its application to entrepreneurs

The outcomes – successful outcome (whether EI improves entrepreneurial success)

The study designs – empirical qualitative and quantitative studies reviewing EI and its impact on entrepreneurs

LITERATURE REVIEW

The concept of EI has not only captured a great of the ordinary people but more so by the scientific community. The concept of EI can be defined as the processes of mental involvement in the understanding, recognition, management and the use of personal and others' state of emotion to regulate and solve behaviors (Mayer & Salovey, 1997). EI has mostly been affiliated with outcomes of life, such as better psychological well-being (Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2007), high-quality social relationships (Lopes et al., 2004), and increased career success (Braidfoot & Swanson, 2012; Braidfoot & Swanson, 2013; Swanson & Zobisch, 2014; Swanson et al., 2015). Results of previous studies showed that EI predicts work performance (O'Boyle et al., 2011), job satisfaction, work commitment, and job involvement (Carmeli, 2003). Lopes, Grewal, Kadis, Gall, and Salovey (2006) studied the relationship between positive work place outcomes and EI. Researchers also show that EI has a major effect on the level of performance on the managers and supervisors (Kumar, 2009). A thorough literature review was conducted using the following databases: ProQuest, EBSCOhost, SAGE Journals Online, JSTOR, ERIC, Google Scholar, and other Internet sites. The systematic literature explored the concept of EI and entrepreneurs. Key word searches were conducted and themes were identified.

Entrepreneurship – Strong Predictor of Workplace Performance

Bradberry (2015), a key author on EI, stated, “Decades of research now point to emotional intelligence as the critical factor that sets star performers apart from the rest of the pack” (para. 1). At his company, *Talent Smart*, researchers found that EI is the strongest predictor of workplace performance. This is essential for both entrepreneurs and intrapreneurs. The good news about EI is that this can be learned or improved on. Prior studies have indicated that EI may predict career success. Information available has shown that EI can predict job performance and job satisfaction. It was posited that EI may also affect entrepreneurship, in terms of entrepreneurial behaviors and success. The results of this study revealed that individual differences in entrepreneurship may only be partially attributed to EI (Ahmetoglu, Leutner, & Chamon-Preuzic, 2011) Entrepreneurs continually succeed in their efforts in the workplace. Australian entrepreneurs were examined in terms of the EI abilities. In-depth structured interviews were used. Results of the study showed that participants exhibited higher EQ levels than the norm. The study confirmed this fact EI is a prime factor in an entrepreneur's success (Cross & Travaglione, 2005).

Entrepreneurship – Client Relations / Retention

Boren (2010) explained the essentials of EI, however, an essential element of the entrepreneurial experience is client management and retention. Client relations are key to grow any business, thus a strong EI can benefit an entrepreneur. Entrepreneurs are not working alone, but building relationships all the time. Boren included a self-assessment on EI. Current research on EI centers around affections-feelings and emotions. Entrepreneurs who tend to be more passionate about their work tend to be more successful than others. However, the ability to manage customers and employees are also important. Being able to assess both the verbal and non-verbal aspects of both employees and customers plays a key role in understanding of their key wants and needs (Chin, Raman, Yeow, & Eze, 2012). In recent years, the concept of EI has been embraced by the scientific community. Mortan, Ripoll, and Carvalo (2014) studied the effect of EI on entrepreneurial intention and self-efficacy. EI has been affiliated with outcomes of life, such as better psychological well-being, high-quality social relationships, and increased career success. Results of previous studies showed that EI predicts work performance, job satisfaction, work commitment, and job involvement.

Entrepreneurship – Strong Social Interaction

McLaughlin (2012) wrote her dissertation on *An emotional business: The role of emotional intelligence in entrepreneurial success*. Specifically the results dealt with the social interactions related to entrepreneurial situations such as “negotiation, obtaining and organizing resources, identifying and exploiting opportunities, managing stress, obtaining and maintaining customers, and providing leadership” (para. Abstract). Awad and Ali (2012) confirmed that a managers’ EI, employee creativity, and organizational atmosphere had a positive direct effect on a person’s entrepreneurial orientation. More interestingly, EI directly affected relationships within the organization, which, in turn, positively affected employee creativity. Encouraging an entrepreneurial orientation within an organization may contribute to an increase in an organization’s success. Ngah, Wahyukaton, Salleh, and Sarmidy (2016) studied the effects EI on entrepreneurs in Malaysia and Indonesia. EI skills are important to entrepreneurs because of their need to manage social interactions with other individuals. Such interactions include but not limited to activities such as gaining and maintaining customers, presenting to investors, negotiating, as well as attracting, selecting, and handling employees, suppliers, and partners. Ngah et al. (2016) defined as a set of individual social abilities or skills to discriminate, monitor, and use-self and other’s emotions to regulate one’s thinking and action. The effects EI are important to entrepreneurs because of their need to manage social interactions with other individuals. Such interactions include but not limited to activities such as gaining and maintaining customers, presenting to investors, negotiating, as well as attracting, selecting, and handling employees, suppliers, and partners. Ngah et al. (2016) asserted that EI is well known to be a combination of competencies. Those competencies enable individual’s ability to monitor and manage his or her emotions, to properly determine the emotional state of others and to influence opinions. Ngah et al. (2016) found that being aware and understanding their emotions helps entrepreneurs channel positive or negative effects into appropriately identifying and solving problems relevant to their lives.

Entrepreneurship – Measuring Employee Perception

Prior to this research, there was no validated instrument that had been available to use when examining employees perception of their EI. New measures were constructed and examined. It was found that EI was positively related to proactive and personal control (Budd & Carraher, 1998). Carland and Carland (1997) used several validated surveys to help support the development of a model which can be used to investigate individuals with a potential for entrepreneurship. The model was tested statistically and visually. The outcomes were then used to develop educational courses/programs in entrepreneurship.

Entrepreneurship – Emotional Competency

Rhee (2014) conducted a web-based survey (Emotional Competency Inventory – ECI) evaluating the EI of members of the Young Entrepreneurs’ Organization (YEO). “YEO is an international invitation-only membership organization, and its members must be under 40 years of age and be founder, co-founder, owner, or controlling shareholder of an operating business with annual gross sales exceeding \$1 million” (Rhee, 2014, para. 10). Although this was a self-assessment which typically has lower reliability, the results were consistent with other studies on the topic. Results revealed high levels of self-confidence, persistence, initiative and adaptability.

The level of demonstration for emotional self-control and optimism were different among male and female entrepreneurs. Among the survey respondents, males demonstrated more emotional self-control and optimism. In other words, male entrepreneurs perceive themselves as behaving more calmly in stressful situations, being less pessimistic about setbacks, and seeing opportunities rather than threats. (Rhee, 2014, para. 24)

Intrapreneurship

Intrapreneurship, as defined by Williams (2013), is “those highly valuable executives and team members who will perhaps never become a company founder, but who have learned to apply the essential principles of entrepreneurship to the roles they fill within a company” (para. 1). Berzin and Pitt-Catsoupes (1998) examined social innovation as it includes the development and application of varying solutions to social problems. Although the concept of emotional intelligence has been applied to the examination of entrepreneurship, the authors posit that it is important to also consider how emotional intelligence can affect the idea of intrapreneurship (Berzin & Pitt-Catsoupes, 1998). Teodorescu (2016) mentioned that little is spoken about EI in the area of intrapreneurship. Guillaume Hervé describes it well in his book entitled “WINNING AT INTRAPRENEURSHIP,” when he talks about emotional intelligence, team spirit and the ability to manage change, which are more rarely-mentioned in entrepreneurship discussions. I’d add “unshakable perseverance,” as audacity and experience are key to entrepreneurial success as well. (Teodorescu, 2016, para. 8)

RESEARCH METHODOLOGY

The systemic review process was used for this study. Embedded within the literature were findings from numerous studies. Our literature review examined a wide range of articles from academic databases including ProQuest, EBSCOhost, SAGE Journals Online, JSTOR, ERIC, Google Scholar, and other Internet sites.

RESULTS AND DISCUSSION

The results of the study indicated a strong relationship between EI and entrepreneurial success. Two of the critical EI skills, intrapersonal and interpersonal, are the foundation upon which the entrepreneur will begin to form relationships. The ability to establish and maintain personal and business relationships is essential to entrepreneurial success. Five themes appeared in the research results. First, was EI as a strong predictor of workplace performance. The second theme was the importance of EI in client relations and in client retention. The third theme was the importance of EI on having strong social interactions as entrepreneurs. The fourth theme was that EI can be used to measure employee (entrepreneurial) perceptions of his or her jobs. The fifth theme was entrepreneurs with high EI demonstrated high emotional competence (revealed high levels of self-confidence, persistence, initiative and adaptability). Although there was scarce literature on intrapreneurship, the findings revealed the skills required are the same as an entrepreneur.

CONCLUDING COMMENTS

The ability to establish and maintain personal and professional relationships is an underlying principle of EI. The ability to recognize and manage one’s own emotions, as well as recognize the emotions and their effect on others is central to the establishment of relationships. EI is a skill that can be learned and, with practice, improved. Based on the themes that were found, the researchers will begin to develop a thematic model for EI and entrepreneurs and intrapreneurs. Further research will be conducted as EI applies to different personalities.

REFERENCES

Ahmetoglu, A., Leutner, B., & Chamon-Preuzic. (2011). EQ-Nomics: Understanding the relationship between individual differences in trait emotions and entrepreneurship, personality and individual differences, *51*(8), 1026-1033.

- Awad, M.S., & Ali, H.K. (2012). Emotional intelligence and entrepreneurial orientation. the moderating role of organizational climate and employee creativity. *Journal of Research in Marketing & Entrepreneurship*, 14(1), 115 doi.1.1108/1475201211246869
- Berzin, S., & Pitt-Catsoupes, S. (1998). Social innovation from the inside: considering “intrapreneurship” path. *Social Work*, 60(4), 360. doi 10.1093/sw/swv
- Boren, A. E. (2010). Emotional intelligence: The secret of successful entrepreneurship? *Faculty Publications: Agricultural Leadership, Education & Communication Department*. 55. <http://digitalcommons.unl.edu/aglcfacpub/55>
- Bradberry, T. (2015, January 21). Why you need emotional intelligence to succeed in business. *Entrepreneur*. Retrieved from <https://www.entrepreneur.com/article/241998#>
- Braidfoot, R., & Swanson, A. (2012, September). White Paper -- Emotional Intelligence of Financial Planners. *College for Financial Planning*. Greenwood Village, CO.
- Braidfoot, R., & Swanson, A. (2013, February). Emotional intelligence of financial planners in mediation. *Review of Business & Finance Studies (RBFS)*, 4(2), 11-20.
- Budd, J., & Carraher, S. (1998). Validation of an inventory to measure attributes of strategic management, *Psychological Reports*, 82(3 Pt.2), 1220-1222.
- Carland, J., & Carland, J. (1997). A model of potential entrepreneurship: profiles and educational implications. *Journal of Small Business Strategy*, 8(1), 1-13.
- Carmeli, A. (2003). The relationship between emotional intelligence and work attitudes, behavior and outcomes. *Journal of Managerial Psychology*, 18, 788-813. doi: <http://dx.doi.org/10.1108/02683940310511881>
- Chin, S. S., Raman, K., Yeow, J. A., & Eze, U. C. (2012). Relationship between emotional intelligence and spiritual intelligence in nurturing creativity and innovation among successful entrepreneurs. a conceptual framework. *International Conference In Asia, Pacific Business Innovation and Technology Management*, 261-267. Doi:10.1016/j.sbspro.2012.09.1184
- Cross, B., & Travaglione, A. (2005). The untold story: Is the entrepreneur of the 21st century defined by emotional intelligence? *The International Journal of Organizational Analysis*, 11(3), 221-228.
- Davis, D. (2016). A practical overview of how to conduct a systematic review. *Nursing Standard* (2014+), 31(12), 60. doi:<http://dx.doi.org/10.7748/ns.2016.e10316>
- Hill, R., Swanson, A., & Kirwan, J. (2016, September 22). Emotional intelligence and learning styles: The effect on learning of generationals. *19th Annual International Conference of Interactive Collaborative Learning*. Belfast, UK.
- Khan, K., Kunz, R., Kleijnen, J., & Angles, G. (2003, March). Five steps to conducting a systematic review. *Journal of the Royal Society of Medicine*, 96(3), 118-121. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC539417/>

Kumar, P. M. (2009). Emotional intelligence and employee performance as an indicator for promotion, a study of automobile industry in the city of Belgaum, Karnataka, India, *International Journal of Business and Management*, 4(4).

Lopes, P., Grewal, D., Kandis, J., Gall, M., & Salovey, P. (2006). Evidence that emotional intelligence is related to job performance and affect and attitudes at work. *Psicothema*, 18, 132-138.

Mayer, J., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter, *Emotional Development and Emotional Intelligence: Implications for Educators* (p. 3-31). New York, NY: Basic Book.

McLaughlin, E. B. (2012, May). An emotional business: The role of emotional intelligence in entrepreneurial success. University of North Texas Libraries, Digital Dissertations.

Mortan, R. A., Ripoll, P., & Carvalho, C. (2014). Effects of emotional intelligence on entrepreneurial intention and self-efficacy. *Revista De Psicología Del Trabajo y De Las Organizaciones*, 30(3), 95-104.

Ngah, R., Wahyukaton, Salleh, Z., & Sarmidy, R. (2016). Comparative study of emotional intelligence and entrepreneurial orientation between Malaysian and Indonesian university Students. *Procedia Economics and Finance*, 37(*The Fifth International Conference on Marketing and Retailing (5th INCOMaR) 2015*), 100-107. doi:10.1016/S2212-5671(16)30099-5

O'Boyle, E. H., Humphrey, R. H., Pollack, J. M., Hawker, T. H., & Story, P. A. (2011). The relation between emotional intelligence and job performance: A meta-analysis. *Journal of Organizational Behavior*, 32, 788-818. doi: <http://dx.doi.org/10.1002/job.714>Pihie

Rhee, K. S., & White, Rebecca J. (2007, September). The emotional intelligence of entrepreneurs. *The Free Library*. Retrieved from [https://www.thefreelibrary.com/The emotional intelligence of entrepreneurs.-a0204986722](https://www.thefreelibrary.com/The+emotional+intelligence+of+entrepreneurs.-a0204986722).

Schutte, N., Malouff, J., Thorsteinsson, E., Bhullar, N., & Rooke, S. (2007). A meta-analytic investigation of the relationship between emotional intelligence and health. *Personality and Individual Differences*, 42, 921-933. doi: <http://dx.doi.org/10.1016/j.paid.2006.09.003>

Swanson, A. C., & Braidfoot, R. (2013, May). An assessment of emotional intelligence understanding in the field of financial planning. *Costa Rica Global Conference on Business and Finance (GCBF) – San Jose, Costa Rica*.

Swanson, A., & Zobisch, P. (2014). Emotional intelligence understanding among real estate professionals. *Global Journal of Business Research (RBFS)*.

Swanson, A., Hamilton, D., & Zobisch, P. (2015). Best practices for including emotional intelligence in real estate professionals. *Global Journal of Business Research (GJBR)*, 9(4), pp. 91-97.

Teodorescu, S. (2016). Why is it the right time for any organization in any industry to start implementing intrapreneurship? *Intrapreneurship Conference*. Retrieved from <https://www.intrapreneurshipconference.com/why-intrapreneurship-and-why-now-counting-down-to-montreal-event-june-16>

Williams, D. K. (2013, October 30). The 4 essential traits of 'intrapreneurs.' *Forbes.com*. Retrieved from <https://www.forbes.com/sites/davidkwilliams/2013/10/30/the-4-essential-traits-of-intrapreneurs/#3c57346151da>

BIOGRAPHIES

Dr. Andree Swanson is a full-time Associate Professor and Program Chair for the Bachelor of Arts in Business Leadership at the Forbes School of Business and Technology at Ashford University. She earned a Bachelor's degree in Business Administration and Management from the University of Maryland European Division, a Masters of Human Relations from the University of Oklahoma, a Masters of Arts in Organizational Management from the University of Phoenix, and a Doctorate in Educational Leadership from the University of Phoenix. She has specialized in distance learning, and values teaching students with diverse backgrounds and schedules. "Having earned my degrees from both traditional classrooms and online learning systems, I value the interactive and responsive instructor." In addition to acting as an educator, Dr. Swanson has worked as a corporate trainer, at one point becoming the national training manager for a rental company. Andree and her husband, Craig, enjoy their family, genealogical research, Facebook, and travel. The couple has one son, a grandson with a new grandbaby on the way. They also own three champion Irish Setters, Wilson, Stewie, and Kamikaze Ozzie.

Dr. Paula J. Zobisch is a full-time Associate Professor and Program Chair for the Bachelor of Arts in Entrepreneurship at the Forbes School of Business and Technology at Ashford University. She earned her PhD in Adult Education from Capella University. Her Master of Business Administration with an emphasis in Marketing and her Bachelor of Science in Business are from the University of Central Oklahoma. Dr. Zobisch has over 20 years experience in the marketing field and has worked in business-to-business industrial sales and as a director of marketing for a 3M distributor. She teaches marketing management, consumer behavior, and marketing research courses at Ashford. Dr. Zobisch says, "I am a perfect example of how an adult can be successful and grow while attending school. I earned all of my degrees while working full time and raising a family, in addition to maintaining a home as a single parent. It seems the more I learn, the more I am aware how much there still is to learn." She resides in Broken Arrow, Oklahoma, and has two adult sons and four grandchildren. Dr. Zobisch enjoys outdoor activities, jumping the waves on her Sea Doo, is a certified Krav Maga instructor, and is currently working on her black belt, second level, in the Executive Black Belt Club in Tae Kwon Do.

Dr. Efiang Akwaowo, an Assistant Professor in the Forbes School of Business and Technology. Dr. Akwaowo holds a PhD in Business Administration with a specialization in International Business from NorthCentral University and a Master of Business Administration in Management along with a Bachelor of Business Administration in marketing both from Texas Southern University. He focuses on courses in International Business, Entrepreneurship and Global Strategic Management. He has worked in the corporate world for more than 15 years in the area of strategic planning and has been teaching traditional and online classes for more than seven years. He enjoys spending time with his family when he is not reading and researching.

Dr. Richard Leventhal is a Professor in the Forbes School of Business and Technology at Ashford University. He obtained his doctorate in Higher Education from the University of Denver with cognates in Marketing/Management, an MBA from San Francisco State College with an emphasis in Marketing, and a BS in Marketing from Cornell University. He previously taught at Metropolitan State University in Denver as a Professor of Marketing, and at Regis University in Denver as an Adjunct Professor of Marketing in their MBA program. He is a subject matter expert in leadership and marketing. He has worked for several Fortune 500 corporations in upper management positions in both sales and marketing, and has extensive experience serving as a consultant to both for-profit and non-profit organizations. In addition to teaching at Ashford, he served as Managing Editor for two global marketing journals. Dr. Leventhal enjoys sharing his experiences with students to make the course content more meaningful and realistic.

CHOICE BEHAVIOR IN MULTIATTRIBUTE CONSUMER DECISION MAKING

Zoltán Veres, University of Pannonia, Veszprém, Hungary
Ildikó Kaszai, E-STAND Co., Budapest, Hungary

ABSTRACT

Since numerous factors – such like attribute importance, indifference, utility value interval, preference instability, consumer experience and product complexity - divert choice decision from utility optimal decision seems to be inconsistent/intransitive in an absolute rational framework. The research positions of choice decisions as it is located in a continuum. One end of the continuum is of such an extreme choice behavior, where consumer is fully able to control the decision, while the other end represents the random type decisions. Research goal was to find the typical choice behavior between the two extremes of the decision continuum. It was found that average of sequential consumer decisions lies between the fully self-controlled and fully random endpoints, closer to the former one.

JEL: M3

KEYWORDS: Preferences, Intransitivity, Decision Continuum, Product Complexity

INTRODUCTION

In the case of conscious choice consumer evaluates the available alternatives based on certain criteria, and applying a decision rule selects one of the options. Consumer's choices can be placed in a decision continuum. One end of the continuum represents the conscious buyer who is able to fully control his/her decision, to perceive the attribute utilities in a contradiction-free way. To the other end of the continuum that imaginary consumer is placed who makes his/her decision without any consideration, in a fully random way. The actual position of this maximum likelihood point is a function of numerous factors.

LITERATURE REVIEW

Expression of preferences is significantly influenced by the fact that an attribute is very important or very unimportant (say: positive and negative *robust attributes*), or they are situated somewhere between these two extremes (let them call: quasi *neutral attributes*). The concept of preferences presupposes by definition the diversity of the objects to be compared, or it allows equal (say: indifferent) utilities in consumer's choice based on principle of completeness. A logical (lifelike) assumption is that utilities of the attributes, for the consumer's mind form intervals of different range instead of fixed levels, in which utilities are accidentally/randomly "floating". Experience has a positive impact on preference stability (Hoeffler and Ariely 1999). As the consumer relies heavily on memory it has a decisive role in decision-making (Mantonakis, Whittlesea and Yoon 2008). Numerous relevant publications demonstrate the complexity of the system attributes (e.g. from the past Bettman 1979). Also on the basis of the Dijksterhuis (2006) experiment it can be assumed that product complexity has a significant role in the purchase decision. Based on the research antecedents the following research questions are worth investigating:

Where is the position of the average sequential transitive choice-steps between the two extremes (controlled vs. random)?

What is the relationship between product complexity and ability to choose in a consistent way?

METHODOLOGY

Since the revealed preferences can only be explored by observation, the observational-experimental design seemed to be a logical choice. Two working hypotheses have been introduced into the research model. If in the case of sequential pairwise product comparisons, the subject manages to consistently answer all questions, i.e. in transitive way, then we can say that the subject met the so-called "*transitivity working hypothesis*". The other extreme is when during the pairwise show up of products, the subject will always respond completely random, as if the coin tossing "heads-or-tails" gave the choice. The latter is called a "*heads-or-tails working hypothesis*". This latter extreme decision behavior has not been simulated by the experimental group but with a robotized mathematical simulation. With this procedure that expected number of steps can be got, where the first intransitive choice comes about during the sequential pairwise product comparison. In order to measure the impact of complexity different complex products were involved into the experiment, but also the number of comparable attributes was modulated.

Robustness vs. neutrality of attributes on individual level can be grasped by rating importance of attributes. For this purpose we can use a small methodological fragment of the Q method (Stephenson 1953; Brown 1966), namely the forced choice grid. In the Q method, the participants are obliged to evaluate all the attribute dimensions ("rate all"), and they are forced to choose a fixed quantity of attributes for each level of importance. The number of attributes can be placed in a given importance level which approaches the normal distribution. The scale of importance ranges from the highly important, through indifferent to highly unimportant. By this method we gain the same number of indifferent (neutral) attribute dimensions for all participants. In the experiment sequential pairwise product comparisons have been carried out on a sample of N=118.

RESULTS

Based on a homogeneity test on the data base it was found that:

The average of the distribution of subsequent consumer decisions lies somewhere between the fully self-controlled and fully random endpoints; a little closer to the fully self-controlled (transitive) endpoint, while farther from the random choice end. The fact, that the average number of transitive steps is farther from the fully random responding endpoint, means that human brain is able to respond in a rather consistent/transitive way. Nevertheless, we proved that the more complex the product, the less the human brain was capable of responding in a consistent/transitive way, that is product complexity reinforces heuristic/random nature of the choice.

REFERENCES

- Bettman, J. R. (1979) "*An Information Processing Theory of Consumer Research*," Reading, MA: Addison-Wesley
- Brown S. R. (1966) "The history and principles of Q methodology in psychology and the social sciences," *Qualitative Health Research*, 6(4), p. 561-567.
- Dijksterhuis, A., M.W. Bos, L.F. Nordgren and R.B. van Baaren (2006) "On making the right choice: the deliberation-without-attention effect," *Science*, 311(5763), p. 1005–7.
- Hoeffler, S., and Ariely, D. (1999) "Constructing Stable Preferences: A Look into Dimensions of Experience and their Impact on Preference Stability", *Journal of Consumer Psychology*, 8(2), p. 113-139.

Mantonakis, A., Whittlesea, B. W. W., and Yoon, C. (2008) "Consumer Memory, Fluency, and Familiarity". In C. P. Haugtvedt, P. Herr, & F. R. Kardes (Eds.), *The Handbook of Consumer Psychology*, (p. 77-102), Lawrence Erlbaum Associates

Stephenson, W. (1953) "*The study of behavior: Q-technique and its methodology*," Chicago, IL: University of Chicago Press.

ACKNOWLEDGEMENT

The author acknowledges funding from Hungarian Scientific Research Fund No. OTKA K 116040

BIOGRAPHY

Zoltán Veres, Professor of Marketing at the University of Pannonia, Veszprém, Hungary, Head of Department of Marketing. He has had consultancy practice and conducted numerous research projects on services marketing and project marketing. He has more than 200 scientific publications, including the books of *Introduction to Market Research*, *Foundations of Services Marketing* and *Nonbusiness Marketing*. He has been editor of series to Academy Publishing House (Wolters Kluwer Group), Budapest.

A CASE STUDY OF ASIAN MARKET ENTRY STRATEGIES OF SOUTH KOREAN FIRMS

Mannsoo Shin, Korea University Business School

ABSTRACT

The research deals with foreign market entry strategies of selected Korean firms in Asia. S. Hymer's Monopolistic advantage theory of foreign direct investment (FDI) assumes that the firm should have a certain monopolistic advantage before it engages in a FDI. However, global market entry strategies of many Korean firms indicate that the monopolistic advantage of a firm may not be a necessary condition for FDI. This paper will investigate the critical success factors of foreign market entry for three Korean firms: Hyundai Motor Company in India, Orion Company in China, and Line Corporation in Japan. At the time of market entry, those Korean firms did not possess any clear superior technological or marketing advantages over competitors. Yet over time, those companies were able to build up a strong market presence through a series of unique market entry strategies. The case study will provide many interesting strategic implications for firms from developing countries which wish to enter into foreign market.

BIOGRAPHY

Professor Mannsoo Shin, Korea University Business School

DISCLOSURE QUALITY OF SUDANESE LISTED COMPANIES

Alnour Nadir Alnour Osman, University of Khartoum, Sudan
Diaeldin Osman, Alcorn State University

ABSTRACT

This research is an attempt to measure disclosure quality of published annual reports of listed companies in Khartoum Stock Exchange (KSE). An unweighted disclosure index of 191 mandatory and voluntary information items was developed and utilized. Actual degrees of disclosure quality of more than 80 % of KSE listed companies were measured. Descriptive statistics showed that disclosed information items represented about 48 % of total information items that were expected to be disclosed. Within disclosed information items, the disclosure degree of mandatory items was 73 %, whereas the disclosure degree of voluntary items was 22 %. The analyses, also, showed that the degree of disclosure quality varied, widely, among KSE companies and sectors. Financial companies provided the highest disclosure degrees.

INTRODUCTION

Accounting identifies measures and communicates financial information about economic entities, to interested parties. Accountants provide useful information for making rational decisions. When information is fully disclosed, users will be more informed, and the society's resources will be more optimally utilized. As a process, accounting can be divided into producing and disclosing function. Zeff (1973) noted that, well-built measurement standards were developed in U.S. and then exported to other countries. So, while measurement standards are widely agreed upon, accountants have different views and opinions, about the quality of satisfactory disclosure. Therefore, the major problem of accounting lies in disclosing functions, rather than in producing functions.

Michael, et al. (1990) defined financial disclosure as "any deliberate release of financial information, whether numerical or qualitative, required by regulations or voluntary and via formal or informal channels". Hannes (2005) argued that, "mandatory disclosure (required by law provisions) is essential to offset the market failure, when there are no rewards for full disclosure". On contrary, Ronen (2001) believed that, "self-induced mechanisms would come into play, when the dynamics between firms and outsiders move firms to fully disclose all available information voluntarily (optional provision of information beyond required mandated levels) because outsiders may interpret non-disclosure as the worst possible news".

There are many motives, both to disclose and not to disclose information. On one hand, managers wish to protect propriety information. On the other hand, managers may wish to disclose financial information to enhance their firm's value. Thus, the extent (size) and the kind (quality) of disclosure vary among firms. The importance of adequate disclosure of corporate affairs cannot be overstressed. The key stone of the entire structure of development in a free economy is the accounting disclosure, which determines the efficiency of the process of resources allocation. It is observable that different countries set different policies and regulations to organize their accounting profession. Therefore, the quality of financial disclosure varies widely among firms and countries. The most important factor may be the level of economic development, which determines accounting development. So, many writers argued that accounting profession is in its early stages in most LDCs. It is not more than accumulation of historical data for financial statements and audit purposes. This idea was common in many studies as stated by Hamza (1996).

EMPIRICAL FINDINGS AND CONCLUSION

Disclosure Levels

With respect to disclosure environment, KSE listed companies were categorized into regulated and unregulated companies. Regulated companies are financial institutions which prepare their financial reports in accordance with disclosure requirements of the AAOIFIs, and closely supervised by the Central Bank. Unregulated companies are non-financial companies, which are not supervised by any regulatory authority and do not have to prepare their financial reports according to certain requirements. However, some of them adopt the IFRSs. The percentages of regulated and unregulated companies in the study sample were shown in following table:

Table 2: Regulated and Unregulated Companies in the Study Sample

Sector	Regulated		Unregulated		Total	%
	Number	%	Number	%		
Banks	19	73.08	-	-	19	45.24
Insurance	7	26.92	-	-	7	16.67
Commercial	-	-	2	12.50	2	04.76
Industrial	-	-	2	12.50	2	04.76
Agricultural	-	-	1	06.25	1	02.38
Communications	-	-	2	12.50	2	04.76
Financial services	-	-	5	31.25	5	11.90
Others	-	-	4	25.00	4	09.52
Total	26	100.0	16	100.0	42	100.0

Source: KSE Annual Report 2007.

This differentiation, according to two references of accounting practices in Sudan, made it difficult to assess the disclosure quality of all listed companies by using a unified set of disclosure requirements. Therefore, a wide disclosure index of 191 information items was designed with reference to the AAOIFIs, in addition to 9 relevant studies done in similar developing countries, as stated above. These items were: contents of annual reports (11 items), general information (18 items), accounting policies items (17 items), balance sheet items (60 items), income statement items (40 items), and strategic information items (45 items). The quality of corporate disclosure in published annual reports of Sudanese listed companies was measured on three levels. First, overall disclosure level, for the whole sample, was measured. Second, disclosure level of each company and sector was computed. Third, comparison of disclosure levels was made to check similarities and variations among companies and sectors.

Disclosure levels were measured by the arithmetical mean (the average). Statistically, the mean is not a robust measurement of central tendency, because it is greatly influenced by outliers, i.e., it may not represent the middle. However, the effect of extreme values may be reduced by different signs of these values, if the items are normally distributed, i.e., higher values offset lower values. High mean is an indicator of better disclosure quality on an assumption that there is a positive relationship between disclosure quantity and quality as stated by Botosan (1997).

For each company, the disclosure mean is the ratio of disclosed items to the total applicable items for that company. For the whole companies, the mean of disclosure is the ratio of items disclosed by all companies to the all applicable items for all companies. Table 3 displayed disclosure levels of the study sample.

The table showed that the minimum disclosure score was 0.25, the maximum disclosure score was 0.73, and the overall disclosure mean was 0.48. So, each company, on the average, disclosed half of its applicable information.

The attitude of disclosure is clearer when it is taken on the basis of mandatory or voluntary disclosure. High levels of mandatory disclosure reflect high compliance with disclosure requirements, while high levels of voluntary disclosure reflects strong incentives for a company to provide, optionally, more information. Dividing disclosure index items into mandatory and voluntary, according to requirements of the AAOIFIs, the study constructed in Table 4.

Table 3: Disclosure Means of the Study Sample

No.	Company Name	Disc. Mean	No.	Company Name	Disc. Mean
1	Sudatel	0.73	22	Sudanese Free Zones (SFZ)	0.51
2	Islamic Devt Cooperative Bank	0.69	23	General Insurance	0.51
3	Financial Investment Bank	0.63	24	Almohager for Investments	0.50
4	Sudanese French Bank	0.61	25	Assalama Insurance	0.50
5	Tadamon Islamic Bank	0.60	26	Almohager for Financial Services	0.50
6	Faisal Bank	0.59	27	The Blue Nile Insurance	0.50
7	Alsalam Bank	0.59	28	Elnilein Insurance	0.49
8	Omdurman National Bank	0.58	29	Watania Co-operative Insurance	0.47
9	United Capital Bank	0.57	30	The National Reinsurance	0.47
10	Bank of Khartoum	0.56	31	Modern Construction	0.46
11	Farmer Commercial Bank	0.56	32	The National Petroleum	0.46
12	Global	0.56	33	Alsaham for Financial Services	0.43
13	Emirates and Sudan Bank	0.56	34	Ivory Bank	0.42
14	Animal Resources Bank	0.56	35	Nile Cement Company	0.39
15	Alshamal Islamic Bank	0.55	36	Alhijra Exchange Co. Ltd	0.38
16	Islamic Development Company	0.55	37	Alrowad Financial Services Co.	0.38
17	Workers` National Bank	0.54	38	Joba Insurance	0.36
18	Sudanese Islamic Bank	0.54	39	Alriy Alaam Press and Publishing	0.34
19	Saudi Sudanese Bank	0.54	40	Tala Investment Co. Ltd	0.32
20	Blue Nile Bank	0.53	41	Tagseet	0.30
21	Export Development Bank	0.52	42	Sud. Kuwaiti Road Transport	0.25
Overall disclosure mean 0.48					

Source: Researcher Own Calculation.

Table 4: Disclosure Means of Mandatory and Voluntary Items

Disclosure Type	Items to be Disclosed	Disc. Mean	Std. Dev.
Mandatory	98	0.73	0.36
Voluntary	93	0.22	0.28

Source: Researcher Own Calculations

The table showed that the degree of disclosing mandatory items was very high when compared with the degree of disclosing voluntary items. The high degree of disclosing mandatory items might be a result of high compliance of regulated companies, whereas its high standard deviation might be attributed to the high degree of non-compliance by unregulated companies.

Since previous studies of accounting disclosure quality, in Sudan, had not provided an overall degree of disclosure quality of Sudanese companies, it was not possible to compare the found degree of disclosure quality (i.e., 48 %) with a local benchmark. Therefore, the found degree of disclosure quality of KSE listed companies was compared with disclosure quality of some similar developing countries as shown by Table 5.

Under an assumption that countries with similar economic conditions might have comparable disclosure quality, the researcher assessed disclosure quality of Sudanese listed companies by using disclosure levels of the above- mentioned countries as references. Although comparisons may not reveal accurate results

when they are made for observations taken at different times, they may give general indicators about a topic, if not much changes have occurred, as assumed by the researcher.

Table (5) showed that disclosure levels in these countries were variable. Some countries had, relatively, high levels of disclosing mandated items, while other countries had, relatively, low levels of disclosure. Regarding the level of mandatory disclosure, the degree of disclosure by Sudanese listed companies (73 %) was similar to that of Zimbabwe (74 %), but less than those of Saudi Arabia (89 %) and India (88 %). Similarly, the degree of voluntary disclosure by Sudanese listed companies (22 %) was lower than those of South Africa (30 %), Saudi Arabia (33 %) and India (25 %). However, the overall level of disclosure of KSE listed companies (48 %) was better than those of Nigeria (38 %), Bangladesh (44 %) and Uganda (34 %).

Table 5: Disclosure Levels in Some Similar Countries

Author	Studied Year	Country	Studied Items	Disc. Mean
Firer and Meth	1984	South Africa	Voluntary items	0.30
Wallace	1986	Nigeria	All items	0.38
Owusu-Ansah	1998	Zimbabwe	Mandatory items	0.74
Naser and Nuseibeh	2003	Saudi Arabia	Mandatory items	0.89
			Voluntary items	0.33
Akhtaruddine	2005	Bangladesh	All items	0.44
Samuel	2005	Uganda	All items	0.34
Hossain	2008	India	Mandatory items	0.88
			Voluntary items	0.25

Source: Literature Reviewed.

A disclosure degree of 48 % means that a company provides half of its information. Hence, a disclosure mean of 48 % can not be considered high, but at the same time, is not low, especially, when compared with disclosure levels of mentioned countries. Therefore, the study revealed that the quality of corporate disclosure in annual reports of Sudanese listed companies is not low.

The degree of disclosure quality of Sudanese listed companies was achieved in the absence of stringent mandatory disclosure requirements. Out of the 191 information items of the disclosure index, 93 items (49 %) were voluntarily provided items, i.e., KSE listed companies report under a very flexible disclosure regime, e.g., whereas financial institutions, in Sudan, have to comply with disclosure standards of the AAOIFs, non-financial companies are not obliged to comply with certain disclosure requirements, which means that those companies have a full right to formulate their disclosure strategies. Besides, the Sudanese Companies Act 1925 has very poor disclosure requirements and KSE has not, yet, issued its own disclosure or listing requirements.

Variations of Disclosure Levels

For variations in disclosure levels among companies and sectors, means, standard deviations and ranges of disclosure levels of all companies and sectors were computed and compared. The research found different levels of disclosure among companies; with a range of 48% (73% - 25%). Moreover, the difference in disclosure means between the highest 5 companies (65 %) and the lowest 5 companies (31 %) was also very high as shown by table 6.

Using the t-test to check the significance of variations among disclosure levels of these companies, it was found that the t-value was 10.48 (i.e., P value > 2) and the variation was significant at the 0.05 level (see appendix 2). This is an indicator of significant statistical variation of disclosure levels among companies. This high variation can be seen more obviously by categorizing disclosure levels into subsequent sets, as shown by table 7.

Table 6: Disclosure Degree of 10 Selected Companies

The Highest 5 Companies		The Lowest 5 Companies	
Company Name	Disc.	Company Name	Disc.
Sudatel	0.73	Joba Insurance	0.36
Islamic Devt. Cooperative Bank	0.69	Alriy Alaam Press and Publishing	0.34
Financial Investment Bank	0.63	Tala Investment	0.32
Sudanese French Bank	0.61	Tagseet	0.30
Tadamon Islamic Bank	0.60	Sudanese Kuwaiti Road Transport	0.25
Overall disclosure mean	0.65	Overall disclosure mean	0.31

Source: Table (3).

Table 7: Categories of Disclosure Quality

Category of Disclosure	Number of Companies	Percentage
< 30 %	01	02.4
30 % < 40 %	07	16.6
40 % < 50 %	08	19.0
50 % < 60 %	22	52.4
60 % < 70 %	03	07.2
> 70 %	01	02.4
Total	42	100

Source: Table (3).

The table showed that disclosure levels of 22 companies were between 50 % and 60 %, whereas disclosure levels of the rest fell in the extreme area (more than 60 % or less than 50 %). Thus, high differences in accounting practices, among both companies of different sectors and within companies of the same sector were reflected. Another feature of high level of variations in disclosure quality was that, while many companies, optionally, adopt and implement the IFRSs, 6 listed companies had not issued audited financial statements for the year 2007, and other 4 listed companies had not provided KSE with audited financial statements for the same period.

Table 8 displayed disclosure levels of regulated (Reg.) and unregulated (Unreg.) companies. Regulated companies are financial companies, whereas unregulated companies are non- financial companies.

Table 8: The Effect of Company Status on Disclosure Levels

Company Name	Comp. Status	Disc. Mean	Company Name	Comp. Status	Disc. Mean
Sudatel	Unreg.	0.73	S F Z	Unreg.	0.51
Islamic Devt. Co-operative Bank	Reg.	0.68	General Insurance	Reg.	0.51
Financial Investment Bank	Reg.	0.63	Almohager for Investments	Unreg.	0.50
Sudanese French Bank	Reg.	0.61	Assalama Insurance	Reg.	0.50
Tadamon Islamic Bank	Reg.	0.60	Almohager for Financial Services	Unreg.	0.50
Faisal Bank	Reg.	0.59	The Blue Nile Insurance	Reg.	0.50
Alsalam Bank	Reg.	0.59	Elnilein Insurance	Reg.	0.49
United Capital Bank	Reg.	0.58	The National Reinsurance	Reg.	0.47
Omdurman National Bank	Reg.	0.58	Watania Co-operative Insurance	Reg.	0.47
Global	Unreg.	0.56	Alsaham for Financial Services	Unreg.	0.43
Farmer Commercial Bank	Reg.	0.56	The National Petroleum	Unreg.	0.46
Emirates and Sudan Bank	Reg.	0.56	Ivory Bank	Reg.	0.42
Bank of Khartoum	Reg.	0.56	Modern Construction	Unreg.	0.46
Animal Resources Bank	Reg.	0.56	Nile Cement Company	Unreg.	0.39
Islamic Development Company	Unreg.	0.55	Alrowad Financial Services Co.	Unreg.	0.38
Alshamal Islamic Bank	Reg.	0.55	Alhijra Exchange Co. Ltd	Unreg.	0.38
Workers' National Bank	Reg.	0.54	Joba Insurance	Reg.	0.36
Sudanese Islamic Bank	Reg.	0.54	Alriy Alaam Press and Publishing	Unreg.	0.34
Saudi Sudanese Bank	Reg.	0.54	Tala Investment Co. Ltd	Unreg.	0.32
Blue Nile Bank	Reg.	0.53	Tagseet	Unreg.	0.30
Export Development Bank	Reg.	0.52	Sud. Kuwaiti Road Transport	Unreg.	0.25

Source: Table (3).

From this table, it is clear that regulated companies showed better disclosure levels than unregulated companies. This finding could be seen more clearly in table 9

Table 9: Disclosure Levels of Regulated and Unregulated Companies

Disclosure Mean	Regulated Companies		Unregulated Companies		Total
	No. of Companies	Percentage	No. of Companies	Percentage	
< 20 %					
20 % < 30 %			1	06.25	1
30 % < 40 %	1	03.85	6	37.50	7
40 % < 50 %	5	19.23	3	18.75	8
50 % < 60 %	17	65.38	5	31.25	22
60 % < 70 %	3	11.54			3
> 70 %	0		1	06.25	1
Total	26	100.0	16	100.0	42

Source: Table (3).

Table 9 showed that 77 % of regulated companies had disclosure levels of more than 50 %, compared to 37 % of unregulated companies. Using the t-test to check the significance of variations between disclosure levels of financial and non-financial companies, it was found that the t-value was 3.448 (i.e., P value > 2) and the variation was significant at the 0.05 level (see appendix 3), i.e., variations of disclosure levels among sectors was statistically significant. Moreover, Pearson correlation analysis showed that the coefficient of correlation between disclosure level and company status (regulated or unregulated) was 0.603 at significance levels of the 0.01 (see appendix 4), which indicates a strong positive correlation.

To test disclosure variations among sectors, disclosure means, standard deviations, ranges, maximum and minimum disclosure degrees of each sector were calculated in Table 10.

Table 10: Disclosure Means by Sectors

Sector	Number of Companies	Minimum Disclosure	Maximum Disclosure	Range	Disclosure Mean	Standard Deviation
Banks	19	0.42	0.69	0.26	0.57	*
Insurance	07	0.36	0.51	0.15	0.47	*
Financial sector	26	0.36	0.69	0.37	0.54	*
Commercial	02	0.30	0.51	0.21	0.41	0.15
Industrial	02	0.39	0.46	0.07	0.42	*
Agricultural	01	0.32	0.32	-	0.32	-
Communications	02	0.34	0.73	0.39	0.53	0.28
Financial services	05	0.38	0.56	0.18	0.45	*
Others	04	0.25	0.55	0.30	0.44	0.13
Non-financial sector	16	0.25	0.73	0.48	0.44	0.12

Source: Table (3). * This symbol indicates a small value.

Banks sector had a disclosure mean of 57 % compared to 32 % disclosure mean of the agricultural sector. Financial sector had a disclosure mean of 54 % compared to 44 % disclosure mean of non-financial sector. Excluding communication sector which contained only two companies and, therefore, was influenced by high disclosure of Sudatel, the insurance, commercial, industrial and financial sectors had disclosure means between 41 % and 47 %. The difference between the disclosure mean of the highest sector (Banks sector) and the lowest sector (Agricultural sector) was 25 %, which indicates a high degree of variation among sectors. Within each sector, there were high differences of disclosure levels. The highest ranges were in the communications sector (39 %) and the others sector (30 %). This reflects high differences in accounting practices, among companies of different sectors and companies of the same sector.

Thus, the research revealed that the level of disclosure quality of Sudanese listed companies was variable. Disclosure quality of published annual reports of KSE listed companies is characterized by wide variations

among companies as well as among sectors. These variations reflect a high disagreement among companies with regard to the size and depth of disclosure quality. Based on this proven high degree of variation of accounting disclosure levels among sectors, the study accepted that the disclosure quality in annual reports of Sudanese listed companies varied among various sectors of KSE.

These results of low disclosure and wide variation of disclosure practices among companies and industries are consistent with findings of many studies. Examples of these studies are those of Cerf (1961), Stagna (1976), Barrett (1976), McNally et al. (1982), Firer and Meth (1982), Chow and Wong-Boren (1987), Wallace (1988), Cooke (1989) and Akhtaruddine (2005).

BIOGRAPHY

Alnour Nadir Alnour Osman, PhD, School of Management. University of Khartoum, Khartoum Sudan

Diaeldin Osman, BBA, MBA, MPA, PhD, Alcorn State University, School of Business, 9 Campus Dr, Natchez, MS 39120

DESIGN PRINCIPLES OF LONG-TERM PRODUCTION PLANNING FOR COST-OPTIMIZED DEMAND MATCHING

Maurice Schmidt, Institute of Production Systems and Logistics, Leibniz Universität Hannover
Peter Nyhuis, Institute of Production Systems and Logistics, Leibniz Universität Hannover

ABSTRACT

Demand fluctuations represent a great challenge regarding the planning and design of production systems. In order to maintain the continuity of high adherence to delivery dates and thus to ensure the competitiveness, companies need to strive for the optimal matching between market demand and capacity. For this purpose, measures of levelling and adjustment of load as well as capacity can be used. The flexibility of capacities restricts the adjustment possibilities. Therefore, the scope of this paper is to analyse load and capacity measures in terms of their interdependencies as well as possible measure combinations. Furthermore, the deviation of design principles enables a pre-selection of suitable measure combinations. In the end, the optimal choice is based on unit costs and facilitates a more specific analysis of the economic consequences at different load situations. The overall goal is to provide a significant support to balance production systems between productivity, flexibility and delivery reliability.

JEL CLASSIFICATION: L600

KEYWORDS: Fluctuating Demand, Capacity Planning, Production Design

INTRODUCTION

Numerous measures are in place to adjust production capacities to the changing load situations (see Figure 1). The aim is to minimize potential sales losses by making optimum use of existing capacities. The requirements for measures that can be used in the event of fluctuations are cost-efficient and short-term operational capability as well as reversibility (Schmidt and Nyhuis, 2016).

In industrial companies as well as in theory, different strategies can be found for the successful managing of demand fluctuations (Wiendahl et al., 2002, Milberg and Reinhart, 1999). There are approaches, which influence the purchasing behavior by incentive systems or self-induced fluctuations, for example by machine failures, with the help of operational measures. The focus of this paper is the planning and control of foreign-induced demand fluctuations in production. In the industry, it is common to take only a small part of possible measures into account, and mainly those from the area of capacity adaption are used in a reactive manner. However, the possibility of a capacity adaption, for example by introducing weekend shifts or overtime, is limited. If the quantity of demand exceeds the capacity limits of the production system, companies miss significant potentials in terms of logistics performance and costs. If a strategic and process-oriented transformation of the production systems is not taken into account at an early stage, there is an additional risk. The adaptations that are progressing in small steps will solidify existing structures even more (Schmidt & Nyhuis, 2017). The expansion of the number of measures and the combination of various measures to optimally respond to fluctuations in demand can help companies to maintain their delivery reliability towards their customers at a high level, even under heavy load. At the same time, an analysis of the economic impact of various combinations of measures makes it possible to save costs significantly. Figure 2 schematically illustrates the difference between individual measures and combinations of measures.

Figure 1: Demand Fluctuation and Demand Shifts as Challenge of Production Planning

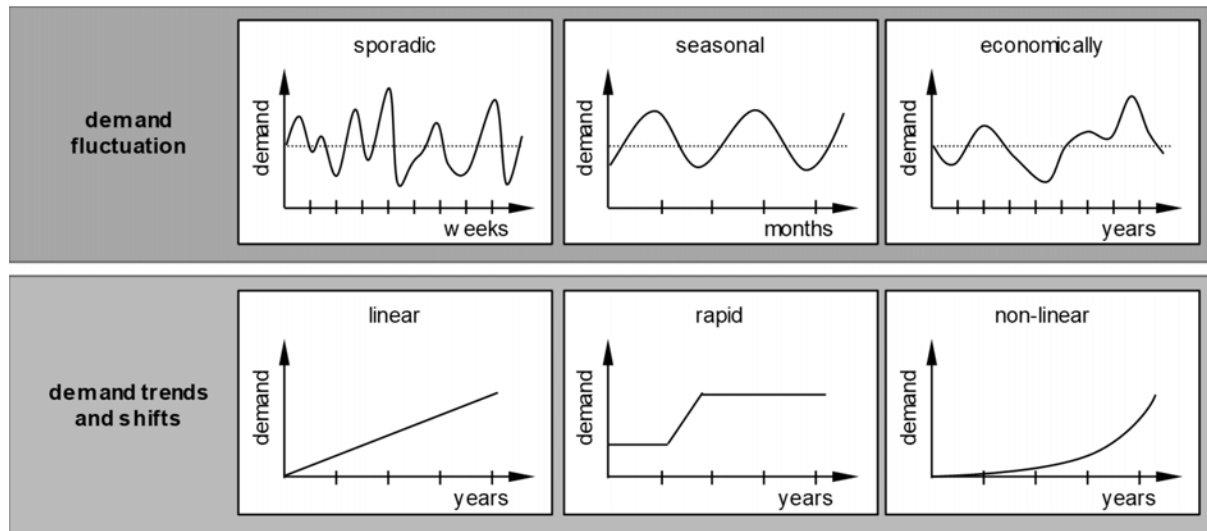
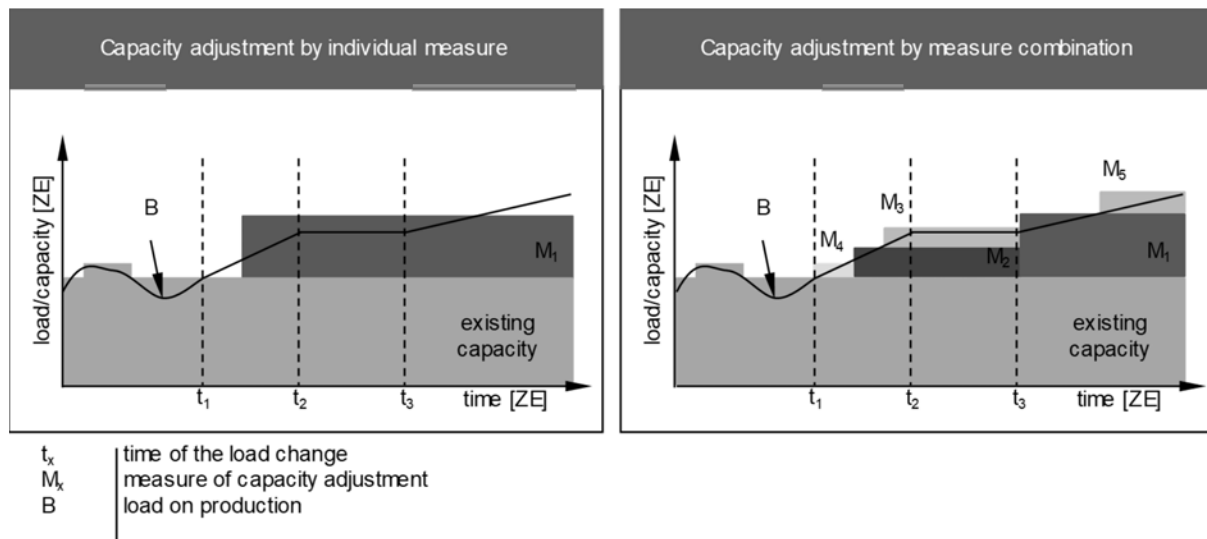


Figure 2: Potential of Measure Combinations in Response to Changes in Demand



The illustration shows that the adjustment using a single measure does not provide an adequate coordination of load and capacity. Due to the reaction time of the measure, the load cannot be controlled at time t_1 , resulting in overcapacity and subsequent under-capacity in the further course of time. By implementing combinations of measures, a more adequate capacity adjustment without under-capacity and with lower overall overcapacity is possible. This low overcapacity is, however, usually to be aimed for in order to provide a further limited room for manoeuvre and to be able to react to short-term disturbances. In order to be able to coordinate the production system in complex capacity and load situations in this way, two types of combinations are possible:

Horizontal combination

Vertical combination

A combination of measures represents the introduction of at least two measures at the same time or with overlapping operating periods. This means that there is at least one period in which more than one measure is effective. The combination can consist of multiple execution of a single task, such as the hiring of two or more permanent employees. Another possibility of the combination is to combine different measures, such as hiring a permanent employee and purchasing a partially automated system. In the broader sense, a combination of measures already exists if only one individual measure is introduced, since the production system already has capacities that have been introduced in the past through measures. Deviated of the production design fields Table 1 provides an overview about production logistical measures (Schmidt and Nyhuis 2017). For this paper, it is assumed that a combination of measures is characterized by the targeted use of several measures in order to react to a specific load situation or to act in terms of production design.

Table 1: Production Logistical Measures to Manage Demand Fluctuations (Schmidt and Nyhuis, 2017)

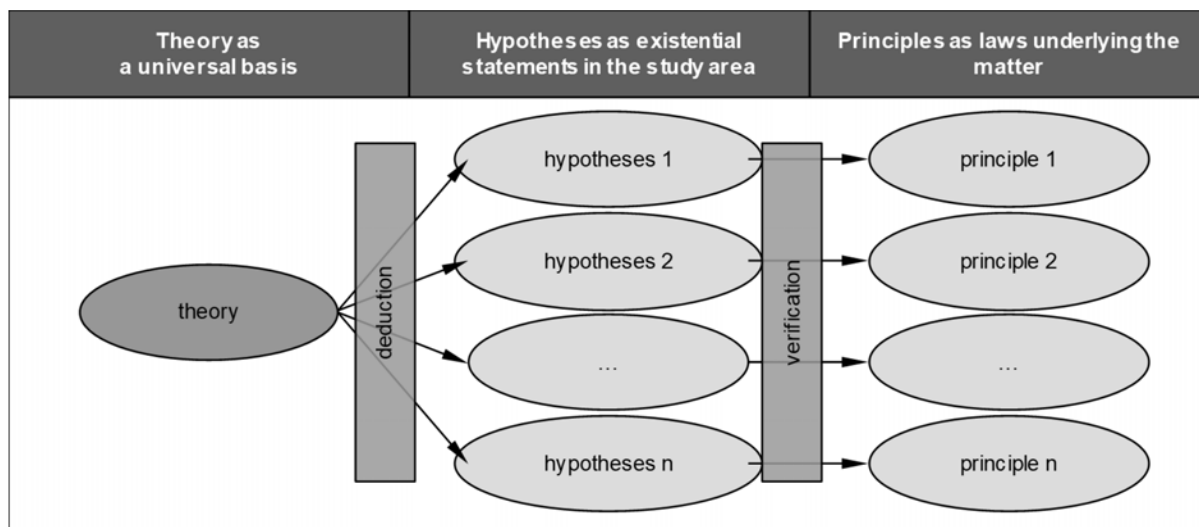
	Capacity planning		Load control	
Design fields	Capacity alignment	Capacity adjustment	Load Balancing	Load adjustment
Organization	No measures	<ul style="list-style-type: none"> • Extension or shortening of shifts • Extension or reduction of the number of shifts • Increase or decrease of operating days • Restart or shutdown of existing machining • Use of short-time work 	<ul style="list-style-type: none"> • Advance or postpone demand quantities 	<ul style="list-style-type: none"> • Out- or insourcing of demand quantities
Logistics	No measures		<ul style="list-style-type: none"> • Allocation or combination of demand quantities • Construction or dismantling of raw material, semi-finished and finished goods stocks 	
Personnel	<ul style="list-style-type: none"> • Set-up or dismantling of flexible overtime and reduced time • Short or medium term intra-company transfer of personnel 	<ul style="list-style-type: none"> • Set-up or reduction of permanent staff • Increase in paid overtime • Recruiting of temporary staff • Use of temporary work 	<ul style="list-style-type: none"> • Relocation of demand quantities to alternative personnel • Shortening or extending executing times 	
Technology	No measures	<ul style="list-style-type: none"> • Purchase or disposal of manual to fully automated systems • Modular removal or dismantling of scalable machining • Mechanization to full automation of processes • Leasing and rental of manual to fully automated equipment 	<ul style="list-style-type: none"> • Shifting of demand quantities to alternative equipment • Reduction or extension of operating times 	

When implementing a combination of measures, however, it must be borne in mind that the possible combinations are limited or only economical in certain variations. For example, there are reciprocally limiting restrictions on the implementation of technological and personnel measures (Corsten and Gössinger, 2016). In order to take these restrictions and dependencies into account, the following approach will be used to derive design principles that allow for a simple pre-selection of measures to be combined.

Approach of Design Principles

There are different paths of knowledge in science for acquiring principles or rules. A distinction can be made between evaluation studies, descriptive and exploratory knowledge pathways (Ulrich and Hill, 1976, Diekmann, 2008, Borchert et al., 2004). For an evaluation and descriptive study, there is a lack of representative basics of description and data. Therefore, an exploratory path of knowledge is used in the present work as an empirical hypothesis generation approach for the derivation of principles. The explorative knowledge path is applied in unresearched areas and is mainly used for the generation of hypotheses and subsequent verification. From already established general theories, observations or hypotheses further ones are derived. These hypotheses are falsified or verified as true statements by an initial investigation. Subsequently, these statements can be examined in further main studies (Diekmann, 2008). The variation of measures and combinations of measures and combinations still represents a sub-area of capacity planning that is still little explored. Corsten and Gössinger (2006) mentions limiting conditions between human and technological capacity of capacities. According to Riebel (1954), the model of market capacity is also extended to include usable capacity, as an intersection of the capacities of different design fields of a production system (Schellmann, 2012). However, there are no statements as to what restrictions and interdependencies exist in the combination of measures.

Figure 3: General Procedure for Deriving Principles



Deduction is used as a method for deriving the special from the general context (Borchert et al., 2004). For this purpose, the existing production theory according to Gutenberg is examined and derived from these hypotheses or bundles of hypotheses as an extended theory. Since the hypotheses represent existential statements, which are to be verified in an empirical procedure. (Borchert et al., 2004, Lang, 2017). In the case of verification, for example using appropriate examples, the statements of existence are valid within the framework described (Lang, 2017). The existential statements made serve as laws of the measures and combinations of measures. Figure 3 shows the described, applied procedure in a qualitative way.

Certain basic requirements are considered to be fully met when implementing the measures and combinations. On the one hand, these are the cost-effectiveness of the combination of measures. This means that the measures or combination of measures must have an effect that is geared to the objective and must bring about an adequate change. The feasibility of the measures must also be ensured. The monetary, organizational, logistical, personnel and technical means and conditions for implementation must be in place. As an example, the extension of the number of shifts in a basic state of the not yet fully continuous shift system can be cited. If a fully continuous layer system is already in place, no additional layer can be introduced, as this would theoretically overlap each other. In order to acquire manual to fully automated systems, the space required for placing these plants must also be available or, in the case of outsourced quantities, there must be an external company that can adequately take over the processes. Table 2 summarizes the derived general design principles of production.

Table 2: Design Principles for Reducing the Planning Complexity of Combinations of Measures

Design fields	Capacity planning		Load control
Organization	Organizational measures always affect personnel and/or technological capacities.		Organizational and logistical measures always lead to a (partial) decoupling of dem and and load.
Logistics	No principles		
Personnel	Personnel measures either have the same type of compensation option or have already been compensated in themselves.	Personnel measures change the ratio in the capacity profile depending on the qualification level..	Technological and personnel measures are only effective if the availability and capability of the capacities concerned are guaranteed.
Technology	Technological measures affecting capacity have a low reversibility.	Technological measures change the ratio in the capacity profile depending on the level of automation.	

Cost-Optimizing Approach

The economic effects of the combinations of measures are assessed by changing the unit costs. These are calculated by the sum of product-specific material input costs and variable costs, consisting of operating, adjustment and imputed costs. In principle, the unit costs of the individual measures are calculated on the basis of their respective operating times during the observed load situation. The unit costs of the measure combination are then calculated using a moving average based on the respective shares of the measures in the total throughput. To calculate minimal unit costs of each measure combination equation 1 can be implemented in an optimization algorithm.

$$K_{\text{Stück, ges}} = \frac{K_{\text{Stück, Schicht}} \cdot D_{\text{Schicht,B}} + K_{\text{Stück, Linie}} \cdot D_{\text{Linie,B}} + K_{\text{Stück, GÜ}} \cdot D_{\text{GÜ,B}} + K_{\text{Stück, BÜ}} \cdot D_{\text{BÜ,B}} + K_{\text{lager,B}}}{D_{\text{Schicht,B}} + D_{\text{Linie,B}} + D_{\text{GÜ,B}} + D_{\text{BÜ,B}}}$$

(1)

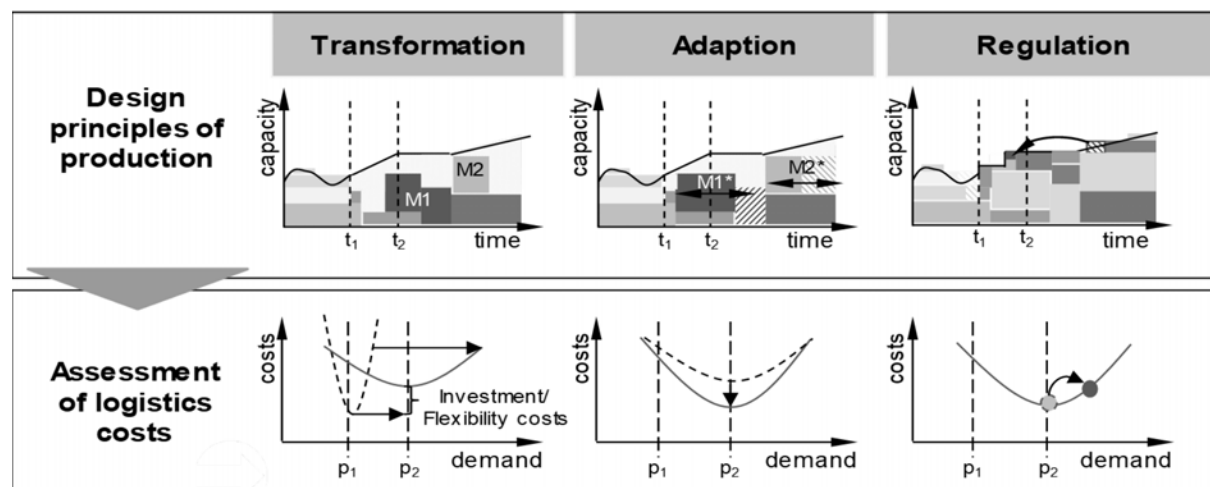
$K_{\text{Stück, ges}}$:	Resulting unit costs of the measure combination
$K_{\text{Stück, Schicht}}$:	Unit costs by choice of shift model
$K_{\text{Stück, Linie}}$:	Unit costs by varying the number of lines
$K_{\text{Stück, GÜ}}$:	Unit costs when using flexible overtime
$K_{\text{Stück, BÜ}}$:	Unit costs for the use of paid overtime hours
$K_{\text{lager,B}}$:	Storage costs due to overproduction
$D_{m,B}$:	Throughput of the individual measures over the duration of loading

To consider the effects of the measures, it is not necessary to take into account the material input costs, since they are fixed costs. Due to the less complex equation and its inherent formulas, it is possible to calculate the unit costs quickly after the coordination measures have been applied. By varying individual cost components, the effects of the measures can also be recognized immediately. By implementing the optimization approach in a software tool, it is possible to evaluate the combinations of measures in different stress situations very well. By varying individual components, it is possible to determine the direct effects on the basis of a change in unit costs. Furthermore, it is also possible to quantify the influence of the lead-time economically. The lead-time of the exposure situation defines the point in time from which a reactivity through coordination measures is possible. In the case of seasonal fluctuations in demand, it is generally possible to forecast the exposure situation well or very well. Changing trends or demand shifts must be taken into account by additional qualitative estimates. Indirectly, the need for high forecasting quality can thus be quantified.

CONCLUDING COMMENTS

The application of design principles facilitates access to the extensive catalogue of measures and the consideration of inherent interactions. The subsequent integration of the principles into a software tool is intended to provide the greatest possible user-friendliness in the future and to calculate the cost-optimal combination of measures. The latter help the user to gain an overview of the effectiveness of the various measures and to identify optimization potential.

Figure 4: Outlook of a Systematic Production Planning to Manage Demand Fluctuations



Overall, the approach described here reduces the complexity of the interrelationships between the various measures to a minimum. In this way, companies are shown alternative ways of responding to changes in demand, which can lead to significant cost savings. The low complexity of the optimization's cost rates enables a rapid approximation of the economic effects of the individual measure combinations. Initial studies have shown that the numerous interdependencies between the measures also lead to a strong branching of the cost rates. Depending on the selected combination of measures, individual cost rates have a greater or lesser impact on the resulting unit costs. These effects are currently being studied further and will finally be integrated into a planning system for production planning and design (see Figure 4).

REFERENCES

- Borchert, J.; Goos, P. and B. Strahler (2004) „Forschungsansätze“ In: Schuhmann, M. (Hrsg.): *Arbeitsbericht*, vol. 25, Georg-August- Universität Göttingen
- Corsten, H. and R. Gössinger (2016) „Produktionswirtschaft. Einführung in das industrielle Produktionsmanagement“ 14. Auflage, de Gruyter, Berlin, Boston, ISBN: 978-3-11-045277-8
- Diekmann, A. (2008) „Empirische Sozialforschung. Grundlagen, Methoden, Anwendungen“ Rohwolt Taschenbuch Verlag, Reinbek, ISBN: 978-3-499-55678-4
- Milberg, J. and G. Reinhart (1999) „Stückzahlflexible Montagesysteme: Lösungen für eine bedarfsgerechte Montage“ München, München: Utz Verlag
- Lang, S. (2017) „Empirische Forschungsmethoden“ Online verfügbar unter: https://www.uni-trier.de/fileadmin/fb1/prof/PAD/SP2/Allge-mein/Lang_Skript_komplett.pdf, Uni Trier, zuletzt geprüft am 17.09.2017
- Riebel, P. (1954) „Die Elastizität des Betriebes. Eine produktions- und marktwirtschaftliche Untersuchung“ In: *Beiträge zur betriebswirtschaftlichen Forschung*. Gutenberg, E.; Hasenack, W.; Hax, K.; Schäfer, E. (Hrsg.), Band 1, Westdeutscher Verlag, Köln, Opladen
- Schellmann, J. H. (2012) „Bewertung kundenspezifischer Mengenflexibilität im Wertschöpfungsnetz“ Dissertation, TU München, Utz Verlag, München
- Schmidt, M. and P. Nyhuis (2016) “Identification of Influencing Variables of Demand-oriented Measures for Volume Flexibility”, *Universal Journal of Management*, vol. 4 (11), p. 601-606
- Schmidt, M. and P. Nyhuis (2017) „Wirtschaftliche Beherrschung von Nachfragemengenschwankungen in der Produktion“, *ZWF Zeitschrift für wirtschaftlichen Fabrikbetrieb*, Jahrg. 112 (5), p. 293-296
- Schmidt, M. & P. Nyhuis (2017) “A production-logistical evaluation approach for the planning and control of demand fluctuations”. In: *Proceedings of International Conference on Engineering Science and Applications (ICESA)* vol. 1, Tokyo, p. 67-77
- Ulrich, P. and W. Hill (1976) „Wissenschaftstheoretische Grundlagen der Betriebswirtschaftslehre (Teil II)“ In: *WiSt Wirtschaftswissenschaftliches Studium, Zeitschrift für Ausbildung und Hochschulkontakt*, vol. 5 (8), p. 345-350
- Wiendahl, H.-P., Lödding H. and M. Schneider (2002) “Selected Strategies and Methods for Production Planning and Control” In: Prof. Pham (Ed.): *Springer Manufacturing Engineering Handbook*, Springer Verlag

ACKNOWLEDGEMENT

The authors thank the BMWi and the AiF for the promotion of their research in the context of the research project "Decision support for manufacturing SMEs for the optimal design of the production system at fluctuating demand volumes" (GeProMe).

BIOGRAPHY

Maurice Schmidt, M. Sc., born in 1987, studied industrial engineering at the Technical University of Dortmund and the Lunds Universitet in Sweden with a specialization in production management and production engineering. Since 2014, he has been working as a research associate at the Institute of Production Systems and Logistics (IFA) in Hannover.

INFLUENTIAL FACTORS WHEN DESIGNING AND EVALUATING ASSEMBLY SYSTEMS

Vivian K. Bellmann, Leibniz Universität Hannover

Peter Nyhuis, Leibniz Universität Hannover

ABSTRACT

The assembly is an important part of the value-adding chain in manufacturing enterprises. The change from a seller's to buyer's market along with the related manifold of variants continually confronts enterprises with a question: How should their assemblies deal with these challenges in order to operate competitively and productively, while still keeping the needs of workers in mind. Maintaining performance capabilities and readiness is becoming increasingly central especially against the background of the changing demographics. In the meantime, due to the number of factors that influence assembly systems, planning them is becoming progressively complex. It is becoming more difficult for enterprises to evaluate their assembly systems and to make adequate decisions regarding how to develop them in the future. One of the critical components of this planning process is selecting a suitable organizational form for the assembly. Existing planning and analysis methods generally only include a minimal number of influential factors. They also frequently do not consider the interactions between these factors and their impact on specific objectives. As a result of this deficit information, enterprises can select an organizational form for their assembly systems, which does not fit the given conditions. The aim of this contribution is to introduce existing approaches to planning and analyzing assembly systems and to indicate future research needs.

JEL: L23

KEYWORDS: Assembly Systems, Manufacturing Process, Multiproduct Production, Productivity

INTRODUCTION

The organization of assemblies is traditionally divided into four different forms, based on the degree they allow products and personnel to move (Lotter, 2012). Throughout site assembly, product and personnel do not move and remain stationary. The products which are manufactured in group assembly also stay stationary, but the personnel changes its workstation according to a given schedule. Stationary working personnel and a moving product characterize an assembly line production (flow principle). The fourth organizational form is known as one-piece-flow. Here, product and personnel move synchronously. Particularly in the industry, hybrid forms are also found. Deciding how to organize the assembly is part of the complex process of planning an assembly system and is focused on the enterprise's goals. During this process, a multitude of influential factors has to be taken into account.

In this context, objectives such as high productivity, high flexibility, low operation costs or short throughput times refer to the targeted developments and states, on which the selection and planning of the assembly system is oriented. A system variant is selected when, compared to other variants, it demonstrates a higher degree of attaining the objectives. Frequently this decision-making process is based on an economic analysis. Influential factors such as variant diversity, employee qualification or batch size refer to parameters that impact the pursued objectives. Usual, there can be a number of factors that influence a single objective and there can be interactions among them. Existing approaches to selecting and planning assembly systems generally follow a multistage system (Bullinger, 1986; Merz, 1987; Deutschländer, 1989; Hartel und Lotter, 2012; Weidner, 2014). Usually, in the first step, the objectives for planning the assembly system are defined. The individually selected objectives are then weighted according to relevance and serve as the basis for the planning process. Economic analyses and cost-benefit analyses tend to be used for the

final analysis and for selecting possible assembly system alternatives. With these methods, existing interactions between the influential factors and objectives are only considered minimally when selecting the assembly's organization form. The focus is often performance-oriented (e.g. overall equipment effectiveness (OEE)) and neglects other objectives (e.g. ergonomics) (Hegenscheidt, 2003). Moreover, these approaches primarily focus on the planning and analysis of assembly systems with already determined organizational forms (e.g., according to the flow principle); their differentiated consideration of alternative organizational forms is thus insufficient. In this contribution, we will first describe existing approaches to plan and analyze assembly systems. Following that, we will briefly introduce factors that influence the selection of the assembly organization and which indicate the need for further research.

Planning Approaches for Assembly Systems

The REFA planning system (Hartel and Lotter, 2012) is a set of guidelines for planning complex production systems and is thus also suitable for planning assembly systems. It is divided into six phases, each of which ends with a decision about the further course of action. Based on the analysis of the initial situation and the concretization of planning tasks, the production system is roughly planned. The solution variants developed here are then evaluated and the selected variant is subsequently particularized in a detailed plan. Following that the system is installed and put into operation. Figure 1 shows a method developed by Bullinger et al. (1986) which focuses on the planning of assembly systems and consists of six different planning stages. In the first stage, planning data is analyzed and initial standardized solutions are developed for the assembly systems from the derived planning goals. The second stage focuses on the product structure and determining planned times for the individual operations. Based on these results, the standardized solutions are particularized and expanded to include suitable organization forms for the assembly as well as fitting concepts for supply materials, in the third stage. Also in this stage, the initial layout is planned and the assembly costs are calculated. In stage four, the assembly system is developed in detail: the required equipment is selected and the layout is more clearly specified. Stages one through four each contain an economic analysis, followed by an evaluation of the results generated in each stage. In stages five and six, the assembly system is then implemented and put into operation.

Hartel and Lotter's system (2012) also focuses on the planning and evaluation of assembly systems but is divided into eleven steps. In the first four steps, the product and its properties are systematically analyzed. Among other things, this includes determining its handling properties and joining sequences as well as a detailed functional analysis in which the times for the individual assembly steps are determined. From there, the required cycle times are calculated. The method implies that the product has to be passed from one workplace to the next and that individual workplaces are linked with one another. This applies especially to assemblies organized according to the flow principle. Forms of assembly organization are thus not evaluated with this method. Once cycle times are established, the layout is planned and personnel requirements and availability are determined. The results from the preceding steps are then transferred to a specification sheet. In the final steps, investment costs are calculated. This serves as the foundation for subsequently evaluating and selecting an assembly system based on the costs per assembly piece.

Further planning systems with similar structures and sequences to the described methods can be found in literature (Deutschländer, 1989; Eversheim, 2012; Merz, 1987). All of the approaches use analysis and evaluation methods to support decision-making processes. Frequently, decisions are made in consideration of monetary objectives (e.g., calculating investment, assembly piece or processing costs). However, non-monetary evaluation methods are also drawn upon in preparation to make decisions (e.g., analyzing cost-benefits, technology or flexibility). The abovementioned planning systems generally do not indicate which analysis or evaluation method should be used to support the decision-making process. Moreover, the analysis and evaluation is usually conducted manually. Weidner (2014) thus developed a software-based concept for planning and evaluating assembly systems. In consideration of criteria specified by users as well as various input data (e.g., component, element or assembly group spectrums) it automatically

determines efficient and productive assembly systems. It is based on a multi-criteria evaluation system that integrates economical, technological, social and ecological factors. It is also possible to manually select different organizational forms. However, a detailed description of correlations between these influential factors and specific objectives in order to create a basis for selecting a suitable organizational form is still missing.

Figure 1: Method for Planning Assembly Systems (Bullinger et al., 1986)

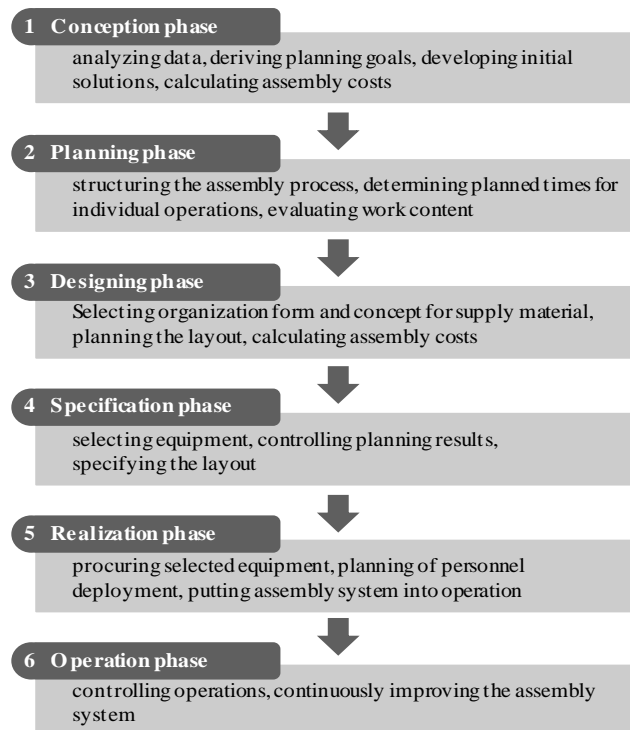


figure 1 shows a method for planning assembly systems according to bullinger et al. (1986). after each phase, a decision-making process on how to continue takes place. most of the existing approaches have a similar structure, meanwhile using software applications for the decision-making process.

Correlation between Influential Factors and Objectives

All described methods exhibit strong similarities in regards to the general procedure for planning and evaluating assembly systems. In particular, all of the methods usually select the assembly organizational form based on qualitatively considering the various influential factors. In most cases these influential factors only describe products and their properties (space requirements, product weight or number of produced goods). There is barely any further consideration of influential factors and the a quantitatively description of the correlations between influential factors and objectives is completely missing. In order to evaluate an assembly organization, all of the factors that possibly influence the assembly organization need to be collected and described. Figure 2 shows influential factors on the assembly organization. This includes factors related to product, technology, customers/market and personnel.

Figure 2: Factors Influencing the Assembly Organization (Bullinger, 1986; Weidner, 2014; Wiendahl, 2014)

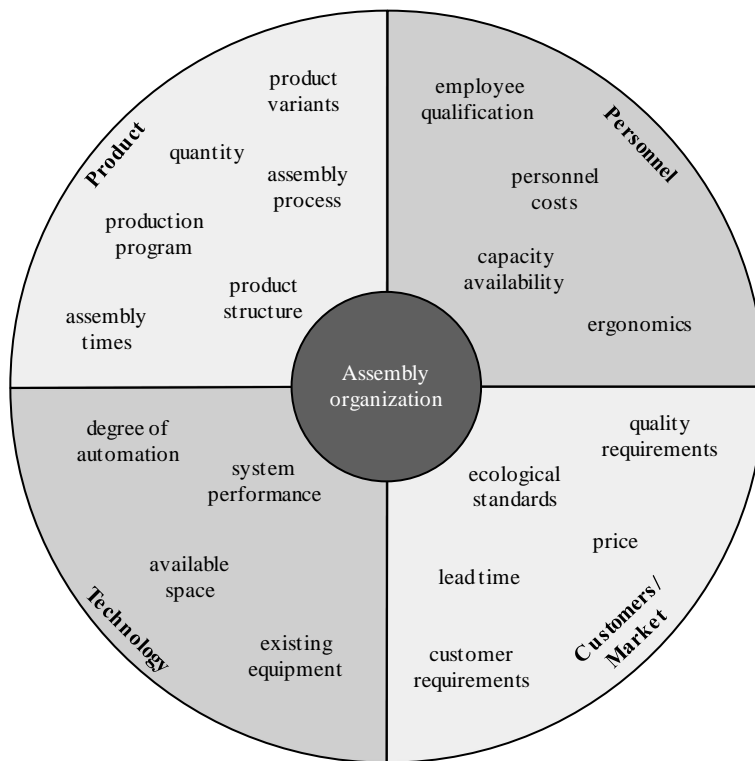


Figure 2 shows factors that influence an assembly organization. These influential factors can also influence each other. To choose a suitable assembly organization form, it is crucial to know how objectives act in different organizational forms while influential factors change.

In addition to the abovementioned examples, the product category also includes the number of product variants as well as assembly times. These two factors are also closely linked. Thus an increasing number of variants can cause strong fluctuations in the respective times required for assembly. In an assembly line production, these influences can, for example, lead to idle times and a loss of productivity. Given such circumstances, it might be more productive to use a different assembly organizational form. These break-even points will be analyzed and quantified within the frame of existing research efforts. Especially for assembly line production systems, there already exists a wide range of approaches analyzing quantitatively the performance of the assembly organization while different influential factors change. Those approaches mainly focus on economical, logistical or performance-oriented objectives such as overall costs, throughput time or OEE. Additionally, there are approaches that identify quantitative criteria to evaluate whether a product is suitable for an assembly line production by focusing on production quantity, throughput time and demand variance (e.g. Friedel, 2017).

To sum up, a holistic analyzation of influential factors, the interactions among them and their effects on different objectives for other organizational forms of assembly is still missing. Therefore, research aims to analyze these causal relationships quantitatively. Based on the identified correlations between the individual influential factors and their impact on specific objectives, a method will be developed that will allow enterprises to comprehensively evaluate assembly organizational forms and including the results in their decision-making process designing and evaluating their assembly systems.

CONCLUDING COMMENTS

This paper demonstrates that existing methods for planning and evaluating assembly systems do not facilitate systematically selecting assembly organization forms. Instead, the selection is generally only oriented on product characteristics, whereby the size and complexity of the product, as well as the production volume, play a key role in the decision. Further influential factors are, in the best case, only considered qualitatively. However, since the organizational form is decisive in the economic analysis of an assembly system (e.g., costs for required equipment), the correlations between further influential factors and objectives will also be quantitatively described and integrated into a comprehensive evaluation system.

REFERENCES

- Bullinger; H-J., Ammer, D., Seidel, U., Weller, B. (1986) "Systematische Montageplanung: Handbuch für die Praxis", Hanser-Verlag, München
- Deutschländer, A. (1989) "Integrierte rechnergestützte Montageplanung", Carl Hanser Verlag, München
- Friedel, A. (2017) "Quantitative Kriterien der Fließlinieneignung für Entscheidungen zur Montageorganisation", *Zeitschrift für wirtschaftlichen Fabrikbetrieb*, vol. 112(1-2), p. 46-50
- Hartel, M., Lotter, B. (2012) "Planung und Bewertung von Montagesystemen", In: Lotter, B. und Wiendahl, H.-P. (2012) "Montage in der industriellen Produktion", Springer Vieweg, Berlin, Heidelberg
- Hegenscheidt, M. (2003) "Kennliniengestützte Leistungsprognose verketteter Produktionssysteme", Dissertation, Hannover
- Lotter, B. (2012) "Manuelle Montage von Großgeräten", In: Lotter, B. und Wiendahl, H.-P. "Montage in der industriellen Produktion", Springer Vieweg, Berlin, Heidelberg
- Merz, K.-P. (1987) "Entwicklung einer Methode zur Planung der Struktur automatisierter Montagesysteme", Dissertation, Aachen
- Weidner, R. S. (2014) "Wissensbasierte Planung und Beurteilung von Montagesystemen in der Luftfahrtindustrie", Dissertation, Hamburg
- Wiendahl, H.-P. (2014) "Betriebsorganisation für Ingenieure", Carl Hanser Verlag, München

BIOGRAPHY

Vivian K. Bellmann is a Research Associate at Leibniz Universität Hannover. She can be contacted at: Institute of Production Systems and Logistics, An der Universität 2, 30823 Garbsen, Germany.

Prof. Dr.-Ing. Peter Nyhuis is a Professor of Production Systems and Logistics at Leibniz Universität Hannover. He can be contacted at: Institute of Production Systems and Logistics, An der Universität 2, 30823 Garbsen, Germany.

JOHN'S BAPTIST CHURCH: A CASE STUDY

Kevin L. Kemerer, Barry University

Noora A. Alsalmi, Barry University

ABSTRACT

This case study requires students to prepare the financial statements and accompanying notes that are required of a non-governmental, non-profit entity using QuickBooks generated reports and additional information that is provided for a church called John's Baptist Church. The case is based upon real world data and reports generated from QuickBooks providing a more realistic experience in preparing financial statements. Accounting for insurance proceeds related to damages to one of its buildings adds complexity to the case.

JEL: M410

KEYWORDS: Church, Non-profit, Accounting, Financial Statements

INTRODUCTION

This case study is based upon a real world data and reports for a Baptist church providing an opportunity for the student to more fully experience the process of preparing the financial statements and accompanying notes that are required of a non-governmental, non-profit entity. John's Baptist Church (referred to as "the Church") experienced an unusual event in 2015 when the ceiling of its sanctuary collapsed. As a result of the collapse the Church began having services held in its "family activity center" (FAC) which houses a full sized basketball court. The Church filed an insurance claim for business interruption and for the replacement cost of the damaged ceiling. Meanwhile the church continued to hold services in the FAC throughout 2016 while the sanctuary ceiling was being repaired. The next section of the case will provide background and information necessary to fulfill the requirements of the case that are detailed in the final section of the case.

Case Information

John's Baptist Church, founded in the 1950s, is a 501(c)(3), nonprofit organization. The Church's mission is based on spreading the news of the Gospel as Jesus commanded in the Great Commission found in Matthew 28: 16-20. In following GAAP the Church utilizes the accrual basis of accounting. Contributions usually are not restricted by the donors but the Church does receive some contributions that are temporarily restricted for specific uses such a classroom renovations or for benevolences.

In accounting for current assets the Church uses the standard definition of cash equivalents, identifying any investments with an original maturity of three months or less to be equivalent to cash. The Church's cash, totaling over \$1,750,000 at December 31, 2016 were in accounts for which only \$250,000 was covered by the FDIC. Nonetheless, management did not believe they exposed to any significant credit risk in association with its cash balances. The Church's accounts receivables typically arise from facilities rentals such as the gym or parking lot and after school, teacher workday or summer camps. Although most receivables are usually collected the Church does use the allowance method of accounting for bad debts and makes a provision for uncollectible accounts.

Property and equipment are recorded at cost unless donated in which case they are recorded at fair value. Buildings and building improvements are depreciated over estimated useful lives ranging from 10 to 40

years and equipment over periods of 3-10 years depending upon the asset. The Church does lease some equipment which is accounted for appropriately as an operating lease with annual payments of \$32,700 occurring during 2017 and the following four years. Payments after the year 2021 are expected to total \$2,725. Because of reporting requirements in the by-laws that mandate quarterly comparisons of actual expenditures to budgeted expenditures acquisitions of long-term assets are recorded as expenses and charged to the appropriate ministry accounts then another journal entry is made to record the asset acquisition and is offset with an account called capital expenditures. At year end the accountant closes the capital expenditures against the expenses recorded for asset acquisition leaving only the asset on the books.

Financial instruments are carried at fair value.

Net assets released from restrictions amounted to \$54,892 of which \$42,468 was for programs and the remainder was for general and administrative purposes.

The Church received approximately \$1,868,000 in insurance proceeds in connection to the ceiling collapse. The church recorded the proceeds as deferred revenue. The Church recognizes amounts spent to make repairs as earned.

The Church has a defined benefit plan in which most employees participate. During the year the Church contributed approximately \$33,000 into the plan.

QuickBooks is to for recordkeeping and a detailed statement of activities for the year ended December 31, 2016 and comparable statements of financial position at December 31 2015 and 2016 generated using the software have been exported into an Excel spreadsheet which can be downloaded at <https://kkemerer.wixsite.com/johnsbaptistchurch>.

Case Requirements

Prepare a complete set of financial statements required for John's Baptist Church and the accompanying notes to the financial statements for the year ending December 31, 2016. The complete set of financial statements should include:

Statement of Financial Position;

Statement of Activities;

Statement of Cash Flows.

Prepare the accompanying notes for John's Baptist Church. The notes should include:

Nature of the Organization and Significant Accounting Policies

Accounts Receivables

Property and Equipment

Restrictions on Assets

Concentrations of Credit Risk

Insurance Proceeds

Retirement Plan

Commitments and Contingencies

CONCLUSION

The teacher's solution is available by contacting the authors at kkemerer@barry.edu.

ACKNOWLEDGEMENT

Any errors are our own.

BIOGRAPHY

Dr. Kevin L. Kemerer is an Associate Professor of Accounting at Barry University. He can be contacted at: Andreas School of Business, 11300 NE Second Avenue, Miami Shores,

Noora A. Alsalmi is a Master of Science in Accounting candidate at Barry University. She can be contacted at: Andreas School of Business, 11300 NE Second Avenue, Miami Shores,

HOW TO CREATE RESEARCH INVENTIONS BY THE COMBINATION OF MULTIPLE THEORIES AND CONCEPTS: AN IMPLICATION FROM DEVELOPING A NEW MATHEMATICAL MODEL FOR CORPORATE ALLIANCES

Satoshi Tomita, Rikkyo University

ABSTRACT

A mathematical model to express the mutual complementary relationship between two companies during the matching phase in a corporate alliance was developed recently. The model made possible the computational expression of the relationship as a value. The developers applied the methodology of modeling in cyber informatics of computer science to the research of corporate alliances. Additionally, the developers combined the theoretical framework of Resource Based View (RBV) with the concept of flow in physics and the concept of Give and Take in psychological science. The combination of these theories and concepts lead to the successful construction of a brand new mathematical model. The model was implemented by programmatic means, which proved its validity. In this way, the combination of multiple theories and concepts has proven to be the key factor for creating new inventions in management studies. These days, research activities including the management field are becoming progressively mature, much more segmented, and increasingly specific. As a result of this, researchers tend to concentrate only on single theories, frameworks or disciplines. This trend obstructs the creation of new inventions in management studies. This paper asserts that the combination of multiple theories and concepts by importing them from other different scientific fields is significantly important and useful, and is a key to success for innovation in research activities.

JEL: C60

KEYWORDS: Mathematical Model, Corporate Alliance, Resource Based View (RBV), Combination of Multiple Theories, Creation of Inventions

INTRODUCTION

This paper defines a corporate alliance as “The state in which two or more companies are independent, in order to develop new business or expand existing business by the exchange of complementary management resources provided to each company regardless of the presence or absence of a binding contract or capital relationship, with continued cooperation, to share the outcome.” This definition is originally from Yoshino and Rangan (1995), which is the first comprehensive study on the different types, classes and definition of corporate alliances.

A new mathematical model of mutually complementary for corporate alliances was proposed by Tomita and Takefuji (2015, 2016a, 2016b, 2016c, 2016d) and Tomita (2017). The mechanism of the formation in the matching phase of a corporate alliance between two companies can be implemented programmatically and computed as a value. In the development of the model, the combination of Resource Based View (RBV), the concept of flow in physics and the theory of Give and Take in human relations of psychology served as the main theory framework.

In the model, the success of a corporate alliance between two companies is increasingly more probable as the mutual complementary relationship, which is the exchange of strengths and weaknesses of each company, becomes increasingly stronger. The model has been constructed making use of a one-dimensional matrix, bipolar vector, and a distance from the maximum point on a two-dimensional map.

The process of development of the model in this paper is used as a case study. This paper asserts that the combination of multiple theories and concepts by importing them from other different scientific fields is significantly important and useful, and is a key to success for innovation in research activities

LITERATURE REVIEW

In relation to prior research on corporate alliances between two companies, the theoretical background was presented by Yasuda (2003, 2006, 2010, 2016). This theory relies primarily on Resource-Based Theory.

Research on Resource Base View (RBV) has been performed in the alliance research from viewpoints including resource characteristics, alliance type, risk management in Das and Teng (1998) and Das and Teng (2000). In Lavie (2006), emphasis is placed on the relationship rather than the establishment of resources. As a genealogy of business science in alliance research, the fundamental theory used as the starting point is Resource-Based View (RBV) as presented by Wernerfelt (1984) and Barney (1991).

As a development, Yasuda (2003, 2006, 2010, 2016) presents the idea that "An alliance is the exchange of management resources" as a new analytical approach to research on strategic alliances. Yasuda (2003, 2006, 2010, 2016) defines the resources owned by companies in a simplified manner as the five management resources of (1) technical resources, (2) human resources, (3) production capacity, (4) sales force, and (5) capital resources. It concludes that an alliance is the exchange of these five management resources.

In Tomita and Takefuji (2015, 2016a, 2016b, 2016c, 2016d) and Tomita (2017), the source of the competitive advantage of a company depends on internal management resources of the company, so in order to grasp the concept of an alliance being to acquire management resources, the main theoretical framework used for alliance research was resource based theory.

However, in these previous studies, there existed no mathematical model that expressed the relationship between the assumed candidate companies. For example, in Mitsuhashi and Greve (2009) research dealing with the matching stage of the alliance had not yet established a mathematical model. There was a mathematical matching model in the field of market design by Roth (2015), but it was not targeted for inter-corporate alliances.

Tomita and Takefuji (2015, 2016a, 2016b, 2016d) had for the first time in that area become the "white space" in this field of research by constructing a mutually complementary mathematical model expressing the relationship in an intercorporate alliance between companies during the matching phase. In Tomita and Takefuji (2016c) and Tomita (2017), additional mathematical models of mutual complementary, additive and synergistic alliances were proposed.

The results of the extensive research in academic papers in the field of psychology by Schaufeli (2006) reveal that it is the claim of over 8,000 professionals (teachers, doctors, nurses, police, prisoner security, social workers, mental disability workers) that the breakdown of the balance of Give and Take is the main cause of burnout. That is, when a relationship is too far imbalanced or mismatched, it results in a Give and Take imbalance or otherwise lopsided or unfair situation for one party or the other, which in turn causes a breakdown in the relationship, known as burnout. In the scope of this paper, the imbalance and resulting burnout occurs when the gap between rewards and cost is too great.

From this, we have taken the concepts of the social exchange theory of Give and Take as it pertains to personal relationships and used it in this study to construct a mathematical model for corporate alliances. Tomita and Takefuji (2016d) and Tomita (2017) incorporate the idea of social exchange theory of Give and Take, which has been studied in personal relationships, into the study of building a mathematical model of the alliance.

Schumpeter (1912) said new knowledge is created by new combinations of already existing knowledge. This is prior important literature for this research.

OUTLINE OF PROPOSED MATHEMATICAL MODEL

Summary of the Mutually Complementary Mathematical Model for Corporate Alliances

In the idea of a mutually complementary alliance model, the strengths of company B will complement the weaknesses of company A, and vice versa. It then becomes fundamental for the strengths of company A to complement the weaknesses of company B. If the complements from one of the companies or both are small, the mutually complementary strength will also be small, but if both companies are committed to complementing the strengths and weaknesses of each other, they will more strongly complement each other. That is, a mutually complementary alliance is considered to be a bipolar model based on the mutually attracting forces between two companies.

Regarding the proposed mutual complementary mathematical model in Tomita and Takefuji (2015, 2016a, 2016b, 2016c, 2016d) and Tomita (2017), there will be an outline provided. In this paper, even though there will be explanations of the physical concept of flow and Give and Take as used in interpersonal relationships, prior to these explanations there will be an outline of the mutual complementary mathematical model.

In the idea of a mutually complementary alliance model, the strengths of company A will complement the weaknesses of company B, and vice versa. It then becomes fundamental for the strengths of company B to complement the weaknesses of company A. If the complements from one of the companies or both are small, the mutually complementary strength will also be small. Conversely, if the complements from one company or both are large, the mutually complementary strength will be large. That is, the mutually complementary relationship in a corporate alliance is a bipolar model based on the mutually attracting forces between two companies.

Utilizing a One-Dimensional Matrix and Bipolar Vector to Express the Strengths and Weaknesses between Two Companies

The strengths and weaknesses of companies A and B can be expressed as a one-dimensional matrix of eight characteristics representing management resources, each graded with values between 1 and 5. The eight characteristics are mainly based on management resources. Also, the integer values represent the score evaluating the strength and weakness of these characteristics for each company.

As an example, consider the two following companies,

Company A $a = (1, 5, 4, 2, 2, 1, 3, 5)$

Company B $b = (5, 1, 1, 3, 4, 2, 3, 2)$

From the above, the result “c” can be shown by subtracting the values of each of the characteristics of Company B from Company A in order to get a directional bipolar vector with values for each characteristic ranging from 0 to 4 (positive or negative). That is to say, we can express the mutually complementary relationship between two companies as a bipolar vector.

Company A – Company B

$$c = a - b = (-4, 4, 3, -1, -2, -1, 0, 3)$$

Summation of Plus and Minus Bipolar Vectors (Positive and Negative Integers)

As an example, in companies A and B mentioned previously, the value expressing the provided strengths from company A to company B is the summation of positive integers (plus' bipolar vector):

$$4 + 3 + 3 = 10$$

This number (10) shows the strengths of company A that complement the weaknesses of company B. Conversely, taking the summation of negative integers (minus' bipolar vector):

$$-4 + (-1) + (-2) + (-1) = -8$$

This number (-8) shows the strengths of company B that complement the weaknesses of company A. The two numbers (10, -8) show the mutually complementary relationship between company A and company B.

The Relationship Strength Mathematically Expressed as the Distance from the Maximum Point

The strengths of the mutually complimentary distance are expressed by measuring the distance from the largest mutually complimentary point of strength.

Namely, in regards to the bipolar vector of the length from 0 to 4 of the eight characteristics, the maximum mutually complementary value determined from taking two sets of half the number of characteristics (4) with a maximum length of 4 for each, which is the longest possible bipolar vector bilaterally.

(8 characteristics / 2) * Maximum length of 4 = (16, -16) The distance (d) between two points is calculated as follows:

$$d = \sqrt{(a_1 - a_2)^2 + (b_1 - b_2)^2}$$

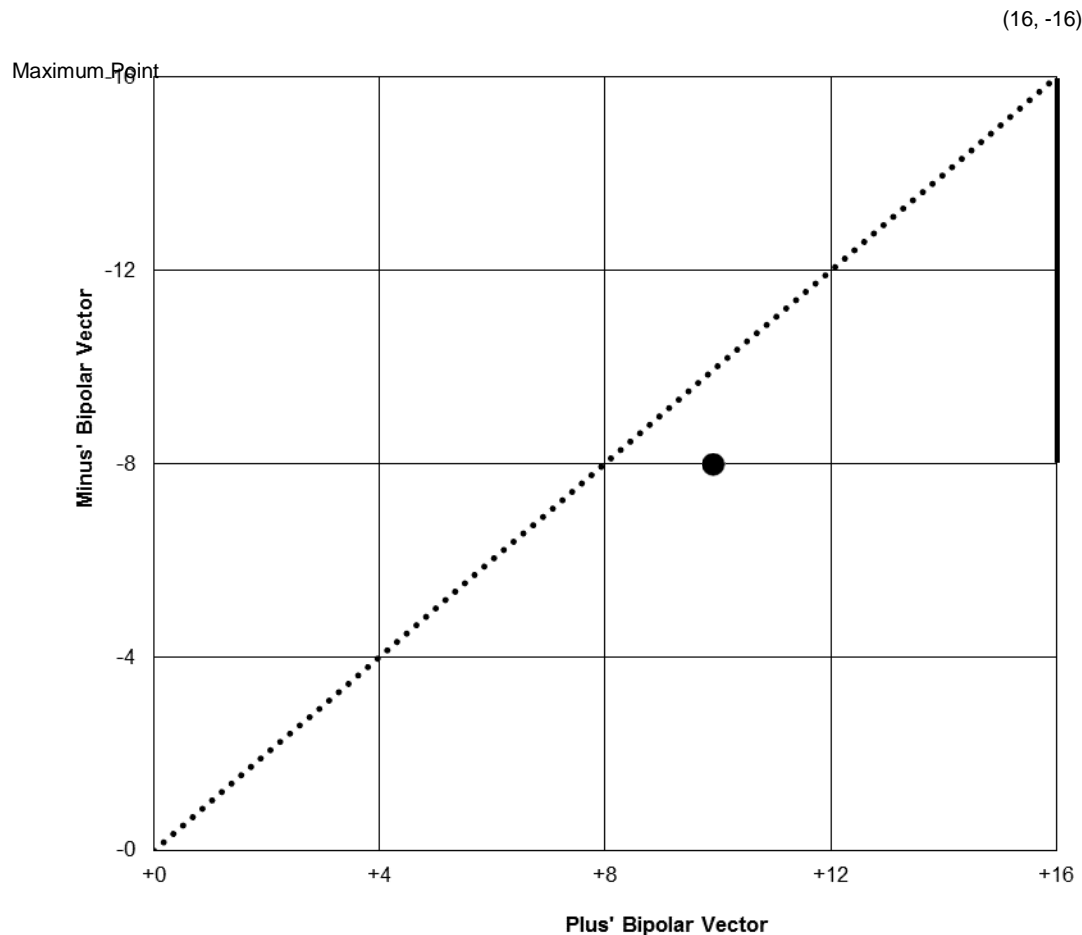
The maximum value of the mutually complementary strength of (16,-16) is shown as the distance from (0,-0) to (16, -16), which is named the maximum point.

The model expresses the strength of the mutually complementary relationship between two companies as a distance from the maximum point mathematically.

When the distance from the maximum point is small, it indicates that the mutually complementary strength is strong. Since it is simpler to subtract from larger numbers, we have inverted the magnitudes of the values.

For example, with a mutually complementary strength of (10, -8) for companies A and B, it is possible to calculate the distance from (16, -16) by means of subtraction from the maximum value as shown in Figure 1 below.

Figure 1: Mathematical Expression by the distance from the maximum point.



This figure shows the example representing the mutually complementary strength of two companies by the distance from the maximum value of the mutually complementary strength. In case of 8 characteristics, the maximum value of the mutually complementary strength is (16,-16) and the point presenting the mutually complementary strength of Company A and Company B is (9,-8).

Mutually Complementary Strength and the Related Coefficient as a Value

The mutually complementary strength derived and explained above can be expressed by the following formula:

$$\sqrt{2 \times \left(\frac{4 \times \text{len}(c)}{2}\right)^2} - \sqrt{\left(\frac{4 \times \text{len}(c)}{2} - \text{plus}\right)^2 + \left(\frac{-4 \times \text{len}(c)}{2} - \text{minus}\right)^2}$$

In the above formula, $\text{len}(c)$ is the number of characteristics, $\text{plus} = \Sigma$ (positive integers), and $\text{minus} = \Sigma$ (negative integers).

When this value is normalized to a value between zero and one it becomes easier to handle. The relative mutually complementary strength can be calculated from the following formula, and is here forth defined as the mutually complementary strength coefficient.

$$1 - \frac{\sqrt{\left(\frac{4 \times \text{len}(c)}{2} - \text{plus}\right)^2 + \left(\frac{-4 \times \text{len}(c)}{2} - \text{minus}\right)^2}}{\sqrt{2 \times \left(\frac{4 \times \text{len}(c)}{2}\right)^2}}$$

In the above formula, len(c) is the number of characteristics, plus=Σ (positive integers), and minus=Σ (negative integers).

Import of the Concept of Give and Take - Explanation by Flow Intensity and Flow Balance

In the previous sections, the outline of this mutual complementary mathematical model proposed by Tomita and Takefuji (2015, 2016a, 2016b, 2016c). In their papers, the model was simply explained by the spin glass model of magnetic force. Furthermore, in Tomita and Takefuji (2016d) and Tomita (2017), the concept of flow in physics and Give and Take in psychological science are incorporated into the construction of the model as backgrounds of the theoretical concept. That is to say, the two terms of flow intensity and flow balance were used to strengthen the framework of the model. In this way, flow intensity was originally used in physics involving electricity and magnets. Also, flow balance was originally used for interpersonal relationships of give and take. That is to say, reward and cost between two people. Tomita and Takefuji (2016d) and Tomita (2017) imported these two concepts from other science fields.

The provision of strengths from Company A to Company B is the “Give”, and received resources to supplement the weaknesses becomes the “Take”. This also applies in reverse the same way.

If the strengths offered (Give) from one or both companies is large and complement (Take) for the weaknesses from the alliance partner is large, the mutually complementary relationship will become stronger. If we were to explain this with the concept of flow intensity, we would say that the flow intensity is strong when mutually complementary relationships are strong. That is to say, when the exchange between Give and Take is large. When the mutually complementing strength is weak, we state that the flow intensity is weak.

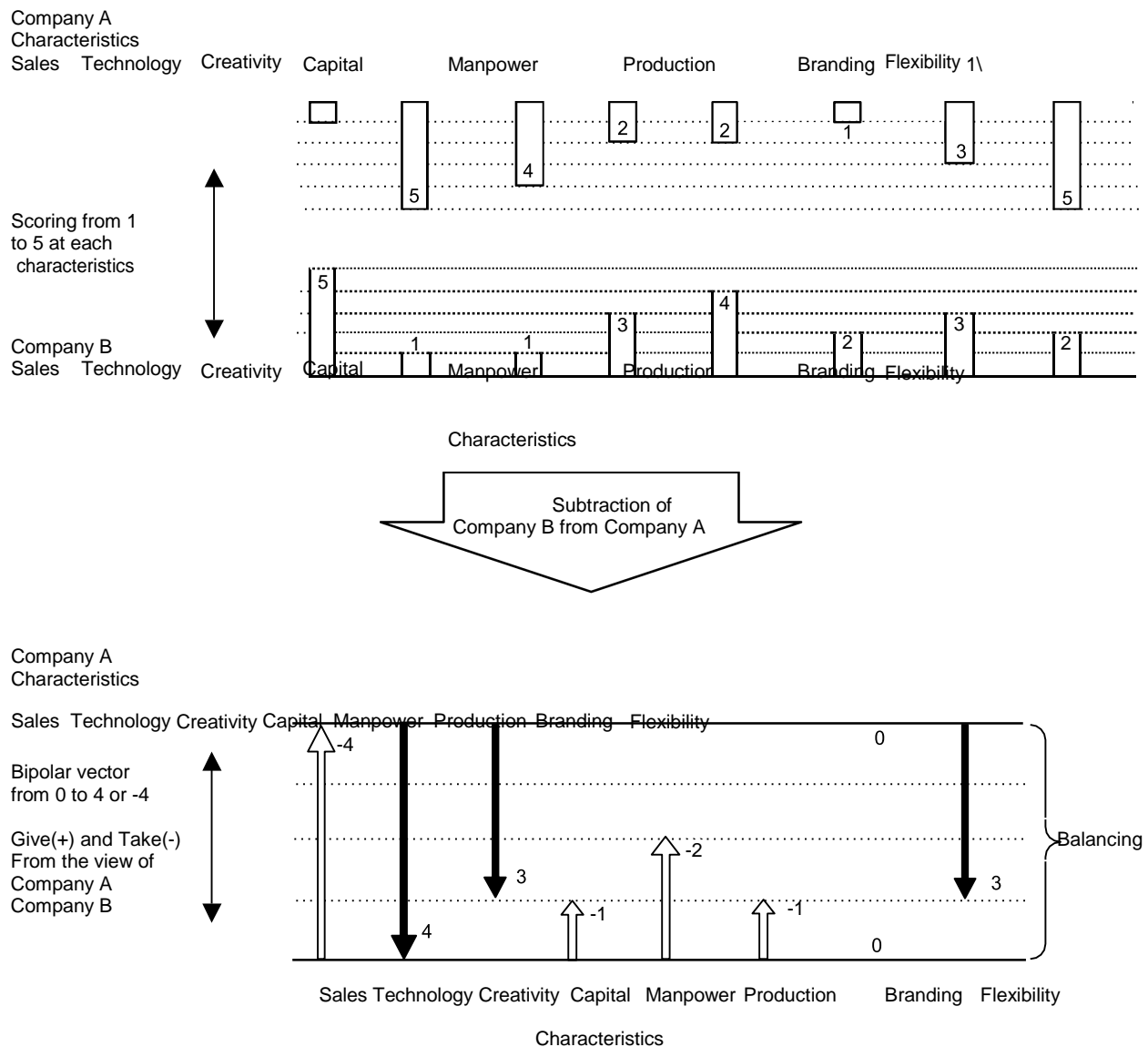
In this mutually complement model, the stronger the flow intensity, the more likely the alliance is to be successful.

However, based on the idea of Give & Take, if the relationship consists only of Gives from one company to another, the relationship will result in burnout. In other words, using another concept, it is necessary to consider flow balance, and it is important to consider the balance of the Gives and Takes between the two companies.

In the mutually complement model, when there are bipolar vectors of plus and minus, that is, when the Gives and Takes are bidirectional, the flow balance is maintained and the alliance is more likely to be successful.

In this way, we can explain that in the mutually complementary model of an alliance using flow intensity and flow balance, in intercorporate alliances if the flow intensities of mutually complementary strengths and weaknesses are strong and the flow balance is maintained, and the alliance is more likely to be successful. If we explain this using the concept of flow intensity and flow balance the maximum mutual complementary strength relationship state is that in which the state of maximum flow intensity and flow balance is maintained evenly.

Figure 2: Flow Intensity and Flow Balance between Companies A and B



This figure illustrates the complimentary relationship between Companies A and B by flow intensity and flow balance as new concepts.

As explained in Figure 2, when both plus and minus bipolar vectors are present, the provided strengths (Give) and compensated weaknesses (Take) exist, there is flow intensity and the flow balance is maintained, the alliance can be successful.

Unsuccessful Pattern 1: No Balancing (One-Sided Relationship)

Company A is scored in every characteristic, which are all larger than those of Company B. In this case, Company A is only providing resources to Company B unilaterally with no balancing. In other words, there are only plus' bipolar vectors from Company A to B, making it one-sided. Since there is no appeal for Company B to Company A, in this case the corporate alliance cannot be successful.

Conversely, in the case where the scores for Company B are all larger than those of company A, Company B is only providing strengths to Company A unilaterally. With only minus' bipolar vectors, the relationship is one-sided, and because there is no appeal for Company A to Company B, in this case the corporate alliance cannot be successful.

Unsuccessful Pattern 2: No Intensity (Identical Strengths and Weaknesses)

In the case the scores for Companies A and B are identical, there are no complementary benefits for either company, so the corporate alliance cannot be successful. When the strengths and weaknesses of Companies A and B are the same, the flow intensity becomes zero.

In this model, we consider a corporate alliance not to be successful when there are only strengths being provided unilaterally in a corporate alliance (plus' or minus' bipolar vectors only), there is no balancing of Give and Take, or the strengths and weaknesses of two companies are identical (flow intensity is zero) and therefore there is no mutually complementary relationship possible.

As shown previously in Figure 1, the corporate alliance is only successful when there is a bilateral relationship of both plus' and minus' bipolar vectors, and there is a balance of Give and Take of strengths and weaknesses.

The Status of the Maximum Complementary Relationship: When the Flow is Balanced at the Maximum Flow Intensity

Next, as mentioned in the precious section, we can say the strongest relationship between two companies in a corporate alliance, in which both companies complement each other's strengths and weaknesses at the maximum value, that is to say, the maximum flow intensity.

If we explain the maximum mutually complementary strength in this relationship using the concepts of flow intensity and flow balance, this is the state in which the maximum flow intensity state is maintained and the flow balance remains balanced.

Although the maximum magnitude of the plus and minus vectors are simply illustrated as 4 consecutive values in sequential order on both the left and right sides, in reality the maximum magnitude of the plus and minus vectors will exist at random across 8 characteristics divided into two groups of four.

The state of a maximum mutually complementary relationship occurs when, by taking half of the number of characteristics from both companies, the result is the largest possible bipolar vector indicating the best possible balancing between two companies. In this case, the number of plus' and minus' bipolar vectors are the same, and when the length of the bipolar vector is at its maximum value, it is considered to be the maximum mutually complementary strength.

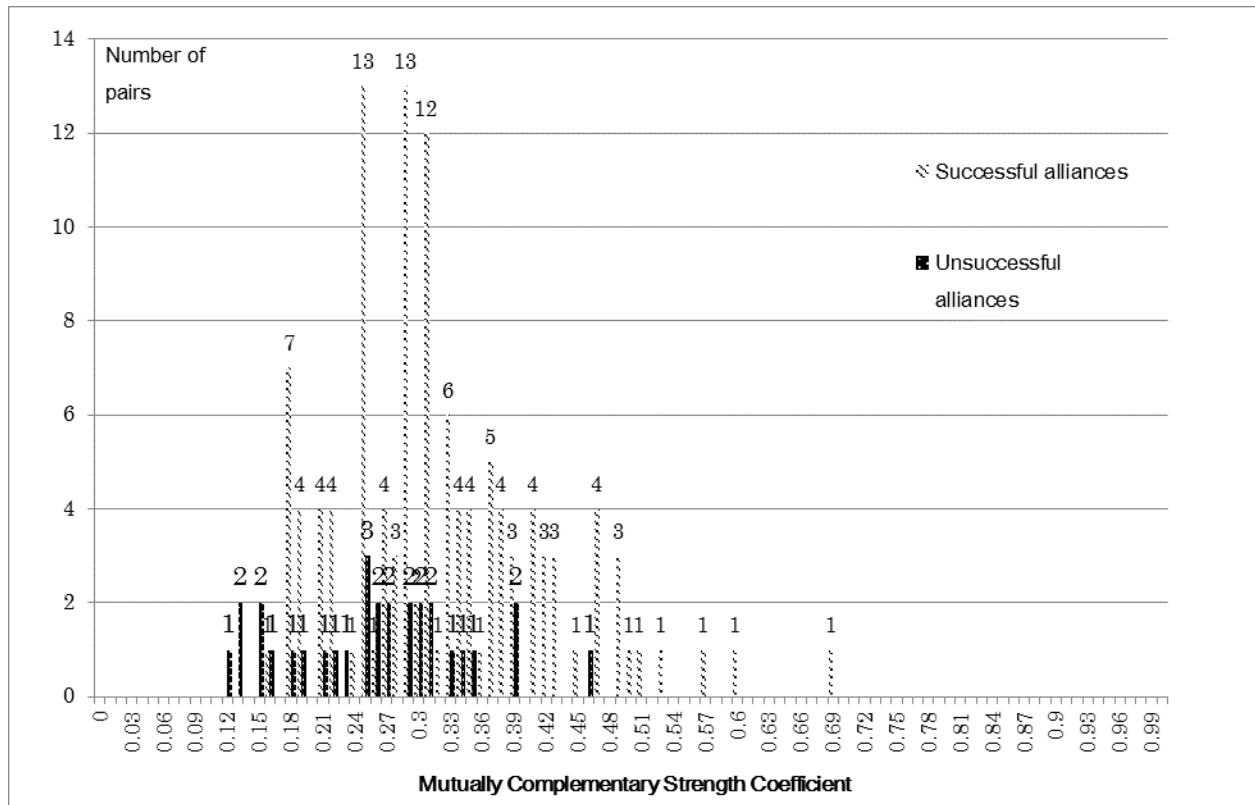
Programmatic Implementation and Computation by Making Use of the Data set of 152 Consulted Companies

The authors have implemented this formula using the Python scripting language, and have made use of the empirical data set from 152 consulted companies from May 2008 to March 2015 to calculate the mutually complementary strength coefficient for all corporate alliances in the data set, and the data from both the successful and unsuccessful corporate alliances. As a result, we were able to confirm the validity of this proposed model.

The above-mentioned formula was implemented in the Python scripting language in Tomita and Takefuji (2015, 2016a, 2016b, 2016c, 2016d) and Tomita (2017), and the coefficients for 152 consulted companies were calculated using empirical data. The validity of this model was confirmed by comparing the

coefficients for 121 pairs of successful alliances and 30 pairs of unsuccessful alliances. The graph plotting of the coefficients can be seen in Figure 3 below. The model was proven to be valid.

Figure 3: The normalized mutually complementary strength coefficients for successful corporate alliances and unsuccessful corporate alliances



This Figure shows the distribution of the mutually complementary strength coefficients for 121 pairs of successful corporate alliances and 30 pairs of not-successful corporate alliances.

CONCLUDING COMMENTS

From the new combination of Resource Based View (RBV), the concept of flow in physics, the concept of Give and Take in psychology, and the method of cyber informatics in computer science, a brand new model has been developed.

This innovative outcome in management studies comes from the combination of several theoretical concepts and imports methodology from other science fields, specifically cyber informatics of computer science. This outcome must have meaningfully significant implications for innovation in management research. The method of this research activity was accorded to the way of thinking as stated by Schumpeter, quite “a new combination.”

This paper asserts that the invention in research activities should not focus solely on one specific field or discipline, but in order to successfully create new inventions like this development of mathematical model, researchers must be more open and flexible to borrow theories and concepts from other science fields and across disciplines as well as to combine them as this is the key to creating new, successful inventions in management studies.

For future consideration, more concepts and methodologies from other research fields should be imported to management studies for acquiring new inventions. By taking this stance, even greater developments in management studies can be achieved.

REFERENCES

Barney, Jay (1991) "Firm Resources and Sustained Competitive Advantage," *Journal of Management*, Volume 17(1), pp.99-120.

Das, T.K., & Bing-Sheng Teng (1998) "Resource and Risk Management in the Strategic Alliance Making Process," *Journal of Management*, Volume 24(1), pp.21-42.

Das, T.K., & Bing-Sheng Teng (2000) "A Resource-Based Theory of Strategic Alliances," *Journal of Management*, Volume 26(1), pp.31-61.

Lavie, Dovev (2006) "The Competitive Advantage of Interconnected Firms: An Extension of the Resource-Based View," *Academy of Management Review*, Volume 31(3), pp.638-658.

Mitsuhashi, Hitoshi & Henrich R. Greve (2009) "A Matching Theory of Alliance Formation and Organizational Success: Complementarity and Compatibility," *Academy of Management Journal*, Volume 52(5), pp.975-995.

Roth, Alvin E. (2015). Who Gets What – and Why, The New Economics of Matchmaking and Market Design, William Collins.

Schaufeli, Wilmar B. (2006) "The Balance of Give and Take: Toward Social Exchange Model of Burnout," *Revue Internationale de Psychologie Sociale*, Volume 19(1), Mar 2006, pp.87-131.

Schumpeter, Joseph A. (1912) "The Theory of Economic Development," English Version published 1934. Routledge.

Tomita Satoshi, & Yoshiyasu Takefuji (2015) "Mathematical Complementarity Modeling and Empirical Analysis of Corporate Alliances: - Making Use of Data for the Activities for 152 Consulted Companies," *Journal of Japan Society for Management Accounting*, Vol.20 No.1.

Tomita, Satoshi & Yoshiyasu Takefuji (2016a), "A New Mathematical Model of Mutually Complementary for Corporate Alliances: Selection of Optimal Partners using Eight Characteristics," Proceedings HI092415299, 2016 Hawaii Global Conference on Business and Finance (GCBF).

Tomita, Satoshi & Yoshiyasu Takefuji (2016b) "A Mathematical Model for Optimal Corporate Alliances: Evidence from Japan," *International Journal of Management and Marketing Research (IJMMR)*, Volume 9(1).

Tomita, Satoshi & Yoshiyasu Takefuji (2016c) "A Mutually Complementary Model, Addition Model, and Synergistic Model for Corporate Alliances and implementation in the Python language – Based on Data for 152 Consulted Companies," *Journal of Business Creator Studies*, No.7, pp99-127.

Tomita, Satoshi & Yoshiyasu Takefuji (2016d) “A Mathematical Model of Mutual Complementarity for Corporate Alliances from the Perspective of Balancing Give and Take -An explanation by Flow Intensity and Flow Balancing,” *Journal of Japan Society for Management Accounting*, Vol.21(1).

Tomita, Satoshi (2017) *The Alliance Strategy for Business Developments – Taking Advantage of IoT and Applied AI*, Hakutou Shobu

Wernerfelt, Birger (1984) “A Resource-Based View of the Firm,” *Strategic Management Journal*, Volume 5, pp.171-180.

Yasuda, Hiroshi (2003) “New Analytical Approach for Strategic Alliances from the Perspective of Exchange of Management Resources,” Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy, Graduate School of Decision Science and Technology, Tokyo Institute of Technology.

Yasuda, Hiroshi (2006). *Strategic Alliance in a Competitive Environment: Theory and Practice*, NTT Publishing.

Yasuda, Hiroshi (2010). *Alliance Strategy*, NTT Publishing.

Yasuda, Hiroshi (2016). *Alliance Strategy – new version-*, NTT Publishing.

Yoshino, Michael and U. Srinivasa Rangan (1995). *Strategic Alliances: An Entrepreneurial Approach to Globalization*. Harvard Business School Press.

DATA-ORIENTED BUSINESS MODELS: GAINING COMPETITIVE ADVANTAGE

Peter Géczy, National Institute of Advanced Industrial Science and Technology (AIST)

ABSTRACT

Data has been widely regarded as a new treasure throw for contemporary organizations. Information technology sector has been experiencing a major shift towards data orientation. A recent explosion of digital data has significantly influenced a number of other economic sectors in developed economies. Exponential growth of data is expected to continue in a foreseeable future. Capitalizing on this trend is gradually becoming a necessity for contemporary businesses. Extracting value from data is a substantial challenge. Data acquisition is the starting point. Efficient processing of collected data is the next stage. Suitably processed data is then used for designing data products and services. At each stage, there are significant opportunities for value creation and monetization—the core aspects of business models. Data-oriented activities also provide opportunities for gaining competitive advantage. Despite the growing importance of data-driven innovation, there is a considerable absence of studies addressing data-oriented business models. We explore the essential elements and enablers of viable data-oriented business models and pathways to competitive advantage.

JEL: C8, C81, C82, C88, D7, D8, D81, M15

KEYWORDS: Data-Oriented Business Models, Data-Driven Innovation, Data Economy, Data Engineering, Data Products, Data Services, Actionable Knowledge

INTRODUCTION

Organizations have been striving to realize the potential and transformational powers of data (Redman, 2015). They started collecting extensive volumes of data both internally and externally. Internal data may provide valuable insights on operational awareness and internal functioning. By utilizing such insights, organizations can innovate their business processes and improve operating efficiency. External data offers indispensable insights about their customers. Better understanding of their customers' needs helps innovating their products and services.

Data-oriented economic activities gave rise to business models based on provision, transformation and utilization of data (Timmers, 1999; Alt and Zimmermann, 2001). The emerging business models have been diverging from the traditional concepts (McCallum and Gleason, 2013). Business models are still a relatively modern concept and scholars are in disagreement on various issues. However, several common grounds have been identified: a) the business model is representing a new unit of analysis, b) business models emphasize an encompassing approach to explaining how companies do business, c) organizational activities play the key role in conceptualization of business models, d) business models aim at explaining how values are created and captured (Zott et al., 2010).

The business model presents the logic or strategies how enterprises create values for customers and how they monetize it for profit (Teece, 2010). Hence, the business models comprise of two main components: value creation and monetization. The presented work embraces this conceptualization of business models.

It elucidates pertinent characteristics of value creation and monetization of data-oriented economic activities and presents a suitable categorization framework.

Data-Oriented Value Creation and Monetization

Understanding of the major segments of data-oriented economic activities and data flow cycle provide beneficial dimensions for positioning of value creation and monetization. We map various strategies for value creation and monetization directly into the segments of data acquisition, data processing, and data services or products. This allows us to clearly see which value creation and monetization strategies are viable at which stage.

Value derived from data varies depending on the prevailing economic activity stage. At each stage, there are two major values. Data collection stage distinguishes acquisition and direct values. Data processing stage underlines processed and extracted values. Data services and products stage is characterized by added and synergic values.

Monetization of data and data driven activities is achievable at all three stages. Different stages are indicative of varying spectrum of monetization strategies. Range of monetization strategies expands at each stage. Data collection stage features licensing, fractional and conditional monetization strategies. In data processing stage, the range is expanded for two more strategies: subscription and dynamic monetization. Data services and data products provide the most options for monetization—further expanding the range for affiliate and cross-subsidy monetization strategies.

Summary

We presented a beneficial perspective on value creation and monetization strategies at the stages of data collection, data processing, and data services or products. Data-oriented value creation strategies are more stage specific. That is, different stages offer different opportunities for creating value from data or data-oriented activities. Data collection stage provides prospects for creating acquisition or direct values. Data processing stage presents possibility for creating processed and extracted values. Added and synergic values are representative of data services or products. The highlighted values are by no means definitive but rather indicative of individual stages. Future developments in data-oriented economic activities may give rise to new value creation strategies.

Monetization of data or data-oriented activities has expansive characteristics. In other words, spectrum of possible monetization strategies expands with each successive stage. At data collection stage, prevailing strategies are licensing, fractional and conditional monetization. At data processing stage, the range is expanded with dynamic and subscription-based monetization strategies. Data services and products provide additional possibilities for affiliate and cross-subsidy monetization. The presented monetization strategies are by no means complete but rather representative. One can ascertain other monetization strategies that may prove viable in data economy.

REFERENCES

- Alt, R., Zimmermann, H.-D. (2001) “Business Models,” *Electronic Markets*, 10, p. 3-9.
- McCallum, Q. E., Gleason, K. (2013) “*Business Models for the Data Economy*,” O’Reilly, Sebastopol.
- Redman, T. C. (2015) “4 Business Models for Data Age,” *Harvard Business Review*, May, 2015.
- Teece, D. J. (2010) “Business Models, Business Strategy and Innovation,” *Long Range Planning*, 43, p. 172-194.

Timmers, P. (1999) “Business models for Electronic Markets,” *Electronic Markets*, 8, p. 3-8.

Zott, C., Amit, R., Massa, L. (2010) “*The Business Model: Theoretical Roots, Recent Developments, and Future Research*,” IESE Business School - University of Navarra, Barcelona.

ECONOMIC ASPECTS OF ORGANIC FARMING: A STUDY OF INDIA

Nisha Singh, Livingstone College

ABSTRACT

The fundamental purpose of this paper is to evaluate the economic facets of the small, landless and marginal farmers to speculate solutions on how farmers will manage enhance their income with organic farming. The important reasons which emphasis the need for organic farming in the country are the fact that majority of the farming community is resource poor and purchase of fertilizers and chemicals in adequate quantities is beyond their capacity. "The landholdings of our farmers are also very small ... Organic farming has come as an appropriate option for us as we can send our produce to niche markets not just in India, but also abroad to get maximum returns for farmers," Brijendra Swaroop, an Indian environmental minister, told The Hindu in 2010. Organic farming is favorable for small and scattered agriculture land holders.

KEYWORDS: Diversification, Economic aspects, Marginal size, Elasticity, Purchasing power, IFOMA-International Federation of Organic Movement, FiBL-the research institute of organic agriculture and ITC-International trade center.

LITERATURE REVIEW

Total world land size is 13.4 billion hectares and share of agriculture land size is 1.5 billion and India agriculture land size is 17990 hectares. The total organically managed area worldwide is 50.9-million-hectare and India's land size is 4.78 million hectare and organic agriculture producers are 2.3 million in 2015. India was on number one with 585,200 producers (FiBL survey 2015). The international market for organic foods are expanding especially in U.S.A., Europe and Japan. The grand viewresearch.com/press-release has estimated that organic market in the year 2015 in terms of US \$ 77.4 billion in 2015. Moreover, it is estimated to generate revenue over USD 110 billion by 2025 and growth rate is 42.12%. While the generated revenue is increasing yearly, the economic impact of it on Indian farmers is very low. This is due to increased number of farmers using small piece of land to farm.

Table 1: Top Ten Countries with Largest Producers of Organic Farming (2015)

Countries	Producers
India	585.2
Euthopia	203.6
Mexico	200.04
Uganda	190.67
Philippine	165.96
Tanzania	148.61
Peru	96.86
Turkey	69.97
Paraguay	58.26
Italy	52.61

Table 2: Countries with Largest Area of Organic Farming (2015)

Countries	Areas (Million Hectare)
Australia	22,69
Argentina	3,07
United States of America	2,03
Spain	1,97
China	1,61
Italy	1,49
France	1,38
Uruguay	1,31
India	1,18
Germany	1,0

Sources: www.FibL.org

Twenty century's world agriculture has moved fast towards organic crops. The increased production of organic crops also resulted in increased agricultural exports, thereby increasing revenue and employment opportunities (The Hindu in 2010). The important reasons which emphasize the need for organic farming in the country are the fact that

Most of the arable soils in India contain organic carbon below the threshold level.

Majority of the farming community is resource poor and purchase of fertilizers and chemicals in adequate quantities is beyond their capacity. A large fraction of farm by-products of plants and animals origin is utilized for non-farm use that is, fuel or other domestic purpose.

Lack of location specific technology to recycle organic wastes and lack of awareness to recycle organic wastes in agriculture are the main reason for its slow adoption even though it is a native technique for the farmers which got lost during the period of green revolution. 1000 million tons of animal dung is produced in India annually, which yields about 500 million tons farm manure which is excellent resource of plant nutrient. An application of 10 tones well rotten FYM/ha can add 50-60 kg K₂O (Potassium Oxide). A systematic research and development programmed in respect of sustaining agricultural systems through organic agriculture needs to be initiated.

Wastes Into Organic Manures

Cropping system: efforts should be made to maintain yield stability and suppress the weeds and pests through adoption of appropriate cropping systems and minimizing weeds and pest's incidence through adoption of appropriate long-term crop rotation systems. Inter cropping of garlic with sugarcane minimizing incidence of shoot borer. Periodical substitution of wheat with a fodder crop in rich-wheat system is a remedy for phyllaries minor. Introducing of legumes as break crops in intensive cereal-cereal system resulting in yield stability and restoration of soil fertility.

Poultry wastes: Large quantities of wastes in the form of manure generates from poultry farm, which are mostly mixed with floor materials e.g. liter, droppings, dead birds etc. Poultry refers to the bedding materials (saw dust, wheat straw and rice hulls) which get mixed with dropping/left over feed and I collected

after Washington in India, the content of N,P,O and K₂O in the poultry litter varies between 3.0-4.0%, 2.0-2.5% and 1.0-2.0% respectively depending upon the kind feed used. Poultry manure generally contains 38 g/kg of organic nitrogen, 4.8 g/kg of ortho-phosphorus and 20.9 g/kg of potash besides Ca, Na, Cu and Zn etc. in very small quantities (The Hindu Survey 2005). The rate of manure produced from a poultry is estimated 17-20 kg of manure are produced daily per 1000 kg broiler live weight. One adult chicken produced 25 kg of compost manure in one year.

Vegetable wastes: India grows about 20 million tons of vegetables and fruits annually. Out of these only .4% is utilized for domestic consumption and processing while the rest are treated as garbage. It is surprising to note that very little attempt has so far been made to exploit this waste as feed for fish after proper processing vegetable leaves like cabbage carrot, cauliflower, radish, tomato etc. contain crude protein (8-20%), either extract (2-4%), crude fiber (11-20%) and (30-80%) nitrogen free extract on dry matter basis which can be used as supplement for formulated fish feed. Protein, fiber and nitrogen free extract of wastes from carrot, cauliflower, dehydrated pea karela (bitter melon), onion, potatoes, spinach and tinda can also be used for preparing fish feeds.

Silkworm wastes: Sericulture wastes, which are a mixture of silkworm faeces, worm slough and mulberry leaves residues can serve as nutrients medium and feed for fish pond. A one hectare mulberry plant can produce 4000-6000 kg of leaves can produce 1000 kg of silkworm wastes, which in turn can result in 125 kg of fish. Silkworm faeces are also consumed.

The following areas for research and development under organic agriculture need attention.

Research projects for formulation of organic farming practices may have to be farmed and implemented as national project.

Incentives for production of good quality organic manure, bio-pesticide, bio fertilizer and green manuring crops may be strengthened.

Development of pesticides of plants origin (such as neem) and use of agents especially under Integrated pest management programmed system need to be promoted.

Objective

The purpose of organic farming aims to maintain and improve soil fertility by evolving a sustainable agricultural system to ensure adequate food production and relies as much as possible upon resources from within its own area. Organic farming can primarily be defined as biology as it manages to incorporate waste recycling, biological pest control, non-chemical weed management, and integrated nutrient management. Considering how health conscious consumers are becoming from both developing and developed countries, it is crucial to provide safe and quality food products. Having said that, the world organic food market estimate was around US \$110 billion in 2025.

“In Uttarakhand and Uttar Pradesh states about 70% of land holdings are less than 100 acres in size and cover about 27% of the total cultivated area of 51%. Also, just over 3% of land holding are above 4 hectares in size and marginal holdings” (Government of Uttar-Pradesh), scale of economics cannot be availed of and so the input cost per unit of output is higher. Therefore, it becomes all the more difficult task to make agriculture a profitable occupation.

Certain set of principles are applied when looking at agriculture as primarily applied biology, such as,
Farm waste recycling
Non-chemical weed management

Biological pest control

Integrated Nutrient Management for sustainable soil fertility and crop productivity

METHODS

The study tends to evaluate the economic aspects of organic farming in India. The respondents are the farmers of Uttar Pradesh and Uttarakhand. This paper is based on true empirical work and the methodology used in this research is primary data. Data has been collected through a self-administrative pre-tested questionnaire was developed and used as the main data gathering instrument for the study. (refer to the questionnaires given in Appendix A).

THE ROLE OF ORGANIC FARMING

India's food production is a success story following the green revolution. In the late 1960's, India significantly increased the food production when the green revolution was launched. During the post green revolution, the production of food grain has increased fourfold, from 50.82 million ones in 1950-5 to 211.1 million tons in 2001-02 (Yojana November 2003). Although the green revolution has played a leading role in making the country self-sufficient in food grains but has created some adverse effects which are matter of serious concern. The negative impact of green revolution includes:

Excessive use of chemical (150-500 kb/ha)

Imbalance in nutrition status causing significant deficiency of Nitrogen, Phosphorus, Potassium

Environment degrading like depletion of stratospheric ozone, nitrate toxic etc. causing health hazards like cancer, methemoglobinemia, respiratory illness hypertension etc.

Data Based Analysis

Data on organic farming were collected from the state of Uttaranchal. Following persons were given the job and they reported to the author

Table 4: Agriculture Economic Value of organic farming

Name	Area in acre (reduced to 1 acre, 1 acre=43545.72 Sq feet)	Cost of Bio- fertilizer in Rs (1 acre)	Production of rice quintal/acre	Economic Values in Rs. of one crop Price 2991.667/qt	Economic profit Values in Rs. of one crop (after cost deduction)
Satish K. Sharma	1 acre	2500	12 qt.	35900	33400
Gajendra Singh	1 acre	1875	16 qt.	47867	45992
Jugapal Singh	1 acre	2000	14 qt.	41883	39883
Rajbahadur Saini	1 acre	2100	14 qt.	41883	39783
Arvind Kumar	1 acre	2000	16 qt.	47867	45867
Rajnish Chauhan	1 acre	2000	18 qt.	53850	51850
Average	1 acre	2079.167	15 qt.	44875	42796

Based on table 4 a farmer annually average income is Rs. 42796 with standard deviation of Rs. 6441 per year if farmer is performing organic farming.

Table 5: Agriculture Economic Value of Inorganic farming

Name	Area in acre (reduced to 1 acre, 1 acre=43545.72 Sq feet)	Cost of fertilizer in Rs (1 acre)	Production of rice quintal/acre Price =	Economic Values in Rs. of one crop 2300/qt	Economic Values in Rs. of one crop (after cost deduction)
Satish K. Sharma	1 acre	5000.00	18 qt.	41400.00	47600.00
Gajendra Singh	1 acre	5250.00	18 qt.	41400.00	36150.00
Jugapal Singh	1 acre	5000.00	18 qt.	41400.00	36400
Rajbahadur Saini	1 acre	4500.00	14 qt.	32200.00	27700
Arvind Kumar	1 acre	5250.00	18 qt.	41400.00	36150
Rajnish Chauhan	1 acre	5000.00	18 qt.	41400.00	36400
Average	1 acre	5000.00	17.2 qt.	39866.67	36733.33

Based on table 5 a farmer annually average income is Rs. 36733.33 with standard deviation of Rs. 6333.851 per year if farmer is performing inorganic farming.

In table 4 the cost of bio-fertilizers as reported by various persons used in acre of farm to produce the production of rice is given. The quantity of rice and the total cost of rice produced is also given. The cost of rice has been calculated at the present market rate of Rs. 2300.00 per quintal for inorganic and 2991.67 per quintal for organic. Similarly, table 5 shows the cost of inorganic fertilizers along with the total value of rice produced per acre. We have assumed that except the fertilizers the other costs like laborer, irrigation, seeds etc. remain the same in both the cases. Therefore, the last column in the tables has shown the value of rice produced after deducting the cost of fertilizers. For bio-fertilizers the average value of production per acre is Rs 44875 while for inorganic fertilizers it is Rs. 39866.67

It is evident that in case of inorganic fertilizers the value of production of rice is more than that in fertilizers. At first it appears that the organic farming is less production. However, in a few years of the starting of organic farming in a given farm the soil condition will improve. Further, in organic farming, the remains of the plants of paddy and wheat are left in the field to make a good bio-fertilizer. Thus, with successive years of bio farming the need of additional bio-fertilizers will decrease, thereby making the bio farming more economical.

Motivational factors of organic farming: Following were the motivational aspects of organic farming by the farmers in Uttar Pradesh and Uttarakhand.

Environmental Motives: About fifty four percent of the former responses could be broadly put under the motive environmental care or awareness of environmental safety and ill effects of hazardous practices followed in modern farming. It was amazing to find the farmers' awareness and care for environment. Their motto was complete health for all human beings.

Financial motives: Reduction in cost of cultivation and increase in net profit were the two important financial motives as the reasons for switch over to organic farming. Most of the inputs required for organic cultivation were derived from the locally available sources like FYM, plants, herbs, etc. So, it reduces the input cost to a great level and increases their net profit to a considerable level, notwithstanding a lower yield in initial years.

Soil health oriented motives: Soil health has been deteriorated due to chemicals. The life of soil living micro-organisms and earth worms are disturbed by heavy dumping of fertilizers and chemicals.

Quality of output related motives: About one fourth of respondents found quality of output as their major concern to shift towards organic farming. Many organic farmers told that the increase in quality of the products like vegetable and food grains were motivating them to go for it. These farmers were very particular about the grade and standard of their harvest. So, they attributed to their conversion to taste, durability, and freshness of the organic produces.

Motivation of Media: An equal percentage of farmers (24%) felt that the influence of and motivation especially by success stories through media like books, magazines, radio and TV programmers on organic farming, played a considerable role in changing their farming activities. Their ideology was formulated by being exposed to the media. Earlier (1998) found increasing cost of chemical inputs (63%) increase in net return in organic farming (11%) as the reasons behind the shift of attitude. Fairweather (2000) found that the antipathy to chemicals and the degradation of soil was the main cause. Molder et al.1991, found that that quest for healthier food was the main cause of farmers to go for bio farming. Willer and Gillmoor (1992) found that about 8% farmers go to the bio farming for ideological reasons propagated by the media.

RESULTS/ CONCLUSION/ CONTRIBUTION

Education seems to be one of the most effective and compelling component for a farmer to ratify/endorse organic farming. Thus, high figure of educated conventional farmers can be aware of the health hazards of contaminated food, so they practice organic farming at least on a limited basis. Further, environment and financial motives were found to be the primary motives behind the farmers' conversion to organic farming. In addition to net profit advantage of organic farming, other hidden environmental benefits of organic farming should also be brought in light to make it more influential and believable. For instance, if one agrees with organic practices' long-term benign effect, then it would strengthen their confidence in this emerging field.

Reduction in cost of cultivation and increase in net profit were the two important financial motives as the reasons for switch over to organic farming. Most of the inputs required for organic cultivation were derived from the locally available sources like plants, herbs, etc. So it reduces the input cost to a great level and increases their net profit to a considerable level, notwithstanding a lower yield in initial years. Anand Kumar (1998) found increasing cost of chemical inputs (63%), increase in net return in organic farming (11%), as the reasons behind the shift. Reduction in cost of cultivation and increase in net profit were the two important financial motives as the reasons for switch over to organic farming. Most of the inputs required for organic cultivation were derived from the locally available sources like FYM, plants, herbs, etc. So it reduces the input cost to a great level and increases their net profit to a considerable level, notwithstanding a lower yield in initial years.

Appendix A: Questionnaire

General Questionnaires			
	1. Name:		
	2. Father' Name:		
	3. Address:		
	4. Age:		
	5. Sex:	Male	Female
	6. Main Occupation:		
	7. Supplementary Occupation:		
	8. Land size:		
	Small	Marginal	Big
	9. Use of land:		
	Agriculture		
	Poultry		
	Fishery		
	Dairy		
	Others		
	10. Occupation wise:		
	1. Agriculture:		
	a. Crops Types:		
Inorganic	b. Farming Methods:	Organic	
c. Profit	11. If organic:	a.Total input	b. Total output
c. Profit	12. If Inorganic methods:	a.Total input	b. Total output
c. Profit	13. Others:	a.Total input	b. Total output

REFERENCES

The fundamental purpose of this paper is to evaluate the economic facets of the small, landless and marginal farmers to speculate solutions on how farmers will manage enhance their income with organic farming. The important reasons which emphasis the need for organic farming in the country are the fact that majority of the farming community is resource poor and purchase of fertilizers and chemicals in adequate quantities is beyond their capacity. "The landholdings of our farmers are also very small ... Organic farming has come as an appropriate option for us as we can send our produce to niche markets not just in India, but also abroad to get maximum returns for farmers," Brijendra Swaroop, an Indian environmental minister, told The Hindu in 2010. Organic farming is favorable for small and scattered agriculture land holders.

KEYWORDS: Diversification, Economic aspects, Marginal size, Elasticity, Purchasing power, IFOMA-International Federation of Organic Movement, FiBL-the research institute of organic agriculture and ITC-International trade center.

LITERATURE REVIEW

Total world land size is 13.4 billion hectares and share of agriculture land size is 1.5 billion and India agriculture land size is 17990 hectares. The total organically managed area worldwide is 50.9-million-hectare and India's land size is 4.78 million hectare and organic agriculture producers are 2.3 million in 2015. India was on number one with 585,200 producers (FiBL survey 2015). The international market for organic foods are expanding especially in U.S.A., Europe and Japan. The grand viewresearch.com/press-release has estimated that organic market in the year 2015 in terms of US \$ 77.4 billion in 2015. Moreover, it is estimated to generate revenue over USD 110 billion by 2025 and growth rate is 42.12%. While the generated revenue is increasing yearly, the economic impact of it on Indian farmers is very low. This is due to increased number of farmers using small piece of land to farm.

Table 1: Top Ten Countries with Largest Producers of Organic Farming (2015)

Countries	Producers
India	585.2
Euthopia	203.6
Mexico	200.04
Uganda	190.67
Philippine	165.96
Tanzania	148.61
Peru	96.86
Turkey	69.97
Paraguay	58.26
Italy	52.61

Table 2: Countries with Largest Area of Organic Farming (2015)

Countries	Areas (Million Hectare)
Australia	22,69
Argentina	3,07
United States of America	2,03
Spain	1,97
China	1,61
Italy	1,49
France	1,38
Uruguay	1,31
India	1,18
Germany	1,0

Sources: www.Fibl.org

Twenty century's world agriculture has moved fast towards organic crops. The increased production of organic crops also resulted in increased agricultural exports, thereby increasing revenue and employment opportunities (The Hindu in 2010). The important reasons which emphasize the need for organic farming in the country are the fact that

Most of the arable soils in India contain organic carbon below the threshold level.

Majority of the farming community is resource poor and purchase of fertilizers and chemicals in adequate quantities is beyond their capacity. A large fraction of farm by-products of plants and animals origin is utilized for non-farm use that is, fuel or other domestic purpose.

Lack of location specific technology to recycle organic wastes and lack of awareness to recycle organic wastes in agriculture are the main reason for its slow adoption even though it is a native technique for the farmers which got lost during the period of green revolution. 1000 million tons of animal dung is produced in India annually, which yields about 500 million tons farm manure which is excellent resource of plant nutrient. An application of 10 tones well rotten FYM/ha can add 50-60 kg K₂O (Potassium Oxide). A systematic research and development programmed in respect of sustaining agricultural systems through organic agriculture needs to be initiated.

Wastes Into Organic Manures

Cropping system: efforts should be made to maintain yield stability and suppress the weeds and pests through adoption of appropriate cropping systems and minimizing weeds and pest's incidence through adoption of appropriate long-term crop rotation systems. Inter cropping of garlic with sugarcane minimizing incidence of shoot borer. Periodical substitution of wheat with a fodder crop in rich-wheat system is a remedy for phyllaries minor. Introducing of legumes as break crops in intensive cereal-cereal system resulting in yield stability and restoration of soil fertility.

Poultry wastes: Large quantities of wastes in the form of manure generates from poultry farm, which are mostly mixed with floor materials e.g. liter, droppings, dead birds etc. Poultry refers to the bedding materials (saw dust, wheat straw and rice hulls) which get mixed with dropping/left over feed and I collected after Washington in India, the content of N,P,O and K₂O in the poultry litter varies between 3.0-4.0%, 2.0-2.5% and 1.0-2.0% respectively depending upon the kind feed used. Poultry manure generally contains 38 g/kg of organic nitrogen, 4.8 g/kg of ortho-phosphorus and 20.9 g/kg of potash besides Ca, Na, Cu and Zn etc. in very small quantities (The Hindu Survey 2005). The rate of manure produced from a poultry is estimated 17-20 kg of manure are produced daily per 1000 kg broiler live weight. One adult chicken produced 25 kg of compost manure in one year.

Vegetable wastes: India grows about 20 million tons of vegetables and fruits annually. Out of these only .4% is utilized for domestic consumption and processing while the rest are treated as garbage. It is surprising to note that very little attempt has so far been made to exploit this waste as feed for fish after proper processing vegetable leaves like cabbage carrot, cauliflower, radish, tomato etc. contain crude protein (8-20%), ether extract (2-4%), crude fiber (11-20%) and (30-80%) nitrogen free extract on dry matter basis which can be used as supplement for formulated fish feed. Protein, fiber and nitrogen free extract of wastes from carrot, cauliflower, dehydrated pea karela (bitter melon), onion, potatoes, spinach and tinda can also be used for preparing fish feeds.

Silkworm wastes: Sericulture wastes, which are a mixture of silkworm feces, worm slough and mulberry leaves residues can serve as nutrients medium and feed for fish pond. A one hectare mulberry plant can produce 4000-6000 kg of leaves can produce 1000 kg of silkworm wastes, which in turn can result in 125 kg of fish. Silkworm feces are also consumed.

The following areas for research and development under organic agriculture need attention.

Research projects for formulation of organic farming practices may have to be farmed and implemented as national project.

Incentives for production of good quality organic manure, bio-pesticide, bio fertilizer and green manuring crops may be strengthened.

Development of pesticides of plants origin (such as neem) and use of agents especially under Integrated pest management programmed system need to be promoted.

Objective

The purpose of organic farming aims to maintain and improve soil fertility by evolving a sustainable agricultural system to ensure adequate food production and relies as much as possible upon resources from within its own area. Organic farming can primarily be defined as biology as it manages to incorporate waste recycling, biological pest control, non-chemical weed management, and integrated nutrient management. Considering how health conscious consumers are becoming from both developing and developed countries, it is crucial to provide safe and quality food products. Having said that, the world organic food market estimate was around US \$110 billion in 2025.

“In Uttarakhand and Uttar Pradesh states about 70% of land holdings are less than 100 acres in size and cover about 27% of the total cultivated area of 51%. Also, just over 3% of land holding are above 4 hectares in size and marginal holdings” (Government of Uttar-Pradesh), scale of economics cannot be availed of and so the input cost per unit of output is higher. Therefore, it becomes all the more difficult task to make agriculture a profitable occupation.

Certain set of principles are applied when looking at agriculture as primarily applied biology, such as,

Farm waste recycling

Non-chemical weed management

Biological pest control

Integrated Nutrient Management for sustainable soil fertility and crop productivity

METHODS

The study tends to evaluate the economic aspects of organic farming in India. The respondents are the farmers of Uttar Pradesh and Uttarakhand. This paper is based on true empirical work and the methodology used in this research is primary data. Data has been collected through a self-administrative pre-tested questionnaire was developed and used as the main data gathering instrument for the study. (refer to the questionnaires given in Appendix A).

THE ROLE OF ORGANIC FARMING

India's food production is a success story following the green revolution. In the late 1960's, India significantly increased the food production when the green revolution was launched. During the post green revolution, the production of food grain has increased fourfold, from 50.82 million ones in 1950-5 to 211.1 million tons in 2001-02 (Yojana November 2003). Although the green revolution has played a leading role in making the country self-sufficient in food grains but has created some adverse effects which are matter of serious concern. The negative impact of green revolution includes:

Excessive use of chemical (150-500 kg/ha)

Imbalance in nutrition status causing significant deficiency of Nitrogen, Phosphorus, Potassium

Environment degrading like depletion of stratospheric ozone, nitrate toxic etc. causing health hazards like cancer, methemoglobinemia, respiratory illness hypertension etc.

Data Based Analysis

Data on organic farming were collected from the state of Uttaranchal. Following persons were given the job and they reported to the author

Table 4: Agriculture Economic Value of organic farming

Name	Area in acre (reduced to 1 acre, 1 acre=43545.72 Sq feet)	Cost of Bio- fertilizer in Rs (1 acre)	Production of rice quintal/acre	Economic Values in Rs. of one crop Price 2991.667/qt	Economic profit Values in Rs. of one crop (after cost deduction)
Satish K. Sharma	1 acre	2500	12 qt.	35900	33400
Gajendra Singh	1 acre	1875	16 qt.	47867	45992
Jugapal Singh	1 acre	2000	14 qt.	41883	39883
Rajbahadur Saini	1 acre	2100	14 qt.	41883	39783
Arvind Kumar	1 acre	2000	16 qt.	47867	45867
Rajnish Chauhan	1 acre	2000	18 qt.	53850	51850
Average	1 acre	2079.167	15 qt.	44875	42796

Based on table 4 a farmer annually average income is Rs. 42796 with standard deviation of Rs. 6441 per year if farmer is performing organic farming.

Table 5: Agriculture Economic Value of Inorganic farming

Name	Area in acre (reduced to 1 acre, 1 acre=43545.72 Sq feet)	Cost of fertilizer in Rs (1 acre)	Production of rice quintal/acre Price =	Economic Values in Rs. of one crop 2300/qt	Economic Values in Rs. of one crop (after cost deduction)
Satish K. Sharma	1 acre	5000.00	18 qt.	41400.00	47600.00
Gajendra Singh	1 acre	5250.00	18 qt.	41400.00	36150.00
Jugapal Singh	1 acre	5000.00	18 qt.	41400.00	36400
Rajbahadur Saini	1 acre	4500.00	14 qt.	32200.00	27700
Arvind Kumar	1 acre	5250.00	18 qt.	41400.00	36150
Rajnish Chauhan	1 acre	5000.00	18 qt.	41400.00	36400
Average	1 acre	5000.00	17.2 qt.	39866.67	36733.33

Based on table 5 a farmer annually average income is Rs. 36733.33 with standard deviation of Rs. 6333.851 per year if farmer is performing inorganic farming.

In table 4 the cost of bio-fertilizers as reported by various persons used in acre of farm to produce the production of rice is given. The quantity of rice and the total cost of rice produced is also given. The cost of rice has been calculated at the present market rate of Rs. 2300.00 per quintal for inorganic and 2991.67 per quintal for organic. Similarly, table 5 shows the cost of inorganic fertilizers along with the total value of rice produced per acre. We have assumed that except the fertilizers the other costs like laborer, irrigation, seeds etc. remain the same in both the cases. Therefore, the last column in the tables has shown the value of rice produced after deducting the cost of fertilizers. For bio-fertilizers the average value of production per acre is Rs 44875 while for inorganic fertilizers it is Rs. 39866.67

It is evident that in case of inorganic fertilizers the value of production of rice is more than that in fertilizers. At first it appears that the organic farming is less production. However, in a few years of the starting of organic farming in a given farm the soil condition will improve. Further, in organic farming, the remains of the plants of paddy and wheat are left in the field to make a good bio-fertilizer. Thus, with successive years of bio farming the need of additional bio-fertilizers will decrease, thereby making the bio farming more economical.

Motivational factors of organic farming: Following were the motivational aspects of organic farming by the farmers in Uttar Pradesh and Uttarakhand.

Environmental Motives: About fifty four percent of the former responses could be broadly put under the motive environmental care or awareness of environmental safety and ill effects of hazardous practices followed in modern farming. It was amazing to find the farmers' awareness and care for environment. Their motto was complete health for all human beings.

Financial motives: Reduction in cost of cultivation and increase in net profit were the two important financial motives as the reasons for switch over to organic farming. Most of the inputs required for organic cultivation were derived from the locally available sources like FYM, plants, herbs, etc. So, it reduces the input cost to a great level and increases their net profit to a considerable level, notwithstanding a lower yield in initial years.

Soil health oriented motives: Soil health has been deteriorated due to chemicals. The life of soil living micro-organisms and earth worms are disturbed by heavy dumping of fertilizers and chemicals.

Quality of output related motives: About one fourth of respondents found quality of output as their major concern to shift towards organic farming. Many organic farmers told that the increase in quality of the products like vegetable and food grains were motivating them to go for it. These farmers were very particular about the grade and standard of their harvest. So, they attributed to their conversion to taste, durability, and freshness of the organic produces.

Motivation of Media: An equal percentage of farmers (24%) felt that the influence of and motivation especially by success stories through media like books, magazines, radio and TV programmers on organic farming, played a considerable role in changing their farming activities. Their ideology was formulated by being exposed to the media. Earlier (1998) found increasing cost of chemical inputs (63%) increase in net return in organic farming (11%) as the reasons behind the shift of attitude. Fairweather (2000) found that the antipathy to chemicals and the degradation of soil was the main cause. Molder et al.1991, found that that quest for healthier food was the main cause of farmers to go for bio farming. Willer and Gillmoor (1992) found that about 8% farmers go to the bio farming for ideological reasons propagated by the media.

RESULTS/ CONCLUSION/ CONTRIBUTION

Education seems to be one of the most effective and compelling component for a farmer to ratify/endorse organic farming. Thus, high figure of educated conventional farmers can be aware of the health hazards of contaminated food, so they practice organic farming at least on a limited basis. Further, environment and financial motives were found to be the primary motives behind the farmers' conversion to organic farming. In addition to net profit advantage of organic farming, other hidden environmental benefits of organic farming should also be brought in light to make it more influential and believable. For instance, if one agrees with organic practices' long-term benign effect, then it would strengthen their confidence in this emerging field.

Reduction in cost of cultivation and increase in net profit were the two important financial motives as the reasons for switch over to organic farming. Most of the inputs required for organic cultivation were derived from the locally available sources like plants, herbs, etc. So it reduces the input cost to a great level and increases their net profit to a considerable level, notwithstanding a lower yield in initial years. Anand Kumar (1998) found increasing cost of chemical inputs (63%), increase in net return in organic farming (11%), as the reasons behind the shift. Reduction in cost of cultivation and increase in net profit were the two important financial motives as the reasons for switch over to organic farming. Most of the inputs required for organic cultivation were derived from the locally available sources like FYM, plants, herbs, etc. So it reduces the input cost to a great level and increases their net profit to a considerable level, notwithstanding a lower yield in initial years.

REFERENCES

Agricultural statistics at a glance, Govt. of India (2003).

Alston, Julian M. et al., 2000, "A Meta-Analysis of Rates of Return to Agricultural R and D: Ex Pede Herculem". Washington, D.C.:International Food Policy Research Institute.

Adoption of Organic Farming Profit and motives of Farmers Indian Journal of Extension Education vol. 39, No. 1&2, pp.35, 2003.

Banerjee, A, Togetherness in Dairying, Indian Dairyman, 1995, Vol. 47 No. S.2-3, pp. 10.

Crosson, Pierre, 1995, "Soil Erosion and Costs, science 269:5223", pp 461-63.

Department of Agriculture, Uttarakhand, Tenth Five-Year Plan 2002-07, and Annual Plan 2002-03.

Etienne, G. 1993, "Indian Village and Districts Revisited, The Issue of Economic Growth and Poverty", Indian Journal of Labor Economics, Vol. 36, No-2, April-June.

Economic Survey, Government of India, Ministry of Finance, Economic Division pp 150-155, 2001.
The Hindu Survey of India Agriculture, 1996, pp. 123.

Hindustan Times, New Delhi, April 13, 2003

Hayami and Ruttan, 1970, "Agricultural Productivity: Difference Among Countries", American Economic Review. December, 60:S. pp. 895-911.

Indian Journal of Extension Education, A Major Success Story, S. Shanugarundaram
Irrigation Management ICAR, RCER, Patna 28 September-7th October 2004. Yojana November 2001, pp.42

Kumar and Mathur, 1996, "Agriculture in Future: Demand-Supply Perspective for the Ninth Five Year Plan", Economic and Political Weekly, Vol. 31, No. 39, pp. A 133-139.

Kalam and Rajan, 1998, A vision for the New Millennium.

Ruttan, Vernon W. 1956, "The contribution of technological progress to farm output 1950-1975", Review of Economics and Statistics, pp 61-69

R.K. Datta, Director, 1996, "Central Sericulture Research and Training Institute", The Hindu Survey of Indian Agriculture, pp 127.

Singh P.K. 2002, "Next phase of economic reforms: Strategies for agriculture", Arth- Vikash, January-June, pp 21-26.

S. Ayyoppan, 1997, "Towards a blue revolution, Central Institute of Freshwater Aquaculture", Kausalyaganga, Bhubaneshwar, Orissa, The Hindu Survey of Indian Agriculture, pp. 118-119.

Singh P.K., 2002, "Next Phase of Economic Reforms: Strategies for Agriculture", Arth-Vikash, pp. 21-26, January-June.

The Hindu Survey of Indian Agriculture 2004, pp. 107

<http://www.grandviewresearch.com/press-release/global-organic-food-beverages-market>

Trz, Xavier et al. 2001, "Agricultural Productivity Growth and Poverty Alleviation", Development Policy Review: 19:4. pp. 449-466, 2001.

Yojana November 2001, pp. 22and pp. 42.

Counting on Agroecology: Why We Should Invest More in the Transition to Sustainable Agriculture (2015), union of concerned scientist, www.ucsusa.org

Seeds of the Future: How Investment in Classical Breeding Can Support Sustainable Agriculture (2015), union of concerned scientist, www.ucsusa.org

Organic Farming for Sustainable Agriculture: Global and Indian Perspective, Global Journal For Research Analysis, Volume: 3, Issue: 2, Page-57, Feb 2014-ISSN No 2277-8160

BIOGRAPHY

Dr. Nisha Singh, Livingstone College 701 West Monroe St. Salisbury 28144

PRICE ELASTICITY OF ELECTRICITY DEMAND WITH TEMPERATURE EFFECT IN SOUTH KOREA: EMPIRICAL EVIDENCE

Jinwoo Dong, Pusan National University
Young-Duk Kim, Pusan National University

ABSTRACT

This study examines price elasticity of demand for electricity using monthly data in South Korea. Since utilizing electric power is associated with temperature or seasonal effect, to estimate price elasticity of electricity demand without temperature factors might be biased. We apply ARDL model to estimate price elasticity with temperature effects. The results show that, first, excluding industrial sector, price elasticity with temperature factors is more sensitive than without these factors. Second, as industrial sector is shown, year effect is relevant to electricity demand compared with temperature effect or seasonal effect. Without temperature effect or year effect, estimating price elasticity of electricity demand in South Korea is downward biased.

JEL: Q41; D12; C32

KEYWORDS: Price Elasticity, Electricity Demand, Temperature Effect, ARDL

INTRODUCTION

In South Korea, many researches on electric demand have estimated price elasticity using unit revenue as electricity price due to limitations of data. Moreover, marginal price does not exist in the time series data of South Korea (Jo, 2015). There are compelling reasons why we carefully use unit revenue. Unit revenue firstly is not marginal price but average revenue or average price. (Ito, 2014; Jo, 2015) Moreover, using unit revenue has identified problem, since these price are endogenously determined between demand and supply. Therefore, price elasticity without omitted factors what affect electric demand might be to estimate downward bias.

Temperature has been known as the useful variable that affects electricity consumption in the previous studies. In South Korea, Compared to the estimated price elasticity of studies not considering temperature (Kim and Park, 2013), the price elasticity of studies (Lee et al., 2010; Hahn, 2013) considering temperature was relatively high. We estimate and compare the price elasticity of electricity demand, which does not control temperature or seasonal effects, and the price elasticity, which controls them. Through the estimation results, we confirmed that if the temperature function is not controlled for the demand function, it leads to a downward bias in price elasticity.

We utilize ARDL model to estimate price and income electricity of demand function for electricity in South Korea. Even though some variables are non-stationary, or mixed I (0) and I (1) in our model, we find long-run relationship in level between variables using ARDL bound test. Finally, we alternatively provide fixed effect model (FE mode) to control seasonally effect. Since temperature effect is associated with seasonal changes, we treat each month as panel's id. Moreover, Our mainly contributions are two features There are many studies that include temperature. However, when the temperature effect was not included in the electricity demand function, they did not consider the direction of bias for the estimation. We firstly find that downward bias of the estimation of price elasticity depends on temperature effect or seasonally effect. We next propose an alternatively method different from previous research in utilizing monthly data. We

illustrate the method to control the seasonality or temperature effect as the fixed effect of each month on the panel data.

The rest of paper is organized as follows. In section 2, we propose model specification and present empirical strategy. In section 3, we show the results of tests such as unit-root test, ARDL bound test and panel unit root test. And we provide the findings of estimation. Section 4, we conclude.

METHODOLOGY

Model Specification

Our aggregated long run electric demand function is specified as follow:

$$\ln E_t = \alpha + \beta_1 \ln P_t + \beta_2 \ln Y_t + \beta_3 \text{Tem}_t + \beta_4 \text{Tem}_t^2 + \epsilon_t \quad (1)$$

Where E_t is consumption of electric energy, and Y_t is GDP and P_t is price of electric energy by using electricity sales per unit. β_1 and β_2 implies price and income elasticity. In time series data of South Korea, we do not utilize marginal price due to limitation of data (Jo, 2015).

Unit revenue alternatively is used as the electricity price. However, there are some empirically problems. First, our price variables are not marginal price, but average revenue or average price. Second, identified problem exist since price is endogenously determined by demand and supply. These problems mean that we try to find variables that shift electricity demand, otherwise omitted variables problem arise to estimate price elasticity. There are U-relationship between electricity consumption and temperature effect (Moral-Carcedo and Vicens-Otero, 2005; Lee and Chiu, 2011).

Electricity demand is relevant to productions associated with temperature changes, such as air conditioning and heating. Therefore, we estimate the electricity demand function that controlled the temperature effect. In addition, we compare the price elasticity of the electricity demand function with controlled temperature effect and price elasticity of electricity demand without them. In order to deal with the temperature effect, we include average temperature in the model. Since there is U-relationship between electricity consumption and temperature effect (Moral-Carcedo and Vicens-Otero, 2005; Lee and Chiu, 2011), we use square term of temperature

Empirical Strategy

We estimate price and income elasticity using time series data. In particular, our mainly focuses are to estimate long run relation in level between demand and price. Therefore, we need to test whether all variables are stationary or not using unit root test. Unit root testing performed using Augmented Dickey-Fuller(ADF) tests or Perron unit root test (Vita et al., 2006). We find all variables are trend stationary using both method. However, even our variables are non-stationary, if a cointegration relationship is found between them, we can estimate the level relationship between them.

Although the Johansen method is usually utilized for testing cointegration relationship, It may lead to erroneous inference when $I(0)$ and $I(1)$ are mixed (Pesaran et al., 2001; Vita et al., 2006). ARDL bound test is the method to testing for the existence of a relationship in level not only either purely $I(0)$ or purely $I(1)$, but also, they are mixed (Pesaran et al., 2001; Vita et al., 2006). Accordingly, we test cointegration relationship for all sorts of electricity demand, such as total, residential, commercial, and industrial demand utilizing ARDL model.

We propose the ARDL model to estimate the level relationship of demand function. The equation for estimating is given as follows:

$$\ln E_t = \alpha + \sum_{i=1}^n a_i \ln E_{t-i} + \sum_{i=0}^p b_{1,i} \ln P_{t-i} + \sum_{i=0}^m b_{2,i} \ln Y_{t-i} + b_3 \text{Tem}_t + b_4 \text{Tem}_t^2 + \epsilon_t \quad (2)$$

In ARDL model, each coefficient has distribution lagged. Therefore, long-run relationship is that price elasticity is $\sum_{i=0}^p b_{1,i} / (1 - \sum_{i=1}^n a_i) = b_1$, and Income elasticity $\sum_{i=0}^m b_{2,i} / (1 - \sum_{i=1}^n a_i) = b_2$

Finally, we alternatively provide fixed effect model (FE mode) to control seasonally effect. Each month in our data is treated as panel data's id(N). Since temperature effect is related to seasonal change, we expect using fixed effect model to control temperature effect given by equation (4).

$$\ln E_{m,c} = \alpha + \sum_{i=1}^n a_i \ln E_{m,t-i} + \sum_{i=0}^p b_{1,i} \ln P_{m,t-i} + \sum_{i=0}^m b_{2,i} \ln Y_{m,t-i} + u_m + \epsilon_{m,y} \quad (4)$$

Where m is month which is panel's N, t is year, and u_m is fixed effect what control seasonal change and is proxy as temperature effect. Price and income elasticity is also same ARDL model.

We still have to identify stationary of variables even using panel model, because our data is small N and large T. Several panel unit root test extended from test in times series is performed whether panel data is stationary or not (Baltagi, 2013). We use panel unit root test such as, Levin-Lin-Chu (2002) test, Harris-Tzavalis (1999) test, Im-Pesaran-Shin (2003) test, and Fisher type (Choi, 2001) test which includes ADF-type and Perron-type.

The various panel unit root test differ in two aspects. They assume different autoregressive process. Levin-Lin-Chu(LLC), and Harris-Tzavalis (HT) tests suppose that all panels share the same autoregressive process. The other tests such as Im-Pesaran-Shin (IPS) test, and Fisher type(FT-ADF, FT-P) allow the autoregressive process to be panel specific (Choi, 2001; Baltagi, 2013). Second, the various tests differ in assumption that both the number of panels, N, and the number of time periods, T, tend to infinity or whether N or T is fixed. While HT and IPS test allow N is infinity, LLC, FT-ADF, and FT-P require that N should be small relative to T (Choi, 2001; Baltagi, 2013). Since we use month as panel's id (N), N is the number of month. Therefore, assumption that N is fixed is more reliable.

RESULTS

Data and Results of Test

The data are monthly data which range from Jan. 1982- Dec. 2016. Demand variables such as $\ln E_t$, $\ln E_{res}$, $\ln E_{com}$, and $\ln E_{ind}$ and price variables such as $\ln pr_t$, $\ln pr_{res}$, $\ln pr_{com}$, and $\ln pr_{ind}$ obtained from the Korea Statistical information service (KOSIS: www.kosis.kr). GDP variables also are gathered by KOSIS. Temperature variables are average monthly temperature gathered Korea Meteorological administration (web.kma.go.kr). Descriptive statistics are as follows Table 1.

The results of our unit root testing are illustrated in Table 2. Table 2 also reports ADF test and Perron test statistics with trend and without trend. We found all variables used ADF test with trend were I(1). However, the results of Perron test with trend is shown that while GDP variables, price of commercial electricity demand($\ln pr_{com}$) and demand variables such as $\ln E_t$, $\ln E_{res}$, $\ln E_{com}$, and $\ln E_{ind}$ are I(1) at significant 5% levels, almost price variables such as $\ln pr_t$, $\ln pr_{res}$, and $\ln pr_{ind}$ are I(0). Since mixture of I(1) and I(0) is found, we have the merit of the use of ARDL bound testing approach .

Table 1: Descriptive Statistics

Variable	note	obs	Mean	Std. Dev.	Min	Max
lnEt	Total electric consumption	420	23.45806	0.8089691	21.77395	24.53973
lnEres	Residential electric consumption	420	21.62923	0.7077429	19.91848	22.66524
lnEcom	Commercial electric consumption	420	22.0813	1.104556	19.87971	23.52985
lnEind	Industrial electric consumption	420	22.89767	0.7200158	21.36699	23.88368
lnprt	Total electric price	420	4.80975	0.2980392	4.430188	5.544074
lnprres	Residential electric price	420	5.069151	0.2226992	4.358491	5.666299
lnprcom	Commercial electric price	420	5.170217	0.4817412	4.547992	6.277472
lnprind	Industrial electric price	420	4.411645	0.1858724	4.114229	4.800283
lnym	GDP across regions	420	31.66962	0.6108948	30.35201	32.47676
Temperature	Average monthly temperature	420	12.61429	9.858369	-7.2	28.5

Source: Korea Statistical information service (KOSIS: www.kosis.kr), Korea Meteorological administration (web.kma.go.kr).

Table 2: Unit Root Test

Variables	Level variables				First-difference variables			
	ADF test		PP test		ADF test		PP test	
	No trend	Trend	No trend	Trend	No trend	Trend	No trend	Trend
lnEt	2.808	-0.205	5.694	-1.818	-1.823*	-4.689***	-20.01***	-25.785***
lnEres	4.455	-1.034	3.486	-3.217*	-2.764***	-7.512***	-23.779***	-27.962***
lnEcom	2.400	0.628	3.766	-2.295	-1.641*	-4.098***	-16.130***	-18.054***
lnEind	3.251	-1.308	6.142	-2.852	-2.252**	-4.651***	-30.884***	-45.946***
lnym	9.805	-1.429	9.805	-1.429	-2.783***	-6.254***	-4.726***	-8.256***
lnprt	-1.826*	-1.224	-1.247	-3.458**	-3.372***	-4.418***	-21.864***	-22.658***
lnprres	-2.794***	-2.143	-1.314	-10.354***	-4.315***	-5.015***	-35.750***	-36.957***
lnprcom	-1.455	-1.622	-2.198**	-1.740	-2.549**	-3.249*	-19.749***	-21.551***
lnprind		-0.612	-0.117	-4.225***	-4.363***	-5.217***	-26.773***	-27.521***

Note 1: ***, **, * indicate that alternative hypothesis is significant at the 1%, 5%, 10% levels
Note 2: The time lag for ADF and PP is based on BIC value

Table 3: Results of ARDL Bound Test

Model	Calculated F-statistic			
Total demand	19.805***			
Residential demand	12.048***			
Commercial demand	6.814***			
Industrial demand	8.723***			
	5% level		1% level	
	I(0)	I(1)	I(0)	I(1)
n=420, k=2	3.79	4.85	5.15	6.36

Note 1: ***, **, * indicate that alternative hypothesis is significant at the 1%, 5%, 10% levels

The results of the bounds testing are reported for each estimated demand in Table 3. We tested all kinds of electricity demand function such as total, residential, commercial, and industrial demand. If F-statistic of each regression is larger than critical value of I(1), null hypothesis that is not shown cointegration is rejected. Since F-statistic in all electricity demand function is larger than the upper critical value of I(1) at

significant 1% level, these tests confirm the existence of a cointegrating relationship between electricity demand, price, and income variables.

Next, we show results of panel unit-root testing in Table 4 and Table 5. Even monthly data is non-stationary, data converted to panel form can be stationary due to control month effect or seasonal effects. Since existence of yearly information for data generating process might occur non-stationary problem, panel unit tests with trend is more applicable.

Table 4 is reported for various demand variables and income variables. Under assumption for common autoregressive procedure among panels, statistics for panel unit root test with trend is rejected null hypothesis at significant 1% level. When we allow specific autoregressive procedure among panels, FT-ADF and FT-P tests with trend also illustrate that our variables are stationary. In IPS tests with trend, residential electricity demand and income variables (GDP per capita) are not rejected null hypothesis. The results of IPS tests are more applicable if the number of panels (N) tends to infinity. Since our data demonstrate that N is fixed, our variables in Table 4 are regarded for stationary in panel unit root tests.

Table 5 also provides results of panel unit root test for price variables. Whether we assume common autoregressive procedure or specific autoregressive procedure, the statistics for various tests with trend is rejected null hypothesis at significant 5% levels. Therefore, all price variables with controlled trend are stationary. These findings imply that, since our data has stationary process if month is controlled as panels N, we can estimate level relationship of electricity demand function using panel model such as fixed effect model.

Table 4: The Results of Panel Unit Root Test (1)

Method	Statistic										Cross- Obs sections	
	lnET		lnEres		lnEcom		lnEind		lnym			
Assumption for common unit root process	No trend	trend	No trend	trend	No trend	trend	No trend	trend	No trend	trend		
Levin, Lin & Chu t*	-1.769 **	-10.54 ***	-7.130 ***	-3.133 ***	0.402	-2.635 ***	-2.271 **	-13.934 ***	-5.285 ***	-15.179 ***	12	420
	0.0384	0.0000	0.0000	0.001	0.656	0.004	0.012	0.000	0.000	0.000	12	420
Harris-Tzavalis Z- stat	-4.476 ***	-16.073 ***	-4.152 ***	-3.068 ***	-0.985	-5.426 ***	-22.425 ***	-22.819 ***	-25.350 ***	-26.369 ***	12	420
	0.0000	0.0000	0.0000	0.001	0.162	0.000	0.000	0.000	0.0000	0.0000	12	420
Assumption for individual's unit root process	No trend	trend	No trend	trend	No trend	trend	No trend	trend	No trend	trend		
Im, Pesaran and Shin W-stat	0.177	-9.809 ***	-4.874 ***	-0.959	1.742	-3.593 ***	-2.043 **	-13.756 ***	-3.902 ***	-16.0083 ***	12	420
	0.570	0.000	0.000	0.169	0.959	0.000	0.021	0.000	0.000	0.000	12	420
ADF-Fisher chi- squared	11.664	49.930 ***	30.935 ***	119.316 ***	9.335	43.642 ***	27.525	62.412 ***	55.958 ***	63.789 ***	12	420
	0.983	0.001	0.0006	0.0000	0.996	0.000	0.281	0.000	0.000	0.000	12	420
PP-Fisher chi- squared	43.405 ***	169.770 ***	43.470 ***	33.403 *	35.983 *	94.016 ***	194.747 ***	331.015 ***	243.821 ***	1475.242 ***	12	420
	0.009	0.000	0.000	0.096	0.055	0.0000	0.000	0.000	0.000	0.000	12	420

Note 1: With ADF-Fisher test, trend means drift term

Note 2: All test subtract the cross-sectional averages from the series

Note 3: Fisher chi-squared statistics are inverse chi-squared

Table 5. The Results of Panel Unit Root Test (2)

Method	Statistic								Cross-sections	Obs
	lnpt		lnpres		lnpcom		lnpind			
Assumption for common unit root process	No trend	trend	No trend	trend	No trend	trend	No trend	trend		
Levin, Lin & Chu t*	-0.468	-3.053***	-5.225***	-6.864***	-2.863***	-3.678***	-0.971	-3.622***	12	420
	0.312	0.001	0.0000	0.0000	0.0021	0.0001	0.166	0.000	12	420
Harris-Tzavalis Z-stat	-4.992***	-3.846***	-12.324***	-12.881***	-6.328	-4.244***	-3.457***	-2.179**	12	420
	0.000	0.000	0.0000	0.0000	0.1649	0.0000	0.000	0.015	12	420
Assumption for individuals unit root process	No trend	trend	No trend	trend	No trend	trend	No trend	trend		
Im, Pesaran and Shin W-stat	0.699***	-1.572*	-5.473***	-7.364***	-1.614*	-2.010**	0.874	-2.415***	12	420
	0.7576	0.0579	0.0000	0.0000	0.0533	0.0222	0.8088	0.0079	12	420
ADF-Fisher chi-square	15.871	56.058***	20.241	61.279***	21.633	69.892***	18.007	57.667***	12	420
	0.892	0.000	0.683	0.000	0.601	0.000	0.802	0.000	12	420
PP-Fisher chi-square	34.192*	58.412***	105.280***	127.594***	59.565***	76.386***	22.228	48.752***	12	420
	0.081	0.000	0.000	0.000	0.000	0.000	0.565	0.002	12	420

Note 1: With ADF-Fisher test, trend means drift term

Note 2: All test subtract the cross-sectional averages from the series

Note 3: Fisher chi-squared statistics are inverse chi-squared

The Results of Estimation

In this paper, we estimate various electricity demands using ARDL model. To select the lag length for the estimation, SBIC is used. Our results are reported in Table 7 and Table 8. Table 7 is shown total, residential, and commercial electricity demand where column (1), (4), and (7) is results of ARDL without temperature effects, column (2), (5), and (8) is shown results of ARDL with temperature effect (TE), and results of column (3), (6), and (9) are illustrated using fixed effect model. As a matter of interest, fixed effect term (u_m) exist following F-statistics, and temperature variables have U-relationship with demand variables. Moreover, coefficients of price using TE and FE in all demands are greater and more significant than results of OLS. It implies that estimation without temperature effect occur downward bias since existence of omitted variables problem. It is ambiguous which coefficients are larger between results of TE and FE.

Findings of industrial electricity demand are reported in Table 8. Column (10) is ARDL without temperature effects, column (11) shows the results of ARDL with temperature effect, and column (12) provides the results of fixed effect. Similar to Table 7, fixed effect term (u_m) also exist following F-statistics, and temperature variables have U-relationship with demand variables. However, the coefficients of price in industrial electricity demand are not shown the difference between OLS and TE or FE. We consider demand for industrial electricity with year effect in column (13)-(14). In this columns, coefficients of price in TE and FE is more significant, but not sensitive.

Table 7: The results of estimation (1)

Variables	Total			Res			Com		
	(1) OLS	(2) TE	(3) FE	(4) OLS	(5) OLS2	(6) FE	(7) OLS	(8) TE	(9) FE
$\ln E_{t-1}$	0.882*** (0.024)	0.835*** (0.024)	0.811*** (0.025)	0.911*** (0.022)	0.904*** (0.022)	0.858*** (0.024)	0.949*** (0.016)	0.921*** (0.017)	0.913*** (0.018)
$\ln P_t$	-0.067*** (0.029)	-0.086*** (0.028)	-0.087*** (0.028)	-0.012 (0.037)	-0.033 (0.038)	-0.096*** (0.037)	-0.135*** (0.033)	-0.146*** (0.032)	-0.144*** (0.033)
$\ln Y_t$	0.122*** (0.047)	0.208*** (0.045)	0.208*** (0.045)	0.048 (0.066)	0.049 (0.065)	0.082*** (0.065)	-0.035 (0.084)	0.007 (0.082)	0.024 (0.083)
Tem_t		-0.003*** (0.000)			-0.001** (0.001)			-0.004*** (0.001)	
Tem_t^2		0.000*** (0.000)			0.000** (0.000)			0.000*** (0.000)	
year									
FE test			4.30***			2.13**			1.74*
Constant	-0.776 (0.513)	-1.272** (0.497)	-1.713*** (0.523)	0.528 (0.666)	0.748 (0.679)	1.016 (0.675)	2.980*** (0.749)	2.316*** (0.761)	1.960** (0.803)
Obs	408	408	408	408	408	408	408	408	408
R2	0.999	0.999	0.999	0.997	0.997	0.997	0.998	0.998	0.998

Note 1. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Note 2. Time lag is 1 by determined by AIC

Table 8. The Results of Estimation (2)

Variables	Ind			Ind2		
	(10) OLS	(11) TE	(12) FE	(13) OLS	(14) TE	(15) FE
$\ln E_{t-1}$	0.758*** (0.033)	0.759*** (0.034)	0.662*** (0.040)	0.756*** (0.034)	0.757*** (0.034)	0.653*** (0.040)
$\ln P_t$	-0.013 (0.030)	-0.016 (0.030)	-0.006 (0.030)	-0.195 (0.031)	-0.030* (0.032)	-0.037* (0.032)
$\ln Y_t$	0.297*** (0.053)	0.294*** (0.053)	0.409*** (0.053)	0.286*** (0.054)	0.274*** (0.055)	0.367*** (0.054)
Tem_t		-0.000 (0.001)			-0.001 (0.001)	
Tem_t^2		0.000 (0.000)			0.000 (0.000)	
year				0.001 (0.001)	0.001 (0.001)	0.003* (0.002)
FE test			1.93**			2.23**
Constant	-3.801*** (0.506)	-3.749*** (0.517)	-5.179*** (0.599)	-4.876** (1.963)	-5.708*** (2.057)	-9.476*** (2.392)
Obs	408	408	408	408	408	408
R2	0.998	0.998	0.998	0.998	0.998	0.998

Note 1. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Note 2. Time lag is 1 by determined by AIC

We computed long-run elasticity following methodology in Table 9. Price elasticity for long-run is calculated differently for each electricity demand, while coefficient of price in TE and FE is more sensitive.

Since magnitude of price elasticity for long run depends on coefficient of lagged dependent variables, the degree of sensitivity for price elasticity between models is ambiguous. However, TE and FE is more applicable when we consider significant level of estimation in Table 7 and Table 8.

Table 9: Long-Run Elasticity

Variables	Total			Res			Com		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	OLS	OLS2	FE	OLS	OLS2	FE	OLS	OLS2	FE
Long run price	-0.568	-0.521	-0.460	-0.135	-0.344	-0.676	-2.647	-1.848	-1.655
Long run income	1.034	1.261	1.101	0.539	0.510	0.577	-0.686	0.089	0.276
Variables	Ind			Ind2					
	(10)	(11)	(12)	(13)	(14)	(15)			
	OLS	OLS2	FE	OLS	OLS2	FE			
Long run price	-0.054	-0.066	-0.018	-0.799	-0.123	-0.107			
Long run income	1.227	1.220	1.210	1.172	1.128	1.058			

CONCLUSION

We analyze price elasticity of demand for electricity using monthly data in South Korea. To deal with omitted variables problem, we consider electricity demand with temperature effect or seasonal effect. We firstly provide results of ARDL bound test to find long-run relation in level between electricity demand and price. Finally, we alternatively provide fixed effect model (FE model) which use that month is treated as panel's id to control seasonally effect.

Our findings as follow that we find long run relationship between demand and price variables in all kinds of electricity demand such as total, residential, commercial, and industrial demand. Second, coefficients of price controlled temperature effect (TE model) or fixed effect model (FE model) are larger and more significant in total, residential, commercial demand. However, industrial demand does not strongly affect TE or FE effect. If we consider year effect, coefficients of price in industrial demand become more sensitive. Moreover, it is difficult to identify which of the price elasticity of TE and FE is larger since degree of long run elasticity depends on magnitude of coefficient of lagged dependent variables.

REFERENCES

- Baltagi, B. H. (2013), *Econometric Analysis of Panel Data*. 5th ed. Chichester, UK: Wiley.
- Choi, I. (2001), "Unit root tests for panel data," *Journal of International Money and Finance*, 20: 249-272.
- Lee, C. C. and Chiu, Y. B. (2011), "Electricity demand elasticities and temperature: Evidence from panel smooth transition regression with instrumental variable approach," *Energy Economics*, 33: 896-901
- De Vita, Glauco, Klaus Endresen, and Lester C. Hunt (2006), "An empirical analysis of energy demand in Namibia," *Energy Policy* 34(18): 3447-3463. .
- Moral-Carcedo, J., and Vicens-Otero, J. (2005), "Modeling the non-linear response of Spanish electricity demand to temperature variations," *Energy economics*, 27(3): 477-494.

Jo, H. H. and Jan, M. W. (2015), “An Analysis of the Price Elasticity of Electricity Demand and Price Reform in the Korean Residential Sector Under block Rate Pricing,” *Environmental and Resource Economics Review*, 24(2): 365-410

Lee, H. L., Han, J. H., and Yi, M. H. (2010), “Electricity Peak Equation: Estimation and Prediction,” *Korean Energy Economic Review* 9(2): 83-99

Harris, R. D. F., and E. Tzavalis (1999), “Inference for unit roots in dynamic panels where the time dimension is fixed,” *Journal of Econometrics*, 91: 201–226.

Im, K. S., M. H. Pesaran, and Y. Shin, (2003), “Testing for unit roots in heterogeneous panels,” *Journal of Econometrics* 115: 53–74.

Ito, K. (2014), “Do consumers respond to marginal or average price? Evidence from nonlinear electricity pricing,” *American Economic Review*, 104(2): 537-563

Kim, Y.D. and Park, M.S., (2013), “Changes in Elasticities of Demand for Oil Products and Electricity in Korea,” *Environmental and Resource Economics Review*, 22(2): 251-279

Levin, A., C.-F. Lin, and C.-S. J. Chu (2002), “Unit root tests in panel data: Asymptotic and finite-sample properties,” *Journal of Econometrics*, 108: 1–24.

Pesaran, M. H., Shin, Y., and Smith, R. J. (2001), “Bounds testing approaches to the analysis of level relationships,” *Journal of applied econometrics*, 16(3): 289-326.

Hahn, S. B. (2013), “An analysis of nonlinear and nonparametric electricity demand model,” *Journal of Korean Economic Development* 19(2): 138-208

BIOGRAPHY

Jinwoo Dong, Oral presenter, The Department Economics, Pusan National University, orkai@naver.com

Youngduk Kim, The Department Economics, Pusan National University, ydkim@pusan.ac.kr

SPANISH PROCEEDINGS

ESTUDIO COMPARATIVO DEL COMERCIO FORMAL VS EL COMERCIO INFORMAL EN EL ESTADO DE MÉXICO

Octavio Augusto Dehesa Vargas, Centro Universitario UAEM Amecameca

Omar Ernesto Terán Varela, Centro Universitario UAEM Amecameca

RESUMEN

En México existe una cultura de informalidad en las empresas y negocios que trabajan día a día para dar sustento a sus familias puesto que este tipo de empresas no pagan impuestos, o no lo hacen de forma correcta, lo que representa un problema para la economía del país pues esto fomenta la corrupción por parte las autoridades encargadas de sus supervisiones, haciendo que paguen cuotas para poder continuar trabajando y haciendo que ese dinero se quede en manos de extorsionadores. Para el año 2015 la medición de la Economía Informal indicó que el 23.6% del PIB se produce en unidades económicas informales y se genera por el 57.9% de la población ocupada que labora en condiciones de informalidad, en tanto que el 76.4% del PIB es producido en el Sector Formal con el 42.1% de la población ocupada formal, es decir, que por cada 100 pesos generados de PIB del país, 76 pesos lo generan el 42% de ocupados formales, mientras que casi 24 pesos los generan el 58% de ocupados en condiciones de informalidad. Los resultados muestran que a lo largo del periodo 2003-2015 la Economía Informal contribuye en promedio en un 25.6% anual al Producto Interno Bruto del país. (INEGI, 2016). La problemática del comercio informal ha sido ocasionada por el mismo sistema burocrático de nuestro país con la cantidad de trámites e impuestos y sobre todo tiempo que hay que invertir para volver una empresa formal. El propósito de la investigación es realizar un estudio comparativo con el objetivo de hacer un análisis en el sistema burocrático de incorporación al régimen fiscal para formalizar el comercio en México, y así permitir a las empresas gozar de los beneficios de la formalidad, mientras pagan sus impuestos correspondientes en un sistema libre de sobornos y corrupción.

PALABRAS CLAVES: Comercio Formal, Comercio Informal, Régimen Fiscal

COMPARATIVE ANALYSIS OF FORMAL VERSUS INFORMAL ECONOMICS SECTOR IN THE STATE OF MEXICO

ABSTRACT

In Mexico there is a culture of informality in companies and businesses that work day by day to provide for their families, since these companies do not pay taxes, or do not do it correctly, which represents a problem for the economy of Country as this encourages corruption by the authorities in charge of their supervision, causing them to pay dues in order to continue working and making that money remain in the hands of extortionists. The National Institute of Statistics and Geography and Informatics (2015) mentions that "By 2015 the measurement of the Informal Economy indicates that 23.6% of GDP is produced in informal economic units and is generated by 57.9% of the employed population Which works in conditions of informality, while 76.4% of GDP is produced in the formal sector with 42.1% of the formal employed population, ie, for every 100 pesos generated in the country's GDP, 76 pesos are generated by the 42% of formal employed, while almost 24 pesos generate 58% of employed in informal conditions. The results show that over the period 2003-2015 the Informal Economy contributes an average of 25.6% per annum to the country's Gross Domestic Product. "Thus, the problem of informal commerce has been caused by the same bureaucratic system of Our country with the amount of paperwork and taxes and above all time that

we have to invest to become a formal company. The purpose of the investigation is to carry out a comparative study with the objective of making an analysis in the bureaucratic system of incorporation to the fiscal regime to formalize the commerce in Mexico, and thus to allow the companies to enjoy the benefits of the formality, while paying their Corresponding taxes in a system free of bribes and corruption.

JEL: A13, J08, L51, L81, M21, P46, P52

KEYWORDS: Formal Trade, Informal Trade, Taxation

INTRODUCCIÓN

En la página HBO en Latino América publico el 13 ago. 2016, que en la cultura de México, es muy común ver por las calles puestos ambulantes donde se consumen una variedad de productos, e incluso en muchas ocasiones se prefiere dicho consumo por lo económico que resulta, pero se debe observar que en países en desarrollo esto es bastante común; Sin embargo en países de primer mundo como lo son Estados Unidos y Canadá esto no es un problema que represente un gran riesgo, ya que el mismo sistema de gobierno le otorga la facilidad a sus habitantes de emprender negocios y empresas incorporándose fácilmente al régimen fiscal. Así mismo, en México son necesarios 67 días hábiles solo para hacer trámites de formalización y se gastan aproximadamente 20,000 pesos mexicanos para realizarlos, en Brasil se necesitan 15 trámites y 63 días, en Venezuela para los mismos 15 trámites se necesitan 124 días para poder realizarlos, en Chile se necesitan 28 días, en Estados Unidos se necesitan 4 trámites que se realizan en 4 días y en Canadá únicamente se requieren 2 trámites que son realizados en 2 días. Con esta información podemos observar que un sistema económico sólido que permita que las empresas sean formales se basa en la simplicidad, pues en México muchos de los tramites que se necesitan en su mayoría son innecesarios y únicamente se realizan para mantener la corrupción del país y para darle un propósito a instituciones que en algunos casos, también son innecesarias. La finalidad de esta investigación es demostrar y proponer al gobierno Mexicano a hacer un análisis en el sistema burocrático de incorporación al régimen fiscal para formalizar el comercio en México, y así permitir a las empresas gozar de los beneficios de la formalidad, mientras pagan sus impuestos correspondientes en un sistema libre de sobornos y corrupción.

REVISIÓN LITERARIA

Artana & Auguste (2002), indican que la alta tasa de informalidad fomenta la baja productividad, ya que generalmente las empresas informales no son sujetas de crédito y, por ende, no pueden aumentar su nivel de capital por trabajador. La economía informal también facilita el incumplimiento de los derechos laborales. Este tipo de empresas no están obligadas a pagar un salario mínimo, y tampoco tienen que proporcionar las prestaciones mínimas de la ley para sus empleados. Además, las altas tasas de informalidad propician que la carga de impuestos se concentre en tan sólo un pequeño porcentaje de los mexicanos que sí operan formalmente, lo cual reduce la recaudación fiscal y desequilibra las finanzas públicas. Uno de los principales motivos para el auge del comercio informal es la excesiva burocracia que existe en México. Muchos ciudadanos han sufrido largas filas y tiempos de espera prolongados para poder pagar sus impuestos e incluso sobornos para poder “agilizar” los trámites necesarios para cumplir con Hacienda. Si a una excesiva burocracia y prolongados trámites para crear empresas (y por ende empleo) le unimos una serie de crisis que han azotado a México en las últimas décadas, junto con políticas macroeconómicas inadecuadas, tenemos el caldo de cultivo perfecto para que muchos, que han visto desvanecerse sus puestos de trabajo, vean en la economía informal una forma de subsistencia.

Busso & Fazio & Levy (2012), señalan que la informalidad es una expresión de varias distorsiones en una economía y forma parte de un conjunto de relaciones entre diversos agentes económicos y el Estado, entendiendo a este último, como el encargado de minimizar o hacer desaparecer las fallas del mercado a través del otorgamiento de bienes públicos. Uno de los enfoques tradicionales bajo los cuales se entiende

la informalidad es el de la exclusión, es decir, cuando los trabajadores no tienen la oportunidad de encontrar empleo en la formalidad, acuden por necesidad a la informalidad en donde no gozan de los servicios otorgados por el Estado, como lo es la seguridad social; y, cuando las empresas deciden por subsistencia transitar de la formalidad a la informalidad, debido a los altos costos que implica pertenecer a la economía formal. Este enfoque distingue tres límites entre las dos economías: el primero, la segmentación del mercado laboral; segundo, la alta burocracia y los altos costos de permanecer en la formalidad, sobre todo para las pequeñas empresas; y, tercero, la excesiva regulación y las presiones fiscales hacen que las grandes empresas operen un porcentaje de su operación en la informalidad.

Sin embargo, para Perry & Maloney & Arias & Fajnzylber & Mason & Saavedra-Chanduvi (2007), comentan en su investigación que la informalidad también debe ser analizada desde el punto de vista empresarial, pues cuando alguna persona no está cómoda o no recibe mayores beneficios que costos por pertenecer a una organización, la persona puede tener dos tipos de reacciones. La primera es comentar su inconformidad y permanecer esperando que el entorno cambie a su favor, pero la segunda consiste en escapar de la organización apostando todo en otro lugar con los riesgos que eso implica. El segundo enfoque que complementa a la exclusión, es justamente el escape: desde el punto de vista de la modalidad empresarial (sector informal), las empresas pequeñas deciden y calculan que no necesitan y/o quieren los programas o beneficios que otorga el Estado, por lo que no pagan por ellos, mientras que las empresas grandes observan en el evadir impuestos con mecanismos sofisticados mayores beneficios que pagándolos. Desde el punto de vista de Friedman & Johnson & Kaufmann & Zoido-Lobaton (2000) dicen que la modalidad empresarial (sector informal), las empresas pequeñas deciden y calculan que no necesitan y/o quieren los programas o beneficios que otorga el Estado, por lo que no pagan por ellos, mientras que las empresas grandes observan en el evadir impuestos con mecanismos sofisticados mayores beneficios que pagándolos.

Dreher & Kotsogiannis & McCorriston (2005), mencionan que en cuanto a los beneficios que el empresario visualiza tener al estar en la economía formal, se relaciona la decisión del empresario para escapar de la formalidad con dos variables principalmente: la corrupción y la calidad institucional. La corrupción se entiende como la actividad ilegal que consiste en el abuso del poder por parte del político para obtener ganancias privadas, y que es caracterizada como factor de la caída del crecimiento y desarrollo económico, de la baja calidad de los servicios públicos y del incremento de la desigualdad. Se colocan a las empresas como agentes racionales que calculan los beneficios y los costos que tienen por estar en la economía formal, mismos que incluyen el pago del político corrupto. Una de sus primeras conclusiones, es que altas tasas impositivas, sumadas a un alto pago por la seguridad social de los trabajadores y pocos beneficios otorgados por el Estado, generan incentivos para escapar del pago de impuestos (deseo racional de transitar de la formalidad a la informalidad).

Sin embargo, la clave del modelo es la calidad institucional de la economía, buscando encontrar los efectos que ésta tiene sobre la economía formal y la informal. Las conclusiones más importantes de este modelo son: primero, que la informalidad genera incentivos para disminuir la corrupción y provoca que la economía formal sea mayor; segundo, que el tamaño de la informalidad se reduce con incrementos en la calidad institucional de una economía; tercero, la relación entre la magnitud de corrupción y la calidad institucional es ambigua; y cuarto, para efectos de México, aseguran que el tamaño de la informalidad y la cantidad de corrupción son muy altos. América Latina cuenta con múltiples casos de éxito en la disminución de la informalidad. Ejemplo de ello son los casos de implementación de ventanillas únicas en Argentina, Brasil y Ecuador, los programas de financiamiento a PyMES con más de un año de operación en República Dominicana, Chile y Costa Rica, así como la promoción de iniciativas empresariales del sector digital en Jamaica. Asimismo, el caso de Chile es emblemático; su programa de sustitución de multas por capacitación a empleadores es una política innovadora que reduce las probabilidades de reincidencia de prácticas ilegales.

METODOLOGÍA

Gran parte de esta investigación es de tipo documental, con una revisión bibliográfica en libros, revistas, periódicos, así como la consulta de artículos y páginas de internet. Es de tipo cualitativo donde se utilizó métodos que siguen una disciplina científica basados en principios teóricos para la toma de decisiones. Se tomó como referencia pequeñas muestras en la observación de un conjunto o interesados en incursionar en la creación de su negocio en la región. Se realizó el estudio de cómo llevar a cabo el comparativo del Comercio Formal vs el Comercio Informal en el Estado de México. Es de tipo descriptiva debido a que se particulariza cómo pueden ser beneficiados el comercio formal e informal. Por medio del mismo se describen datos para conocer las situaciones, costumbres, actitudes más importantes a través de las actividades como el objeto de estudio y sus procesos. Fue de tipo no experimental transversal debido a que las variables son independientes. Los trasversales recolectan datos en un solo momento en un tiempo único, su propósito fundamental es describir variables y analizar su incidencia y relación en un momento dado.

RESULTADOS

Se cuenta con resultados parciales, y está realizando la investigación de campo mediante un instrumento que puedan determinar el comportamiento mediante el estudio comparativo del Comercio Formal vs el Comercio Informal en el Estado de México, como oportunidad de poder generar estrategias que permitan sacar de la informalidad a dichas empresas del Estado de México. Así mismo, se están considerando una serie de factores claves para el éxito de una organización que le permitan posicionarse a este tipo empresa en un mercado competitivo. Para lograr este objetivo, se deben cumplir dos condiciones: Proporcionar a los consumidores lo que necesitan y la otra es sobrevivir a la competencia. Para dar a los consumidores alternativas de pago, en función de sus clientes y proveedores. Una vez que saben cuáles son los clientes, deberá estudiar sus necesidades y sus comportamientos, es decir, las causas por las que deciden escoger una oferta en lugar de otra. A partir de ese momento, la empresa podrá trazar su estrategia para su posicionamiento.

REFERENCIAS BIBLIOGRÁFICAS

Artana, D. & Auguste, S. (2002) “Informalidad, productividad y crecimiento. Propuesta metodológica basada en censos industriales”; Banco Interamericano de Desarrollo; Notas Técnicas #DB-TN-342.

Aterido, R., Hallward-Driemeier, M., Pagés, C. (2011), “Does Expanding Health Insurance Beyond Formal-Sector Workers Encourage Informality? Measuring the Impact of Mexico’s Seguro Popular?”; Policy Research Working Paper 5785.

Border, K. y Sobel, J. (1987), “Samurai Accountant: A Theory of Auditing and Plunder; Review of Economic Studies; Oxford University Press; Vol. 54, No. 4.

Busso, M., Fazio, M.V., Levy, S. (2012), “Informal and Unproductive: The productivity Costs of Excessive Informality en México”; Banco Interamericano de Desarrollo; IDB Working Papers Series No. IDB-WP-341.

Dixit, Avinash y Londregan (1996), “The Determinants of Success of Special Interests and Redistributive Politics”. Journal of Politics 58 (4): 1132-1155.

Dreher, A., Kotsogiannis, y McCorriston, S. (2005), How do institutions affect corruption and the shadow economy?; University of Exeter Discussion Paper.

Elizondo, C. (1994), “In Search of Revenue: Tax Reform in Mexico under the Administrations of Echevarria and Salinas”; Journal of Latin American Studies; Vol. 26, No. 1; 159-190.

Elizondo, C. (2001), “Impuestos, Democracia y Transparencia”; Cámara de Diputados, Comisión de Vigilancia, Auditoría Superior de la Federación: Series: Cultura de la Rendición de Cuentas; Auditoría Superior de la Federación.

Flores, R., Zamora, S., y Contreras, E. (2013), “Transacciones entre el trabajo formal e informal y medios de intermediación laboral en México 2005-10”; Banco Interamericano de Desarrollo; Nota Técnica #IDB-TN-525.

Friedman, E., Johnson, S., Kaufmann, D. y Zoido-Lobaton, P., “Dodging the Grabbing Hand (2000), The Determinants of Unofficial Activity in 69 Countries”; Journal of Public Economics 76; 459-493.

HBOenLatinoAmerica publicado el 13 ago. 2016, Recuperado de

https://www.youtube.com/watch?v=tqf_TBvgC6g

Levi, M.; (1988), *Of Rule and Revenue*; Berkeley, CA: University of California Press; [Capítulos 2-3, pp. 10-70].

Magar, E.; Romero, V. y J. F. Timmons, (2009) “The Political Economy of Fiscal Reforms in Latin America: Mexico” en SSRN Electronic Journal.

Perry, G., Maloney, W., Arias, O., Fajnzylber, P., Mason, A. y Saavedra-Chanduvi, J. (2007) “Informalidad: Escape y Exclusión”; Banco Mundial; Estudios del Banco Mundial sobre América Latina y el Caribe.

ESTRATEGIAS DE COMPETENCIA LABORAL COMO DETONADOR DE LA COMPETITIVIDAD DE LAS ORGANIZACIONES DEL SECTOR TERCIARIO EN LA ZONA ORIENTE DEL ESTADO DE MÉXICO

Yesenia Burgos Madariaga, Centro Universitario UAEM Amecameca

Omar Ernesto Terán Varela, Centro Universitario UAEM Amecameca

RESUMEN

El mundo se mueve a través de procesos de globalización en donde los países le apuestan a su crecimiento y posicionamientos de sus productos en los mercados al menor costo de producción y con una excelente calidad, para ello, se basan en que el Capital Humano (CH) sea el responsable de dicho procesos, y que al realizar la evaluación correspondiente solo se busca no tener ningún de tipo responsabilidad laboral con los mismos, por lo que, rebuscan en otros países mano de obra calificada y a bajo costo, sin tener la necesidad de volverlos un activo tangible para su organización. Dadas estas circunstancias, existe el interés en torno a la formación y certificación con base en competencias laborales que se ha venido incrementando desde hace varios años en América Latina. De hecho, ya antes del advenimiento del modelo de competencia laboral se promovían proyectos regionales sobre la certificación ocupacional, orientados hacia el reconocimiento formal de las capacidades laborales, independientemente de la forma como se adquirieron. Es por ello que, se denomina competitividad a la facultad de competir: disputarse el dominio de algo, rivalizar para quedarse con aquello que otro u otros también pretenden conseguir. La idea de competitividad alude a contar con la capacidad necesaria para enfrentar a los competidores. Para México y en especial a la Zona Oriente del Estado de México (ZOEM), que es una zona la cual carece de dicho procesos, se plantea que la investigación este enfocada a la competitividad hacia el CH (personas físicas que se desempeñan laboralmente dentro de una organización), que se pueda definir como aquella capacidad que permite al individuo, desempeñar de forma superior y efectivamente una actividad de trabajo en el uso conjunto de sus conocimientos, habilidades, destrezas y comprensión; necesarios para lograr los objetivos que tal actividad supone desarrollar y llevar a cabo. Es por ello, que el objetivo de la investigación es generar estrategias enfocadas al desarrollo de competencias laborales como detonador de la competitividad de las organizaciones del Sector Terciario de la ZOEM.

PALABRAS CLAVES: Competencia Laboral, Competitividad De Las Organizaciones, Sector Terciario

ABSTRACT

DEVELOPMENT OF LABOR COMPETENCIES AS A TRIGGER FOR COMPETITIVENESS OF ORGANIZATIONS IN THE TERTIARY SECTOR IN THE EASTERN PART OF THE STATE OF MEXICO

The world moves through globalization processes where countries are betting on their growth and product positioning in markets at the lowest cost of production and with an excellent quality, based on the fact that Human Capital (CH) Is responsible for these processes, and that when carrying out the corresponding evaluation only seeks to have no type of labor responsibility with them, reason why, in other countries scour qualified labor and low cost without having the need to Make them a tangible asset for your organization. Given these circumstances, there is interest in training and certification based on labor competencies that has been increasing for several years in Latin America. In fact, even before the advent of the labor

competency model, regional projects on occupational certification were promoted, aimed at the formal recognition of labor capacities, regardless of how they were acquired. That is why, it is called competitiveness to the faculty of competing: to dispute the dominion of something, to compete to stay with what another or others are also trying to achieve. The idea of competitiveness alludes to having the necessary capacity to face competitors. For Mexico and especially the Eastern Zone of the State of Mexico (ZOEM), which is an area that lacks these processes, it is proposed that the research is focused on the competitiveness towards the CH (natural persons who work within An organization) that can be defined as that capacity that enables the individual to perform a work activity in a superior and effective way in the joint use of their knowledge, skills, skills and understanding; Necessary to achieve the objectives that such activity involves developing and carrying out. It is for this reason that the objective of the research is to generate strategies focused on the development of labor competencies as a trigger for the competitiveness of organizations in the Tertiary Sector of the ZOEM.

JEL: J24, L44, M10, M12, M51, M54, Y80, Z00

KEYWORDS: Labor Competition, Competitiveness of Organizations, Tertiary Sector

INTRODUCCIÓN

Para Alles (2006), menciona que en estos procesos de globalización en donde los países le apuestan a su crecimiento y posicionamiento de sus productos en los mercados al menor costo y se basan en que el Capital Humano sea el responsable de dicho proceso, y que al realizar la evaluación correspondiente solo se busca no tener ningún tipo de responsabilidad laboral con los mismos, por lo que, buscan en otros países mano de obra calificada y a bajo costo, sin tener la necesidad de volverlos un activo tangible para su organización. Dadas estas circunstancias, existe el interés en torno a la formación y certificación con base en competencias laborales se ha venido incrementando desde hace varios años en América Latina. De hecho, ya antes del advenimiento del modelo de competencia laboral se promovían¹ proyectos regionales sobre la certificación ocupacional, orientados hacia el reconocimiento formal de las capacidades laborales, independientemente de la forma como se adquirieron. Es por ello que, se denomina competitividad a la facultad de competir: disputarse el dominio de algo, rivalizar para quedarse con aquello que otro u otros también pretenden conseguir. Continuando con Alles (2016), alude a que la idea de competitividad es contar con la capacidad necesaria para enfrentar a los competidores.

En el ámbito de la economía, la competitividad se refiere a la capacidad que tiene una persona, empresa o país para obtener rentabilidad en el mercado frente a sus otros competidores. Enfocada la competitividad hacia el recurso humano (personas físicas que se desempeñan laboralmente dentro de una organización), entonces se puede definir como aquella capacidad que permite al individuo, desempeñar de forma superior y efectivamente una actividad de trabajo en el uso conjunto de sus conocimientos, habilidades, destrezas y comprensión; necesarios para lograr los objetivos que tal actividad supone. Se tomó como referencia pequeñas muestras de acuerdo a un proceso de observación, que tienen como propósito permitir hacer un diagnóstico de la competitividad de organizaciones del Sector Terciario en la Zona Oriente del Estado de México, que para la cual, se está realizando un estratificado por municipio, que presentan en un principio deficiencias de competencia laboral.

REVISION LITERARIA

A inicios de los años sesenta, el profesor de Psicología de la Universidad de Harvard, David McClelland (1987), propone una nueva variable para entender el concepto de motivación: Desempeño Calidad, considerando el primer término como la necesidad de logro (resultados cuantitativos) y el segundo como la calidad en el trabajo (resultados cualitativos). Siguiendo el enfoque de McClelland se plantea los posibles vínculos entre este tipo de necesidades y el éxito profesional: si se logran determinar los mecanismos o

niveles de necesidades que mueven a los mejores empresarios, gerentes, entre otros, podrán seleccionarse entonces personas con un adecuado nivel en esta necesidad de logro, y por consiguiente, formar a las personas en estas actitudes con el propósito de que puedan desarrollarlas y sacar adelante sus proyectos. La aplicación práctica de esta teoría se llevó a cabo por parte de su autor, en la India, en 1964, donde se desarrollaron un conjunto de acciones formativas y en sólo dos años se comprobó que 2/3 de los participantes habían asimilado características innovadoras, que potenciaban el auge de sus negocios y en consecuencia de su localidad de residencia.

Siguiendo con los estudios de McClelland (1987), dichos resultados permitieron que los estudios de este tipo se extendieran en el mundo laboral. Todos querían encontrar la clave que permitiera a las organizaciones ahorrar tiempo y dinero en los procesos de selección de personal. No obstante, por una razón u otra, la problemática universal en torno a qué formación debe poseer la persona, y que fuere adecuada para desempeñarse con éxito en un puesto determinado, aún no estaba resuelta. En 1973, McClelland demuestra que los expedientes académicos y los test de inteligencia por sí solos no eran capaces de predecir con fiabilidad la adecuada adaptación a los problemas de la vida cotidiana, y en consecuencia el éxito profesional. Esto lo condujo a buscar nuevas variables, a las que llamó *competencias*, que permitieran una mejor predicción del rendimiento laboral. Durante estas investigaciones encuentra que, para predecir con una mayor eficacia el rendimiento, era necesario estudiar directamente a las personas en su puesto de trabajo, contrastando las características de quienes son particularmente exitosos con las de aquellos que son solamente promedio. Debido a esto, las competencias aparecen vinculadas a una forma de evaluar aquello que *realmente causa un rendimiento superior en el trabajo* y no «a la evaluación de factores que describen confiablemente todas las características de una persona, en la esperanza de que algunas de ellas estén asociadas con el rendimiento en el trabajo».

Alles (2006), determina que las competencias, por tanto, más que hacer una referencia a lo que una persona hace habitualmente en cualquier situación, centran su objetivo en lo que una persona sería capaz de hacer cuando se le demanda. Además puntualiza que, haciendo mención a Boyatzis & Spencer & Spencer (1982), determinan que *las competencias hacen referencia a cualquier característica individual que pueda medirse con fiabilidad y que permita pronosticar el desempeño excelente de una persona en un puesto de trabajo*. En este proceso de ser competitivo, existen organizaciones encargadas de certificar la competitividad laboral. Otro autor muy referido en esta línea de investigaciones es Boyatzis (1982), quien en una de sus intervenciones analiza profundamente las competencias que incidían en el desempeño de los directivos, utilizando para esto la adaptación del Análisis de Incidentes Críticos. En sus estudios se concluye que existen una serie de características personales que deberían poseer de manera general los líderes, pero que hay también algunas que sólo poseían otras personas que desarrollaban de modo excelente sus responsabilidades, son estas algunas de las apreciaciones referentes al origen del término en cuestión.

En el libro de Alles (2016), define el término de Gestión por competencias donde establece que el modelo de gestión permite alinear a las personas que integran una organización (directivos y demás niveles organizacionales) en pos de los objetivos estratégicos. Y para que sea eficaz, la gestión por competencias debe implementarse bajo el enfoque sistémico, es decir, aplicarse en todos los subsistemas de Recursos Humanos de la organización. Es por ello que el término “modelo” es utilizado para designar al conjunto de relaciones basadas en términos lógicos, y “modelo de competencias”, a su vez, se utiliza para identificar al conjunto de procesos relacionados con las personas que integran la organización para alinearlos en pos de los objetivos organizacionales. Por lo que, el modelo de competencias va a permitir seleccionar, evaluar y desarrollar a las personas en relación con las competencias necesarias para alcanzar las estrategias organizacionales. Es por ello que, algunos autores señalan que la diferencia entre Gestión por competencias y de las competencias, dan una explicación que: la expresión “Gestión de las competencias” hace referencia al conjunto de acciones que se realizan con el propósito de administrar las capacidades de los colaboradores- en especial, sus competencias-, y que las acciones a realizar son: medición, comparación con lo requerido (concepto de adecuación persona puesto formación y desarrollo), por citar las más relevantes. Por lo tanto,

dicha expresión-gestión de las competencias- se utiliza para señalar una gestión planeada, por parte de la organización, entorno a las competencias de sus colaboradores, donde implica tenerlas en cuenta ya sea tanto para darles una utilización adecuada como para incrementarlas cuando sea necesario.

Continuando de Alles (2016), menciona que el concepto se puede asimilar al desarrollo de las competencias y que es claramente diferente a la gestión por competencias, cuando el propósito sea implantar un modelo de gestión basado en competencias, la expresión correcta será “gestión por competencias”. Y si la metodología que se expondrá es la que surge tanto de las investigaciones como del trabajo profesional, también es labor del equipo que integra la organización, de manera tal que se vean los resultados positivos en las empresas a lo largo de toda Latinoamérica. Por lo tanto, la gestión por competencias, así como los aspectos más sobresalientes de la metodología que se describe a continuación, conforme a las buenas prácticas en materia de recursos humanos. Al llegar a la inclusión de las definiciones conlleva un doble propósito: clarificar el significado de ciertos términos, para las que no estén familiarizados con ellos con y, al mismo tiempo, fijar nuestra posición en aquellos casos en que puedan existir diversas interpretaciones o corrientes relacionadas con esta terminología.

Escobar (2005), menciona que sobre el tema de las competencias laborales escriben por estos días, y gran parte de ellos coincide en opinar que las mismas constituyen una nueva alternativa para incrementar el rendimiento laboral y la motivación, entre otros aspectos, lo cual sin duda constituye la finalidad de la aplicación de este modelo (Gestión por Competencias). Este artículo contribuye a sistematizar los conocimientos sobre el tema, describiendo para ello una serie de aspectos relacionados con el concepto de competencias. Los cambios que hoy se producen en el entorno empresarial, caracterizados por la globalización de la economía, y la continua introducción de las nuevas tecnologías en los procesos de producción y administración en las organizaciones, han provocado a su vez, cambios en las estructuras al interior de las mismas, existiendo la tendencia al aplanamiento de estructuras y a la constante evolución de los puestos de trabajo, lo cual hace difícil mantener la estabilidad de los mismos. Esta nueva realidad también ha modificado el contrato entre las organizaciones y sus miembros, basándose ahora en el desarrollo profesional de los empleados y en la búsqueda, por parte de dichas organizaciones, de nuevas formas para potenciar al máximo las competencias de su personal. Para dar respuesta a este gran reto, muchas empresas han optado por la aplicación de un Sistema de Competencias Laborales,⁴ como una alternativa para impulsar la formación y la educación, en una dirección que logre un mejor equilibrio entre las necesidades de las organizaciones y sus miembros.

Continuando con Escobar (2005), menciona que como en efecto, el concepto de competencias es muy utilizado por estos días en el contexto empresarial, para designar un conjunto de elementos o factores, asociados al éxito en el desempeño de las personas, y cuando se hace referencia a los orígenes del mismo, por lo general encontramos que se cita a McClelland. No obstante, en la literatura se hace referencia a algunos trabajos anteriores a los de este autor, útiles para comprender mejor el origen del término. En 1949, T. Parsons elabora un esquema conceptual que permitía estructurar las situaciones sociales, según una serie de variables dicotómicas. Una de estas variables era el concepto de Logros vs Atributos, que en esencia consistía en valorar a una persona por la obtención de resultados concretos, en vez de hacerlo por una serie de cualidades que le son atribuidas de una forma más o menos arbitraria (Resultados vs Buena Cuna). Casi diez años después, en 1958, Atkinson lograba demostrar de forma estadística la utilidad del dinero como un incentivo concreto que mejoraba la producción, siempre que el mismo estuviese vinculado a resultados específicos.

METODOLOGÍA

Gran parte de esta investigación es de tipo documental, con una revisión bibliográfica en libros, revistas, periódicos, y de estadísticas del INEGI, así como consulta de artículos y páginas de internet. Es de tipo cualitativo donde se está utilizando métodos que siguen una disciplina científica basados en principios

teóricos para la toma de decisiones. Se tomó como referencia pequeñas muestras de acuerdo a un proceso de observación, que permite hacer un diagnóstico de la competitividad de organizaciones del Sector Terciario en la Zona Oriente del Estado de México, que para la cual, se está realizando un estratificado por municipio, que presentan en un principio deficiencias de competencia laboral. Es de tipo descriptivo debido a que se particulariza cómo pueden ser beneficiados dichas empresas del sector. Así mismo, por medio del mismo se describen datos para conocer las situaciones, costumbres, actitudes más importantes a través de las actividades como el objeto de estudio y sus procesos. Fue de tipo no experimental transversal debido a que las variables son independientes. Los trasversales recolectan datos en un solo momento en un tiempo único, su propósito fundamental es describir variables y analizar su incidencia y relación en un momento dado.

RESULTADOS

Se cuenta con resultados parciales, y continua con el trabajo de campo, mediante un instrumento que pueda determinar el comportamiento de la competitividad de organizaciones del Sector Terciario en la Zona Oriente del Estado de México, como oportunidad de generar estrategias que le permitan mejorar las deficiencias en la competencia laboral que presentan. Así mismo, se está considerando una serie de factores claves para su éxito, que le permitan posicionarse en un mercado competitivo. Para lograr este objetivo, se deben cumplir dos condiciones: proporcionar las herramientas necesarias para medir la competitividad interna de los empleados, y que le permita sobrevivir ante la competencia, y darle a los empleados los instrumentos adecuados para el desarrollo de sus actividades, para dar un mejor servicio a sus clientes y proveedores. Una vez que saben cuáles son los clientes, deberá estudiar sus necesidades y sus comportamientos, es decir, las causas por las que deciden escoger una oferta en lugar de otra. A partir de ese momento, la empresa podrá trazar su estrategia para su posicionamiento.

REFERENCIAS BIBLIOGRAFICAS

Alles, Martha Alicia (2006), “Desarrollo del Desarrollo del Talento Humano basado en Competencias”, Editorial Granica, México, DF, México.

Alles, Martha Alicia (2016), “Selección por competencias: (Nueva Edición)”, Editorial Granica, México, DF, México.

Escobar Valencia Miriam (2005), “¿Las competencias laborales: la estrategia laboral para la competitividad de las organizaciones?”, Revista Estudios Gerenciales Nro 96, Julio – Septiembre 2005, by Universidad ICESI, Cali Colombia, Colombia.

McClelland David C (1987), “Human Motivation”, Cambridge University Press, USA.

BIOGRAFIA

Yesenia Burgos Madariaga, Centro Universitario UAEM Amecameca

Omar Ernesto Terán Varela, Centro Universitario UAEM Amecameca

LA INCLUSIÓN FINANCIERA EN LAS MICROEMPRESAS: EL CRÉDITO FACTOR ESTRATÉGICO PARA LA COMPETITIVIDAD Y DESARROLLO ECONÓMICO

Héctor Fabian Gutiérrez Rangel, Universidad de Guanajuato

RESUMEN

La inclusión financiera respecto al acceso al crédito se ha convertido en un objetivo primordial de las autoridades en el Estado de Guanajuato, la falta de conocimiento y el bajo nivel de acceso al financiamiento a diversos programas del gobierno por parte de los micro empresarios son una de las principales causas de falta de competitividad, crecimiento y un alto índice de mortandad de las pequeñas empresas en México. Esta investigación se realizó a una muestra de 256 empresarios en la ciudad de Guanajuato, en aras de identificar las causas por las cuales los empresarios desconocen o no tienen la oportunidad de acceder a servicios que oferta el gobierno a través de la inclusión financiera. Los resultados muestran que 68% no tienen conocimiento de los programas que oferta el gobierno, asimismo el 32% ha solicitado algún tipo de financiamiento y un 29% mencionan que las tasas de interés son altas. Por otra parte, de los que tienen desconocimiento el 29% mencionaron tener desconfianza del gobierno y de las instituciones financieras.

PALABRAS CLAVE: El Crédito, Pequeñas Empresas, Inclusión Financiera

THE FINANCIAL INCLUSION IN MICROENTERPRISES: THE STRATEGIC FACTOR CREDIT FOR COMPETITIVENESS AND ECONOMIC DEVELOPMENT

ABSTRACT

Financial inclusion, regarding access, to credit has become a primary objective of the authorities in the State of Guanajuato, the lack of knowledge and the low level of access to financing to various government programs by micro entrepreneurs are the main causes of lack of competitiveness, growth and a high death rate of small businesses in Mexico. This research was carried out on a sample of 256 entrepreneurs in the city of Guanajuato, in order to identify the causes for which business owners are unaware or do not have the opportunity to access services offered by the government through financial inclusion. The results show that 68% have no knowledge of the programs offered by the government, likewise 32% have requested some type of financing and 29% mention that the interest rates are high. On the other hand, of those who are ignorant, 29% mentioned having distrust of the government and financial institutions.

JEL: G00, G2, G20, G22, G21, G23, G28

KEYWORDS: Credit, Small Businesses, Financial Inclusion

INTRODUCCIÓN

Una de las principales razones por las cuales se investigó el tema de inclusión financiera se debió a que existen 4 millones 15 mil unidades empresariales de las cuales el 99.8% son micro, pequeñas y medianas

empresas que se encargan de generar el 52% del Producto Interno Bruto (PIB) y el 72% de los empleos de acuerdo al Instituto Nacional de Estadística y Geografía (INEGI). El riesgo de morir de este sector es muy alto respecto a la de las grandes empresas debido a la falta de planeación y control, el difícil acceso al crédito entre otros factores. La Comisión Nacional para la Protección y Defensa de los Usuarios de los Servicios Financieros (CONDUSEF) define a la micro, pequeña o mediana empresa como una unidad económica que es operada por una persona natural o jurídica, bajo cualquier forma de organización jurídica o gestión empresarial y que desarrolla cualquier tipo de actividad ya sea de producción, comercialización o prestación de servicios”. El 75% de las empresas que abren en México, quiebran durante los primeros siete años, una de las razones es la falta de acceso al crédito. Por tal motivo en este artículo se realizó un estudio sobre la percepción que tienen los micro empresarios respecto al acceso al crédito y conocimiento de los diversos programas gubernamentales que crea el gobierno con la finalidad de apoyar a este sector para que sea más competitivo. Por otro lado, la falta de profesionalismo de los mismos empresarios, de educación financiera, la falta de mecanismos para controlar sus principales actividades de compra y venta de productos y servicios, son otros factores que inciden a no tener acceso al financiamiento que otorgan las instituciones financieras. Uno de los factores principales por los cuales las personas no cuentan con una educación financiera adecuada es por la situación económica que tiene el país respecto a las políticas de cobertura en educación.

Aunque en los últimos años han mejorado los indicadores México según datos de la Organización para la Cooperación y Desarrollo Económico (OCDE) destacando la cobertura en educación superior de 37.3% y en educación básica del 96.4%. Lo anterior, es fundamental para contar con gente preparada con conocimientos básicos que permitan aplicar sus conocimientos en la administración de sus negocios y contar con las habilidades para buscar opciones de financiamiento. Una adecuada inclusión financiera en las pequeñas y medianas empresas tendría un gran impacto en el desarrollo de las mismas, ya que se podría solventar financiamiento a su estructura y a la innovación de nuevos productos y ser más competitivas en un entorno globalizado. Las pequeñas empresas en México son consideradas como el motor principal de la economía de un país, los gobiernos preocupados por desarrollar mayor competitividad en este sector han desarrollado planes estratégicos para generar programas de acceso a créditos, de capacitación en el afán de atacar el índice de mortalidad de estas organizaciones. Investigaciones realizadas en este tema en particular, hacen mención sobre el bajo índice de conocimiento sobre aquellos apoyos financieros que existen por parte del gobierno federal, estatal e instituciones financieras a las microempresas para su desarrollo y competitividad en la ciudad de Guanajuato.

La inclusión financiera hoy en día se considera un tema relevante para la subsistencia de las microempresas toda vez que incide en desarrollo económico de un país. Así mismo, el gobierno federal dentro de su plan estratégico contempla acciones para fomentar un mayor apoyo crediticio a este sector empresarial que en su mayoría son clasificadas en este nivel, en el estado de Guanajuato se tienen registrados 7,238 MIPyME's en 2015 de los cuales el 29.47% tiene conocimiento sobre aquellos programas de promoción y apoyo que el gobierno otorga conforme al estudio realizado Instituto Nacional de Estadística y Geografía (INEGI) y en conjunto con el Banco Nacional de Comercio Exterior (BANCOMEXT). Por lo anterior es pertinente realizar esta investigación con el fin de contar con información confiable para determinar el impacto que tiene la inclusión financiera respecto al crédito en las microempresas y si ha contribuido a desarrollar competitivamente este sector.

REVISIÓN DE LITERATURA

Secretaría de Economía define a Las microempresas como todos aquellos negocios que tienen menos de 10 trabajadores, generan anualmente ventas hasta por 4 millones de pesos y representan el 95 por ciento del total de las empresas y el 40 por ciento del empleo en el país; además, producen el 15 por ciento del Producto Interno Bruto. Por otra parte, la Comisión Nacional Bancaria y de Valores (CNBV) y Banco de México (BM) definen a la inclusión financiera como el tener acceso a un conjunto de productos y servicios

financieros por parte de la población, bajo una regulación apropiada que cuida los intereses de los usuarios del sistema financiero que incluyen crédito, ahorro, seguros, sistema de pagos y pensiones, así como la educación financiera y protección al consumidor. La Comisión Nacional para la Protección y Defensa de los Usuarios de Servicios Financieros (CONDUSEF) lo define como la estrategia de bancarización que abarcará todos los segmentos de la población y todos los productos financieros; considerará una gran coordinación entre el sector público y privado; y girará sobre dos conceptos básicos «Presupuesto y Riesgo». Instrumentando la estrategia nacional de educación financiera para así fortalecer los mecanismos de transparencia y protección al consumidor e incentivar la expansión de la infraestructura bancaria, y evolucionar junto con los usuarios de servicios financieros.

Otras instituciones financieras en México describen a la inclusión financiera como la base de la pirámide para promover iniciativas de bancarización y la accesibilidad financiera a través de un plan global de educación financiera. Asimismo, el Banco Mundial hace referencia al acceso que tienen las personas y las empresas a una variedad de productos y servicios financieros útiles y asequibles que satisfacen sus necesidades —como pagos y transferencias, ahorro, seguros y crédito— y que son prestados de una manera responsable y sostenible. De acuerdo al Banco Mundial (2015), los líderes mundiales establecieron 17 objetivos globales, los cuales ayudarán a disminuir la pobreza que serán medibles dentro de los próximos 15 años. La inclusión financiera abarca 7 de los objetivos por lo cual la importancia de realizar programas para el fomento de la misma. Más de 200 millones de microempresas y pequeñas y medianas empresas (MIPYMES), formales e informales, en las economías emergentes carecen del financiamiento adecuado para prosperar y crecer.

(Roa, 2013) Con su artículo titulado *“Inclusión financiera en América Latina y el Caribe: acceso, uso y calidad”* muestra las tendencias generales de la inclusión financiera en América Latina y el Caribe a partir de sus diferentes dimensiones: acceso a diversos productos financieros, el uso que se les da a estos productos y una tercera dimensión que se empieza a agregar a la definición de inclusión financiera tiene que ver con la naturaleza y las características del acceso y uso de los servicios financieros; es decir, con la calidad o eficacia de estos. Las principales fuentes que uso fueron informes y las encuestas realizadas a las entidades financieras por los bancos centrales o las superintendencias. Un aporte importante es el que nos presentan (Mehrotra & Yetman, 2015) en su artículo *“Inclusión financiera: Implicaciones para los bancos centrales”* donde se dispone de datos de la encuesta de inclusión financiera en distintos países. El grado de inclusión financiera varía ampliamente por región y por nivel de ingresos pues la proporción de adultos que poseía una cuenta varía de apenas por encima del 20% en promedio en países de bajos ingresos hasta casi un 90% en las economías de altos ingresos y dentro de las economías de mercado emergentes (eme) más grandes, la encuesta sugiere que menos de un 40% de los adultos son titulares de cuentas en la India, México y Nigeria, mientras que son más de un 60% en China y Polonia

En la Encuesta Nacional sobre Productividad y Competitividad de las Micro, Pequeñas y Medianas Empresas (ENAPROCE) que se realizó en 2015 el Instituto Nacional de Estadística y Geografía (INEGI) en conjunto con el Instituto Nacional del Emprendedor (INADEM) y el Banco Nacional de Comercio Exterior (BANCOMEXT) en un proyecto con el fin de promover un fomento cultural de nuestro país se dio a conocer que del total de empresas consideradas en la ENAPROCE 2015 el 97.6% son microempresas y concentran el 75.4% del personal ocupado total. Le siguen las empresas pequeñas, que son un 2% y tienen el 13.5% del personal ocupado. Las medianas representan 0.4% de las unidades económicas y tienen poco más del 11% de los ocupados (INEGI, 2016) en un estudio realizado sobre la informalidad en las pequeñas empresas afirma que ésta es la principal barrera de entrada al crédito formal para las Micro, Pequeña y Medianas Empresas (MIPyME's). Sólo el 7.1 por ciento de estas empresas cuenta con algún tipo de financiamiento. Este número contrasta con el 59.4 por ciento de las grandes empresas. La falta de crédito afecta el crecimiento de las microempresas con el 22.7%, en tanto que para las empresas pequeñas y medianas el 24.4% y 24.0%, respectivamente, opina que el exceso de trámites gubernamentales e impuestos altos incide en su desarrollo. Asimismo, existen unidades económicas que declaran no tener problemas para

su crecimiento, tal es el caso del 20.0%, 16.8% y 12.5% de las empresas medianas, pequeñas y micro en forma respectiva. En el Estado de Guanajuato según información presentada por la Secretaría de Economía de Desarrollo Social se apertura 3,687 micro y pequeñas empresas en un periodo de dos años, han generado 7 mil 978 empleos y una inversión privada de 482.9 millones de pesos; gracias al Sistema de Apertura Rápida de Empresas que opera en 36 municipios. Durante 2014 en Guanajuato abrieron mil 514 micro y pequeñas empresas, las cuales generaron 3 mil 352 empleos y se realizó una inversión privada de 235.6 millones de pesos. En la Encuesta Nacional sobre Productividad y Competitividad de las Micro, Pequeñas y Medianas Empresas (ENAPROC) que se realizó en 2015 también se destacaron el número de micro, pequeñas y medianas empresas que se registraron en el estado de Guanajuato de los cuales se conocen que sus principales giros son: alimentos, bebidas, tabaco y confitería, equipo de transporte terrestre excepto ferroviario, Industria textil, servicios turísticos, químico, servicios de investigación y desarrollo tecnológico, Productos farmacéuticos, equipo médico y algunos instrumentos de medición y la categoría que engloba a otros.

METODOLOGÍA

La metodología aplicada en esta investigación es mixta, es decir, por un lado, la cuantitativa permite explicar la relación que existen entre cada una de las variables estudiadas. Por otra parte, se utilizó la metodología cualitativa, aplicando cuestionarios en los respectivos establecimientos de los comerciantes. Algunos autores debaten y afirman cuales son los beneficios de utilizar una metodología mixta, pues es claro que el utilizar este tipo de metodologías el panorama a interpretar se hace más amplio ya que existen datos que estadísticamente nos arrojan un resultado que numéricamente se puede interpretar y los datos que se pueden obtener de manera más enfocados a la realidad pues la muestra en estudio también da una opinión objetiva de su medio, dato que de igual manera se puede interpretar. Por un lado, Vera (2005) manifiesta que resulta imposible en un proceso de construcción de conocimientos los estudios no se apoyen de la investigación cuantitativa, ya que no es posible observar sin interpretar las realidades de un fenómeno. Por otro lado, Henwood (2004) manifiesta que los estudios con enfoques mixtos permiten promover la innovación promoviendo nuevos caminos para revisar y reinventar las formas del conocimiento. En la práctica la investigación cualitativa y cuantitativa no son separables ya que todos los investigadores deben observar el fenómeno de forma sistematizada y a su vez interpretar eso que observan para construir el conocimiento.

Por un lado, los investigadores que adoptan la metodología cuantitativa hacen una crítica a la metodología cualitativa manifestando que los resultados tienden ser subjetivos, ya que no son medibles, en cambio, los investigadores que adoptan la metodología cualitativa hacen una crítica a la metodología cuantitativa debido a que esta es impersonal incapaz de capturar la experiencia humana como resultado de las interacciones de los individuos. Los enfoques mixtos se fundamentan en que los procesos cuantitativos y cualitativos son dos opciones que el investigador elige de acuerdo al objetivo y problemática de investigación y ambos procesos son válidos o inválidos por sí mismos. Como lo subraya Henwood (2004), la validez no resulta ser una propiedad inherente de un método en particular, sino que concierne a la información recolectada, los análisis efectuados, los resultados y conclusiones alcanzadas en determinada investigación en un contexto y objetivo particular. Es por ello por lo que en este trabajo resulta interesante e innovador el uso de la metodología mixta utilizando ambos procesos con el fin de complementar los hallazgos alcanzados.

Objetivo de la Investigación

Determinar los factores que no permiten a las microempresas del municipio de Guanajuato tener acceso a los servicios crediticios, aplicando encuestas como instrumento de investigación, a una muestra de dirigentes de este segmento comercial, con la finalidad de desarrollar nuevas estrategias que promuevan el uso de los servicios crediticios, para que las microempresas tenga un mayor grado de participación en la inclusión financiera en el municipio de Guanajuato, y de este modo impactar favorablemente en aumento

de la competitividad y desarrollo económico del estado y del país. Proposición Las microempresas del municipio de Guanajuato no hacen uso de los servicios crediticios ofrecidos por las instituciones financieras y gubernamentales debido al desconocimiento de los programas de financiamiento existentes.

Muestra

La muestra está formada por 256 microempresas, usando un modelo estadístico de muestro sobre una población finita. Para poder conocer la muestra poblacional, lo que representa el 4.12% del total de la población. La elección de cada negocio fue totalmente aleatoria respecto de la distribución de cada local en el municipio de Guanajuato, tomando como prioridad el centro del mismo. Para efectos del tamaño, se determinó con base al número de empleados, de acuerdo con el criterio establecidos por el Diario Oficial de la Federación, del 30 de junio del 2009, es decir, microempresa es aquella que cuenta hasta con 10 empleados y hasta 4 mdp que se encuentre desarrollada en cualquiera de los sectores económicos que existen en México. Usando información registrada del Instituto Nacional de Estadística y Geografía respecto a las microempresas actualmente activas en la Capital de Guanajuato teniendo como resultado una cifra de 6,203 microempresas actualmente activas en la Capital. Usando un modelo estadístico de muestro sobre una población finita se usaron los datos como muestra la Tabla 1 para poder conocer la muestra poblacional a la cual se le realizaría la encuesta construida.

Tabla 1: Muestro de Población Finita

α	95%
$Z^2\alpha/2$	3.8416
p	50%
q	50%
N	6,203
e^2	0.0036

Fuente: Elaboración propia

Al tener los datos recolectados, se usó la formula correspondiente al modelo en uso como lo muestra la Tabla 2 donde al sustituir las variables que se obtuvieron con anterioridad se encuentra el número de encuestas necesarias que se deben realizar para obtener los resultados con un menor margen de error al interpretar las gráficas finales y los diagramas de dispersión a crear.

Tabla 2: Ecuación Del Modelo Sobre Población Finita

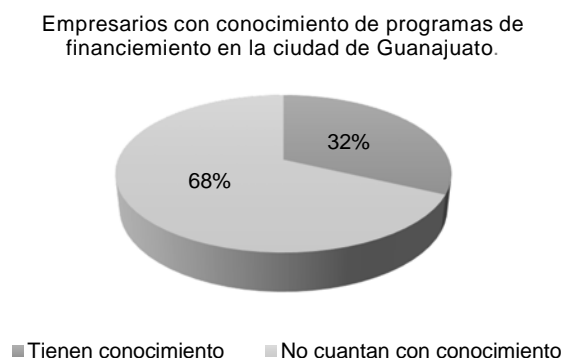
$n = \frac{Z^2\alpha/2}{e^2} \frac{p}{N} \frac{q}{+} \frac{N}{Z^2\alpha/2} \frac{p}{q}$
$n = \frac{3.8416}{0.0036} \frac{50\%}{6,203} \frac{50\%}{+} \frac{6,203}{3.8416} \frac{50\%}{50\%}$
$n = \frac{5957.36}{23.2912} = 256$ muestra

Fuente: elaboración Propia

RESULTADOS

Una vez realizada la encuesta a un total de 256 empresarios en el municipio de Guanajuato se obtuvieron resultados interesantes sobre la percepción que tienen sobre la inclusión financiera respecto al acceso al crédito, a través de los distintos programas que oferta el gobierno tanto Federal y Estatal a través de diversas instituciones financieras o dependencias públicas creadas para el apoyo y desarrollo de las micro, pequeñas y medianas empresas. Es importante señalar que para efectos de esta investigación se aplicó la encuesta al sector de la microempresa. En este sentido la Figura 1 muestra que el 68% de los empresarios entrevistados no conoce ningún tipo de programa de financiamiento por parte del gobierno para acceder a un crédito para invertir en el negocio y de esta manera mejorar su competitividad.

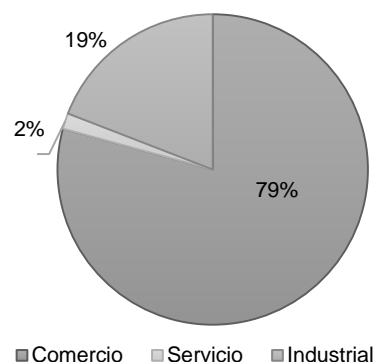
Figura 1: Porcentaje de Empresarios Que Desconocen Sobre los Programas de Financiamiento



Fuente: Elaboración propia

Actualmente Guanajuato es una ciudad que se dedica al comercio en todas sus áreas, desde el comercio de alimentos, ropa y productos de primera necesidad, es también pionera en el comercio turístico, por lo que el 79% de los microempresarios encuestados se dedican al sector económico del comercio como lo muestra la Figura 2.

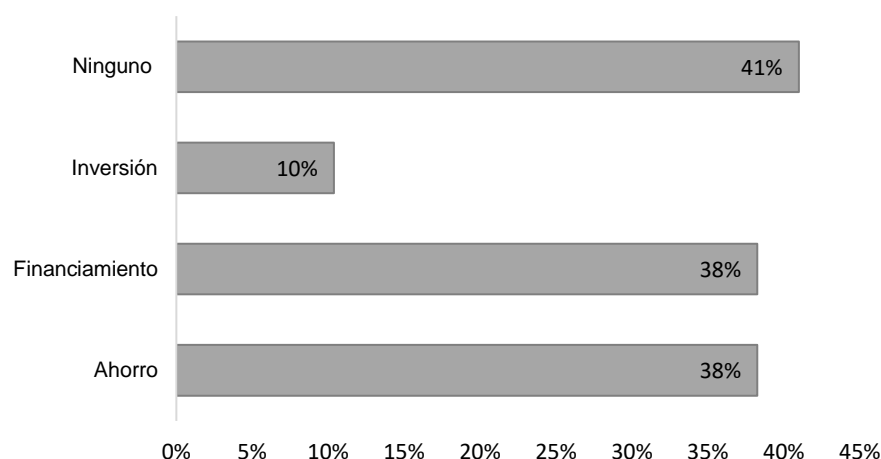
Figura 2: Giro Económico de las Microempresas Encuestadas



Fuente: Elaboración propia

Por otra parte, en el Figura 3 se puede observar que los microempresarios que han tenido al acceso a un tipo de servicio financiero el 38% lo ha utilizado para ahorro y financiamiento y sólo el 10% lo ha utilizado para invertirlo en el negocio y un 41% no mostró interés en hacer uso de algún tipo de financiamiento.

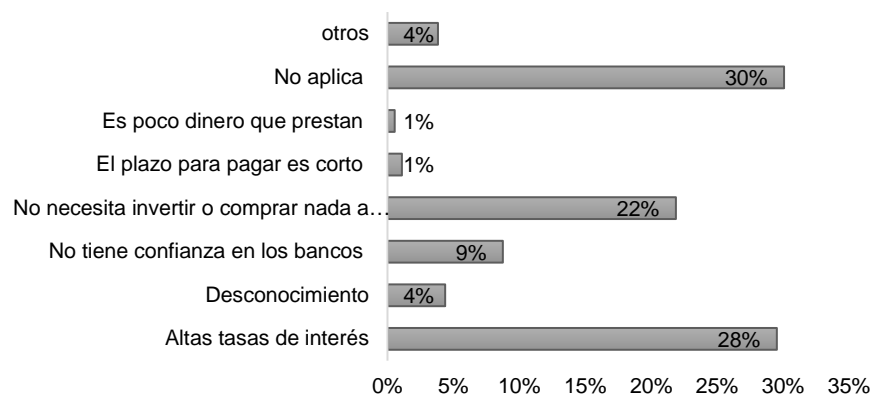
Figura 3: Servicios Financieros Adquiridos por los Empresarios Encuestados



*Nota: Los porcentajes no suman 100% debido a que las microempresas podrían conocer más de un servicio.
Fuente: Elaboración propia*

Por otra parte, en la Figura 4 se observan las razones los empresarios no han solicitado algún tipo de crédito, destacando el 28% que manifestaron que las tasas de intereses son muy elevadas, el 30 % no manifestó razón por la cual no ha solicitado algún tipo de servicio y un 22% mencionaron que no necesitaban acceso a un tipo de crédito para adquirir un producto o invertir en el negocio.

Figura 4: Razones Por las Cuales Los Empresarios No Han Adquirido un Servicio de Crédito



*Nota: Los porcentajes no suman 100% debido a que las microempresas podrían tener más de una razón.
Fuente: Elaboración propia*

CONCLUSIONES

La inclusión financiera respecto al acceso al crédito es un factor importante en el desarrollo de la competitividad de las pequeñas empresas en México. Sin embargo, los resultados de esta investigación muestran que existe un gran desconocimiento de los empresarios sobre los diversos programas que el gobierno cuenta para acceder al financiamiento en sus diferentes niveles. De los empresarios encuestados que han tenido acceso al financiamiento el 38% lo ha utilizado para ahorro y sólo el 10% lo ha utilizado para invertirlo en el negocio y un 41% no mostró interés en hacer uso de algún tipo de financiamiento. Por otra parte, las razones por las cuales no solicitan algún tipo de crédito son por las altas tasas de interés que

cobrar las instituciones financieras y por no cumplir los requisitos establecidos que casi siempre están destinados a empresarios con ingresos mayores a 2 millones de pesos anuales y los micros empresarios no rebasan dicha cantidad, lo que los deja en una situación de competencia desleal contra grandes corporativos que cuentan con una administración más formal.

BIBLIOGRAFÍA

Henwood, K. (2004). Reinventing validity: Reflections on principles and practices from beyond the quality-quantity divide. En *Mixing methods in Psychology*. (págs. 37-57). Todd, Z., Nerlich, B., Mckeown, S. and Clarke, D. (Eds.).

Roa, M. (2013). Inclusión financiera en América Latina y el Caribe: acceso, uso y calidad. Recuperado de http://www.cemla.org/PDF/boletin/PUB_BOL_LIX03-01.pdf

Leyva, J. (2016). Informalidad frente entrada de MIPyME's a préstamos bancarios. Recuperado de <http://www.elfinanciero.com.mx/economia/informalidad-frenta-entrada-de-mipymes-a-prestamos-bancarios.html>

Vera, J. (2005). La imposibilidad de separar lo observado de lo interpretado: la falsedad del empirismo y del interpretativismo como métodos distintos. *Episteme* No. 6. Año 2. Consultado el 18 de febrero de 2015 de: http://www.uvmnet.edu/investigacion/episteme/número5-05/colaboracion/a_observacion.asp.

Banco de México. (2017). Recuperado el 04 de septiembre de 2017, de Sistemas de pago, transferencias, Banco de México: <http://www.banxico.org.mx/sistemas-de-pago/index.html>

Comisión Nacional Bancaria y de Valores. (2017). Recuperado el 24 de agosto de 2017, de Descripción de Inclusión Financiera: www.cnbv.gob.mx/Inclusión/Paginas/Descripción.aspx

Instituto Nacional de Estadística y Geografía. (JULIO de 2016). ENAPROCE. Obtenido de INEGI: http://internet.contenidos.inegi.org.mx/contenidos/productos/prod_serv/contenidos/espanol/bvinegi/productos/nueva_estruc/promo/ENAPROCE_15.pdf

PERCEPCIÓN DEL USO DE LOS SIMULADORES DE NEGOCIO EN ESTUDIANTES UNIVERSITARIOS DE LA CARRERA DE ADMINISTRACION DE EMPRESAS

Erick Paul Murillo Delgado, Universidad de Guayaquil

Christian Wladimir Bermúdez Gallegos, Universidad de Guayaquil

Yanina Bajaña Villagómez, Universidad Católica Santiago de Guayaquil

RESUMEN

En la última década, con el avance acelerado de la tecnología se ha propagado el uso de juegos de computadora pasando del entretenimiento hasta convertirse en medios de aprendizaje, denominados juegos serios o aprendizaje basado en juegos. Esto ha dado lugar al desarrollo de herramientas tecnológicas como los simuladores de negocios que son de suma importancia en el proceso de aprendizaje del estudiante de administración de empresas, ya que ayuda a la generación de habilidades en la toma de decisiones gerenciales sin ser influenciados por el alto riesgo que esta puede representar. El propósito de este estudio es reflejar la percepción del uso de los simuladores de negocios como parte del proceso de aprendizaje en las aulas de clases de alumnos universitarios. Para lo cual se consideró una metodología cuantitativa partiendo de la exhaustiva revisión teórica y aplicando como instrumento de recolección de datos una encuesta previamente estructurada y aplicada a una muestra aleatoria simple de 190 estudiantes de pregrado de la carrera de administración de empresas de una universidad pública y otra privada de la ciudad de Guayaquil. Los resultados demuestran que existe una percepción alta de los beneficios recibidos por parte de los participantes al utilizar simuladores de negocios como parte de su proceso de aprendizaje. Se propone que estudios posteriores utilicen los resultados obtenidos para demostrar la mejora de competencias específicas en los participantes de futuros experimentos.

PALABRAS CLAVES: Simuladores de Negocios, Administración de Empresas, Proceso de Aprendizaje

PERCEPTION OF THE USE OF BUSINESS SIMULATORS IN UNIVERSITY STUDENTS OF THE CAREER OF BUSINESS ADMINISTRATION

ABSTRACT

In the last decade, with the accelerated advancement of technology has spread the use of computer games from entertainment to become the means of learning, called serious games or learning based on games. This has led to the development of technological tools such as business simulators that are of paramount importance in the student learning process of business administration, as it helps the generation of skills in managerial decision making without being influenced by the High risk that this may represent. The purpose of this study is to reflect the perception of the use of business simulators as part of the learning process in the classes of the university students' classes. For what is considered a quantitative methodology of the exhaustive theoretical revision and applying as an instrument of data collection a previous survey of the structure and the application of a simple random sample of 190 undergraduate students of the business management career of a university Public and another private city of the city of Guayaquil. The results show that there is a high perception of the benefits received by participants from using business simulators as part of their learning process. It is proposed that subsequent studies use the results obtained to demonstrate the improvement of specific competences in the participants of future experiments.

JEL: M, M1, M19, I, I2, I23

KEY WORDS: Business Simulators, Enterprise Management, Learning Process

INTRODUCCIÓN

El crecimiento de la era tecnológica de forma acelerada en los últimos años ha incursionado en distintas aristas de la vida cotidiana del hombre pasando desde el entretenimiento hasta convertirse en medios de aprendizaje no solo lúdicos, sino que acercan al individuo con realidades que pudieran resultar costosas de replicar en la vida real. Por ejemplo, el Ejército de los Estados Unidos usa juegos de entrenamiento táctico y estratégico que permite a los aprendices participar en simuladas batallas del mundo real (Iuppa, & Borst, 2012; Rystedt, 2002). Los juegos de ordenador parecen ofrecer experiencias motivadoras y gratificantes, ante tal posición los investigadores educativos y los responsables de la formulación de políticas se han preocupado en integrar mejor los juegos a los programas educativos (Kirriemuir y McFarlane, 2004). Esta tendencia ha impulsado en el desarrollo de distintos simuladores para el aprendizaje convirtiéndolos en un recurso digital para la transferencia de conocimientos. Gelves, Torres, y Montoya, (2010) evidenciaron que el uso de herramientas tecnológicas como los simuladores propician un ambiente de enseñanza-aprendizaje favorable en temas como matemáticas, física y programación dada la reproducción de actividades diversas que permite lograr la participación de los alumnos en forma significativa.

La relevancia de este artículo se enfoca en evidenciar y describir como el uso de simuladores a nivel latinoamericano, específicamente en Ecuador, todavía no ha tenido el avance suficiente como lo es en el ámbito europeo, asiático y norteamericano (Gelves, Torres, & Montoya, 2010). Considerando que el uso de estos podría convertirse en una práctica metodológica apropiada en el proceso de enseñanza aprendizaje que la educación universitaria debería implementar con el objetivo de que el estudiante asocie lo aprendido en los salones de clase a un caso práctico mediante un hipotético ambiente de negocios. Una de las características de los simuladores es que el estudiante aprende a vivir de sus errores y aciertos en la toma de decisiones empresariales. El estudiante comprende el efecto de las variables externas en su sector industrial y le permite analizar y percibir las oportunidades y amenazas que se le presentan, así como detectar las fortalezas y debilidades de su organización de una manera tangible. Diversos estudios reflejan que el uso de simuladores como herramientas de enseñanza aprendizaje ha tomado especial relevancia en las metodologías que se deben implementar se pueden mencionar estudios como el de Yusoff, Crowder, Gilbert, y Wills (2009) quienes proponen un modelo conceptual sobre cómo funcionan los simuladores en el proceso de enseñanza aprendizaje, otros estudios como el de Arnseth (2006) se enfocó en la determinación de la influencia de los simuladores en sistemas de aprendizaje. El presente estudio pretende describir la percepción del uso de simuladores en dicho proceso de aprendizaje, basados en premisas como que el uso de simuladores provoca mejora en comprensión de conceptos teóricos, herramienta para entrenamiento empresarial, desarrollo de trabajo en equipo y como los simuladores permiten practicar estrategias de negocios.

Importancia

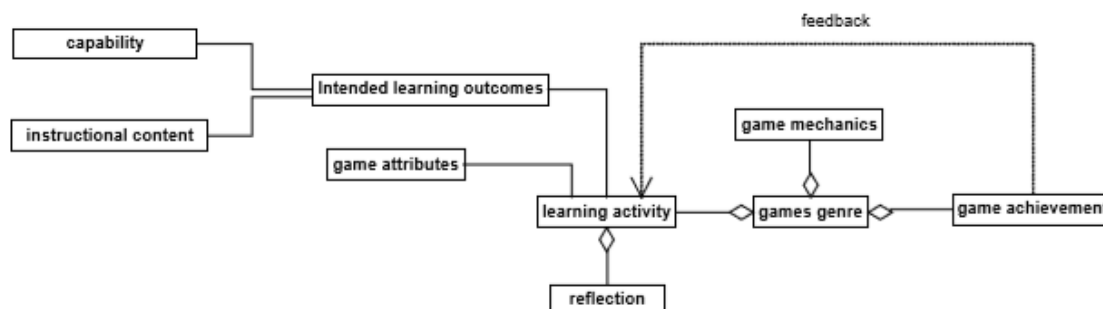
El aporte teórico radica en que este estudio aportará con evidencia empírica a lo que hasta ahora se conoce del uso de simuladores de negocio en el proceso de enseñanza aprendizaje. Reseñas sobre los efectos de juegos serios muestran resultados ambiguos (Ke, 2009; Sitzmann, 2011; Vogel et al., 2006; Wouters, Van Der Spek y van Oostendorp, 2009), pero varios eruditos han notado que en general la calidad del juego desarrollado es pobre (O'Neil et al., 2005) y que los juegos serios no son más eficaces en términos de aprendizaje que otros métodos de enseñanzas cuando son probados científicamente (Clark, Yates, Early, & Moulton, 2010). Muchas afirmaciones están respaldadas por argumentos anecdóticos y carecen de sólida evidencia empírica. Sin embargo, en los últimos cinco años, más estudios empíricos han sido diseñados

para investigar los efectos de juegos serios sobre aprendizaje y motivación (Wouters, Van Nimwegen, Van Oostendorp, & Van Der Spek, 2013). La relevancia práctica de esta investigación radica en la importancia de incluir la utilización de simuladores de negocios en los syllabus de las materias que componen los pensum universitarios de la carrera de administración de empresas en el Ecuador. Pues, estas herramientas permiten la mejor comprensión de teorías y modelos de la gestión de negocios, lo cual brinda un soporte significativo en el proceso de enseñanza de las Instituciones de Educación Superior.

REVISIÓN DE LA LITERATURA

La naturaleza de esta investigación es de tipo cuantitativa ya que parte de un marco teórico con una exhaustiva revisión de la literatura que permite obtener las variables que componen el marco conceptual que fueron la base para el desarrollo del cuestionario utilizado en la recolección de datos. El estudio tuvo un corte transversal puesto que la recolección de datos se lo realizó en un periodo determinado de tiempo y de tipo no experimental ya que no se sometió a los encuestados a situaciones específicas ni se hubo manipulación de las variables de estudio (Hernández et al., 2006). Los autores Yusoff, Crowder, Gilbert, y Wills (2009) concluyeron que mediante el uso de simuladores el estudiante puede mejorar el rendimiento académico y practicar estrategias de negocios ya que la práctica y el ejercicio proporcionan la repetición del aprendizaje. Para lo cual propusieron un marco conceptual de nueve variables que se muestra en la Figura 1 y que se refiere a las capacidades, contenido instruccional, resultados de aprendizaje deseados, atributos del juego, actividad de aprendizaje, reflexión, mecanismo del juego, categoría del juego y desafío del juego.

Figura 1: Marco Conceptual para el Juego de Simulación de Negocios. Tomado de “a conceptual framework for serious games. in Advanced Learning Technologies, 2009” por Yusoff, a., Crowder, R., Gilbert, L., & Wills, G. (2009). ICALT 2009. Ninth IEEE International Conference on, pp.21-23.



Así mismo, Kirriemuir y McFarlane, (2004) mencionaron que la experiencia del juego parece afectar las expectativas de aprendizaje de los niños, en el sentido de que prefieren tareas rápidas, activas y exploratorias con canales de información múltiples y paralelos; lo que no es bien satisfecho por los métodos de instrucción tradicional. Entonces, se puede inferir que el método de aprendizaje mediante simuladores mejora la comprensión de conceptos teóricos por parte del estudiante. Otro aspecto que refleja un impacto positivo en el proceso de enseñanza aprendizaje mediante simuladores es el desempeño del equipo empresarial y los conocimientos adquiridos durante la simulación, tal como lo demostraron Gelves, Torres, y Montoya (2010), que el uso de simuladores como estrategia didáctica a través de los cuales se transfiere conocimiento, causa impacto positivo al convertir la clase más interesantes, existe mayor participación de los alumnos, son más claras las explicaciones que se dan, incrementan la retención al presentarse los contenidos, y aumenta la motivación y el gusto por aprender. Por su parte, O'Neil, Wainess, y Baker (2005) plantearon que los juegos serios abordan tanto las dimensiones cognitivas y afectivas del aprendizaje, permitiendo a los estudiantes adaptar el aprendizaje a sus necesidades cognoscitivas e intereses, y para proporcionar motivación hacia el aprendizaje (Malone, 1981). En base a las variables mencionadas se

formularon las preguntas que conformaron el cuestionario que fue utilizado para la recolección de los datos con una escala de Likert de seis puntos para no dar opción a una etiqueta neutral en las respuestas de los participantes. En la Tabla 1 se describe el sustento teórico de las variables que componen el cuestionario y las preguntas que forman parte del mismo.

Tabla 3: Variables Que Componen el Cuestionario Para Medir La Percepción del Uso de los Simuladores de Negocios

Variable	Indicador	Pregunta del Cuestionario
Habilidades	Comprensión de la Teoría	P2. ¿Cree usted que la práctica en el simulador de negocios mejora la comprensión de los conceptos teóricos de las materias finanzas, logística, administración de la producción, marketing?
Atributos del Juego	Entrenamiento Empresarial	P3. ¿Es necesario que en las universidades se utilicen los simuladores de negocios en el entrenamiento empresarial de los alumnos?
Desafío del Juego	Conocimiento Empresariales	P4. ¿Los resultados obtenidos en la simulación, muestran el desempeño del equipo empresarial y los conocimientos adquiridos?
Reflexión	Estimula Razonamiento Analítico	P5. ¿Las clases en el simulador resultan motivantes y desafían mis conocimientos?
Mecánica del Juego	Practicar Estrategias de Negocio	P6. ¿Cree usted que la practica en el simulador de negocios mejora la comprensión de los conceptos teóricos de las materias finanzas, logística, administración de la producción, marketing?
Atributos del Juego	Trabajo en Equipo	P7. ¿Fue una gran oportunidad para aprender a trabajar en equipo?

En esta tabla se describe las preguntas asociadas con las variables teóricas e indicadores

METODOLOGIA

El instrumento fue validado previamente mediante entrevista a un grupo de expertos en el uso de simuladores de negocios quienes proporcionaron los ajustes que fueron adecuados al instrumento de medición, el mismo que fue aplicado a una muestra de 190 estudiantes pertenecientes a los dos últimos semestres de estudio de la carrera de Administración de Empresas de la Universidad Estatal de Guayaquil y de la Universidad Católica de Santiago de Guayaquil. Las dos universidades utilizan para el proceso de enseñanza aprendizaje la plataforma de simulación LABSAG que dispone de 10 simuladores de negocios en áreas específicas y generales de la gestión empresarial.

El estudio consistió en un proceso de tres etapas, capacitación, recolección de datos y análisis de los datos. En la etapa inicial se capacitaron a 370 estudiantes entre ambas universidades en el uso de la herramienta de simulación de negocios, 250 de la Universidad Guayaquil y 120 de la Universidad Católica de Santiago de Guayaquil. En la siguiente etapa se recolectaron los datos de la percepción de los estudiantes acerca del uso del simulador de negocios, esta encuesta fue realizada en una sola instancia de tiempo en ambas universidades empleando una muestra aleatoria sin estratificación, pues no se desea resaltar ninguno de los dos grupos de la población ni determinar relaciones entre los mismos. En una última etapa se analizó el conjunto de datos recolectados mediante estadística descriptiva para obtener las características de la muestra mediante medidas de centralización y de dispersión.

RESULTADOS

Los datos recolectados fueron tabulados y analizados mediante estadística descriptiva utilizando la herramienta informática SPSS versión 23, con lo cual se obtuvo las frecuencias relativas de las respuestas que dieron los participantes de la muestra tomada. En la Tabla 2 se presentan las medias aritméticas obtenidas de cada una de las preguntas, cuyos valores son superior a los cuatro puntos de la escala de Likert de 6 puntos, que va desde 1=totalmente en desacuerdo hasta 6=totalmente de acuerdo.

Tabla 4: Medias Aritméticas de las Percepciones Captadas de los Estudiantes en el Uso de los Simuladores de Negocios

Pregunta	Media
P1. ¿Considera que el simulador de negocios le dejó una gran enseñanza y/o es realmente una pérdida de tiempo?	5.72
P2. ¿Cree usted que la práctica en el simulador de negocios mejora la comprensión de los conceptos teóricos de las materias finanzas, logística, administración de la producción, marketing?	5.17
P3. ¿Es necesario que en las universidades se utilicen los simuladores de negocios en el entrenamiento empresarial de los alumnos?	5.33
P4. ¿Los resultados obtenidos en la simulación, muestran el desempeño del equipo empresarial y los conocimientos adquiridos?	4.78
P5. ¿Las clases en el simulador resultan motivantes y desafían mis conocimientos?	5.18
P6. ¿Cree usted que la práctica en el simulador de negocios mejora la comprensión de los conceptos teóricos de las materias finanzas, logística, administración de la producción, marketing?	5.19
P7. ¿Fue una gran oportunidad para aprender a trabajar en equipo?	5.22

En esta tabla se muestra las medias obtenidas de cada una de las preguntas

En general, la percepción del uso de los simuladores de negocios de los estudiantes universitarios de la carrera de Administración de Empresas es superior a los cinco puntos de la escala de Likert, lo cual refleja que están bastante de acuerdo en los beneficios obtenidos en el proceso de enseñanza aprendizaje luego de su participación en el juego de simulación.

Discusión

El perfil de los participantes pertenece a estudiantes universitarios de los últimos semestres de sus carreras profesionales con un rango de edad entre 20 y 23, correspondiente a la generación millennials que se caracterizan por un avanzado manejo de la tecnología, internet y las redes sociales, además de ser propensos a aceptar mayores responsabilidades en sus carreras profesionales según estudio realizado por la Organización Mundial de Mercadotecnia en el año 2000.

La pregunta P4 que cuestiona si ¿los resultados obtenidos en la simulación, muestran el desempeño del equipo empresarial y los conocimientos adquiridos? refleja un puntaje inferior de 4.78, debido a que los estudiantes perciben que la herramienta no es amigable para el proceso de toma de decisiones, por lo tanto, no refleja totalmente el desempeño de sus equipos o sus conocimientos adquiridos en clases.

Por otro lado, la pregunta P1 que capta la percepción del participante acerca de que, ¿Considera que el simulador de negocios le dejó una gran enseñanza y/o es realmente una pérdida de tiempo? Los participantes del estudio demuestran estar casi en total acuerdo con respecto a su aporte en el proceso de aprendizaje al afianzar los conocimientos teóricos adquiridos en el aula de clases.

CONCLUSIONES

De los resultados obtenidos se concluye que los estudiantes de la carrera de Administración de Empresas de las universidades en Ecuador perciben que el uso de simuladores de negocios es significativamente relevante durante su proceso de aprendizaje, ya que involucra tanto a docentes como a estudiantes en un entorno virtual de negocios, donde cada equipo participante compite con otros simulando la dirección de

una empresa virtual, y analiza los posibles resultados para posteriormente ejecutar las estrategias que permitan llegar a la mejor decisión y ganar el juego.

Según la opinión de los encuestados, los simuladores de negocio se presentan como la principal herramienta tecnológica que complementa el proceso de adquisición del conocimiento en el aula de clases, desarrollando la capacidad de trabajar en equipo generando liderazgo dentro de los grupos de trabajo y haciendo más reflexivo la toma de decisiones tomando en cuenta las variables externas que pudieran afectar su desempeño.

REFERENCIAS

- Arnseth, H. C. (2006). Learning to play or playing to learn-A critical account of the models of communication informing educational research on computer gameplay. *Game Studies*, 6(1).
- Gelves, G. A. C., Torres, R. G., & Montoya, M. S. R. (2010). Uso de simuladores como recurso digital para la transferencia de conocimiento. *Apertura*, 2(1), 86-100.
- Iuppa, N., & Borst, T. (2012). *Story and simulations for serious games: tales from the trenches*. CRC Press.
- Kirriemuir, J. & McFarlane, A. (2004). Literature Review in Games and Learning. Bristol: Nesta Futurelab series, report 8.
- Rystedt, H. (2002). *Bridging practices. Simulations in education for the health-care professions*. Gothenburg: Gothenburg Studies in Educational Sciences 187.
- Yusoff, A., Crowder, R., Gilbert, L., & Wills, G. (2009, July). A conceptual framework for serious games. In *Advanced Learning Technologies, 2009. ICAIT 2009. Ninth IEEE International Conference on* (pp. 21-23). IEEE.
- Wouters, P., & Van Oostendorp, H. (2013). A meta-analytic review of the role of instructional support in game-based learning. *Computers & Education*, 60(1), 412-425.
- O'Neil, H. F., Wainess, R., & Baker, E. L. (2005). Classification of learning outcomes: Evidence from the computer games literature. *The Curriculum Journal*, 16(4), 455-474.
- Clark, R. E., Yates, K., Early, S., Moulton, K., Silber, K. H., & Foshay, R. (2010). An analysis of the failure of electronic media and discovery-based learning: Evidence for the performance benefits of guided training methods. *Handbook of training and improving workplace performance*, 1, 263-297.
- Wouters, P., & Van Oostendorp, H. (2013). A meta-analytic review of the role of instructional support in game-based learning. *Computers & Education*, 60(1), 412-425.
- Hernández, F., & Fernández, C. (2006). Baptista. Metodología de la Investigación. Cuarta edición. Mac Graw Hill editores. México DF México, 103, 205.

DIRECTRICES METODOLÓGICAS PARA EL DISEÑO DE INCUBADORAS DE NEGOCIOS EN INSTITUCIONES DE EDUCACIÓN SUPERIOR

Yolanda Saldaña Contreras, Universidad Autónoma de Coahuila
Fernando Miguel Ruiz Díaz, Universidad Autónoma de Coahuila
Laura Leticia Gaona Tamez, Universidad Autónoma de Coahuila
Juan Jesús Nahuat Arreguín, Universidad Autónoma de Coahuila
Kelly Alejandra Muñoz Peña, Universidad Autónoma de Coahuila

RESUMEN

Objetivo: describir, como resultado de una investigación efectuada, las directrices que guiaron el diseño de la metodología para la creación de una incubadora de negocios en una Institución de Educación Superior. Método: dada la extensión del manual que contiene dicha metodología, se analizaron, seleccionaron y sintetizaron los procedimientos efectuados que pueden ser útiles a otras universidades interesadas en el tema. Resultados: muestran las directrices, conceptos e ideas que orientaron la elaboración de dicha metodología y procedimientos operativos. Conclusión: apoyar al alumno emprendedor e impulsar el desarrollo de su negocio dentro de las universidades constituye un reto para enfrentar los embates que amenazan el futuro de nuestros egresados.

PALABRAS CLAVE: Directrices, Metodología, Incubadora de Negocios

ABSTRACT

Objective: to describe, as a result of a research done, the directives that guided the design of a methodology for the creation of a business incubator at a Higher Education Institution. Method: given the extension of the manual that contains such methodology, it was analyzed, selected and synthesized, the procedures carried out that can be useful to other universities interested on the subject. Results: the guidelines, concepts and ideas that oriented the production of such methodology and the operational procedures, are shown. Conclusion: to support the entrepreneur student and drive the development of his/her business inside the universities constitutes a challenge to confront the poundings that threatens the future of our graduates.

KEY WORDS: Guidelines, Methodology, Business Incubator

JEL: M10, M20, M50

INTRODUCCIÓN

La observación es fuente generadora de ideas de investigación (Rea y Parker, 2014). Como académicos-investigadores, observamos que existen alumnos que costean sus estudios o satisfacen necesidades personales a través de la venta de productos, ya sean fabricados por ellos mismos o terceros, dentro de la Facultad de Contaduría y Administración (FCA) de la Universidad Autónoma de Coahuila (UA de C). Estos alumnos poseen un espíritu emprendedor, son tenaces, buenos vendedores y creativos. Sin embargo, una vez que se gradúan, ocupan puestos que no corresponden a su formación. Y nos preguntamos ¿dónde quedó ese espíritu emprendedor? Tal vez la respuesta la encontremos en una declaración emitida por Yunus y Weber (2010):

“Cuando una siembra la mejor semilla del árbol más alto en una maceta pequeña, obtiene una réplica de ese árbol, pero en pequeño, de solo unas cuantas pulgadas de alto (árboles bonsái). No había nada malo con la semilla sembrada, pero la cantidad de tierra que se le dio para crecer era inadecuada...No hay nada equivocado con sus semillas, pero la sociedad nunca les dio una base suficiente para crecer”.

Dichos alumnos poseen un perfil emprendedor. Pero iniciar un negocio sin asesoría especializada y sin financiamiento, los obliga a emplearse en el empleo que encuentren disponible una vez que concluyen sus estudios. Consideramos entonces, que es de suma importancia que la FCA apoye aquellos alumnos con un perfil emprendedor para que obtengan asesoría y financiamiento para crear y/o hacer crecer su empresa. Por lo anteriormente expresado, efectuamos una investigación con la finalidad de diseñar una metodología para la creación y funcionamiento de una incubadora de negocios dentro de dicha institución. El resultado de dicha investigación se encuentra contenido en un extenso manual de 218 páginas titulado: *Metodología y Procedimientos Operativos para la Creación de una Incubadora de Negocios en la Facultad de Contaduría y Administración (Unidad Norte) de la Universidad Autónoma de Coahuila*. Por tanto, el objetivo de éste trabajo es exponer de forma sintetizada las principales directrices metodológicas que guiaron el diseño de una incubadora de negocios para una Institución de Educación Superior (IES) y que podría ser útil también, para otras IES de México.

REVISIÓN LITERARIA

Concepto de Incubadora de Negocios

En Batavia, N.Y., surgen los primeros conceptos de incubadoras. Como resultado de las diversas investigaciones en este campo, el concepto evolucionó de acuerdo con las necesidades, entornos y madurez alcanzada en esta área (Barreto, 2008). En México, la incubadora de negocios consiste en una organización cuyo objetivo es apoyar la creación y el desarrollo de pequeñas empresas o microempresas en sus primeras etapas de vida a través de la gestión empresarial, acceso a instalaciones y recursos con la finalidad de disminuir el riesgo inherente a la creación de un nuevo negocio (Valdés, 2015). Para Sánchez (2013), una incubadora de empresas es un centro generador de negocios. Su finalidad es acompañar, asesorar y capacitar a emprendedores para que transformen sus ideas en productos y servicios. Bajo este enfoque, en una incubadora se analizan las ideas de nuevos negocios y se seleccionan los proyectos más viables para su implementación. Dentro del mismo enfoque Perezcano (2011) agrega que parte de las actividades de una incubadora consisten en apoyar en el diseño del plan de negocios y en el proceso de crear la empresa a través de proporcionar consultoría en áreas tales como: administración, finanzas, mercadotecnia, recursos humanos, tecnología, etc. En la opinión de Wompner (2007), una incubadora se convierte en un organismo de apoyo para los nuevos empresarios, asesorando y prestando infraestructura con la finalidad de que una empresa que inicia reduzca los riesgos, costos de puesta en marcha y el proceso de aprendizaje por el que atraviesa toda persona que inicia su negocio. Durante la investigación documental efectuada se encontró que existen una considerable cantidad de definiciones sobre el concepto de incubadora de negocios. Por lo tanto se consideró pertinente seleccionar las aportaciones más relevantes publicadas por otros autores y se agruparon de acuerdo con su contribución (Ver Tabla 1).

Tabla 1: Aportaciones al Concepto de Incubadora de Negocios Por Diversos Autores

Autor	Aportación Significativa al Concepto de Incubadora de Negocios
Sánchez (2013)	Centro generador de negocios Transforma ideas en productos y servicios Analiza la viabilidad y puesta en marcha del negocio.
Tornatzky et al., (2003)	Transfiere a emprendedores los conocimientos necesarios para crear una empresa sólida. Minimiza el riesgo y la incertidumbre de las iniciativas empresariales.
Allesch, (1987)	Consolidan firmas jóvenes apoyándolas durante el período el start up en que son más vulnerables. Su meta es producir “empresas exitosas”, independientes y financieramente viables. El énfasis principal está en la creación de empleos locales, revitalizar la economía local y fortalecer la economía regional y nacional.
Hackett y Dilts (2004)	Cuentan con una red de apoyo a la gestión donde se integran elementos del sector público, privado y educativo.
Coit, (2006)	Se basa en un acuerdo interinstitucional para lograr el fortalecimiento de las empresas albergadas, sus interconexiones y su articulación con entidades de enseñanza y capacitación.

La Tabla 1 muestra las diversas, pero semejantes definiciones que varios autores y expertos en el tema han publicado acerca del concepto de incubadora. Sin embargo, aunque los conceptos son similares, cada autor añade valor al aportar una nueva idea, enfoque, o perspectiva. Fuente: elaboración propia a partir de las aportaciones de diversos autores.

Perezcano (2011) expresa que la creación de incubadoras genera una cadena que fomenta el desarrollo, es decir, si creamos incubadoras apoyaremos a otros en la creación de sus empresas. Asimismo, agrega que en nuestro país el 98% de las empresas son PyMES y que éstas requieren de los servicios de asesoría y consultoría para ser más competitivas y/o desarrollarse en el mercado. Desde ésta perspectiva podemos inferir que una incubadora de empresas puede ser considerada un instrumento de desarrollo regional. Pues a través de su funcionamiento, busca proporcionar soluciones a las necesidades de la región en que se ubique. De igual forma, una incubadora articula las cadenas productivas con las demandas y ofertas e impulsa los procesos de desarrollo de acuerdo con las necesidades detectadas en dichas cadenas (Bollati, 2015). Para este proyecto, una incubadora de negocios es:

“Un centro de apoyo para alumnos emprendedores que les facilita la creación y permanencia de un negocio; les proporciona un espacio físico y servicios de apoyo para asesoría especializada, tutorías personalizadas, diseño de planes de negocios y asesoría para acceder a créditos” (Civaj, 2008).

Misión de Una Incubadora de Negocios

Una incubadora de empresas tiene como misión apoyar a nuevos empresarios en la formación y desarrollo de nuevos negocios con la finalidad de que éstas sobrevivan y sean exitosas (Barreto, 2008). Para Carsud (2000) la misión de una incubadora de empresas consiste en incrementar las oportunidades de un negocio creado en sus años formativos y agrega que para que el programa de incubación pueda ser considerado efectivo debe alcanzar las siguientes metas:

Presentar un suficiente buen número de nuevas y jóvenes empresas con potencial de crecimiento y optima tasa de rotación.

Tener una alta tasa de supervivencia de sus empresas graduadas que continúan haciendo negocios fuera de su entorno.

Lograr un impacto positivo en la percepción de los nuevos empresarios y en la creación de una cultura emprendedora.

Cultivar fuertes relaciones con las industria, centros de desarrollo e innovación y universidades y, Contar con una estructura la cual facilite el acceso a los mercados financieros (Carsud, 2000).

Tipología de los Modelos de Incubadoras

Incubadora tradicional: Se enfoca a la creación de negocios en sectores tradicionales y sus requerimientos de infraestructura física, tecnológica y mecanismos de operación son básicos. Están dirigidas principalmente al comercio, servicios y algunas industrias ligeras: papelerías, confección y maquila de ropa, loncherías, farmacias, restaurantes, lavanderías, distribuidoras, comercializadoras, joyería, abarrotes, etc. Su implantación es relativamente más sencilla y el tiempo de incubación es de tres meses aproximadamente (Mayer y Jiménez, 2011). De acuerdo con el Instituto Tecnológico de Estudios Superiores de Monterrey (ITESM, 2007), tres son las etapas del modelo de incubadora tradicional: Pre- incubación, incubación y post-incubación. Incubadora de tecnología intermedia: una incubadora de tecnología intermedia es aquella especializada en brindar asesoría a negocios basados en procesos, productos o servicios donde la tecnología es nueva o innovadora, donde el conocimiento se convierte en el elemento que aporta un valor agregado permite mantener una ventaja competitiva. Los negocios incubados de acuerdo con este diseño incorporan elementos de conocimientos innovadores e innovaciones. Esto, requiere que dichas empresas estén vinculadas con institutos o centros generadores de conocimientos o grandes empresas. La infraestructura física y tecnológica, así como sus mecanismos de operación y procesos son semi-especializados, es decir, incorporan elementos de innovación (CETYS, 2006). Incubadora de alta tecnología: Este tipo de empresa está dirigido a los sectores de software especializado, computación, consultoría en tecnologías de información y comunicaciones (TIC's), diseño de microprocesadores, biotecnología, robótica, etc. Este tipo de empresa requiere de mayor tiempo de incubación (hasta dos años) amplia infraestructura física y tecnológica y una operación altamente especializada (Montiel, 2008).

Las IES y las Incubadoras de Negocios

Vincular la educación superior con el entorno económico es uno de los principales retos a los que las universidades de los países emergentes se enfrentan. La principal tendencia es que los egresados busquen, independientemente de su talento, incorporarse al mercado laboral en busca de un empleo aparentemente seguro y estable. Así mismo, frecuentemente en las instituciones de educación superior existe un vacío en la formación en emprendimiento, pues se asumen como un “*medio para generar empleados y no para formar empleadores*”; cuando en realidad debería buscarse la “*transferencia de conocimiento a la actividad económica mediante la creación de empresas*” (Errosa y Arroyo, 1997. p. 73). De acuerdo con las autoras referidas el emprendedor desempeña un papel fundamental para crear nuevas empresas, esto con el propósito de revitalizar entornos económicamente deprimidos e impulsar el desarrollo económico en éstas zonas, a través de la creación de empleos y la reactivación de la economía. Según Wompner (2013) son escasas las universidades que desempeñan un papel crucial en la creación de nuevas empresas; no se cuenta con experiencia para la formación y educación de emprendedores y, existe una división entre el mundo académico y las empresas. Una propuesta aportada por Schorr (2006) y citado por Wompner (2013), respecto al papel de las universidades para fomentar el emprendimiento esta conformada por los siguientes puntos:

Permear transversalmente el emprendimiento a través de las diferentes asignaturas de cada uno de los programas de estudio.

Fomentar la cultura emprendedora a través de concursos, conferencias, exposiciones, talleres, etc.

Fomentar un clima emprendedor con la finalidad de desmitificar las ideas de que las personas deben, una vez concluido sus estudios, buscar seguridad laboral, no asumir riesgos, etc.

MÉTODO

Para la elaboración la elaboración del manual titulado: *Metodología y Procedimientos Operativos para la Creación de una Incubadora de Negocios en la Facultad de Contaduría y Administración (Unidad Norte) de la Universidad Autónoma de Coahuila*, realizamos una investigación documental y de campo. Respecto a la investigación documental, localizamos aquellos documentos, publicaciones y libros sobre el tema objeto de estudio. Posteriormente, efectuamos un proceso de selección de los mismos con el objetivo de acotar la cantidad de información considerada para esta investigación. Posteriormente procedimos a dar continuidad a través de la lectura analítica, el procesamiento y clasificación de la información obtenida. Para la investigación de campo se solicitamos la orientación e información de asesores del Instituto Nacional de Estadística y Geografía e Informática (INEGI) y del Instituto Nacional del Emprendedor (INADEM) perteneciente a la Secretaría de Economía (ambos con sede en Saltillo, Coahuila). Asimismo, contamos con la orientación de asesores de la Red de Apoyo a Emprendedores (RAE) del INADEM, adscritos a la Cámara Nacional de Comercio (CANACO) en Monclova, Coahuila.

Para el trabajo aquí presentado y dada la extensión del manual que contiene dicha metodología, seleccionamos y sintetizamos los procedimientos metodológicos útiles para otras universidades interesadas en el tema. El criterio empleado para la síntesis de las directrices consistió en proporcionar al lector interesado, un panorama global de los pasos indispensables para crear una incubadora de negocios: analizar para su entorno geográfico, la evolución de los sectores económicos por Unidad Económica (UE) y Población Ocupada Total (POT). Esto, a través de los censos económicos del INEGI. Así como, identificar el sector económico que predomina entre los negocios de los alumnos emprendedores de la institución donde se pretenda crear una incubadora.

RESULTADOS

Las directrices metodológicas son:

Obtener un Panorama Global de la Evolución de los Sectores Económicos Pertenecientes al Entorno Donde se Pretende Crear una Incubadora

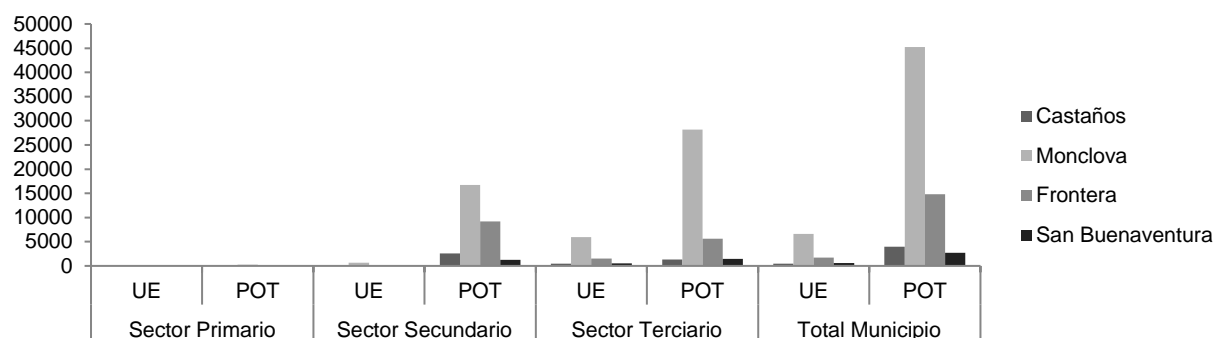
Para el diseño de una incubadora de negocios resulta pertinente obtener, a través del procesamiento y análisis de los censos económicos del INEGI, un panorama de la evolución del entorno económico de la zona donde se pretenda crear una incubadora de negocios. Dicho análisis debe tomar en cuenta las Unidades Económicas (UE) y las Población Ocupada Total (POT). En nuestro caso correspondió a la zona conurbada de Monclova, Coahuila; misma que abarca los municipios de Castaños, Frontera y San Buenaventura. En las siguientes Figuras se muestra dicha evolución. Los datos aportados por los censos económicos del INEGI (2004, 2009 y 2014) muestran que en el caso de la zona conurbada de Monclova, Coahuila, el sector primario prácticamente desapareció. El sector secundario se mantiene estancado; mientras que en el sector terciario se concentran la mayor cantidad de UE y POT. Esto nos permitió determinar estrategias que promuevan el éxito y supervivencia de las nuevas empresas. Por ejemplo, el diseño de un curso taller de creatividad e innovación.

Identificar la Cantidad de Emprendedores en la IES y Seleccionar el Tipo de Incubadora de Negocios a Implantar

Simultáneamente, se efectuó un censo entre la población estudiantil de la FCA para identificar de entre los 1, 244 alumnos ¿Cuántos actualmente tienen un negocio? (Emprendedores Universitarios). Para la realización de dicho censo se recorrió el total de aulas de ambos turnos y la información se obtuvo manualmente contando el número de alumnos que respondieron a la pregunta formulada. De acuerdo con los datos obtenidos se identificaron 99 EU. Sin embargo, solamente 57 EU accedieron a participar en el

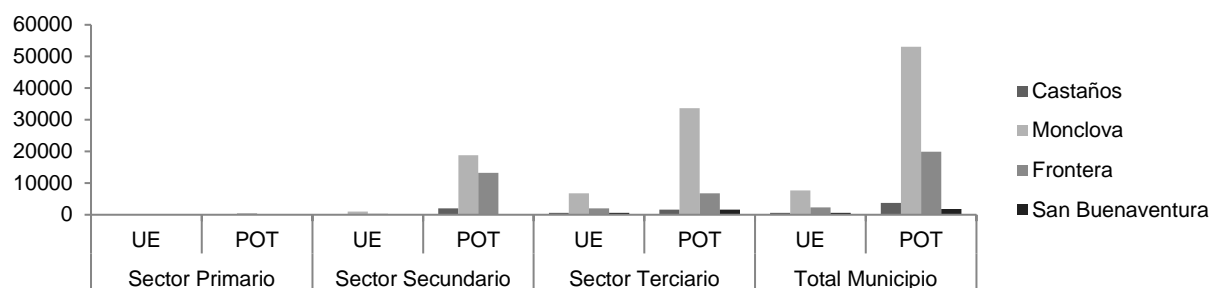
estudio. Una vez identificados los Emprendedores Universitarios (EU), se procedió a la administración de un cuestionario. Se solicitaron: datos generales, sector al que pertenece su negocio, descripción del mismo y apoyo requerido. Esto permitió definir el modelo de incubadora predominante para la FCA: de tipo tradicional. Dicho tipo de incubadora no otorga dinero en efectivo sino, proporciona el conocimiento y las herramientas requeridas para arrancar el negocio y posteriormente se le apoya proporcionando al futuro empresario la información y orientación necesaria para la obtención del financiamiento requerido para la puesta en marcha de su negocio.

Figura 1: Distribución de los Sectores Económicos y Mercado Laboral en 2004



UE: Unidad económica POT: Población ocupada Total. La Figura 1 muestra que durante el 2004 el sector primario de Monclova y Castaños representa un porcentaje relativamente bajo, menor del 1 por ciento y no existen registro de las Unidades Económicas (UE) de Frontera y San Buenaventura, Coahuila. Respecto a los sectores secundario y terciario del área conurbada, los porcentajes de las UE, respecto al total de los municipios son muy semejantes. Los porcentajes de las UE del sector secundario del área conurbada, respecto del total varía de un 8.7% a un 9.2 % del total. El porcentaje de las UE del sector terciario en el área conurbada respecto del total varían de un 89.93% a un 91.3%. Fuente: elaboración propia a partir de datos del Censo Económico 2004 del INEGI. Fuente: elaboración propia a partir de datos del Censo Económico 2004 del INEGI.

Figura 2: Distribución de los Sectores Económicos y Mercado Laboral en 2009



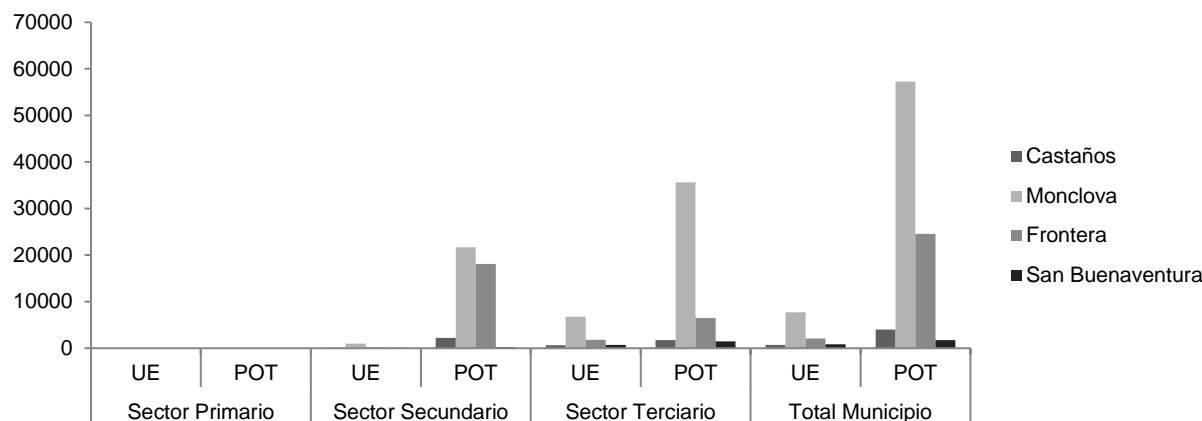
UE: Unidad económica POT: Población ocupada Total. La Figura 2 muestra que en el 2009 las Unidades Económicas (UE) del sector primario de Castaños disminuyeron respecto al total y las de Monclova se incrementaron. No existen registros de las UE de los sectores primarios de Frontera y San Buenaventura. En el sector secundario, las UE de Monclova, Frontera y Castaños aumentaron respecto al censo 2004; mientras que San Buenaventura se redujeron levemente. Consecuentemente, las UE del sector terciario de Monclova, Frontera y Castaños se redujeron como porcentaje del total de las UE, respecto al censo del 2004 y en San Buenaventura se incrementaron levemente. Fuente: Elaboración propia a partir de datos del Censo Económico 2009 del INEGI. Fuente: Elaboración propia a partir de datos del Censo Económico 2009 del INEGI.

Diseñar de los Procedimientos Operativos de la Incubadora de Negocios

a). *Estructura administrativa:* Se definió la misión y visión para la Incubadora de Negocios de la Facultad de Contaduría (INFCA), su principal función, servicios que brinda y necesidades que deben ser atendidas por la INFCA. Asimismo, se diseñó el organigrama el cual está integrado por el Consejo Administrativo, el Coordinador General, los Asesores INADEM, el Coordinador de Servicios Administrativos, el Consejo

Técnico de Evaluación Interna, el Comité Externo de Evaluación y Retroalimentación, los Asesores Técnicos Profesionales y un Asistente Administrativo. Se definieron las funciones de cada uno de éstos.

Figura 3: Distribución de los Sectores Económicos y Mercado Laboral en 2014



UE: Unidad económica POT: Población ocupada Total. La Figura 3 muestra que para el 2014, el sector primario desapareció del área conurbada de Monclova, Coahuila. En cuanto al sector secundario, las Unidades Económicas (UE) del área conurbada representan alrededor de la décima parte del total de las UE de los sectores secundarios y terciarios. De tal forma que casi el 90% del total de las UE de dicha área pertenecen al sector terciario. Fuente: Elaboración propia a partir de datos del Censo Económico 2014 del INEGI.

b). Etapas del proceso de incubación de la INFCA y sus procedimientos operativos correspondientes a cada fase.

I Etapa: Proceso de Pre-Incubación

I Fase: tipificación y pre-registro del emprendedor, su perfil y del proyecto. El primer paso a efectuar es identificar y registrar los datos del emprendedor, de su proyecto, así como corroborar que posea el perfil de emprendedor. Para tal propósito el alumno emprendedor que desee participar en la incubadora deberá cumplir con los requisitos que se muestran en la Tabla 2.

Tabla 2: Requisitos a Cumplir Por el Alumno-Emprendedor

Llenar cédula de pre-registro
Contestar el cuestionario tipo Likert para determinar si cumple con el perfil de emprendedor.
Resolver test para evaluar capacidad de creatividad e innovación
Asistir a un taller de innovación y creatividad (duración 12 horas), obtener la constancia de participación y cumplimiento con el producto a entregar.
Elaboración de la presentación del proyecto de negocio a crear.
Obtener la carta de aceptación y notificación para la presentación del proyecto del emprendedor ante el Consejo Técnico de Evaluación Interna

La Tabla 2 muestra los requisitos que todo alumnos-emprendedor aspirante a recibir apoyo de parte de la incubadora debe cumplir anterior a su valoración por el comité del Consejo Técnico de Evaluación Interna. Fuente: Elaboración propia a partir de datos contenidos en el Manual Metodología y Procedimientos Operativos Para la Creación de una Incubadora de negocios en la Facultad de Contaduría y Administración de la Universidad Autónoma de Coahuila.

II Fase: Valoración por el Consejo Técnico de Evaluación Interna.

Se reúne el Consejo Técnico de Evaluación Interna y se entrega el expediente de cada uno de los candidatos a participar en la INFCA con la finalidad de revisar, retroalimentar y emitir un dictamen sobre el proyecto de negocio. Dicho Consejo elabora los documentos indicados en la Tabla 3.

Tabla 3: Documentos a Elaborar Por el Consejo Técnico de Evaluación Interna

Evaluación del perfil del proyecto.
Dictamen del perfil del emprendedor y de su proyecto de negocio.
Carta de aceptación y notificación de la presentación del proyecto de negocios ante el Comité de Evaluación y Retroalimentación Externo.

La Tabla 3 muestra los procedimientos a ser ejecutados por el Consejo de Evaluación Interna. Dicho Consejo evalúa, emite un dictamen y elabora la carta de aceptación y notificación de la presentación del proyecto de negocios ante el Comité de Evaluación y Retroalimentación Externo. Fuente: Elaboración propia a partir de datos contenidos en el Manual Metodología y Procedimientos Operativos Para la Creación de una Incubadora de negocios en la Facultad de Contaduría y Administración de la Universidad Autónoma de Coahuila.

III Fase: Evaluación y Retroalimentación por el Comité Externo de Evaluación y Retroalimentación. El Comité Externo de Evaluación y Retroalimentación, escucha la propuesta y presentación del proyecto de negocio del incubando, evalúa y proporciona a éste retroalimentación pertinente y directriz que permita a dicho incubando incorporar propuestas de mejora y viabilidad a su proyecto. Dicho Comité llena los documentos indicados en la Tabla 4.

Tabla 4: Documentos a entregar por el Comité Externo de Evaluación y Retroalimentación.

Cédula de evaluación.
Retroalimentación: Análisis FODA
Concentrado de evaluación de los proyectos de negocios.
Notificación de resultados a alumnos-emprendedores cuyos proyectos fueron aceptados.

La Tabla 4 muestra los procedimientos que el Comité Externo de Evaluación y Retroalimentación debe realizar una vez que escucha y evalúa la propuesta y presentación del proyecto de negocio del incubando. Fuente: Elaboración propia a partir de datos contenidos en el Manual Metodología y Procedimientos Operativos Para la Creación de una Incubadora de negocios en la Facultad de Contaduría y Administración de la Universidad Autónoma de Coahuila.

II Etapa: Proceso de Incubación

IV Fase: Gestación y procedimiento para la elaboración del Plan de Negocios.

En ésta fase el incubando desarrolla y consolida las competencias que el incubando requiere para gestar, elaborar y documentar su Plan de Negocios pertinente al proyecto de negocio presentado y aprobado por el Comité de Evaluación y Externo. A partir de ésta fase se establecerá el enlace entre los incubandos y los asesores certificados del Instituto Nacional del Emprendedor (INADEM), el tutor que le sea asignado y el Equipo de Trabajo INFCA (Conformado por Asesores Técnicos Profesionales). En esta fase el incubando realiza las actividades que se muestran en la Tabla 5.

Tabla 5: Actividades Que el Incubando Deberá Realizar

Recurrir al Modelo o Lienzo de Canvas diseñado por Osterwalder y Pigneur (2014) para detectar los elementos que generan valor al negocio.
Elaborar su Programa de Trabajo para ordenar y sistematizar información relevante para llevar a cabo las actividades necesarias para la creación del negocio.
Redactar su Plan de Negocios donde describe detallada y formalmente la propuesta de un negocio nuevo y cómo será llevado a la práctica.
Escribir el Resumen Ejecutivo donde sintetiza los puntos más importantes que conforman un Plan de Negocios.

La Tabla 5 muestra una serie de actividades que el incubando deberá realizar una vez que su proyecto fue evaluado y aprobado por el Comité Externo de Evaluación y Retroalimentación. Algunas de las actividades incluyen diseñar su programa de trabajo de acuerdo con el modelo o lienzo de Canvas, redactar su plan de negocios y el resumen ejecutivo. Fuente: elaboración propia a partir de datos obtenidos del INADEM (2016)

Durante esta fase el Equipo de asesores INFCA asesoran al emprendedor de acuerdo con el programa de trabajo establecido. Registran y reportan al tutor los acuerdos y avances de cada reunión en minutas. Al término de cada etapa del Programa de Trabajo se convoca a una reunión al equipo de trabajo INFCA para retroalimentar al emprendedor. En caso requerido, se realizan ajustes a dicho programa y al Lienzo de Canvas. Asimismo, y de acuerdo a las necesidades detectadas se organizan cursos-talleres de carácter

práctico que tengan como objetivo fortalecer las habilidades y competencias de los incubandos en la elaboración de su programa de trabajo. Una vez que el incubando entregó el Plan de Negocios y el Resumen Ejecutivo y ambos fueron aprobados Equipo de Trabajo INFCA se le otorga una constancia de aprobación.

V Fase: Constitución de la empres y financiamiento. El tutor del emprendedor y algunos miembros del Equipo de Trabajo INFCA orientarán al incubando sobre los procedimientos a efectuar para la constitución y financiamiento para su empresa. En esta fase se determinan fuentes de financiamiento y se cumple con formalidades fiscales, laborales y gubernamentales.

VI Fase: Ejercicio de los recursos financieros de acuerdo con el Plan de Negocios. En esta fase se propone asegurar que el recurso financiero se realice de acuerdo con el Plan de Negocios elaborado por el incubado. En ésta fase participan todos aquellos incubados que aprobaron su Plan de Negocios y obtuvieron el recurso o crédito financiero.

III Etapa: de Post-Incubación

VII Fase: Seguimiento, monitoreo y evaluación de los indicadores de desempeño de la nueva empresa. En esta fase el objetivo principal es dotar al nuevo empresario de las habilidades y competencias necesarias para dar seguimiento y llevar un control de su nuevo negocio y se emplean las herramientas mostradas en la Tabla 6.

Tabla 6: Herramientas Para El Seguimiento, Monitoreo y Evaluación de la Nueva Empresa

Empleo del Método de Razones Financieras
Análisis Organizacional Interno.
Análisis del Entorno.
Mejoras a implementar

En la Tabla 6 se muestran las herramientas a las que los tutores que pertenecen a la incubadora deberá recurrir para proceder al seguimiento, monitores y evaluación de la nueva empresa. Fuente: Elaboración propia a partir de datos contenidos en el Manual Metodología y Procedimientos Operativos Para la Creación de una Incubadora de negocios en la Facultad de Contaduría y Administración de la Universidad Autónoma de Coahuila.

Una vez efectuado el análisis sobre el estado financiero y el diagnóstico organizacional, el nuevo empresario deberá recibir retroalimentación por un evaluador de la INFCA.

CONCLUSIONES

A través de éste trabajo se expusieron, de manera sintetizada, las directrices y procedimientos operativos que guiaron el diseño de la metodología para crear una incubadora de negocios para una Institución de Educación Superior (IES). De tal forma que se puede concluir lo siguiente:

En primer lugar, resultó de suma utilidad revisar y analizar los censos económicos 2004, 2009 Y 2014 del INEGI, pues se observó que en el sector terciario donde pertenecen comercios, servicios, etc., existe una fuerte competencia. Esto debido a que el sector primario (agricultura, ganadería, etc.) prácticamente desapareció y el secundario (industria y manufactura) se encuentra estancado. Dado que los negocios de los alumnos emprendedores pertenecen en su mayoría al sector terciario, se estableció como estrategia incentivar la creatividad e innovación. El alumno emprendedor que solicite incorporarse a la incubadora deberá asistir a un curso-taller de creatividad e innovación y como resultado, presentar la innovación efectuada a su producto o servicio que actualmente ofrece o desea brindar. En segundo lugar, se observó que la mayoría de los alumnos que actualmente tienen un negocio recurrieron tanto a ahorros propios como familiares. De tal forma que la familia tiene injerencia en el negocio. Por tanto, en el manual *Metodología y Procedimientos Operativos Para la Creación de una Incubadora de negocios en la Facultad de*

Contaduría y Administración de la Universidad Autónoma de Coahuila, se incluyeron herramientas del campo de la empresa familiar.

La pertinencia de incorporar herramientas del campo de la empresa familiar es corroborada por diversos autores. De acuerdo con Valdez & Sánchez (2012), a nivel mundial, se clasifica a las empresas como: micro, pequeña y mediana empresa. Esta clasificación es también empleada por los programas gubernamentales que destinan recursos económicos federales para impulsar la incubación de negocios. Sin embargo, clasificar a las empresas en micro, pequeñas o medianas es la forma más fácil, pero no la más útil. Pues el tipo de propiedad condiciona más la continuidad de las empresas, que el tamaño de éstas (Tàpies, 2014). Cabello, Reyes & Solís (2004); Mendoza, Hernández y Salazar (2010); Simón (2013); La Salle (2013) y Arthursen (2016) coinciden en que la mayoría de las micro y pequeñas empresas inician como negocios familiares: empiezan con ahorros propios y de la familia. Por ende, se ven afectadas por los conflictos inherentes a toda empresa familiar no profesionalizada. De aquí la necesidad de incorporar el Protocolo familiar, políticas para la contratación y despido de familiares, etc.

Finalmente, una facultad enfocada a la administración debe no solamente enseñar asignaturas relacionadas con este campo. Sino también, proporcionar apoyo a los alumnos emprendedores a través de la creación de una incubadora de negocios. De esta forma, se aportaría una solución al “desligamiento entre la idea y los recursos necesarios para poner en marcha el negocio”. Para nuestro entorno, donde el desempleo y subempleo prevalece apoyar al alumno emprendedor e impulsar el desarrollo de su negocio dentro de las universidades constituye un reto para enfrentar los embates que amenazan el futuro de nuestros egresados.

REFERENCIAS BIBLIOGRÁFICAS

Allesch, J., (1987). Innovation Centers and Sciences Parks in the Federal Republic of Germany en Gibb, J.M. Ed., Science Parks and Innovation Centers: Their Economic and Social Impact. Elsevier, Amsterdam. 1987. Disponible en: <http://epn.sagepub.com/content/32/6/1065.abstract>

Arthursen, (2016). Empresa familiar no es sinónimo de PYME. Disponible en: <http://www.arthursen.com/articulos-estudios/empresa-familiar>

Barreto, K., (2008). *Una metodología de diseño en la implementación de incubadoras de empresas de tecnologías de información en universidades peruanas y su aplicación en la UNMSM (Universidad Nacional de San Marcos)*. Tesis. Lima, Perú. Disponible en: [http://www2.congreso.gob.pe/sicr/cendocbib/con2_uibd.nsf/5B28A1EA447F5BB40525771F007AD00B/\\$FILE/2_Tesis_Una_metodolog%C3%ADa_de_dise%C3%B1o_en_la_implementaci%C3%B3n_de_incubadoras_de_empresas.pdf](http://www2.congreso.gob.pe/sicr/cendocbib/con2_uibd.nsf/5B28A1EA447F5BB40525771F007AD00B/$FILE/2_Tesis_Una_metodolog%C3%ADa_de_dise%C3%B1o_en_la_implementaci%C3%B3n_de_incubadoras_de_empresas.pdf)

Bollati, L., (2015). Análisis de los modelos de incubación existentes . Csp de estudio de la Red de incubadoras de América Latina. Disponible en: <http://repositorio.flacsoandes.edu.ec/bitstream/10469/7876/2/TFLACSO-2015LMB.pdf>

Cabello, A., Reyes, R., y Solís, P., (2004). El perfil organizacional de las PyMEs (microempresas, pequeñas y medianas Empresas) En el sector manufacturero: un análisis integral. Disponible en: http://acacia.org.mx/busqueda/pdf/02-197_Adalberto_Cabello_Ch__vez.pdf

Carsud, A., (2000). Creating An International High Technology Incubator: The Case Of The Ucla Venture Development Program, Journal of Enterprising Culture, Vol 8, No. 2, (Junio, 2000), pp. 185-200. Disponible en: <http://www.worldscientific.com/doi/abs/10.1142/S0218495800000115>

CETYS, Universidad. (2016). Incubadora de Negocios de CETYS Universidad. Proceso metodológico de incubación de una incubadora de tecnología intermedia. Disponible en:
<http://www.cetys.mx/userfiles/centroemprendedor/Incubadora.pdf>

Civaj, M., (2008). El aliado que necesitas para crecer. En Revista digital entrepreneur. Disponible en:
<http://www.entrepreneur.com/article/260461>

Coit, M., (2006). Place To Hatch Startups: Helping Companies Take Shape - Former Agilent Campus In Rohnert Park Becomes Incubator For Fledgling Entrepreneurs, The Press Democrat, Vol 17, No. 3, (Diciembre, 2006), pp. 60-67. Disponible en:
<http://www.pressdemocrat.com/news/2249862-181/startup-incubator-in-rohnert-park?ref=related>

Erossa, V., y Arroyo, P., (1997). Creación de pequeñas empresas exportadoras: una experiencia en Centroamérica. En *Comercio Exterior*. Disponible en:
<http://revistas.bancomext.gob.mx/rce/magazines/331/9/RCE9.pdf>

Hackett, M., y Dilts, D., (2004). A Systematic Review of Business. Incubation Research, Springer Netherlands, Vol 29, No. 1, (Enero, 2004), pp. 55-82. Disponible en:
<http://link.springer.com/article/10.1023/B:JOTT.0000011181.11952.0f#/page-1>
INADEM, (2016). Página Institucional. Instituto Nacional del Emprendedor. Disponible en:
<https://www.inadem.gob.mx/institucional/>

INADEM (2016). Programa de Incubación en Línea (PIL). Crea tu empresa. Disponible en:
http://www.ime.gob.mx/documentos/PIL_2016.pdf

INEGI (2004). Censos económicos 2004. Disponible en:
<http://www.beta.inegi.org.mx/app/saic/default.aspx>

INEGI (2009). Censos económicos 2009. Disponible en:
<http://www.beta.inegi.org.mx/app/saic/default.aspx>

INEGI (2014). Censos económicos 2014. Disponible en:
<http://www.inegi.org.mx/est/contenidos/proyectos/ce/ce2014/default.aspx>

ITESM, (2007). Incubadora de Microempresas Tradicionales ITESM. Disponible en:
<http://apps05.ruv.itesm.mx/portal/portales/incubadorasocial/publico/infogeneral/incubadora.htm>

La Salle, (2013). Protocolo de Familia para PYMES. Disponible en: http://www.empresasfamiliares-lasalle.mx/?q=protocolo_de_familia#.WFgkrY0izIU

Mayer, E., y Jimenez, K., (2011). Las incubadoras de negocios en México: un análisis descriptivo. En *Ciencia UAT*, Vol. 6 núm. 2, octubre-diciembre, pp. 8-13. Disponible en:
<http://www.revistaciencia.uat.edu.mx/index.php/CienciaUAT/article/view/62>

Mendoza, J., Hernández, M., y Salazar, B., (2010). Las PYMES familiares y no familiares ¿Empresas diferentes? Disponible en:
https://www.uaeh.edu.mx/investigacion/icea/LI_SistOrgSocMedEfec/mendoza_moheno_jessica/
Montiel, C., (2008). Incubadoras de empresas: una tipología de modelos de incubación en México.

Ponencia presentada en II International Conference on Industrial Engineering and Industrial Management XII Congreso de Ingeniería de Organización September 3-5, 2008, Burgos, Spain. Disponible en:

http://adingor.es/congresos/web/uploads/cio/cio2008/BUSINESS_ADMINISTRATION_AND_STRATEGY/219-228.pdf

Osterwalder, A., y Pigneur, I., (2014). Generación de Modelos de Negocios. Disponible en: http://utfrre.com.ar/wp-content/uploads/2014/08/Generacion_de_Modelos_de_Negocios.pdf

Perezcano, L., (2011). ¿Qué es una incubadora de negocios? En *Kπpital Privado*. Disponible en: <http://www.capitalprivado.com.mx/2011/05/10/que-es-una-incubadora-de-negocios/>

Rea, L., y Parker, R., (2014). *Designing and Conducting Survey Research. A Comprehensive Guide*. Fourth Edition. Jossey-Bass A Wiley Brand.

Sánchez, J., (2013). *Incubadora de empresas: concepto, estructura y universalidad*. Disponible en: <http://www.encyclopediadetareas.net/2013/05/incubadoras-de-empresas-concepto.html>

Simón, J., (2013) Pymes familiares mexicanas, optimistas ante futuro: PwC. En *El Economista*. Disponible en: http://eleconomista.com.mx/industrias/2013/01/29/pymes-familiares-mexicanas-optimistas-ante-futuro-pwcpymes_familiares_y_no_familiares__empresas_diferentes.pdf

Tàpies, J., (2014). Somos una PIME o una empresa familiar. Disponible en: <http://blog.iese.edu/empresafamiliar/2014/somos-una-pyme-o-una-empresa-familiar/>

Tornatzky, L., et. al. (2003). *Incubating Technology Business: A National Benchmarking Study*, NBIA Series., USA. Disponible en: <http://docplayer.es/14932069-Estado-del-arte-de-incubadora-de-empresas-de-tecnologias-de-la-informacion-en-universidades.html>

Valdés, J., (2015). Síntesis sobre las características de los procesos de emprendimiento e incubación de negocios en México. Disponible en: <https://dialnet.unirioja.es/descarga/articulo/5071442.pdf>

Valdez, J., & Sánchez, G., (2012). Las MIPYMES en el contexto mundial: sus particularidades en México. En *Iberóforum*. Vol. VII, Núm. 14. Disponible en: <http://www.redalyc.org/pdf/2110/211026873005.pdf>

Wompner, F., (2007). Un modelo de incubadora de negocios universitaria; en la ruta de la innovación organizacional. En *Observatorio de la economía latinoamericana*. Revista académica de economía. Disponible en: <http://www.eumed.net/cursecon/ecolat/cl/2007/fw-incub.htm>

Yunus, M., y Weber, K., (2010). *Empresas para todos. Hacia un nuevo modelo de capitalismo que atiende las necesidades más urgentes de la humanidad*. Grupo Editorial Norma. México

BIOGRAFÍA

Yolanda Saldaña Contreras: Doctorado en Educación por The University of Manchester, Inglaterra. Adscrita a la Universidad Autónoma de Coahuila como catedrático- investigador perfil PRODEP. Se puede contactar en la Facultad de Contaduría y Administración, Carretera 57 km. 4.5, Monclova, Coahuila, México. Correo electrónico:

Fernando M. Ruiz Díaz: Doctorado en Investigación de Operaciones por The University of Manchester, Inglaterra. Adscrito a la Universidad Autónoma de Coahuila como catedrático- investigador perfil PRODEP. Se puede contactar en la Facultad de Contaduría y Administración, Carretera 57 km. 4.5, Monclova, Coahuila, México. Correo electrónico:

Laura Leticia Gaona Tamez: Candidata a Doctor en Administración y Alta Dirección. Catedrática Asociada con perfil PRODEP en la Facultad de Contaduría y Administración de la Universidad Autónoma de Coahuila. Se puede contactar en la Facultad de Contaduría y Administración en Carretera 57 km. 4.5, Monclova, Coahuila, México.

Juan Jesús Nahuat Arreguín: Doctorado en Planeación Estratégica por la Universidad Popular Autónoma del Estado de Puebla. Catedrático investigador, Perfil PRODEP. Se puede contactar en la Facultad de Contaduría y Administración, Carretera 57 km. 4.5, Monclova, Coahuila, México.

Kelly Alejandra Muñoz Peña: alumna de la carrera de Licenciatura en Contaduría de la Universidad Autónoma de Coahuila. Colaboradora en proyectos de investigación realizados por la Dra. Yolanda Saldaña Contreras: Facultad de Contaduría y Administración, Monclova, Coahuila.

EL ENDEUDAMIENTO COMO INDICADOR DE RENTABILIDAD FINANCIERA EN LAS MIPYMES TURÍSTICAS DE CAMPECHE

Luis Alfredo Argüelles Ma, Universidad Autónoma de Campeche, México
Román Alberto Quijano García, Universidad Autónoma de Campeche, México
Mario Javier Fajardo, Universidad Autónoma de Campeche, México
Fernando Medina Blum, Universidad Autónoma de Campeche, México
Carlos Enrique Cruz Mora, Universidad Autónoma de Campeche, México

RESUMEN

Este trabajo de investigación se realiza a través de un análisis empírico, descriptivo y correlacional, de 11 mipymes turísticas de San Francisco de Campeche, Campeche, en el primer semestre del 2017 para valorar los aspectos económicos de los estados financieros básicos con cifras finales al cierre del 2016, en lo particular el apalancamiento financiero y su efecto en la rentabilidad, que aunque parezca extraño los resultados arrojan genéricamente que si la organización aumenta su endeudamiento puede incrementar positivamente su rentabilidad financiera. Se da a conocer en forma sintética el endeudamiento, introduciendo inicialmente a la rentabilidad empresarial para dejar clarificado el estudio, y tener la visión amplia del objeto al ser la financiación una de las principales decisiones de los directivos. Se parte de la hipótesis de que a mayor nivel de endeudamiento se propician mejores resultados de rentabilidad. Las conclusiones se sustentan en la aplicación de la correlación lineal a los indicadores de rentabilidad financiera y endeudamiento de las 11 organizaciones muestra, que arroja un resultado bastante confiable con una R^2 de 0.764 por lo que la ecuación matemática obtenida puede ser tomada para pronosticar resultados.

PALABRAS CLAVE: Apalancamiento Financiero, Resultados Empresariales, Pronóstico

INDEBTEDNESS AS AN INDICATOR OF FINANCIAL PROFITABILITY IN THE TOURIST MIPYMES OF CAMPECHE

ABSTRACT

This research work is carried out through an empirical, descriptive and correlational analysis of 11 Mipymes of tourism in San Francisco de Campeche, Campeche, in the first semester of 2017 to assess the economic aspects of the basic financial statements with final figures at the end of the 2016, in particular the financial leverage and its effect on profitability, which although it seems strange the results throw generically that if the organization increases its indebtedness can increase positively its profitability Financial. It is made known in a synthetic way indebtedness, initially introducing to the business profitability to leave clarified the study, and to have the broad vision of the object being the financing one of the principal decisions of the managers. It is part of the hypothesis that a higher level of debt is conducive to better profitability results. The conclusions are based on the application of the linear correlation to the indicators of financial profitability and indebtedness of the 11 organizations shows, which yields a fairly reliable result with a R^2 of 0.764 so the mathematical equation obtained can be taken to predict results

JEL: G31

KEY WORDS: Financial Leverage, Business Results, Prognosis

INTRODUCCIÓN

Este estudio empírico es parte del proyecto de investigación orientado hacia la eficiencia de las organizaciones, donde se tocan aspectos relativos a los indicadores de desempeño financiero, toda vez que es cada vez el mayor número de empresas que están en la búsqueda de fuentes de financiamiento para su operación, pero siempre con la mira de lograr los mejores rendimientos para favorecer a los trabajadores y accionistas. En forma proporcional es cada vez mayor el número de establecimientos que utilizan los fondos ajenos en vez de los propios a través de la inversión o reinversión, y les ha dado resultado porque de esa forma han logrado incrementar su potencial de producción y ventas con el consecuente resultado de mejoría en sus utilidades. Considerando que la composición de la deuda influye en la decisión de los inversionistas para mejorar la rentabilidad de la organización, es momento de plantear el problema de investigación: ¿Cuál es la probabilidad de que las empresas que, conociendo un modelo predictivo de su rentabilidad en función a el endeudamiento, puedan mejorar su competitividad y posicionamiento en el mercado? En vista del problema citado, se plantea la siguiente pregunta de investigación: ¿Definiendo que el endeudamiento está relacionado con la rentabilidad, es posible que mejore su competitividad? Como parte objetiva de este trabajo de investigación es determinar si el endeudamiento de las mipymes del sector turístico campechano está asociado a la rentabilidad financiera, y en consecuencia pueda utilizarse un modelo matemático predictivo que sirva de plataforma para alcanzar los índices deseados en las organizaciones de este grupo. Se consideran los siguientes objetivos particulares: 1. Determinar el índice de endeudamiento de las 11 empresas, 2. Determinar el índice de rentabilidad de las 11 empresas, 3. Efectuar la comparación entre el índice de endeudamiento y el índice de rentabilidad de las 11 empresas, y 4. Concluir si es posible establecer un pronóstico acerca de un modelo matemático en base al punto 3, que mejore la rentabilidad organizacional.

Por lo expuesto y tomando en consideración que el tamaño de la empresa está influenciado por el grado de endeudamiento, y que tiene un impacto en la rentabilidad organizacional, se desarrolla este trabajo de investigación para determinar si verdaderamente existe una asociación entre dichas variables (endeudamiento/rentabilidad), partiendo desde la definición del objetivo de investigación con la pregunta correspondiente, recorriendo el marco teórico alrededor de los conceptos, estableciendo la metodología, procedimientos hasta llegar a los resultados, conclusiones y recomendaciones. Al final del camino se pretende dejar establecido un modelo matemático probabilístico para pronosticar la rentabilidad empresarial en función a su endeudamiento.

MARCO TEÓRICO

Los indicadores de la rentabilidad miden la efectividad de la administración de la empresa en el control de los costos y gastos, al igual que su capacidad de convertir las ventas en utilidades, los indicadores de rentabilidad también analizan como retornan los valores invertidos de la empresa (Ortiz Anaya, 2006), los indicadores de endeudamiento se encargan de medir el grado de participación de los acreedores en el financiamiento de la compañía, también se encarga de detectar el riesgo en que incurren los acreedores y los dueños en el momento de realizar transacciones financieras, mide los beneficios o inconvenientes de un determinado nivel de endeudamiento en relación a la rentabilidad de la institución. (Ortiz Anaya, 2006)

La rentabilidad es considerada el indicador más cercano a los accionistas y propietarios (De la Hoz, Ferrer, & De la Hoz-Suarez, 2008, García-Lorenzo, Velar-Martin, & Cañadas-Sánchez 2009). Por otro lado, la gestión de la deuda se presenta como una variable esencial para las empresas, dado que una mala gestión por falta de liquidez podría derivar a la desaparición de cualquier entidad. En periodos intensos y prolongados de crisis económica provoca un aumento del déficit (Ruiz-Huerta, Carbonel & Garcia Diaz, 2012). La rentabilidad es el resultado de tomar las decisiones y estrategias financieras correctas, se refleja en la proporción o utilidad excedente de un activo, por su utilización en un periodo de tiempo, además de

medir la eficiencia de las operaciones y actividades e inversiones que se ejecuten en las empresas (Nava 2009). Para lo anterior es necesario determinar la importancia de la relación entre la rentabilidad y el nivel óptimo del indicador de endeudamiento, donde no se genere la insolvencia de la empresa al aumentar la financiación externa (deuda) en relación con el patrimonio y en general con el capital propio. No existe un modelo que logre determinar el endeudamiento óptimo para la empresa y por ende mejorar la rentabilidad financiera desde la óptica de la estructura financiera, algunas empresas optan por el financiamiento propio no utilizando su capacidad de deuda, por consiguiente, la rentabilidad se puede elevar al lograr una relación ideal de deuda-capital (Rivera Godoy 2008). Los indicadores de rentabilidad 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 (Ortiz, 2011). La forma antes descrita se encuentra reflejada en la ecuación (1)

INDICADOR**ECUACIÓN**

**RENTABILIDAD
FINANCIERA**

$$\frac{\text{UTILIDAD ANTES DE IMPUESTOS}}{\text{TOTAL DE ACTIVOS}}$$

(1)

Los indicadores de endeudamiento tienen por objeto medir en qué grado y de que forman participan los acreedores dentro del financiamiento de la empresa. De la misma manera se trata de establecer el riesgo que corren tales acreedores, el riesgo de los dueños y la conveniencia o inconveniencia de un determinado nivel de endeudamiento para la empresa (Ortiz, 2011). Estos indicadores comparan el financiamiento originario de terceros con los recursos de accionista, socios o dueños de las empresas, con el fin de establecer cuál de las dos partes está corriendo el mayor riesgo. Así, si los accionistas contribuyen apenas con una pequeña parte del financiamiento total, los riesgos de la empresa recaen principalmente sobre los acreedores, como se muestra en la ecuación (2)

$$\text{INDICE DE ENDEUDAMIENTO} = \frac{\text{DEUDAS A CORTO Y LARGO PLAZO}}{\text{TOTAL DEL ACTIVO}} \quad (2)$$

En las organizaciones deportivas españolas se han realizado estudios orientadas a decir que la deuda y la rentabilidad financiera tienen relación directa, principalmente en tiempos de crisis con el tamaño de la empresa. Aquí consideran que el tamaño de la negociación es factor de vital importancia (Amis y Slack, 1996; Amorim-Varum & Rocha, 2012; Grimaldi-Puyana & Ferrer-Cano, 2016; Vithessonthi & Tongurai, 2015). Otras investigaciones apuntan a que el tamaño y estructura son elementos importantes para la existencia de los negocios permitiendo tomar decisiones importantes de autofinanciación (Grimaldi-Puyana y Sánchez Oliver, 2017). El propósito de este trabajo de investigación toma todas estas teorías narradas que orientan hacia una asociación directa entre la deuda y la rentabilidad, para explicar si en el sector turístico campechano existe esta oportunidad de uso y aplicación estratégica en la gestión de negocios.

METODOLOGIATipo y Diseño de la Investigación

La investigación es de tipo no experimental correlacional, se tiene un grupo de 11 empresas en la cual se va a analizar y explicar la relación existente entre los indicadores financieros de rentabilidad financiera y endeudamiento, para su cálculo se utilizó el método de Razones Financieras, analizando los componentes principales de los estados financieros. La rentabilidad financiera y el endeudamiento se miden en forma cuantitativa y para ello se utilizan los modelos financieros de: rentabilidad financiera y endeudamiento.

Para medir el grado de asociación de los indicadores utilizamos la correlación y regresión simple mediante el coeficiente de correlación de Pearson, el indicador rentabilidad financiera como variable dependiente y el indicador endeudamiento como variable independiente.

Población y Muestra

El modelo predictivo del indicador financiero rentabilidad - endeudamiento se obtuvo con 11 mipymes del sector turístico campechano, de las cuales 9 son pequeñas y 2 grandes empresas de la ciudad de Campeche con 50 trabajadores, que representaron a la población total, Con lo anterior, tal como lo manifiesta Cárdenas (1996), se está ante la presencia de una muestra del tipo censal, ya que puede participar toda la población, sin necesidad de determinarse la muestra. Ratificando lo anterior, Chávez (1994) señala que una muestra censal poblacional implica la obtención de datos de todas las unidades del universo, acerca de las cuestiones que constituyen el objeto censado, los datos se recogen entre una muestra de unidades que representan el universo, dado que la población es pequeña y se puede hacer un estudio de cada uno de los elementos que la conforman.

Procedimiento

Con los datos cuantitativos tomados de los estados financieros al 31 de diciembre del 2016 se aplican las ecuaciones (1) y (2), y se obtienen los índices de rentabilidad financiera y endeudamiento. Se concentran los datos y se aplica el estadístico de regresión y correlación simple utilizando el software: Statistical Package for the Social Sciences (SPSS.23)

RESULTADOS

Una vez aplicado los modelos matemáticos que les son relativos, se construye una Matriz de Datos de las 11 empresas donde se refleja la variable dependiente (rentabilidad financiera) y la independiente (endeudamiento) para ejecutar el estadístico de regresión y correlación simple.

Resultados de la Regresión y Correlación simple entre los indicadores financieros Endeudamiento y Rentabilidad Financiera.

Se observa que la variable independiente (endeudamiento) es incluida en el modelo al ser su valor diferente a cero; el coeficiente de correlación arroja 0.874 (R) y el de determinación 0.764 (R²), el error típico es de 0.7378 con una significancia de 0.00; la anova arroja un estadístico F con valor de 29.187 mayor al de significancia, así como el valor adquirido por la variable dependiente a través de la constante (a) es 0.843. El coeficiente B (beta) es de 4.303 con intervalo de confianza del 95%, resultando la ecuación (3)

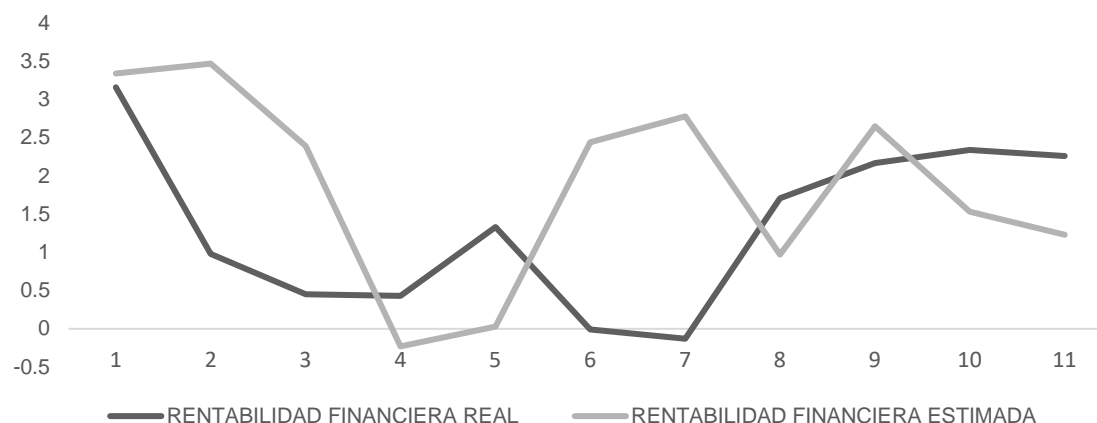
$$\gamma = a + B_1 X_1 \quad (3)$$

La ecuación (3) de regresión y correlación simple con los valores sustituidos después de aplicar las pruebas estadísticas es:

$$\gamma = 0.843 + 4.303 X_1$$

Se efectúa la verificación del modelo antes descrito mediante la verificación de la bondad del ajuste, consistente en sustituir los valores reales en la ecuación para tener el valor estimado de la rentabilidad y se compara con su valor real como se ilustra en la Figura 1.

Figura 1: Gráfica de la Bondad de Ajuste



Fuente: Elaboración propia utilizando el modelo matemático determinado y sustituyendo los valores con la realidad reflejada en las empresas muestra

CONCLUSIONES

Se ha visto que aunque hay estudios que hablan sobre la rentabilidad financiera, el endeudamiento y la crisis económica en las empresas, es muy poco lo que hace una vinculación entre todos ellos en forma precisa. Al amparo de lo expresado, se puede confirmar que la hipótesis de investigación planteada se robustece al obtener un modelo estadístico de correlación que señala que las organizaciones en la medida que prudentemente contraen deudas tanto internas como externas, hay una gran probabilidad de que su eficiencia financiera se manifiesta en el mismo sentido y crecimiento.

El objetivo de esta investigación se ha centrado en un estudio descriptivo y correlacional de 11 empresas representativas del sector turístico en la ciudad de Campeche, obteniendo su rentabilidad financiera y endeudamiento del último período financiero publicado por ellas y que son relativos al cierre del ejercicio 2016. En este sentido se obtuvo con el sustento teórico respectivo los modelos matemáticos de rentabilidad financiera y endeudamiento, lo que nos llevó a conocer en lo particular cuál es el comportamiento de ambos elementos en ellas, con resultados contrastantes ya que en la mayoría se visualiza una tendencia sincrónica entre el crecimiento y/o de la rentabilidad financiera con el endeudamiento. Casos muy particulares inciden en una disminución de su deuda con la misma tendencia de sus resultados financieros.

Haciendo una revisión de cada uno de los elementos estudiados se aprecia que aplicando la ecuación de rentabilidad financiera, todas las organizaciones observadas presentan resultados positivos que van desde 0.01 el más bajo hasta 4.28 el más alto; sin embargo, en la parte del endeudamiento va desde -0.025 hasta 0.61 el más alto, lo que vislumbra una tendencia simultánea de que a mayor proyección de la deuda un impacto de soporte para que crezca la rentabilidad.

Los comentarios vertidos se ratifican ya que a través del modelo estadístico de correlación y regresión simple, se establece una adecuada asociación entre las variables rentabilidad financiera (dependiente) y el endeudamiento (independiente), al resultar un coeficiente de determinación de 0.874 y el coeficiente de determinación ajustado R^2 de 0.764, valores por demás confiables para tomar decisiones y que conducen a la conclusión de que la variable endeudamiento da respuesta a la variable rentabilidad. Esto por consecuencia permite sustentar que el modelo matemático obtenido y presentado como ecuación (3) es confiable para aplicar en las organizaciones del sector turístico campechano en la gestión empresarial.

Aún más, se hizo la prueba a través del estadístico de bondad de ajuste, método en el cual se sustituye en la ecuación predictora los resultados reales de la empresa, y se confirmó la aseveración de que conforme se endeude prudentemente la organización, los resultados financieros serán los planeados, aspecto que ciertamente contribuye a una gestión de negocios exitosa. Si se visualiza la Figura 1 resultado de la prueba antes mencionada, se puede apreciar una pendiente positiva, significando una respuesta proporcional directa entre las dos variables de estudio.

Recomendaciones

Para el uso prudente del modelo matemático obtenido en esta investigación hay que tomar en consideración que se establece para un grupo representativo de empresas turísticas en Campeche, y solo se circunscribe a este entorno, donde las condiciones financieras de las bancas de desarrollo, principalmente del Gobierno del Estado, están favoreciendo la obtención de capitales a bajos costos. El trabajo es interesante replicarlo en el resto del Estado de Campeche y posteriormente pasar a otros sectores de la economía para poder comprobar si existen resultados similares o contrastantes. Para aquellos estudiosos que quieran utilizarlo como línea de investigación futura habrá de revisar su similitud con el entorno campechano. Habrá que actuar con prudencia respecto a las fuentes de financiamiento externas que puedan soportar el endeudamiento, ya que en la medida que sean económicas se podrán considerar como una opción tentadora para no utilizar los fondos propios y así incentivar mayor productividad con el consecuente impacto en rentabilidad y gestión empresarial. Por otro lado, en la medida que ellas sean onerosas podrán obstaculizar la eficiencia financiera del ente económico.

REFERENCIAS

- Amis, J. & Slack, T. (1996). The sizestructure relationship in voluntary sport organizations. *Journal of Sport Management*, 10, 76-86.
- Armorim-Varum, C. & Rocha, V. (2012). The effect of crises on firm exit and the moderating effect of firm size. *Economic letters*, 114, 94-97.
- Cárdenas, A. (1996). "Plan de acción". *Aula Abierta*. Año I, no. 3
- Chávez, N. (1994). *Introducción a la investigación educativa*. Maracaibo: ARS Gráficas, S.A
- De La Hoz, B., Ferrer, M. A., & De La Hoz-Suárez, A. (2008). Indicadores de rentabilidad: herramientas para la toma decisiones financieras en hoteles. *Revista de Ciencias Sociales*, 14(1), 88-109.
- García-Lorenzo, R, Velar-Martín, L. N., & Cañadas-Sánchez, A.F. (2009). *Análisis de los estados contables en el nuevo PGC 2008*. Madrid: Esic Editorial
- Grimaldi-Puyana, M. & Ferrer-Cano, P. (2016). Dimensión y Perfil de las Organizaciones de Gestión de Instalaciones y Deportiva. *Apunts*, 4(126), 72-78.
- Grimaldi-Puyana, M. & Sanchez-Oliver, A. (2017-In-press). Tamaño y evolución económica de los clubes de baloncesto S.A.D. después de la crisis económica de 2008. *Cuadernos de Psicología del Deporte*.
- Héctor Ortiz Anaya. (2006). *Análisis Financiero Aplicado y Principios de Administración Financiera*. Bogotá.

Nava, M. (2009). Análisis financiero: una herramienta clave para una gestión financiera eficiente. *Revista venezolana de gerencia*, 14(48), 609-628.

Ortiz, H. (2011): Análisis financiero aplicado. Colombia: Universidad Externado de Colombia.

Rivera Godoy, J. (2008). Un análisis empírico de la financiación de la PYME Metalmecánica del Valle del Cauca: 2000-2006. *Cuaderno de administración*, 39.

Ruiz-Huerta, J., Carbonell, M.A. & García Díaz, (2012). El endeudamiento de las Comunidades Autónomas: Límites y problemas en el contexto de la crisis económica, *Revista de Estudios Autonómicos y Federales*, 15, 124-163

Vithessonthi, C. & Tongurai, J. (2015). The effect of firm on the leverage-performance relationship during the financial crisis of 2007- 2009. *Journal of Multinational Financial Management*, 29, 1-29.

BIOGRAFÍA

Luis Alfredo Argüelles Ma es Doctor en Gestión Estratégica y Políticas de Desarrollo por la Universidad Anáhuac Mayab. Profesor Investigador de Tiempo Completo en la Universidad Autónoma de Campeche - Facultad de Contaduría y Administración. Especialista en Auditoría y Control. Se puede contactar en Cel. (981) 1204891 C

Román Alberto Quijano García es Doctor en Gestión Estratégica y Políticas de Desarrollo por la Universidad Anáhuac Mayab. Profesor Investigador de Tiempo Completo en la Universidad Autónoma de Campeche - Facultad de Contaduría y Administración. Especialista en Finanzas. Se puede contactar en Cel. (981) 1204891

Mario Javier Fajardo es Maestro en Contaduría por la Universidad Autónoma de Campeche - Profesor Investigador de Tiempo completo en la Universidad Autónoma de Campeche - Facultad de Contaduría y Administración. Especialista en Contabilidad y Control. Se puede contactar en Cel. (981)1252684

Fernando Medina Blum es Candidato a Doctor por la Universidad Anáhuac Mayab, Profesor Investigador en la Universidad Autónoma de Campeche – Facultad de Contaduría y Administración.

Carlos Enrique Cruz Mora es Maestro en Innovación Administrativa por la Universidad Autónoma de Campeche – Profesor Investigador de la Facultad de Contaduría y Administración.

LA TECNOLOGIA DE LA INFORMACION EMPRESARIAL EN LA PROFESION DE NEGOCIOS

Leonor Gutiérrez González, Universidad Autónoma de Coahuila

Jimmy Armas Aguirre, Universidad Peruana en Ciencias

Liliana Patricia Zavala Chacón, Universidad Autónoma de Coahuila

RESUMEN

El trabajo de investigación es de tipo descriptivo con enfoque cuantitativo y cualitativo, se realizó una muestra a 150 estudiantes de diferentes carreras de la Facultad de Contaduría y Administración de la Universidad Autónoma de Coahuila, el objetivo es analizar el grado de conocimiento y/o aplicación de las tecnologías de la información en el área contable administrativa. El estudio visualiza algunas prácticas que presenta el software SAP (Sistemas, Aplicaciones y Productos) y que permite al estudiante el manejo de tecnologías de información empresarial. Se establecen las siguientes variables: aspectos básicos, nivel de percepción de conocimiento y/o aplicación de las tecnologías de la información empresarial y el nivel de percepción de la práctica en el ambiente laboral. Los resultados sostienen medias muy significativas positivamente a la interrogante que los universitarios cuenten con las capacitaciones en el manejo de herramientas de información tecnológicas. Así mismo, se considera que la aplicación de la tecnología en las áreas de negocios aporta un incremento a la competitividad en las organizaciones. Se concluye que es altamente provechoso el conocimiento práctico que brinda las aplicaciones del software SAP a los estudiantes de esta institución, y que los sitúa en rangos laborales altamente aceptables para su futuro laboral.

PALABRAS CLAVES: Tecnologías de la Información, Software SAP, Estudiantes, Empresas

THE TECHNOLOGY OF THE BUSINESS INFORMATION IN THE PROFESSION OF BUSINESS

ABSTRACT

The research work is descriptive with quantitative and qualitative approach, a sample was made to 150 students from different careers of the Accounting and Administration School of the Autonomous University of Coahuila, the objective is to analyze the degree of knowledge and / or application of information technologies in the administrative accounting area. The study visualizes some practices that the SAP software presents (Systems, Applications and Products) and that allows the student the management of business information technologies. The following variables are established: basic aspects, level of knowledge perception and / or application of business information technologies and the level of perception of the practice in the work environment. The results hold very significant means positively to the question that the university students have the training in the use of technological information tools. Likewise, it is considered that the application of technology in business areas contributes to an increase in competitiveness in organizations. It is concluded that the practical knowledge that SAP software applications provide to the students of this institution is highly profitable, and that it places them in highly acceptable work ranges for their future work.

JEL: M1, M15

KEYWORDS: Information Technology, SAP Software, Students, Companies.

INTRODUCCIÓN

En la actualidad disponemos de una base tecnológica que no solo puede substituir al trabajo manual (principal característica de las tecnologías manufactureras de la economía industrial), sino que también ayuda en el proceso de generación y difusión del saber, es decir, en el trabajo mental de los nuevos “trabajadores del conocimiento” De acuerdo a esta dinámica, las organizaciones deben visualizar nuevos horizontes, y consolidar estrategias organizacionales que incorporen elementos claves como sistemas de información, telecomunicaciones, tecnologías Web, tecnologías móviles, entre otros proyectos de tecnologías de información (Marquardt, 2011). El entorno virtual facilita, entonces, la interactividad y el acceso a recursos de aprendizaje, además de que permite un aprendizaje autónomo y dirigido (Catasús, Romeu, & Pérez-Mateo, 2007) La exposición a recursos de aprendizaje propicia la activación y deliberación sobre los propios saberes, y la interacción con otros facilita la reflexión.

REVISIÓN DE LITERATURA

El explosivo crecimiento de la tecnología de información -a través de la potencia de las computadoras, los sistemas de información y las redes- amplía al alcance y le da un nuevo rol en las organizaciones, ya que permite rediseñarlas, transformando la estructura, alcance, mecanismos de reporte y control, prácticas y flujos de trabajo, productos y servicios. Los cambios que provoca la incorporación de TI, principalmente manifestados en los sistemas de información, son estructurales y de gran magnitud. (Villaprado Chávez & López Franco, 2016) ERP (Sistemas de Planificación de Recursos) Enterprise Resource Planning en inglés, conocidos como Sistemas de Planificación de Recursos es un software que facilita e integra la información para cumplir con las funciones de producción, logística, finanzas y recursos humanos de una empresa. Este sistema comprende muchos módulos completamente integrados, que abarca prácticamente todos los aspectos de la administración empresarial. Ha sido desarrollado para cumplir con las necesidades crecientes de las organizaciones mundiales y su importancia está más allá de toda duda. SAP ha puesto su mirada en el negocio como un todo: así ofrece un sistema único que soporta prácticamente todas las áreas en una escala global. SAP proporciona la oportunidad de sustituir un gran número de sistemas independientes, que se han desarrollado e instalado en organizaciones ya establecidas, por un solo sistema modular. Cada módulo realiza una función diferente, pero está diseñado para trabajar con otros módulos. Está totalmente integrado, ofreciendo real compatibilidad a lo largo de las funciones de una empresa. www.sap.com SAP Programa de Alianzas Universitarias Las instituciones admitidas forman parte del programa utilizan SAP Business Suite como una herramienta de enseñanza en sus clases — haciendo una unión entre la teoría y la aplicación práctica. El software de SAP se usa en negocios, ciencia de la computación, ingeniería — todo lo relacionado con procesos de negocios, utilización analítica de webservices y tecnología. Se ingresa al sistema vía SAP hosting sites — University Competency Center. El acceso es el mismo que utilizan los clientes SAP — no se le brinda este acceso a una versión “educativa”.

METODOLOGÍA

La presente investigación utiliza el muestreo no probabilístico, utilizando como procedimiento el muestreo por conveniencia, “el elemento se autoselecciona o se ha seleccionado debido a su fácil disponibilidad” (Kinneer & Taylor, 1998). Se eligió el muestreo por conveniencia por el acceso y disponibilidad de la información que se obtiene de aquellos estudiantes que hayan participado en alguna de las capacitaciones de software SAP en la Facultad de Contaduría y Administración Unidad Norte, en algún periodo determinado del año agosto de 2012 a marzo de 2017 En este contexto, (Hernández Sampieri, Fernández Collado, & Baptista Lucio, 2010) indica que, miden, evalúan o recolectan datos sobre diversos conceptos. Procesamiento de los Datos. Para calcular la confiabilidad del instrumento fue utilizado el método de formas alternativas o paralelas (Hernández Sampieri, Fernández Collado, & Baptista Lucio, 2003) a partir de la aplicación del instrumento final a tres docentes investigadores y diez estudiantes en el cual se comparó

la similitud de los diferentes ítems en el instrumento aplicado. Para el cálculo de la confiabilidad se utilizó el coeficiente de α (Alpha) de Cronbach El cálculo es mediante el software SPSS 22.0 dando como resultado: Cronbach Alpha 0.805; valor que es aceptable según (Devellis, 2003, pp.95 y 96) La investigación se hizo mediante una metodología de tipo descriptiva y cuantitativa, debido a que parte de la recolección de la información se obtuvo por medio de una encuesta realizada a una muestra de **150** estudiantes de diferentes carreras de la Facultad de Contaduría y Administración.

RESULTADOS

Aspectos Básicos de los Participantes:

Tabla 1: Número de Alumnos y Porcentaje Por Programa de Estudio

Carrera	Frecuencia	Porcentaje
Lic. En Contaduría	71	47.2
Lic. en Administración de empresas	45	30.2
Lic. En Administración de Recursos Humanos	34	22.6
Total	150	100.0

En base a la metodología aplicada y que en primer momento describen las tablas (tablas 1) fueron un total de 150 alumnos a quienes se les aplico en cuestionario de los cuales fueron 34 hombres y 116 mujeres; así mismo 71 son estudiantes de la carrera de Lic. En Contaduría; 45 de la carrera En Administración de Empresas y 34 son de la carrera de Lic. En Administración de Recursos Humanos.

Tabla 2: Considera Necesario o Útil Que las Universidades Impartan Cursos Sobre Herramientas ERP

Carrera	N	Media
Lic. en Contaduría	69	4.73
Lic. en Administración de Empresas	50	4.82
Lic. En Administración de Recursos Humanos	31	4.56
Total	150	4.89

El resultado de la (tabla No. 2) muestra que las medias de 4.17 de la carrera de Contaduría; 4.09 de Administración de Empresas y 4.10 de Administración de Recursos Humanos, son muy significativas positivamente a la interrogante de que es importante que los universitarios cuenten con las capacitaciones en el manejo de herramientas ERP.

Tabla 3: Ha Sido Satisfactorio Haber Realizado los Talleres SAP GBI

Carrera	N	Media
Lic. en Contaduría	84	4.73
Lic. en Administración de Empresas	45	4.82
Lic. En Administración de Recursos Humanos	21	4.56
Total	150	4.89

La (tabla No. 3) proporciona el resultado sobre la cuestión de una de las capacitaciones realizadas en la institución sobre el software SAP, este resultado muestra que las medias de 4.73 de la carrera de Contaduría; 4.82 de Administración de Empresas y 4.56 de Administración de Recursos Humanos. Las medias obtenidas muestran que fue altamente satisfactorio la experiencia de los talleres.

Tabla 4: Nivel de Importancia de Obtener una Certificación del Manejo de SAP

Carrera	N	Media
Lic. en Contaduría	68	3.53
Lic. en Administración de Empresas	52	3.99
Lic. En Administración de Recursos Humanos	30	3.78
Total	150	4.10

Los resultados de la (tabla No. 4) establece el nivel de importancia por obtener una certificación el software SAP, donde muestra las medias de 3.53 de la carrera de Contaduría; 3.99 de Administración de Empresas y 3.78 de Administración de Recursos Humanos. Determinado que no es relevante dicha certificación, esto tal vez a la situación laboral de los alumnos que no es de exigencia contar con este grado.

Tabla 5: Qué Nivel de Importancia le Daría al Hecho de Tener Conocimiento Práctico en Dicho Sistema, en Caso de Alguna Vacante o de un Ascenso en la Empresa

Carrera	N	Media
Lic. en Contaduría	57	4.73
Lic. en Administración de Empresas	56	4.17
Lic. En Administración de Recursos Humanos	37	4.60
Total	150	4.53

A partir de la población que labora (tabla No. 5) se cuestiona la importancia de contar con la práctica de una herramienta ERP para el desarrollo profesional, donde los resultados son 4.73 de la carrera de Contaduría; 4.17 de Administración de Empresas y 4.60 de Administración de Recursos Humanos. La repercusión positiva en el ámbito empresarial cuando ya se cuenta con el conocimiento práctico de un software ERP.

Tabla 6.: Es Relevante Que se Establezca Un Ambiente Virtual en las Empresas

Carrera	N	Media
Lic. en Contaduría	61	4.15
Lic. en Administración de Empresas	49	3.99
Lic. En Administración de Recursos Humanos	40	4.07
Total	150	4.03

La respuesta sobre la importancia de que las empresas tienen la necesidad imperiosa de contar con tecnologías en la administración de la empresa, el resultado de la (tabla No. 6) muestra que las medias son 4.15 de la carrera de Contaduría; 3.99 de Administración de Empresas y 4.07 de Administración de Recursos Humanos. Por tanto, la mayoría de los encuestados están de acuerdo o totalmente de acuerdo en esta cuestión.

Tabla 7: es una Ventaja Competitiva Acceder y Analizar la Información Mediante un ERP SAP

Carrera	N	Media
Lic. en Contaduría	52	4.23
Lic. en Administración de Empresas	49	4.19
Lic. En Administración de Recursos Humanos	49	4.18
Total	150	4.17

En la (tabla No. 7) los resultados muestran una similitud dado que las medias son: 4.23 de la carrera de Contaduría; 4.19 de Administración de Empresas y 4.18 de Administración de Recursos Humanos. Determinando así que los encuestados han experimentado en la empresa la importancia de la información que se otorga para la toma de decisiones cuando se utiliza un ERP SAP.

Tabla 8: Considera Que con el Manejo del ERP SAP se Logre la Habilidad de Obtener Información

Carrera	N	Media
Lic. en Contaduría	67	4.14
Lic. en Administración de Empresas	39	3.99
Lic. En Administración de Recursos Humanos	44	4.01
Total	150	4.07

Como resultado (tabla No. 8) del cuestionamiento sobre obtener información estratégica con el manejo del ERP SAP se muestra que las medias son las siguientes: 4.14 de la carrera de Contaduría; 3.99 de Administración de Empresas y 4.01 de Administración de Recursos Humanos. Esto visualiza que tanto las carreras de Contaduría y Administración de Recursos Humanos están de acuerdo o totalmente de acuerdo.

Tabla 9: la Tecnología en la Empresa Puede Mostrar el Impacto de las Decisiones Directivas

Carrera	N	Media
Lic. en Contaduría	60	4.07
Lic. en Administración de Empresas	55	4.00
Lic. En Administración de Recursos Humanos	29	3.95
Total	150	3.99

La (tabla No. 9) se refiere que tanto la tecnología en la administración de la empresa tendrá impacto en las decisiones directivas, los resultados sobre esta percepción se manifiestan como sigue: 4.07 de la carrera de Contaduría; 4.00 de Administración de Empresas y 3.95 de Administración de Recursos Humanos. Determinando por tanto que el punto de vista de los encuestados se manifiesta dependiendo de los campos del conocimiento; contable, administrativo o capital humano. Sin embargo, la media total es de 3.99 lo que determina que casi están de acuerdo en este cuestionamiento.

CONCLUSIONES Y RECOMENDACIONES

Finalmente, esta investigación permite concluir que es altamente provechoso para los alumnos que una facultad de Contaduría y Administración cuenten con la enseñanza de aplicaciones ERP. En ese sentido, el contar con la licencia del software y formar parte de las Alianzas Universitarias SAP muestra que no es realmente un gasto, sino una inversión que con el tiempo generará un incremento en el nivel académico muy importante. Así mismo, también se concluye que cada vez las compañías requieren de la manipulación de un alto volumen de datos y así necesariamente optan por las soluciones integradas que brindan los sistemas ERP. Ello se debe a que, al aumentar el rendimiento de sus actividades, se mejora la calidad de servicio al cliente, y, por consiguiente, la imagen de la organización. De esta manera, así como un ERP ofrece grandes ventajas para las compañías, también ofrece ventajas para los que optemos por aprender de dichos sistemas, ya que el mercado laboral de la actualidad, es altamente competitivo y hay mucha demanda de recurso humano bien capacitado. Por lo tanto, es necesario que los docentes universitarios se capaciten continuamente, pues el hecho de conocer el uso de los sistemas ERP definitivamente le da un valor agregado a su carrera profesional. En definitiva, si la universidad logra establecer cursos del manejo de SAP a disposición de todos sus alumnos, mantendría a sus estudiantes a la vanguardia en el conocimiento de estas herramientas para en seguida poder optar así por una certificación con la que se puede incursionar en el mercado laboral como consultor de este ERP líder en el mercado mundial. Además, el hecho de tener ese valor agregado puede incidir en que en una entrevista de trabajo se escoja a uno u otro, según el respaldo profesional y la experiencia laboral que se tenga en ese campo.

REFERENCIAS BIBLIOGRAFICAS

Catasús, M. G., Romeu, T., & Pérez-Mateo, M. (2007). Competencias TIC y trabajo en equipo en entornos virtuales. *International Journal of Educational Technology in Higher Education (ETHE)*, 4(1).

Hernández Sampieri, R., Fernández Collado, C., & Baptista Lucio, P. (2003). Metodología de la investigación. La Habana: Editorial Félix Varela, 2.

Hernández Sampieri, R., Fernández Collado, C., & Baptista Lucio, P. (2010). Metodología de la investigación. México, DF: México: McGraw Hill.

Kinney, C. T., & Taylor, R. J. (1998). Investigación de mercados. 5a. Edición. México. Editorial McGraw Hill.

Marquardt, M. J. (2011). Building the learning organization: Mastering the five elements for corporate learning: Hachette UK.

Villapardo Chávez, O., & López Franco, M. (2016). La influencia de la tecnología en la administración.

<http://www.significados.com/tecnologia/>

<http://definicion.de/administracion/>

<http://www.historiasdegrandes exitos.com/2008/11/historia-de-sap.html>

<http://www.ptolomeo.unam.mx:8080/xmlui/bitstream/handle/132.248.52.100/1780/Tesis.pdf?sequence=1>

[http://www.globalmedia-it.com/index.php/analysis/47731-](http://www.globalmedia-it.com/index.php/analysis/47731-sap_extiende_su_programa_para_universidades_en_latinoam_rica.html)

[sap_extiende_su_programa_para_universidades_en_latinoam_rica.html](http://www.globalmedia-it.com/index.php/analysis/47731-sap_extiende_su_programa_para_universidades_en_latinoam_rica.html)

<http://www.anfeca.unam.mx/doctos/ponencias/2010/Actualizacion.pdf>

BIOGRAFIA

Leonor Gutiérrez González es Doctora en Administración y Alta Dirección de Universidad Autónoma de Coahuila, UPC miembro del SAP University Alliances Program en Latinoamérica. Coordinadora del software educativo SAP en la Facultad de Contaduría y Administración, Unidad Norte. Investigadora en la línea casos prácticos para fines didácticos en la gestión PYMES.

Jimmy Armas Aguirre, Master en Administración de Empresas (MBA Directivo) por la Universidad Politécnica de Cataluña y por la Universidad Peruana de Ciencias Aplicadas. UPC miembro del SAP University Alliances Program en Latinoamérica, Coordinador de la Carrera de Ingeniería de Sistemas de Información.

Liliana Patricia Zavala Chacón, Estudiante de VIII semestre de la Licenciatura en Contaduría de la Facultad de Contaduría y Administración, Unidad Norte Universidad Autónoma de Coahuila

LA ESCOLARIDAD DE LOS TRABAJADORES DE LA INDUSTRIA HOTELERA Y SU RELACIÓN CON LA CALIDAD EN EL SERVICIO CASO SAN MIGUEL DE ALLENDE

Betzabeth Dafne Morales, Universidad de Guanajuato
Mitzi Abigail Díaz Jiménez, Universidad de Guanajuato

RESUMEN

El turismo es una actividad económica de impacto mundial que propicia el desarrollo, no solo de los lugares sino también de la comunidad receptora. El sector turístico es una fuente de empleo que, a través de la capacitación, se logra la profesionalización de las funciones a realizar. Por lo anterior, resulta interesante el objetivo de esta investigación, que es estudiar y analizar el perfil de escolaridad y sociodemográfico de las personas que laboran en la hotelería, una de las principales áreas de trabajo de quienes se dedican a la industria turística, además de relacionar dicho nivel de estudios con la calidad en el servicio que ofrecen a sus huéspedes. Para ello, se utilizó una metodología cuantitativa, a través del diseño de dos cuestionarios aplicados en forma de encuesta: uno para los colaboradores de hoteles de 4 y 5 estrellas de la ciudad de San Miguel de Allende, Guanajuato y otro para los turistas que se hospedaron en dicha ciudad. Entre los principales resultados, se encontró que la falta de recursos económicos y el estado civil determinan el estancamiento en el nivel de estudios de los trabajadores. Aún así, la mayoría de los turistas califican su estancia general en los establecimientos de hospedaje como muy satisfactoria.

PALABRAS CLAVE: Turismo, Hotelería, Escolaridad, Calidad, Servicio

THE EDUCATION OF WORKERS IN THE HOTEL INDUSTRY AND ITS RELATION WITH SERVICE QUALITY: SAN MIGUEL DE ALLENDE CASE

ABSTRACT

Tourism is an economic activity with a global impact that fosters the development, not only of the places but also of the receiving community. The tourism sector is a source of employment that, through training, achieves the professionalization of the functions to be performed. Therefore, the objective of this research is interesting, which is to study and analyze the profile of schooling and sociodemographic of people working in the hotel industry, one of the main areas of work of those engaged in the tourism industry, in addition to relate this level of studies with the quality of the service offered to their guests. To do this, a quantitative methodology was used, through the design of two questionnaires applied in the form of a survey: one for the collaborators of 4 and 5 star hotels in the city of San Miguel de Allende, Guanajuato and another for tourists who were lodged in said city. Among the main results, it was found that the lack of economic resources and marital status determine the stagnation in the level of studies of workers. Even so, most tourists rate their general stay in lodging establishments as very satisfied.

JEL: I21, L8, L83, M1, M10, M12, Z3, Z30, Z31, Z32

KEY WORDS: Tourism, Hospitality, Schooling, Quality, Service

INTRODUCCIÓN

La actividad turística nace con la motivación del desplazamiento de las personas con fines de descanso, cultura, comercio y desde la edad antigua las personas tenían la necesidad de desplazarse de un lugar a otro. Hoy en día es una de las principales actividades económicas en diversos países. El turismo hoy en día se encuentra fuertemente ligado al desarrollo y abarca un número creciente de nuevos destinos. Tiene una relevancia ineludible para el crecimiento de los países, ya que juega un importante papel para detonar las economías nacionales, contribuir a la disminución de la pobreza por propiciar grandes cadenas productivas en la generación de empleos y ser un elemento insoslayable de cohesión social y cultural (Ruiz, 2008). Ahora bien, el presente trabajo aborda como tema principal *la profesionalización en el sector hotelero* en la ciudad de San Miguel de Allende, cuyo objetivo es conocer el nivel de escolaridad de los empleados en los hoteles de cuatro y cinco estrellas, y comprobar si influye en la satisfacción de los huéspedes. Debido que la escuela es el ámbito donde las personas pueden aprender diferentes áreas del conocimiento y desarrollar habilidades, intelectuales, físicas y morales, además que permite el poder socializar con otros individuos.

La calidad del servicio ofrecido recae por completo en el personal que atiende al cliente al huésped, el buen trato, la solución de quejas y la rapidez en el servicio son aspectos que los directivos en el sector hotelero deben de tomar en cuenta al realizar sus funciones. La satisfacción de los huéspedes dentro de la estancia constituye un componente para lograr el éxito y la competitividad en el hotel, por lo que no solo debemos considerar las instalaciones o los elementos tangibles, sino también la actitud de servicio del personal, su preparación, habilidades, motivación, entre otros. En México la actividad turística es un eje fundamental de la economía. El país tiene una amplia gama de oferta turística: playas, montañas, desiertos, selvas, sitios arqueológicos, además de contar con una riqueza patrimonial, histórica y gastronomía, que permite que los destinos tengan un potencial turístico, lo cual ha posicionado a México en el octavo lugar del ranking mundial de los países más visitados, recibiendo a más de 35 millones de turistas, subiendo un peldaño en comparación al 2015. En relación a los ingresos por divisas, también se tuvo un ascenso de dos lugares, pasando del lugar 16 al 14, teniendo como ingresos 19.6 miles de millones de dólares (Barómetro OMT, 2017). Otro aspecto a resaltar y que soporta la relevancia de la presente investigación, es hablar sobre el impacto que tiene la actividad turística en la generación de empleos en México. El empleo turístico aumentó 3.6% en el primer cuatrimestre de 2017 con respecto a igual periodo de 2016, cantidad mayor en 138 mil 672 empleos, es decir, la población ocupada en el sector turismo de México obtuvo los 4 millones 30 mil 762 empleos, lo que significa un máximo histórico de la serie desde 2006 y representó 8.5% del empleo total. Podemos decir que en México ha tenido muchos avances en el sector turismo, desarrollándose con el paso de los años convirtiéndose en un factor de crecimiento económico y desarrollo aportando a la economía de los mexicanos con generación de nuevos empleos.

Contexto del Estudio: San Miguel de Allende

San Miguel de Allende, ciudad Patrimonio de la Humanidad, es un importante destino turístico por su diversidad cultural y artesanal. Cuenta con edificios que datan desde el siglo XVI y XVIII, una arquitectura religiosa, desde un estilo barroco hasta neogótico. Una importante parada de la ruta de la plata entre Zacatecas y la ciudad de México. De sus atractivos turísticos que destacan son la parroquia de San Miguel de Arcángel, centro cultural de Ignacio Ramírez, el jardín botánico, el museo de juguete y un mercado de artesanías, museo histórico y una de las zonas arqueológicas que es Cañada de la Virgen. Es sede del festival internacional de cine de Guanajuato (GIFF por sus siglas en inglés), festival de cine de cámara y festival internacional de jazz, feria de lana y latón, y es parte del circuito del vino recibiendo un fuerte potencial por su gastronomía. Es una ciudad que ha recibido diferentes nombramientos en dos de las revistas más influyentes del mundo de viajes, es reconocida como la mejor ciudad de Latino América y la tercera en el mundo, por la revista travel + leisure, en sus premios world's best awards 2016. En 2017 fue galardonada con el primer lugar mundial de ranking anual "top 25 cities of the world", Condé Nast Travel. De acuerdo

con el perfil de turista de la SECTUR Guanajuato, para 2016, la ciudad de San Miguel de Allende recibió 1.25 millones de visitantes, de los cuales fueron 317,445 internacionales, 952,488 nacionales y 263,617 estatales, el 59% son turistas y 41% excursionistas. Para este año se obtuvo una derrama económica en el sector turismo de 6 mil 696 millones de pesos. San Miguel de Allende cuenta con una oferta de 143 hoteles de 1 a 5 estrellas y sin clasificar. De acuerdo con la distribución del visitante por tipo de hospedaje, los hoteles tienen el 32% de ocupación. El 64% de los turistas si hacen reservación y su medio favorito es por internet, la mayoría viajan en pareja representado con el 36%.

REVISIÓN DE LA LITERATURA

Para iniciar la investigación es necesario postularse a la definición de Turismo. El glosario básico de la Organización Mundial del Turismo lo define como “Un fenómeno social, cultural y económico relacionado con el movimiento de las personas a lugares que se encuentran fuera de su lugar de residencia habitual” (OMT, 2017), es decir, la actividad que realizan a consecuencia del desplazamiento y estancia temporal de las personas fuera de su entorno. De igual forma, contemplando que el estudio se realiza específicamente en hoteles, cabe mencionar su definición: es el establecimiento edificado tradicionalmente en estructuras físicas verticales, se caracteriza por el tipo de alojamiento que le son propios en cuartos y suites, además de otros complementarios como: espacios sociales, piscina, restaurantes, bar, etcétera (Ramírez, 1992).

La Organización Mundial del Turismo (OMT) al hablar de calidad señala que es resultado de un proceso que abarca la satisfacción de todas las necesidades, exigencias y expectativas de los clientes en relación al servicio recibido. Entonces se puede decir que la satisfacción del cliente va directamente relacionada con la calidad que el establecimiento ofrece en su servicio. Según Deming (1989) la calidad es “*un grado predecible de uniformidad y fiabilidad de bajo coste, adecuado a las necesidades del mercado*”. Entonces que la calidad en el servicio se puede definir como la percepción acerca de la excelencia en el servicio recibido. “*La calidad es el nivel de excelencia que la empresa ha escogido alcanzar para satisfacer a su clientela clave; representa, al mismo tiempo, la medida en la que se logra dicha calidad*” (Publicaciones S.L, 2008).

El estudio “Medición de la calidad de servicios: una aplicación en empresas hoteleras” realizado por Sara Joana Gadotti dos Anjos (Universidad del Valle del Itajaí) y Aline Franca de Abreu (Universidad Federal de Santa Catarina), es una investigación aplicada en hoteles de sol y playa en la provincia de Santa Catarina, Brasil para la medición de la calidad. Su objetivo fue analizar la expectativa y la percepción de los clientes con la de los empleados en relación a la calidad de los servicios ofrecidos. La metodología que se utilizó para dicho estudio fue aplicar entrevistas a los clientes y a los empleados de los hoteles de diferentes categorías, utilizando una adaptación del modelo SERVQUAL donde se evalúan las expectativas y percepciones de los clientes respecto de 5 dimensiones que son las siguientes: aspectos tangibles, fiabilidad, capacidad de respuesta, seguridad y empatía. Como resultado del estudio obtuvieron que en los hoteles de dos estrellas según la percepción de los clientes presentan índices negativos en la percepción de los empleados. En los hoteles de tres estrellas se obtuvieron índices positivos en relación a la rapidez y atención. En los hoteles de cuatro estrellas el conocimiento de las tareas específicas por parte de los empleados presentó una evolución mejor de la esperada.

La importancia de este estudio fue entregar un análisis detallado de las expectativas y percepciones a los gestores de los hoteles para que conocieran los puntos fuertes y débiles así como el aumento constante de las exigencias del consumidor de acuerdo a sus expectativas acerca de la calidad de los servicios. En la actualidad, la gestión de la calidad se convierte en condición necesaria para cualquier estrategia dirigida al éxito de las empresas (Gadotti & Franca, 2007). El turismo es uno de los escenarios que demanda en mayor medida dar relevancia a la atención al cliente, especialmente en los hoteles, que se caracterizan por el alto grado de interacción con los clientes. Otra investigación que analiza la satisfacción de los huéspedes en relación al servicio de los empleados es el de la “Satisfacción laboral como factor crítico para la calidad; el

caso del sector hostelero de la provincia de Córdoba, España”, que es un artículo que trata sobre el nivel de satisfacción en relación a diferentes aspectos del personal y cómo influye en la satisfacción de los huéspedes. El objetivo es reflejar la influencia de determinadas variables como género, edad, estado civil, nivel educativo y afiliación sindical y variables organizacionales como el salario, antigüedad, horas de trabajo. La metodología que se utilizó fue la aplicación de una encuesta a los empleados de los hoteles de todas las categorías. Cada pregunta se contestó en una escala de Likert de 5 puntos, siendo 1 “muy insatisfecho y 5 muy satisfecho”. Se puede resaltar que en esta investigación la diferencia de la variable del nivel educativo en los empleados no presenta un patrón lógico, por lo tanto, para el caso de este estudio no genera aportaciones relacionadas directamente. Se concluyó que existe una estrecha relación entre la satisfacción del empleado, con la calidad del servicio y satisfacción del cliente. *“Una empresa hotelera no puede aspirar a niveles de calidad competitivos en servicio si su platilla no se encuentra satisfecha”* (González, Sánchez y López, 2011).

Zanfardini (2014) en su artículo “Calidad en los hoteles de San Martín de los Andes, Patagonia, Argentina” utilizó el modelo SERVQUAL y una escala de indicadores propios de los establecimientos que participaron en dicha investigación, aplicó entrevistas para conocer las expectativas y percepciones de los huéspedes. Se obtuvieron como resultado que las principales dificultades de los establecimientos de hospedaje estuvieron vinculadas con la accesibilidad a los hoteles con personas que tienen una capacidad especial, el control de la temperatura en las habitaciones, el confort en las camas y la seguridad del huésped. La importancia de estos estudios es poder identificar las actividades más efectivas que influyen en la probabilidad de que los empleados lleven a cabo lo que el huésped desea. Botía y Orozco resaltan que la calidad en el servicio se percibe más por los usuarios cuando los prestadores de servicios le dan respuesta a sus requerimientos. *“Constantemente, el servicio o la prestación de servicios en el sector turístico se ve dirigida a la solución de los requerimientos de los clientes que por su dinámica y particularidades se transforma en un constante “solucionar los problemas”, pues se generan a cada paso circunstancias que interfieren con la intencionalidad y objetivos de los usuarios”* (Botía, M., y Orozco, L. 2012) Los establecimientos hoteleros demandan empleados con un cierto nivel educativo. Sánchez et, al. (2017) en su artículo “La satisfacción laboral en los establecimientos hoteleros” mencionan un estudio en los hoteles de Hong Kong donde detectaron que los trabajadores con educación primaria se encontraban satisfechos con sus compañeros y en el trabajo en sí, pero muy descontentos con su desarrollo profesional. Los empleados con niveles superiores de educación no se encuentran satisfechos laboralmente, lo que explica sus altas expectativas y ambición.

Como se mencionaba en el párrafo anterior para poder tener establecimientos con calidad en el servicio es importante que cada uno de los colaboradores se encuentren satisfechos en su trabajo ya que son la imagen de la empresa. En el estudio de los hoteles en Hong Kong los empleados con nivel educativo más alto no se encuentran conformes con el puesto que tienen por lo tanto no dan una buena calidad en el servicio. La investigación Competencias en servicio al cliente y efectividad en solución de problemas : Sus características en el sector turismo” realizado por Botía y Orozco (2012).Fue efectuado en tres ciudades colombianas (Armenia, Palmira- Buga y Neiva), se evaluaron a 336 personas que realizan labores de servicio al cliente, 53 de ellas eran de establecimientos de alojamiento, donde aplicaron test de efectividad en la solución de problemas, para con ello identificar si los patrones de conducta, hábitos y prácticas sociales influían negativamente en el logro de los estándares de productividad y efectividad en diversos sectores de la economía, entre ellos, el sector turismo. Los autores obtuvieron como resultado sobre el nivel educativo de la muestra en relación con el desempeño en competencias, la correlación tiende a cero, es decir, indica ortogonalidad ($r = 0.02$); esto se puede analizar desde la perspectiva teórica planteada, según la cual la disposición al servicio está más asociada a un patrón cultural del servir servil enraizado, y no a un proceso educativo sistemáticamente orientado a lograr patrones de comportamiento alineados con estándares internacionales de calidad para el sector turismo.

METODOLOGÍA

En los últimos años, la actividad turística ha sido un gran aporte a los recursos económicos de los países, que se caracteriza por el servicio directo que tiene hacia sus clientes, es por ello que las empresas en el sector turismo deben de ser más conscientes en la calidad del servicio, ya que es uno de los aspectos más importantes en la satisfacción de las expectativas de los clientes, por lo cual las empresas tienen la necesidad de incorporar herramientas de gestión de calidad. Es por ello la importancia de investigaciones acerca del tema, pues es un mercado en constante crecimiento, las empresas turísticas como son el caso de los hoteles deben de contar con una profesionalización en sus actividades para obtener ventajas competitivas para su supervivencia en el mercado. Para cumplir con los objetivos de la investigación se utilizó una metodología cuantitativa, aplicando dos encuestas. La primera enfocada al personal hotelero, buscando conocer su puesto actual, antigüedad en el mismo, capacitación recibida, escolaridad, tiempo transcurrido desde su último nivel de estudios, y si contaban con licenciatura o posgrado, conocer si se encontraban titulados. La segunda se aplicó a los huéspedes, buscando conocer si sus expectativas habían sido cubiertas, y analizando a detalle su experiencia con el personal de las diversas áreas de hotel con quienes haya tenido contacto. En ambas encuestas se tomaron en cuenta datos socio demográficos como género, edad, estado civil, ocupación, entre otras.

Objetivo General

Conocer el nivel de escolaridad de los empleados en el sector hotelero de la ciudad de San Miguel de Allende y comprobar si influye en la calidad del servicio ofrecido por los mismos a los huéspedes.

Hipótesis

H₀ Los hoteles que cuentan con capital humano con escolaridad superior y/o capacitación constante brindan un servicio de mayor calidad que se ve reflejado en la satisfacción del cliente, en comparación a los que tienen personal con nivel de escolaridad básico.

Población Objetivo

Los sujetos del presente estudio son los colaboradores de los establecimientos de hospedaje de la ciudad de San Miguel de Allende, así como los huéspedes. Se utilizará una muestra estratificada, se trabajará únicamente con los hoteles de cuatro y cinco estrellas, la fórmula que se utilizó para sacar la muestra es la siguiente.

$$n = \frac{k^2 \cdot p \cdot q \cdot N}{(e^2 \cdot (N-1)) + k^2 \cdot p \cdot q}$$

N= es el número de la población o universo.

k= Nivel de confianza en este caso será del 90%.

e= es el error muestral deseado se utilizará del 5%.

p= es la proporción de individuos que poseen en la población la característica de estudio. El dato que se utilizará será de p=q=0.5 que es la opción más segura.

q= es la proporción de individuos que no poseen esa característica, es decir, es 1-p.

n: es el tamaño de la muestra (número de encuestas que vamos a hacer).

San Miguel de Allende cuenta aproximadamente con una población de 650 personas trabajando en hoteles de cuatro y cinco estrellas, por lo que la muestra es de 192 personas. En relación a los turistas al ser una

muestra infinita se utiliza un nivel de confianza del 95% y admitiendo un margen de error del 5% como resultado se obtiene que el tamaño de la muestra tendrá que ser de 384 encuestas.

Descripción de la Encuesta del Personal Hotelero en la Ciudad de San Miguel de Allende

Dentro de algunas de las preguntas más relevantes se encuentran las referentes a la antigüedad que llevan en el hotel, el tiempo trabajando en la hotelería en general, en los casos de los empleados que se encontraban titulados en su licenciatura y/o posgrado preguntamos cual fue la modalidad de su titulación, en el caso de que no conocer los motivos, universidad donde realizaron sus estudios, las personas que recibieron capacitación cuestionamos sobre por cual institución la recibieron es decir, la empresa actual, empleo anterior, gobierno o privado. Participaron 51 hoteles en la investigación y se encuestaron a 537 empleados.

Descripción de la Encuesta de Calidad en el Servicio en los Hoteles de la Ciudad de San Miguel de Allende

La encuesta de calidad en el servicio, es un cuestionario que recolecta la opinión de los turistas de la ciudad de San Miguel de Allende sobre los establecimientos de hospedaje. Para conocer el perfil de los turistas, la encuesta contiene apartados tales como el género, estado civil, edad, cantidad de hijos, acompañante de viaje, escolaridad, ocupación, motivo de visita y procedencia. Contiene además el nivel de satisfacción de las expectativas de los turistas en relación a la calidad de los servicios de reservaciones telefónicas, recepción, camaristas, mantenimiento, alimentos y bebidas, gerencia, se mide con una escala Liker siendo 1 muy satisfecho, 2 satisfecho, 3 insatisfecho y 4 muy insatisfecho, por último contienen preguntas referentes al manejo de quejas. Se encuestaron a 428 turistas.

RESULTADOS

La presente investigación permite evaluar si el nivel educativo de los trabajadores en los hoteles es relevante para satisfacer las necesidades de los clientes y conocer las dimensiones de la calidad de los servicios prestados en los establecimientos de hospedaje en la ciudad de San Miguel de Allende. Este conocimiento permitirá ayudar a los gestores en la mejora en la calidad en las actividades dentro del establecimiento. generando estrategias de acción e identificando objetivos que creen satisfacción en las expectativas de los clientes. La investigación también permite conocer las capacitaciones que sus trabajadores creen que necesitan para poder desarrollar mejor sus actividades. Se analiza toda la información obtenida comentando los aspectos más destacables de cada ítem específico de la encuesta, acompañándolo de gráficas, e interrelacionando las variables de la siguiente manera:

Perfil del empleado con el puesto desempeñado en el hotel, con la finalidad de conocer cuántas mujeres y hombres se encuentran en las distintas áreas, su edad y el tiempo que llevan en el puesto.

Perfil del empleado con la escolaridad, el propósito es conocer el nivel educativo tanto de hombres como de mujeres, así como relacionarlo con el puesto desempeñado.

Puesto desempeñado en el hotel relacionarlo con las capacitaciones para identificar qué áreas si reciben capacitación y cuales lo carecen.

Nivel de satisfacción de los turistas con el puesto desempeñado de los empleados con la finalidad de conocer que áreas cumplen con las necesidades de los clientes.

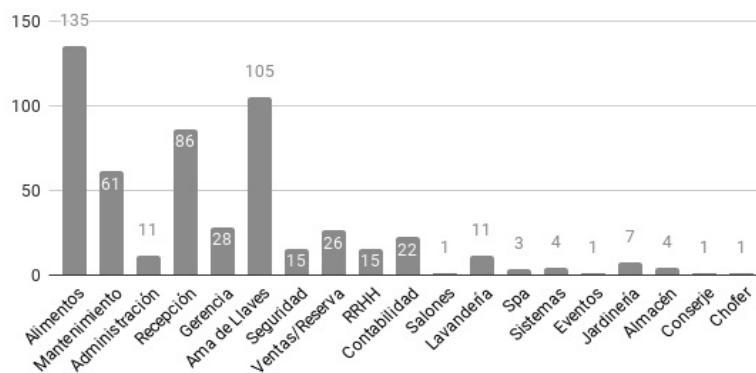
Resultados Obtenidos del Personal Hotelero en la Ciudad de San Miguel de Allende

En relación al género, fueron 51.6% mujeres y 38.3% hombres. En el rango de edad de los trabajadores en su mayoría se encuentran entre los 26 y 35 años de edad, representando el 34.3% de los encuestados y en minoría entre los 51 años o más representado por el 11.9%. La mayoría del personal encuestado se encuentra

en un estado civil soltero representado por el 52.9% y el 47.1% restante se encuentran casados. Otro aspecto importante, es conocer si los colaboradores tienen hijos, encontrando que de 537 empleados, 347 tienen hijos, la mayoría solo entre uno y dos. En la Figura 1 se observa que dentro de los encuestados, la mayoría pertenecían al área de alimentos y bebidas, ama de llaves y recepción.

Figura 1: Área del Hotel a la Que Pertenecen los Encuestados

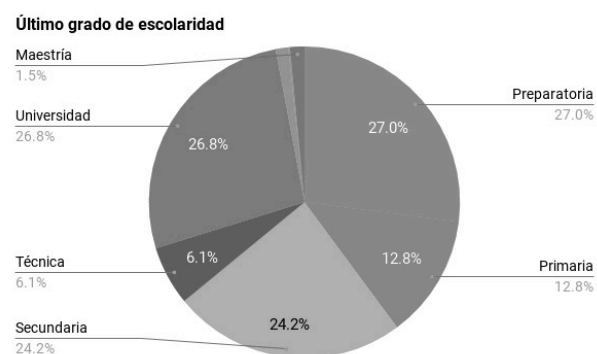
Área del hotel a la que pertenece:



Fuente: Elaboración propia

En relación a la antigüedad dentro de hotel se obtuvo que la mayoría tienen un año o menos, con 38.2%, y como minoría, 12.5 % cuentan con más de 10 años en el puesto. Referente al nivel educativo del personal encuestado en los hoteles de 4 y 5 estrellas de la ciudad de San Miguel de Allende, el 12.8% del personal tiene como último grado de escolaridad primaria, 24.2% secundaria, 6.1% técnica, 27.0% preparatoria, 26.8% universidad y el 1.5% restante cuenta con maestría, el 1.3% no estudió.

Figura 2: Último Grado de Escolaridad del Personal Encuestado en los Hoteles de 4 y 5 Estrellas en la Ciudad de San Miguel de Allende



Fuente: Elaboración propia

El 37.8% de las personas dejaron los estudios por falta de recursos, 24.6% no tenían interés por continuar estudiando, el 14.6% por falta de tiempo, el 8.8% fue por contraer matrimonio, 6.0% por tener hijos, 3.3% por trabajo, % 1.2 por falta de escuelas. Del total de los encuestados, solo 152 personas cuentan con una licenciatura habiendo 98 titulados y 54 sin haberlo hecho. Un dato importante es conocer cómo aprendieron las labores de su profesión los trabajadores encuestados mayormente con 39.8% con capacitación, el 32.1% en otros trabajos, el 13.9 % en la escuela y/o universidad, 12.2% en cursos externos, 1.5% empíricamente y el 0.5% por la práctica. Los dos grupos más significantes lo han aprendido por las capacitaciones recibidas y por la experiencia en sus otros trabajos. Los temas más recurrentes en los que reciben capacitación los

colaboradores de las empresas de hospedaje son: calidad en el servicio, capacitación técnica, trabajo en equipo, inglés, mercadotecnia y seguridad e higiene. En las siguientes gráficas se mostrará la relación que existe en algunas variables demográficas obtenidas en el cuestionario del personal hotelero en la ciudad de Guanajuato relacionados con los datos obtenidos. En relación al género y al cargo dentro del departamento, se encontró que en las jefaturas el 63.4% son hombres y 36.6% mujeres. La única área que cuenta con personal con doctorado es gerencia, las áreas que tiene personal con maestría son alimentos, contabilidad, recepción y gerencia, A su vez, las áreas que cuentan con mayor personal con licenciatura son: alimentos, recepción y ventas o reservas. Finalmente, el área con mayor personal con educación básica es el área de ama de llaves en su mayoría primaria y secundaria.

Resultados Obtenidos de la Encuesta Aplicada a Turistas en San Miguel de Allende

El 59% de los encuestados fueron mujeres y el 41% hombres. Con respecto a la edad del turista, la mayoría tiene entre 26-35 años. Del total, respecto al estado civil la mayoría de ellos son solteros obteniendo el 51.7 % y el 48.3% restante se encuentran casados. Así mismo, el 44.1% prefiere viajar en familia y el 8.2% solos. Con respecto a la procedencia de los turistas, el 85.8% fueron nacionales, 9.1% internacionales y el 5.1% estatales. Dentro de los nacionales, la mayoría provenían de la Ciudad de México, Estado de México y Jalisco. El nivel de satisfacción en la estancia en general de los turistas encuestados, se observa que el 68.9% estuvieron muy satisfechos, el 27.3% satisfechos y el 3.8% insatisfechos. De los dos grupos más significantes se puede obtener que la mayoría de los turistas obtuvieron un buen servicio en su estancia. Los turistas encuestados calificaron el manejo quejas como excelente en su mayoría. El 90.2% de recomendarían al hotel mientras que el 9.8% no. La mayoría de los turistas lo recomiendan por la ubicación donde se encuentra, el servicio que recibió, por las instalaciones, la limpieza del establecimiento, de algunos de ellos porque fueron económicos o porque tenían estacionamiento. Respecto a los que no fue por el mal mantenimiento de las instalaciones, la limpieza, el mal servicio y el precio.

CONCLUSIONES

En los últimos años la actividad turística se ha convertido una de las actividades económicas más importantes en los países, uno de los servicios que ofrece es el del hospedaje, como la actividad turística se ha vuelto tan importante tiene como consecuencia el crecimiento de esta industria, esto hace que los hoteles tengan que ser más competitivos para permanecer en el mercado y ofrecer mejores servicios ya que las exigencias de los clientes han ido aumentando. Al finalizar esta investigación, se encuentran varias premisas importantes. Una de ellas es que las personas que laboran en la hotelería, adquieren las habilidades y conocimientos para desempeñar sus funciones, a través de la capacitación y la experiencia, dejando en tercer lugar los conocimientos adquiridos en la escuela. Lo cual nos lleva a reflexionar en qué es lo que está faltando a la educación universitaria para dotar de los elementos necesarios a los estudiantes en este campo. Otro punto importante, es el hecho de que la calidad ofrecida en el servicio otorgado por los colaboradores, no se ve directamente influenciada por el nivel de escolaridad, es decir, las personas que cuentan con educación básica suelen ofrecer un servicio de calidad y mostrar una actitud amable, y por el contrario, no necesariamente, el contar con estudios universitarios garantiza que el personal cuente con esa actitud de amabilidad y trato con la gente. Este estudio permite auxiliar a los gestores de los hoteles a entender la importancia de que los huéspedes evalúen el servicio recibido por cada una de las áreas con las que interactuaron durante su estancia, con el fin de que puedan identificar las estrategias que creen satisfacción o que excedan las expectativas de los clientes. Como se mencionó anteriormente una de las herramientas más importantes para que los empleados desempeñen bien sus funciones es la capacitación, se recomienda que la capacitación sea un proceso continuo. Los jefes de cada una de las áreas deben de ser los primeros interesados en su propia formación y los primeros responsables en capacitar al personal a su cargo. Los beneficios que se obtienen gracias a la capacitación es generar un aumento en la productividad y calidad en el trabajo, que el personal adquiera y desarrolle conocimientos, que se sienta capacitado para resolver

problemas y tomar decisiones, tener una ventaja competitiva ante los demás, y por consiguiente contribuir al desarrollo personal de los colaboradores.

México tiene mucho que ofrecer al mundo, a pesar de las distintas situaciones que ha enfrentado el país. Lo que se espera es que año tras año vaya aumentando el número de turistas internacionales que ingresen, ya que esto provoca el empleo para muchos trabajadores y que se fortalezca la economía del país. Para poder llevar a cabo el desarrollo de la actividad turística se han necesitado diferentes industrias como los servicios de alimentos y bebidas, hospedaje, recreación, transporte, entre otros, que conforman una serie de elementos para poder satisfacer las necesidades del turista al momento de su viaje. Es por ello la importancia de esta investigación que nos habla sobre el nivel escolaridad del personal y la calidad en el sector hotelero para la satisfacción del cliente. La hotelería desempeña un papel relevante para la realización de la actividad turística y se concibe como el conjunto de actividades derivadas de la hospitalidad y el servicio de alojamiento a turistas.

Cada vez las necesidades del cliente son más exigentes y las industrias turísticas deben de contar con el personal capacitado e idóneo que realice una gestión eficaz en cada una de sus actividades sin importar lo mínimas que sean, los cargos ejecutivos deben tener la capacidad de proponer estrategias competitivas así como desarrollar planes de acción que coadyuven al desarrollo económico de la empresa. *“Desde el momento en el que el empleado inicia su relación laboral en una empresa de servicios, como un hotel, se debe fomentar en él la creación de una cultura de la calidad en la prestación del servicio con el huésped. Esta cultura de la calidad debe estar enfocada hacia la satisfacción total del cliente en cuanto a sus necesidades, deseos y expectativas”* (Báez, 2009). La profesionalización en el sector turismo constituye una parte fundamental para que todos los servicios y productos puedan ser competitivos y se adapten a las necesidades y exigencias de cada cliente.

BIBLIOGRAFÍA

Báez, S. (2009). Hotelería. México: Grupo Editorial Patria S.A de C.V.

Botía Sanabria, M. L., & Orozco Pulido, L. H. (2012). Competencias en servicio al cliente y efectividad en solución de problemas : Sus características en el sector turismo. Bogotá: Universidad Antonio Nariño.

Fernández Cabrera, M. (2004). Gestión de la calidad en las empresas hoteleras. España: Instituto para la calidad española.

Ferrari, M. (2012). Metodología de investigación aplicada a encuestas . Buenos Aires: Universidad de Buenos Aires .

Godotti dos Anjos, S. J., & Franca de Abreu, A. (28 de Mayo de 2007). La medición de la calidad de servicio: una aplicación en empresas hoteleras. Santa Catarina, Brasil.

González Santa Cruz, F., López Guzmán, T., & Sánchez Cañizares, S. (31 de Octubre de 2010). Satisfacción laboral como factor crítico para la calidad. Córdoba , España.

INEGI. (2015). Encuesta Intercensal.

OMT. (2000). Recomendaciones sobre estadísticas del turismo. New York: Naciones Unidas.

Publicaciones S.L, V. (2008). Calidad en el servicio al cliente. España: Vértice.

Ramírez, M. (1992). Teoría general de turismo. México: Diana, S. A de C.V.

Ruiz, O. (2008). Desarrollo y competitividad de México. México: Centro de estudios sociales y de opinión pública.

SECTUR. (2017 de junio de 2017). Glosario de la Secretaría de Turismo. Obtenido de Glosario de la Secretaría de Turismo: <http://www.datatur.sectur.gob.mx/SitePages/Glosario.aspx>

Vergara, J., Quesada, V., & Blanco, I. (2011). Análisis de la calidad en el servicio y satisfacción de los usuarios en dos hoteles cinco estrellas de la ciudad de Cartagena (Colombia) mediante un modelo de ecuaciones estructurales. *Revista chilena de ingeniería*, 420-428.

BIOGRAFIA

Betzabeth Dafne Morales, Universidad de Guanajuato

Mitzi Abigail Díaz Jiménez, Universidad de Guanajuato

CALIDAD DE VIDA LABORAL DE LOS EMPLEADOS EN EL SECTOR COMERCIAL

Cristina del Pilar López Saldaña, Universidad Autónoma de Coahuila-México
Adriana Guadalupe Chávez Macías, Universidad Autónoma de Coahuila-México
Maricela Carolina Peña Cárdenas, Universidad Autónoma de Coahuila-México
Aranza María Contreras Tovias, Universidad Autónoma de Coahuila-México

RESUMEN

La calidad de vida en el trabajo tiene implicaciones significativas en la vida de los empleados, por esta razón para las organizaciones representa un proceso que conlleva acciones tendientes a crear condiciones laborales favorables para mejorar los niveles de satisfacción en el lugar de trabajo y fortalecer la identificación de los integrantes con la institución, así como para alcanzar mejor desempeño laboral. El objetivo de esta investigación consistió en reconocer el nivel de apreciación sobre la calidad de vida laboral de los empleados del sector comercial de Monclova, Coahuila, utilizando una metodología cuantitativa y descriptiva. Los resultados indican que la variable predominante fue la identidad y autoestima laboral. Lo que permite concluir que los empleados tienen un nivel de apreciación positivo en cuanto a la calidad de vida laboral, debido a que la empresa a través de un ambiente adecuado fomenta la identificación del trabajador con las actividades que realiza, con sus compañeros, con sus superiores y con la organización.

PALABRAS CLAVE: Calidad de Vida Laboral, Satisfacción en el Trabajo

QUALITY OF WORKING LIFE OF EMPLOYEES IN THE COMMERCIAL SECTOR

ABSTRACT

The quality of life at work has significant implications in the lives of employees, for this reason for organizations represents a process that entails actions tending to create favorable working conditions to improve levels of satisfaction in the workplace and strengthen the identification of the members with the institution, as well as to achieve better work performance. The objective of this research was to recognize the level of appreciation on the quality of working life of employees in the commercial sector of Monclova, Coahuila, using a quantitative and descriptive methodology. The results indicate that the predominant variable was identity and self-esteem at work. This leads to the conclusion that employees have a positive level of appreciation for the quality of work life, because the company through an adequate environment encourages the identification of the worker with the activities that he performs, with his colleagues, with his superior and with the organization.

KEY WORD: Quality of Work Life, Satisfaction at Work

INTRODUCCIÓN

Considerando el tiempo que las personas transcurren en su trabajo, es necesario estar conscientes de las repercusiones y consecuencias que puede ocasionar en sus vidas. La calidad de vida en el trabajo tiene implicaciones significativas en la calidad de vida emocional, y en el equilibrio socio-emocional y afectivo que pueden lograr o no los seres humanos. Demostrar la clase de vida laboral, que deben exigir los

trabajadores y garantizar los empleadores, demanda la oferta de empleos que proporcionen ocupaciones estables, salarios satisfactorios, reducción de jornadas de trabajo, mejoras ambientales, participación en toma de decisiones entre otras, que conducen a elevar la calidad del bienestar humano de los trabajadores Camacaro, P. R. (2010). La filosofía de una organización en cuanto a la gestión del recurso humano repercute en la calidad de vida en el trabajo, por ejemplo la percepción que tiene cada miembro de lo que vive en la organización en aspectos como la dignidad del empleado, las oportunidades de desarrollo, el clima organizacional, entre otros. El objetivo de esta investigación consistió en reconocer el nivel de apreciación sobre la calidad de vida laboral de los empleados del sector comercial de Monclova, Coahuila, con la finalidad de aportar un diagnóstico de la situación actual de la organización.

REVISIÓN LITERARIA

Calidad de Vida Laboral

De acuerdo a Ivancevich, et al (2005) el concepto de calidad de vida laboral se emplea para referirse a “una filosofía de la administración que mejora la dignidad de todos los trabajadores; introduce cambios en la cultura de la organización, y mejora el bienestar físico y emocional de los empleados”. González et al (2007) proponen la siguiente acepción: “Concepto multidimensional que se basa en la satisfacción, a través del empleo, de una amplia gama de necesidades personales, ubicándolo como la clave para la realización personal, familiar y social y como medio para preservar la economía y la salud”. Zohurul y Siengthai (2009) la definen: como una condición favorable para los empleados, como puede ser a través del cuidado de la salud de los trabajadores, al igual que las actitudes positivas de los directivos hacia ellos. Mientras que Espinosa y Morris (2002) la mencionan como un intento de señalar que la competitividad no necesariamente debe elevarse a costa de empleos insatisfactorios para los trabajadores, y que deben tomarse medidas para, disminuir los niveles de estrés y mejorar los ambientes laborales en las empresas.

Elementos de la Calidad de Vida Laboral

Según Che et al. (2006) los elementos que son relevantes incluye la tarea, el ambiente de trabajo físico, el ambiente social dentro de la organización, los sistemas administrativos y la relación entre la vida dentro y fuera del trabajo. En cambio Ukko et al. (2008) afirman que incluye elementos, tales como: Motivación en el trabajo, oportunidades de aprendizaje, satisfacción en el trabajo, atmósfera de trabajo, salud y seguridad, participación en la toma de decisiones, realización de objetivos a nivel personal y de equipo, al igual que el sistema de recompensa. Uno de los elementos de la calidad de vida es la participación y control, sobre este aspecto Lares, A (1998) menciona, la participación, significa que los trabajadores y empleados de determinada organización se involucran en el proceso de toma de decisiones a diferentes niveles de la misma. El control, implica participación en todos los niveles dentro del proceso de toma de decisiones y sugiere que los trabajadores y empleados no solo participan en las decisiones de las empresas, sino que ejercen también, un determinado grado de determinación sobre la conducta organizacional. Para Newstrom, J. (2007) la participación es el compromiso mental y emocional de los trabajadores en situaciones de grupo, que los anima a contribuir para lograr las metas del grupo y a compartir las responsabilidades correspondientes.

La mayoría de los empleados quieren que su sistema de remuneración sea equitativo, el cual es otro elemento importante de la calidad de vida laboral. Newstrom J. (2007) menciona que la equidad, desde el punto de vista del empleado, se aplica no sólo al tamaño de las recompensas y su relación con los aportes realizados, sino también al proceso por el cual se administran. Chiavenato, I (2009), las personas siempre están comparando su contribución a la organización con el retorno que reciben y comparando esa ecuación de insumos/resultados con la de los demás colegas dentro y fuera de la organización; por lo que la organización requiere balancear las dos formas de la equidad para mantener la coherencia en su estructura salarial. Un tercer elemento esencial para la calidad de vida laboral es la satisfacción en el trabajo que

según Ivancevich, et al (2005), se trata de una actitud de la gente hacia su empleo y que se deriva de la percepción que tiene de sus labores y el grado de correspondencia entre el individuo y la organización. Mientras que Newstrom, J. (2007) establece que es un conjunto de emociones y sentimientos favorables o desfavorables del empleado hacia su actividad laboral.

La identidad y la autoestima laboral, representan un elemento esencial dentro de la calidad de vida laboral, de acuerdo a Robbins, S. y Judge A. Timothy (2009) la identificación del empleado, se define como el involucramiento, satisfacción y entusiasmo de un individuo con el trabajo que realiza. Por su parte, Lares, A. (1998) menciona lo siguiente: cuando el trabajo estimula la autonomía, la oportunidad para la creatividad laboral y el reconocimiento de los logros; la auto identificación en el trabajo es valorizada ampliamente y considerada como una condición significativa para mejorar la calidad de vida en el ambiente laboral. Alalú, L. (2016) una organización que presta atención a la calidad de vida laboral obtendrá colaboradores comprometidos con el crecimiento de la misma. Besterfield (1995) refiere que sí bien es cierto que la calidad es estudiada con la institución, también es cierto que el recurso humano es quién la lleva a cabo y no deberá ser considerada como la responsabilidad de una sola persona o de una sola área, sino más bien como una tarea que todos deben compartir. En su estudio sobre calidad de vida laboral, Zohurul y Siengthai, (2009) observaron que tanto la productividad como los resultados de la empresa están influenciados por la calidad de vida laboral que experimentan los trabajadores en su ambiente laboral. Huerta Riveros et al. (2011), en los resultados de su estudio les permitió confirmar que existe una relación positiva y significativa entre la calidad de vida laboral y los resultados empresariales, y además que la calidad de vida laboral influye positivamente en los resultados empresariales que alcanzan las sociedades.

METODOLOGÍA

El diseño metodológico corresponde a una investigación de campo tipo cuantitativa y descriptiva. La población se integró por empleados que laboran en dos empresas regionales del sector comercial en la ciudad de Monclova, Coahuila; la muestra que se consideró para este estudio fue de 104 trabajadores. Para medir la calidad de vida laboral, se consideró el cuestionario rediseñado en base al instrumento creado por el sociólogo Armando Lares (1998), que consta de 6 dimensiones, de las cuales se utilizaron cuatro para esta investigación, (ver Tabla 1), cada una de estas variables, con sus respectivos indicadores, quedando un total de 20 reactivos, en una escala de tipo Likert con 5 opciones de respuesta, representando la opción 1 y la 2 un valor negativo, mientras que la 3, 4 y 5 simbolizan un valor positivo. Respecto a la confiabilidad y validez, se reporta como válida y confiable con un alfa de Cronbach para 'participación y control 0.73, para equidad económica 0.86, para satisfacción en el trabajo 0.78 y para identidad y autoestima laboral 0.77

El instrumento utilizado para la investigación está dividido en dos secciones: la primera contiene las características demográficas con respecto al sexo, escolaridad, antigüedad y edad. La segunda sección es el cuestionario rediseñado para medir la calidad laboral de Armando Lares (1998). Para la recolección de los datos, se realizó de la siguiente forma, una vez que los empresas otorgaron su autorización para participar en la investigación, se acudió a la instalaciones donde se les entregó el cuestionario a los trabajadores para que lo llenaran en forma anónima.

Tabla 1: Operacionalización de Variables

Variable	Indicadores	Preguntas
Participación y control	Participación en programas y proyectos, cantidad de información	8,9,10
Equidad económica	Beneficio y retorno económico, sueldo y salarios, equidad interna, competitividad externa	1,2,6,19,20
Satisfacción en el trabajo	Oportunidad de desarrollo en la organización, reconocimiento, logro, características del trabajo	3,5,7,12,15,16,17,18
Identidad y autoestima laboral	Identidad y autoestima labora	14,11,13,14

Fuente: Elaboración propia.

RESULTADOS

En primer lugar se procedió a calcular las frecuencias de respuestas en cuanto a las características demográficas, observando que la mayoría de los encuestados fueron del género femenino ya que representan el 56%, en cuanto a la escolaridad se encontró un 49% tienen estudios de preparatoria, seguidos por los que concluyeron la secundaria con un 37%. Respecto a la antigüedad el 44% de los empleados que participaron tienen más de dos años trabajando en la empresa, en lo referente a la edad las personas que tienen entre 21 a 25 años representaron mayoría con un 28%. Considerando el diagnóstico realizado, en las Tablas 2,3,4 y 5 se presentan las puntuaciones promedios para cada una de las variables investigadas en base a la respuesta de los trabajadores de las empresas en estudio, donde se puede observar que en todas las variables estudiadas los empleados tienen un nivel de apreciación positivo en cuanto a la calidad de vida laboral de la empresa, por ejemplo entre los aspectos con mayor promedio se encuentran los siguientes: consideran que lo que realizan diariamente en su trabajo contribuye a cumplir con los objetivos y metas que se ha trazado la empresa; otro punto es, que al comparar la empresa con otras, pueden afirmar que en donde trabajan los beneficios son buenos; y otro más, es que cuando les preguntan qué tipo de trabajo realizan, mencionan con orgullo las funciones que tienen que efectuar en la empresa.

Tabla 2: Puntuaciones Promedio Para la Variable de Participación y Control

Pregunta	Media
Tiene verdadero conocimiento del sistema de pago implantado por la empresa	3.41
Se ha involucrado en la formulación del sistema de pago del persona	3.02
La evaluación de la eficiencia del personal de la empresa responde a los criterios de una buena administración de recursos humanos	3.62

En esta tabla se muestran los promedios la variable de Participación y Control en base a la respuesta de los trabajadores de las empresas en estudio, donde se puede observar que en todas las variables estudiadas los empleados tienen un nivel de apreciación positivo (mayor a 3). Fuente: Elaboración propia

Tabla 3: Puntuaciones Promedio Para la Variable de Equidad Económica

Pregunta	Media
Si usted compara esta empresa, podría afirmar que aquí los beneficios son buenos	3.96
Piensa que los beneficios que recibe de la empresa (incluye sueldos y beneficios) realmente representa el fruto de su trabajo	3.56
Las responsabilidades que tiene asignadas en su trabajo y las funciones que realiza justifican el sueldo que recibe	3.35
Está satisfecho con el sueldo que percibe	3.32
Cuál es su grado de satisfacción con la distribución de los sueldos en la empresa, considerando los sueldos que reciben otros trabajadores y comparándolos con el que usted percibe	3.18

En esta tabla se muestran los promedios la variable de Equidad Económica en base a la respuesta de los trabajadores de las empresas en estudio, donde se puede observar que en todas las variables estudiadas los empleados tienen un nivel de apreciación positivo (mayor a 3). Fuente: Elaboración propia.

Tabla 4: Puntuaciones Promedio Para la Variable de Satisfacción en el Trabajo

Pregunta	Media
Existe poca oportunidad para ascender en el trabajo a menos que tenga una buena suerte	3.21
Realmente considero que mi trabajo contribuye a mi crecimiento futuro como trabajador	3.45
La empresa tiene una política de motivación del personal	3.38
Considera que su trabajo le plantea retos interesantes que le permiten desarrollar su creatividad	3.56
Cuál es su nivel de satisfacción con las oportunidades que le ofrece la empresa para desarrollar su carrera profesional, técnica o administrativa	3.71
Está satisfecho con las tareas y responsabilidades asignadas a su trabajo, considerando su nivel de capacitación profesional, administrativo o técnico	3.64
Cuál es el grado de satisfacción que usted manifiesta ante el reconocimiento por parte de sus superiores inmediatos de la labor cumplida	3.46
Está satisfecho con los resultados que obtiene en el desempeño de su trabajo	3.77

En esta tabla se muestran los promedios la variable de Satisfacción en el trabajo en base a la respuesta de los trabajadores de las empresas en estudio, donde se puede observar que en todas las variables estudiadas los empleados tienen un nivel de apreciación positivo (mayor a 3). Fuente: Elaboración propia.

Tabla 5: Puntuaciones Promedio Para la Variable de Identidad y Autoestima Laboral

Pregunta	Media
La persona que tiene iniciativa para tomar decisiones es estimulada rápidamente en esta organización	3.33
Considera que lo que realiza diariamente en su trabajo contribuye a cumplir con los objetivos y metas que se ha trazado la empresa	3.98
Considera que su jefe inmediato toma en cuenta sus sugerencias relacionadas con el trabajo	3.58
Cuando me preguntan qué tipo de trabajo realizo, menciono con orgullo las funciones que tengo que efectuar en la empresa	3.89

En esta tabla se muestran los promedios la variable de Identidad y Autoestima laboral en base a la respuesta de los trabajadores de las empresas en estudio, donde se puede observar que en todas las variables estudiadas los empleados tienen un nivel de apreciación positivo (mayor a 3). Fuente: Elaboración propia.

Según la Tabla 6, que indica las puntuaciones promedio por cada variable estudiada, se puede ver que la variable predominante es la identidad y autoestima laboral, lo que significa que la empresa apoya en la identificación del trabajador con la empresa, a través de un ambiente favorable.

Tabla 6: Puntuaciones Promedio Por Variable

Variable	Media
Participación y control	3.35
Equidad económica	3.47
Satisfacción en el trabajo	3.52
Identidad y autoestima laboral	3.69

En esta tabla se muestran los promedios por cada variable en base a la respuesta de los trabajadores de las empresas en estudio, donde se puede observar que en todas las variables estudiadas los empleados tienen un nivel de apreciación positivo (mayor a 3). Fuente: Elaboración propia.

CONCLUSIONES

El objetivo de este estudio fue reconocer el nivel de apreciación sobre la calidad de vida laboral de los empleados del sector comercial de Monclova, Coahuila, con la finalidad de aportar un diagnóstico de la situación actual de la organización. Los resultados obtenidos, permiten concluir lo siguiente, considerando al tema de estudio en forma integral, con todas las variables analizadas, los empleados tienen un nivel de apreciación positivo en cuanto a la calidad de vida laboral de la empresa. Entre las razones para que los empleados perciban esto, están las siguientes: consideran que lo que realizan diariamente en su trabajo contribuye a cumplir con los objetivos y metas que se ha trazado la empresa; si comparan la empresa con otras, pueden afirmar que en donde trabajan los beneficios son buenos; y que cuando les preguntan qué tipo de trabajo realizan, mencionan con orgullo las funciones que tienen que efectuar en la empresa. Finalmente se pudo detectar que la empresa a través de un ambiente adecuado fomenta la identificación del trabajador con las actividades que realiza, con sus compañeros, con sus superiores y con la empresa.

REFERENCIA

- Alalú, L. (2016) *La importancia de la calidad de vida en el trabajo*. Directora de consultoría de Great Place to Work en Perú
- Besterfield, D. H. (1995) *Control de Calidad*. 4ª. Ed. México. Editorial Prentice Hall Hispanoamericana,
- Camacaro, P. R. (2010) *Abordaje conceptual de calidad de vida en el trabajo*. Revista contribuciones a las ciencias sociales. Recuperado 25/03/2011 de <http://www.eumed.net/rev/cccss/07/prc.htm>.
- Che, R., Beh, L., Uli, J. & Idris, K. (2006). "Quality of Work Life: Implications of Career Dimensions". *Journal of Social Sciences*, vol. 28 (2) p. 61-67 Haryana India.
- Chiavenato, I. (2009). *Gestión del Talento Humano: El nuevo papel de los Recursos Humanos*. 8va. Ed. México. Ed. Mc. Graw Hill.
- Espinosa, M. & Morris, P. (2002). *Calidad de vida en el trabajo: percepciones de los trabajadores*. Cuadernos de Investigación. Cuaderno No. 16. Santiago de Chile: Dirección del Trabajo, Departamento de Estudios del Gobierno de Chile.
- González Baltazar, R., Hidalgo Santacruz, G. & Salazar Estrada J. (2007) "Calidad de vida en el trabajo: un término de moda con problemas de conceptualización" *Psicología y Salud*, vol. 17 (1), Enero, p.115-123.
- Huerta Riveros, P., Pedraja Rejas, L., Contreras Espinoza, S. & Almodóvar Martínez, P. (2011) "Calidad de vida laboral y su influencia sobre los resultados empresariales". *Revista de Ciencias Sociales*, vol. XVII (4), Octubre, p. 658-676.
- Ivancevich, John M., Konopaske, R. & Matteson, M. T. (2005) *Comportamiento organizacional*. 7ª. ed. México. Editorial McGraw Hill
- Lares, A. (1998) *Calidad de vida en el trabajo: un modelo integral* Venezuela. Consultores Asociados
- Newstrom, J. (2007) *Comportamiento Humano en el trabajo*. 13ª ed. México. McGraw Hill.
- Robbins, S. & Judge A. T. (2009). *Comportamiento Organizacional*. 13ª. ed. México. Editorial Pearson, Prentice Hall
- Ukko, J., Tenhunen, J. & Rantanen, H. (2008). *The Impacts of Performance Measurement on the Quality of Working Life*. Business Performance Management, vol.10 (1), p. 86-98. Estados Unidos
- Zohurul, I. & Siengthai, S. (2009). *Quality of Work Life and Organizational Performance: Empirical Evidence from Dhaka Export Processing Zone*.

LOUIS J. LEBRET Y “EL ESTUDIO SOBRE LAS CONDICIONES DEL DESARROLLO DE COLOMBIA 1954- 1956”

Carlos Alberto Cano Plata, Universidad de Bogotá Jorge Tadeo Lozano
Diana Sofia Cárdenas Espinoza, Universidad de Bogotá Jorge Tadeo Lozano
Anyi Marcela Hernández Rubio, Universidad de Bogotá Jorge Tadeo Lozano

RESUMEN

Esta ponencia es el resultado del estudio sobre las condiciones del desarrollo de Colombia en aspectos económicos y sociales que presentó el país durante el periodo comprendido entre 1945 y 1954. Esto corresponde a un análisis del trabajo realizado por el sacerdote Lebre, L. J. en 1956, y que sirvió como preambulo a la creación de diferentes programas de formación en administración y economía, cuyo proposito era llevar al desarrollo a este país suramericano. En consecuencia la única fuente primaria consultada para esta ponencia es el informe final del Pdr. Lebre, ya que sobre este no se ha hecho un análisis en el sentido que exponemos y fue el modelo a seguir durante varios años en Colombia. Además de mostrar el desarrollo que tuvo la Nación durante este período, los temas que abordaremos serán: la producción agrícola y minera, las vías de comunicación, el sector bancario, el desarrollo de la industria, la inversión, y con mayor atención el tema de la educación, el cual hasta el momento sigue presentados problemas.

PALABRAS CLAVE: Desarrollo, Educación, Productividad, Aprendizaje.

ABSTRACT

This paper is the result of the study on the developmental conditions of Colombia in economic and social aspects presented by the country during the period between 1945 and 1954. This corresponds to an analysis of the work done by priest Lebre, LJ in 1956, and served as a preamble to the creation of different training programs in administration and economics, whose purpose was to bring development to this South American country. Consequently, the only primary source consulted for this paper is the final report of the Pdr. Lebre, since on this one has not been made an analysis in the sense that we expose and was the model to follow during several years in Colombia. In addition to showing the development that the country had during this period, the topics we will address are agricultural and mining production, communication channels, banking sector, industry development, investment and more attention to the issue of education, which to date still present's serious problems.

JEL: A, 20, B1, B15, B19, N00

KEYWORDS: Development, Education, Productivity, Education, Learning.

INTRODUCCIÓN

El documento se basa en la misión “Economía y humanismo”, dirigida por R. P Louis Joseph Lebre (1956), y que al momento de su publicación en 1958 se conoció con el nombre de “Estudio sobre las condiciones del desarrollo de Colombia”. La misión comenzó su trabajo en diciembre de 1954 y lo terminó en junio de 1956. Después de cincuenta y nueve años de haber entregado los resultados y dado a conocer el informe, y como lo dijo en su momento la oficina de planeación, se publicaron 10.000 ejemplares, surgen muchas preguntas: la primera de ellas es ¿Por qué si el trabajo terminó en 1956, solo sale a la luz pública en 1958,

dos años después de haberse concluido y coincidiendo con la fecha de inicio del primer gobierno del “Frente Nacional” y la creación del Departamento Nacional de Planeación?; la segunda es ¿Sirvió como insumo, el informe para el primer plan de desarrollo en Colombia, que fue propuesto por Alberto Lleras Camargo para su ejecución, en un periodo de Diez años?

A la fecha de publicación del documento final, en Colombia se habían llevado a cabo 289 estudios, según reporte del Comité Nacional de Planeación, entre ellos se destacó el realizado por la Misión del Banco Internacional de Reconstrucción y Fomento, que fue dirigido por Lauchlin Currie, a mediados de 1949 y finalizado en 1950. Los resultados fueron publicados con el nombre de “Bases de un Programa de Fomento para Colombia” (Currie L; 1951) y el realizado por la CEPAL (Comisión Económica para América Latina), que se efectuó entre 1954 y 1955. En él de manera detallada, muestra los rasgos principales del desarrollo histórico de la economía colombiana desde 1925 hasta 1953, dando también las proyecciones y alternativas del crecimiento económico para Colombia desde 1953 hasta 1970. La CEPAL terminó esta investigación en 1955. Estos trabajos fueron elaborados por expertos colombianos y de otras nacionalidades con el propósito de ayudar a que el país se desarrollara tanto económica como socialmente (Prieto S, C; 1958). El propósito del informe de Le Bret era: analizar los niveles de vida popular de las poblaciones rurales y urbanas en Colombia, con el fin de deducir las necesidades de consumo y de dotación; mostrando la situación económica del país entre los años 1945 y 1954. Con el análisis del informe de la misión “Economía y humanismo”, y haciendo una revisión del documento con respecto a los sectores de la economía que el sacerdote y sus investigadores abordaron en su trabajo, se identificaron los factores negativos y positivos de cada sector económico; y principalmente se analizó la situación y las necesidades educativas del país identificadas por Le Bret.

Colombia ha sido un país fragmentado y dividido, con diversidad de climas, en un territorio que lo recorren tres grandes cordilleras, pero también, con una diversidad cultural, social y política que lo hacen interesante de ser estudiado en diferentes aspectos. (Palacios & Safford; 2012). Esto le ha permitido el desarrollo lento, de varios sectores productivos, entre los más importantes están: la agricultura, la ganadería, la pesca marítima y la minería. En lo que respecta al sector agrícola el país produce variedad de víveres, capaz de satisfacer las principales necesidades alimenticias de sus habitantes (Ordoñez L. 2011; Mayor M 2005; Sáez R 2002; Bushnell, 1993;). Algunos de los factores negativos que tuvieron los productos agrícolas en esta época fueron: la falta de apoyo y colaboración para controlar la calidad de las semillas, realizar el control de las plagas que hacían que la producción disminuyera, así como los reducidos precios. Para 1945 la agricultura aportaba un 40% a la formación del ingreso nacional, manteniéndose así hasta 1953, seguido por la industria manufacturera que contribuía con el 17.5% en 1953 y un 13.1% en 1945; el comercio ayudaba en un 97.7% para 1953, el gobierno y los servicios con 6.6%, los transportes 5.7% y las minas 2.9%. (Le Bret; 1956)

La ganadería también era un sector importante en el país, pero también presentaba serios problemas como: la utilización racional de las tierras, el crédito, la elección de razas, la lucha contra las plagas, el mejoramiento de la alimentación, la poca producción de leche, mejorar la calidad de la carne, entre otros, que, comparado con otros sectores de la producción como la agricultura, exhibía rendimientos económicos débiles.

Otro sector productivo importante en el país era el relacionado con la pesca, especialmente la marítima, debido a que Colombia está rodeada por dos Océanos: el Atlántico y el Pacífico, los recursos obtenidos mediante esta actividad eran muy considerables, además de esta manera se estimulaba el empleo y se reducían las importaciones de pescado enlatado del exterior. (Le Bret; 1956)

Simultáneamente la minería y los recursos minerales en Colombia eran muy variados, pero entre 1954 y 1955 el 79% de las minas correspondían a metales preciosos, en esos años el número de concesiones

otorgadas con relación a las propuestas presentadas, indicaban la dificultad que tenía el sector para la exploración y explotación de yacimientos, esto se debía principalmente a la falta de tecnología adecuada para dichas operaciones. Adicional a las minas de metales preciosos, Colombia también contaba con numerosos yacimientos de carbón, hierro, cal y minerales diversos. (Tovar P, 2015).

METODOLOGÍA

El marco metodológico de la investigación fue de carácter cualitativo, en el cual se utilizaron las fuentes documentales escritas, en este caso el informe de la Misión “Economía y humanismo”, realizado entre 1954 y 1956 por el padre Louis J. Lebreton y su grupo de apoyo, se recurrió a fuentes secundarias como libros resultados de investigación que ayudan a entender de alguna manera la implementación de las recomendaciones derivadas de la misión. El trabajo fue documental, no experimental de corte histórico. Como se indicó la fuente primaria es el informe derivado del “Estudio sobre las condiciones del desarrollo colombiano: Misión Economía y Humanismo” realizado por el Pdr. Francés Louis J. Lebreton, entre 1954 y 1956 en Colombia.

El estudio documental, se abordó acudiendo a la técnica de análisis de contenido en diferentes fuentes como, archivos particulares, bibliotecas y Ministerios.

RESULTADOS

Vías De Comunicación

En un párrafo anterior se dijo que Colombia posee un relieve muy accidentado y este fue la principal razón de las dificultades para establecer redes de comunicación, dificultades que fueron aumentando con el auge de los intercambios, por tal razón se crearon programas para facilitar el transporte entre los puertos fluviales y el interior del país, Pachón A & Ramírez M. T (2006). En 1954 la red de carreteras colombianas comprendía un total de 23.295 km, a las cuales no se les destinaba ingresos para su conservación y por razones relativas al relieve, la naturaleza, deslizamientos y derrumbes, luego de un tiempo, quedaban intransitables. (Lebreton: 1956); Al descuidar el mantenimiento de las carreteras, ello se constituía en un gran despilfarro. Para el mismo año las líneas del ferrocarril abiertas al tráfico general tenían una longitud de 2.986 km. En cuanto a las vías navegables, el río Magdalena era el único que tenía un tráfico importante, técnicamente organizado. Colombia disponía de significativos puertos sobre el Atlántico, los cuales estaban localizados en Santa Marta, Barranquilla, Cartagena, Mamonal y sobre el pacífico, el puerto de Buenaventura, el cual llevaba bastante ventaja sobre la salida de mercancías respecto a los demás puertos. La red aérea en Colombia, León V. K (2011) tuvo un desarrollo sustancial, particularmente en el año 1945 debido a las condiciones geográficas del país, las grandes distancias y el mal estado de las carreteras; a mediados de 1954 Colombia era uno de los países de América Latina con una red aérea desarrollada; pasó de tener 45 aeropuertos en 1945 a 158 en 1954 casi cuatro veces más, siendo el aeropuerto de Bogotá sin duda el más importante.

También es interesante observar la evolución del uso del automóvil según el número de habitantes, mientras que en 1945 había 248,8 personas por cada vehículo, en 1954 ya había 97,1 personas por vehículo, esta importación intensa de autos se debió a la favorable balanza de pagos. (Lebreton:1956).

Productividad

Para aumentar la productividad no es suficiente con adquirir el material más reciente o instalar una fábrica, sobre un modelo que haya tenido éxito en otros países, también se necesita un personal capacitado que haga un uso provechoso del material y de las instalaciones, Safford F. (2014). En cuanto a productividad Colombia se encontraba en una posición favorable, durante el periodo 1925 a 1953 el país presentó un

crecimiento en los tres sectores de la economía, en el sector primario (agricultura e industria minera) se duplicó el producto bruto por persona activa respecto a 1925, en el sector secundario aumento 2.5 veces y en el sector terciario creció en 2/3 partes. Aunque las cifras fueron buenas la productividad del país no fue lo que debería ser, especialmente en el sector primario el cual, como ya se ha mencionado, tenía mucho potencial para crecer, pero debido a la falta de técnica en el momento de la explotación de los recursos y a la ineficiente utilización de los mismos, el desarrollo en este sector fue débil. (Lebret. 1956).

El Sector Bancario y La Inversión

La red bancaria con la que contaba Colombia a fines del año 1953 era una de las más desarrolladas de América latina, progresó en un 70% desde 1950 a 1953 las grandes unidades bancarias de tipo nacional daban al país el servicio de ayudar y buscaban unificar la economía, así como asegurar su circulación monetaria.

Los bancos colombianos habían realizado una sana gestión, y su reputación internacional era muy buena; algo de gran interés era la tendencia a la especialización que tuvieron las entidades bancarias, esto debido al carácter cada vez más complejo que adquirió la economía moderna; de esta manera algunos bancos se especializaban en las prácticas de comercio nacional e internacional (bancos comerciales), otros a las operaciones agrícolas (Caja de Crédito Agrario) y otros a las operaciones reservadas del artesano, la construcción familiar y al pequeño negocio (Banco Popular).

Es importante exteriorizar la repartición geográfica de los créditos en el cual se ve la ventaja que tenían los departamentos más “ricos” (Cundinamarca, Caldas, Antioquia, Atlántico y Valle) los cuales representaban el 51.2% de la población total y recogían el 73,1% de los créditos totales. También cabe resaltar que de los créditos otorgados por el banco Caja Agraria en 1953, el 53.86%, iban destinados a la ganadería, esto con el fin de mejorar dicho sector productivo. (Lebret:1956)

La gran mayoría de los capitales invertidos en el país eran de origen nacional, prevaleciendo la inversión privada, la cual en su distribución mostraba que el 70% era destinado a las importaciones de bienes de capital. Con respecto a las inversiones públicas, el gobierno colombiano se vio obligado, no solo a establecer programas generales, sino también a participar de ellos directamente por tratarse de operaciones muy importantes o sin atracción para las empresas que buscaban rendimientos inmediatos. La inversión pública aumento desde 1945 y siguió creciendo, debido a los proyectos nacionales que se trinan, respecto a infraestructura, desarrollo agrícola e industrial. Por otra parte, cabe resaltar que las compañías norteamericanas fueron las más importantes compañías extranjeras que operaron en Colombia en 1955. (Lebret:1956).

El Cambio de Fase en el Desarrollo Colombiano

En 1953 Colombia se encontraba culminando la fase de arranque hacia el desarrollo, y de esta manera estaba empezando una etapa nueva que se denominaba, la etapa de industrialización; razón por la cual las personas empezaron a migrar hacia las ciudades, en busca del mejoramiento de su calidad de vida, ya que sentían que en el campo no se iban a cumplir sus expectativas, y esto hizo que aumentaran los problemas relacionados con la exportaciones agrícolas, debido a que empezaron a disminuir el número de personas que trabajaban en el agro. Robinson, & Urrutia M (2007).

El periodo de transición que sufrió Colombia, presento varias dificultades, algunas fueron: respecto a infraestructura; el crecimiento de la industria mecánica y metalúrgica estuvo retrasado, la estructura y crecimiento de las manufactureras no correspondía a las necesidades de la población, hubo distorsiones en la estructura de consumo, dificultades en el control de las finanzas públicas, la situación de violencia provocó la necesidad de recurrir a capitales extranjeros y había una enorme dispersión de la productividad,

ya que para 1955 habían 555 empresas que tenían 50 o más obreros, 923 empresas entre 20 y 49 obreros, 6.743 entre 5 y 19 obreros y 38.539 con menos de 5 obreros, por otra parte, los índices de productividad de las pequeñas empresas eran defectuosos, respecto a los de las grandes compañías. (Lebret:1956)

Para lograr el desarrollo nacional era preciso aplicar inversiones locales, para que el desarrollo se efectuase en beneficio de todas las regiones del país y así asegurar que las comunicaciones entre poblaciones estuvieran respaldadas con el máximo de eficiencia económica y para que las unidades regionales gozaran de cierta autonomía y fueran más útiles al conjunto de la Nación.

Educación

La educación forma parte de los deberes fundamentales de un Estado, este debe asegurar directa o indirectamente la enseñanza y formación a la que tienen derecho sus ciudadanos, Cano, P, C. (2016). De acuerdo con la declaración de los derechos del hombre de la ONU “La educación debe ser gratuita al menos en lo concerniente a la instrucción elemental y básica; la instrucción técnica y profesional debe ser generalizada; y el acceso a los estudios superiores debe ser igual para todos en función de los méritos respectivos”, ONU (1948).

Las personas se deben educar al menos en lo elemental adquiriendo los conocimientos necesarios para asumir sus responsabilidades sociales. La educación no solo forma a las personas individualmente, sino que también es la forjadora del alma de un pueblo, un pueblo ignorante, sin tradiciones culturales, carente de grupos selectos que lo guíen no logrará alcanzar su madurez y no desempeñará ningún papel en la historia, aun siendo numeroso y rico. La educación permite que los ciudadanos de un país tengan sentido de interés público y tomen parte activa en su realización. ONU (1948).

En Colombia la educación ha presentado muchos problemas y deficiencias durante su historia, inicialmente, es orientada a la élite, posteriormente se masificó y de tener una calidad razonable, pasó a ser cuestionable, estos problemas repercuten en las estadísticas nacionales y se puede notar especialmente en los niveles de analfabetismo que presentaba el país en 1951. Según Lebret los niveles de analfabetismo eran los más impresionantes para una Nación, el hecho de saber leer y escribir representaba el primer paso para la adquisición de conocimientos. El nivel de analfabetismo representa el grado de desarrollo educacional de un país. En Colombia en 1951 la tasa de analfabetismo era del 44% en toda la población, una cifra muy alta que deja ver los grandes problemas que presentaba el país respecto a este sector y la principal razón de su atraso en comparación a otros países.

Grandes variaciones se presentaban de un departamento a otro, mientras que, en el Atlántico, Antioquia y Cundinamarca, la tasa de analfabetismo no superaba el 30%, en el departamento del Chocó era de un 72% y Bolívar 61,8% debido a sus pésimas condiciones económicas, pero también en el departamento de Boyacá el porcentaje era alto con un 57,5% de analfabetas por cada cien ciudadanos. (Lebret:1956); Cano, P, C. (2016). Las principales causas de analfabetismo eran: la falta de escuelas, la dispersión geográfica y el ausentismo escolar, ya que los niños se veían en la necesidad de trabajar desde muy jóvenes. Según estudios los que se encontraban alfabetizados en 1951 se muestra en la tabla 1:

Tabla 1. Alfabetizados 1951

Estudios primarios	84,5%
Estudios secundarios (Bachillerato)	12,2%
Estudios universitarios	1,3%
Otros estudios	2,0%

Fuente: Informe misión “economía y humanismo” (Lebret:1956).

La razón por la cual los jóvenes que continuaban con sus estudios secundarios en comparación a los que estaban en formación primaria eran tan baja, se debía entre otras cosas a las malas bases que recibían. Algunas fallas de la enseñanza primaria pueden percibirse a través de dos fenómenos:

El problema de la deserción escolar: en el sector rural la enseñanza se veía afectada debido a que la mitad de los niños matriculados, no frecuentaban la escuela más que durante un año, el porcentaje de los que superaban los dos años era insignificante. En la ciudad más de la mitad de los niños no sobrepasaban dos años de escuela.

La repetición de cursos: Este era un fenómeno importante para entender el índice de rendimiento en la enseñanza primaria, pues este fenómeno de quienes repetían curso alcanzaba fuertes proporciones, debido a los alumnos que, por pereza o incapacidad, frecuentes ausencias y/o enseñanza defectuosa, perdían el año y no podían avanzar al curso siguiente; este índice era dos veces superior en el campo que, en la ciudad, lo que muestra la mínima calidad de la enseñanza rural. Este problema no solo afectaba al alumno, y el tiempo del maestro, sino que también tenía efectos secundarios en el presupuesto del país.

Otros factores que afectaban el rendimiento de los alumnos eran: la calidad de la salud de los niños, la falta de recursos de los padres, el ambiente familiar, condiciones especiales de los medios rurales, los programas y métodos de enseñanza y los maestros. La calidad del cuerpo de docentes se convertía en una de las principales fallas de la educación colombiana en casi todos los niveles de la enseñanza (de la primaria, a la superior). Este factor presentó múltiples deficiencias; entre las más importantes se tienen: los bajos salarios que recibían los maestros, la falta de capacitación y además, no tenían preparación pedagógica; tenían poca estabilidad, ya que los trasladaban con frecuencia a lugares lejanos, aislándose de su familia y llevándolos a lugares con pésimas condiciones de alojamiento y clima malsano; Insuficiencia del apoyo intelectual y moral, ya que los maestros sufrían de aislamiento geográfico en multitud de puestos rurales, esto los obligaba a estar en medio de una población que no poseía, ni educación, ni calidad de vida y por tanto no lo motivaban a leer, ni a adquirir nuevos conocimientos. Los salarios eran mínimos, porque la capacitación de los docentes era menor en el campo que en las ciudades.

En cuanto a los programas y métodos de enseñanza, se puede decir que los programas estaban muy recargados, eran inadecuados, los programas eran concebidos en función de la enseñanza secundaria y esta lógica era inadecuada, ya que los cinco años de primaria constituían para la mayoría de alumnos, el único bagaje con que contaría en la vida, por lo cual debía proporcionarle las bases esenciales del saber. Los maestros debido a que estaban desprovistos de la preparación pedagógica no utilizaban los métodos adecuados para enseñar a los niños. La enseñanza era pasiva, es decir, el maestro hablaba y el alumno se limitaba a escuchar o hacer que escuchaba, y su único trabajo activo era el de copiar en un cuaderno la lección que luego debería aprender de memoria, ya que se exigía más de la memoria que de otras cualidades del aprendizaje.

Por otra parte, según Lebrecht (1956), las condiciones de los materiales de la enseñanza eran ciertamente malas, era excepcional que los niños realizaban trabajos en grupos, es decir la enseñanza era en su mayoría individual, las escuelas contaban con un mínimo de materiales de aprendizaje como libros, mapas geográficos, a veces no se contaba con tablero o con la tiza suficiente para que el maestro pudiera escribir y explicar de forma más entendible los temas que iba a enseñar a sus alumnos. Además, el número de aulas adecuadas para la enseñanza era realmente reducido, las condiciones de higiene eran frecuentemente deplorables y más aún en las épocas de lluvia. La mitad de las escuelas no tenían baño, y dos tercios de las que poseían carecían de agua, en cuanto al servicio de restaurante en el sector rural más del 90% de las escuelas no tenían el servicio, y en las ciudades aproximadamente el 63% carecía del mismo. La dotación de muebles y espacio para que los alumnos estuvieran cómodos era insuficiente.

Educación Técnica

En cuanto a la educación técnica, esta fue organizada por la ley 143 del 23 de diciembre de 1948 y comprendía 5 clases de establecimientos:

- Institutos técnicos superiores – 7 años de estudio – técnico
- Institutos técnicos industriales – 5 años de estudio - experto
- Escuelas medias de artes y oficios – 3 años de estudio - operario
- Escuelas superiores de artes y oficios – 4 años de estudios - perito
- Escuelas artesanales - 2 años de estudios

Para 1954 Colombia tenía una urgente necesidad de técnicos, de especialistas y de obreros calificados. El notable esfuerzo realizado por la universidad Técnica de Bucaramanga ha sido confirmado por el aumento notable del número de alumnos, tal como lo muestra la tabla 2, elaborado el 6 de marzo de 1956 (Lebret:1956).

Tabla 2. Universidad Técnica de Bucaramanga

<i>Facultad de ingeniería Eléctrica Primer año</i>	40
Segundo año	22
Tercer año	12
Cuarto año	5
Quinto año	13
Total	92
<i>Facultad de ingeniería Química</i>	
Primer año	21
Segundo año	10
Tercer año	7
Cuarto año	7
Quinto año	4
Total	46
<i>Facultad de ingeniería de Petróleos</i>	
Primer año	27
Segundo año	25
Tercer año	28
Cuarto año	7
Total	87
<i>Facultad de ingeniería Mecánica.</i>	
Primer año	35
Segundo año	27
Tercer año	13
Cuarto año	2
Quinto año	10
Total	87
<i>Facultad de ingeniería Metalúrgica.</i>	
Primer año	8
Segundo año	7
Tercer año	6
Cuarto año	5
Total	26
Total	338

Fuente: Informe misión “economía y humanismo” (Lebret:1956).

La tabla 3 establece la distribución por profesiones en 1955.

Tabla 3: Distribución por profesiones 1955

<u>Mecánica</u>		<u>Fundición</u>		<u>Ebanistería</u>	
Técnicos:	4	Técnicos:	-	Técnicos:	-
Expertos:	46	Expertos:	5	Expertos:	1
Peritos:	31	Peritos:	10	Peritos:	21
Operarios:	38	Operarios:	10	Operarios:	23
<u>Electricidad</u>		<u>Forja y soldadura</u>		<u>Construcción</u>	
Técnicos:	7	Técnicos:	-	Técnicos:	-
Expertos:	20	Expertos:	-	Expertos:	3
Peritos:	4	Peritos:	13	Peritos:	-
Operarios:	2	Operarios:	15	Operarios:	-
<u>Motores</u>		<u>Metalistería</u>		<u>Dibujo</u>	
Técnicos:	-	Técnicos:	-	Técnicos:	-
Expertos:	17	Expertos:	6	Expertos:	2
Peritos:	3	Peritos:	-	Peritos:	-
Operarios:	-	Operarios:	-	Operarios:	-
<u>Sastrería</u>		<u>Zapatería</u>			
Técnicos:	-	Técnicos:	-		
Expertos:	-	Expertos:	-		
Peritos:	13	Peritos:	3		
Operarios:	10	Operarios:	1		

Fuente: Informe misión "economía y humanismo" (Lebret:1956).

Enseñanza Industrial

Los principales problemas en cuanto a la enseñanza industrial eran:

Desadaptación entre la enseñanza industrial y el estado de la evolución económica en Colombia, la enseñanza industrial no ocupaba el lugar que le correspondía respecto a un país en proceso de industrialización, ya que las ramas de la enseñanza especializada practicadas por las escuelas no lograban abarcar la amplia gama de las especializaciones propias de la economía moderna.

Insuficiente coordinación con los organismos de planeación y los organismos profesionales, las escuelas crean sus propias tradiciones y terminan por limitar sus horizontes.

Insuficiencia del material de enseñanza, la enseñanza industrial era costosa y por lo tanto era imposible que, con el presupuesto nacional, se pudieran cubrir los gastos.

La enseñanza comercial era más aceptada que la industrial, debido a que el alumno después de 6 meses o un año de estudios, ya podía encontrar un empleo remunerado.

Enseñanza Secundaria

En lo referente a la enseñanza secundaria se encontraron problemas similares a los de la enseñanza primaria, además de eso, las deficiencias se debían a una desarticulación entre los programas y las necesidades de una verdadera preparación para la vida, además que tenía un costo más elevado; esto hizo que muchos jóvenes se convirtieran en "desadaptados de la sociedad", ya que los conocimientos que adquirían eran mínimos, y por tanto era difícil que consiguieran un empleo, esto hacía que el orden social corriera riesgo, ya que al no tener en que ocuparse estarían en las calles y adquirirían vicios y/u optarían por la delincuencia como forma de conseguir dinero para sus necesidades básicas.

Esta progresiva deserción de la enseñanza secundaria representaba para el país una importante pérdida de capital tanto humano, como financiero. Se puede decir que la enseñanza secundaria en Colombia estuvo reservada a una determinada clase social.

Enseñanza Superior

La universidad desempeña un papel preponderante en una Nación, ya que en ella se preparan los grupos de dirigentes de un país. De la calidad de la enseñanza que confiere, de la educación humana que aporta, del espíritu que infunde, depende en parte el porvenir de la Nación. Colombia mostró un aumento del 63% de alumnos de grado superior en 1954 respecto a 1946. A la educación superior le faltaba principalmente capacidad para preparar a la élite con miras al cumplimiento de sus deberes nacionales, es decir a colaborar activamente con la formación económica, social y moral del país. Safford F. (2014); (Lebret:1956).

Una de las causas de estas deficiencias era, que las universidades carecían de espíritu de investigación científica, la pasión de descubrir, el rigor científico, y un sano espíritu crítico. Esto llamó la atención y llevó a la creación de un “Instituto de Investigación Científica y Técnica” como anexo a la Universidad Nacional (diciembre de 1954) incitando así a que las demás universidades crearan también sus centros de investigación. *“El medio más eficaz para vigorizar la enseñanza universitaria y ponerla en contacto con la realidad nacional es ciertamente desarrollar el sector de investigación”* (Lebret:1956; 350).

Muchos estudiantes llegaban a la enseñanza superior sin un conocimiento suficiente de sus aptitudes y su vocación, e ignorando las verdaderas necesidades del país; y esto también fue la causa de que muchos notaran su error al cabo de uno o dos años y optaran por abandonar sus estudios. Las estadísticas muestran que menos del 50% de los alumnos que empezaban una carrera profesional continuaban después del tercer año. Cano C (2016).

CONCLUSIONES

Colombia mostró un crecimiento entre 1945 y 1953 no solo en el desarrollo de vías de comunicación, sino también en varias actividades industriales como: energía eléctrica, refinación del petróleo y oleoductos, las minas y la extracción, siderúrgicas, el cemento, el vidrio, la industria de las bebidas, industria textil, industrias de calzado y confección, industria farmacéutica, la construcción y las obras públicas (el auge en la construcción urbana, inversión en obras públicas y construcción de fábricas).

En cuanto al mercado agrícola en Colombia no existían cantidades apreciables de productos explotables para exportación, a excepción del café, el banano y el tabaco, y esto debido a que los agricultores no sentían preocupación por recolectar productos de calidad, y no existía ningún sistema organizado para la recolección y almacenamiento, razón por la cual los productos solo eran vendidos en el mercado local; en cambio sí se importaban productos como el trigo, el cacao y la compra en una cantidad considerable, lo cual era bastante irónico en un país con potencial agrícola.

Para que estas situaciones mejoraran era importante desarrollar en los hombres de negocio una mentalidad industrial en remplazo a una mentalidad puramente comercial, así como también incentivar a la cooperación entre los distintos sectores de la economía. El gobierno esperaba estos resultados a partir de la creación de programas para la formación de gerentes como: programas de Economía, Ingeniería Industrial y Administración.

El ingreso que obtenían los campesinos era muy reducido, y había pocas excepciones en las que dichos ingresos fueron empleados en mejorar y conservar el suelo, seleccionar cuidadosamente los productos y el ganado, en establecer medios de almacenamiento y transformación; es por esto por lo que, aunque Colombia tenía mucho potencial en el campo, no se realizaba la inversión que este sector requería, situación que hoy por hoy no ha cambiado mucho. Por consiguiente, seguirá siendo un sector rezagado y con poco potencial para expandirse a los mercados internacionales.

El país tenía factores positivos en cuanto a recursos del suelo, la agricultura y la pesca, ya que contaba con tierras utilizables, suelos fértiles, climas diversos, experiencias agrícolas, comienzos de modernización especialmente en los cultivos de arroz y algodón, investigación agrícola, productos de exportación como el café y el banano, cultivos industriales como el algodón, el caucho, el fique, cultivos de granos; en conclusión el país disponía de inmensas posibilidades agropecuarias pero que hasta el momento habían sido explotadas de forma desordenada, razón por la cual el gobierno debía tomar medidas adecuadas para el cuidado de los suelos, el agua y todos los recursos naturales en general para que a futuro los daños no fueran devastadores, los cambios en este sentido han sido lentos.

En cuanto al tema de educación podemos concluir que los métodos de enseñanza utilizados eran anticuados y por los resultados académicos de los niños de primaria se podía decir que ineficaces; de igual forma la preparación en pedagogía de todos los profesores no era la ideal, y si se aplicaban métodos uniformes para enseñar pedagogía a los maestros, en grandes proporciones este problema se iba a remediar. El diagnóstico surge en 1956, las soluciones no se empiezan a dar sino hasta mediados de la década del 90 pero el problema sigue latente.

Dentro de las condiciones expuestas por Le Bret se tenía que se debían implementar modelos pedagógicos más modernos, basándose en experiencias de otros países iguales a Colombia y que hubiesen dado resultados eficientes, creando clases piloto que se convertirían en arquetipo para las clases futuras, de igual forma la creación de escuelas normales para el fomento de nuevos profesores con nuevos espíritus pedagógicos más modernos y entusiastas; así como el mejoramiento de las aulas de estudio y de los elementos materiales creando un ambiente propicio para el aprendizaje de los niños. Esta situación se dio en las ciudades capitales, pero en algunas zonas rurales el problema prevaleció.

BIBLIOGRAFÍA

Bejarano, J.A (1987). “El despegue cafetero, 1990-1928”, en Ocampo J.A (comp) Historia Económica de Colombia. Ed. Siglo XXI Bogotá.

Bushnell (1993) The making of Modern Colombia: Berkeley: University of California press.

Cano, P, C.(2016) Cambios y permanencias en la historia del currículo universitario en Administración en Colombia, 1940-2000. Doctorado thesis, Universidad Nacional de Colombia - Sede Bogotá.

CEPAL (1957) Estudio Económico de América Latina, Naciones Unidas 1958. Alojado en <http://archivo.cepal.org/pdfs/EEAL/1957.pdf>. Consultado el 07 de junio de 2017.

CEPAL (1957) Análisis y proyecciones del desarrollo económico III el desarrollo económico de Colombia. Estudio realizado por la Secretaría de la Comisión Económica para América Latina, Naciones Unidas Departamento de Asuntos Económicos y Sociales. México, 1957.

Currie, L. (1951). Bases de un programa de fomento para Colombia, Bogotá, Ediciones del Banco de la República.

Dávila, C. and Pallares, Z. ‘Empresariado Medio, Proteccionismo y Política Pública: La Asociación Colombiana de Pequeña y Mediana Industria (-) in Cerruti, M. (Ed) Empresas y Grupos Empresariales en América Latina, España y Portugal () Monterrey: Universidad Autónoma de Nuevo León.

Junguito, B,R (2017) Historia económica de Colombia en el siglo XX Ed. Universidad Sergio Arboleda. Kalmanovitz, S. (2008) Nueva Historia Económica de Colombia. Ed. Tauro, Bogotá.

- Lebret, L. J. (1958). Estudio sobre las condiciones del desarrollo de Colombia: Economía y humanismo. Presidencia de la República. Comité Nacional de Planeación- Dirección Ejecutiva.
- León V. K (2011) Historia de la Aviación en Colombia. Rev. Historia Crítica No 269. Banco de la República alojado en:
<http://www.banrepcultural.org/blaavirtual/revistas/credencial/diciembre2011/aviacion>.
- Ley 43 de 23 de diciembre de 1948. Por la cual se organiza la educación técnica, Diario Oficial No. 26904. Bogotá.
- Mayor M, A (2005) Ética, trabajo y productividad en Antioquia. Tercer Mundo Editores. Bogotá Colombia;
- Meisel, A y Ramírez, M.T (2010) Economía Colombiana en el siglo XIX. Bogotá Fondo de Cultura Económica; Ocampo J.A (2007) Historia Económica de Colombia. Bogotá Ed. Planeta.
- ONU (1948) Declaración de los derechos humanos; artículo 26. Alojado en
http://www.ohchr.org/EN/UDHR/Documents/UDHR_Translations/spn.pdf. Consultado el 10 de julio de 2017.
- Ordóñez L, A (2011). Industrias y empresarios pioneros: Cali 1910-1945. Cali: Universidad del Valle, 210 páginas;
- Ospina V, L (1955). Industria y protección en Colombia Ed. Bedut Medellín;
- Pachón A & Ramírez M. T (2006) La infraestructura de transporte en Colombia durante el siglo XX. Ed. Fondo de Cultura económica-Bogotá.
- Palacios, M., & Safford, F. (2012). Historia de Colombia. País fragmentado, sociedad dividida. Bogotá: Ediciones Uniandes.
- Prieto S, C (1958) Carta de presentación de la obra, dirigida al presidente Alberto Lleras Camargo; Septiembre. Director ejecutivo Comité Nacional de Planeación.
- Robinson, & Urrutia M (2007) Economía Colombiana del siglo XX, Un análisis cuantitativo: Fondo de cultura económica.
- Sáenz R, E (2002) Colombia años 50 Industriales, política y diplomacia. Colección Sede Universidad Nacional de Colombia.
- Tovar P,H; (2015) Que nos tengan en cuenta: Colonos, empresarios y aldeas Colombia, 1800-1900 Ed. Uniandes.

RECONOCIMIENTO

Los autores agradecen apoyo de la Universidad de Bogotá Jorge Tadeo Lozano para la Investigación de la cual se deriva esta ponencia, titulada “El desarrollo de la educación universitaria en Colombia: el caso de economía, 1930 hasta el fin del llamado Frente nacional_ 1974. Aprobado por la Dirección de Investigaciones de la Universidad de Bogotá Jorge Tadeo Lozano. En convocatoria interna No. 16 de 2016. con código No. 797-CP-16. Asimismo, agradecen los comentarios de los árbitros y editores del IBFR. Los cuales contribuyeron a mejorar la calidad del documento.

BIOGRAFIAS

Carlos Alberto Cano Plata. Doctor en Historia, Magister en administración, profesor Asociado en la Universidad de Bogotá Jorge Tadeo Lozano, adscrito a la Facultad de Ciencias Económicas y Administrativas.

Diana Cárdenas. Estudiante de contaduría pública, participante del semillero de investigación en Historia Empresarial, económica y de gestión SHIEEG. De la Universidad de Bogotá Jorge Tadeo Lozano.

Anyi Marcela Hernández. Estudiante de contaduría pública, participante del semillero de investigación en Historia Empresarial, económica y de gestión SHIEEG. De la Universidad de Bogotá Jorge Tadeo Lozano.

FACTORES ASOCIADOS A LA ACEPTACIÓN DE CUPO EN UNA CARRERA UNIVERSITARIA

Betzabé del Rosario Maldonado Mera, Universidad de las Fuerzas Armadas ESPE

José Javier Buenaño Cabrera, Universidad de las Fuerzas Armadas ESPE

Karla Viviana Benavides Espinosa, Universidad de las Fuerzas Armadas ESPE

RESUMEN

Desde la implementación del sistema nacional de admisión a la educación superior pública del Ecuador en el 2011, no se observan estudios que evalúen su eficiencia. En este contexto el objetivo del estudio es estimar los factores asociados a la aceptación del cupo en una carrera universitaria, tomando en cuenta características personales, contextuales y experienciales contempladas en la Teoría Cognitivo Social de Desarrollo de la Carrera propuesta por Robert Lent. El estudio se realiza sobre los estudiantes que residen en la Provincia de Pichincha y que rindieron el examen de ingreso en el segundo periodo 2013. Se aplicó el modelo de regresión múltiple logística para estimar la probabilidad de aceptación del cupo asignado a través del sistema de admisión. Los resultados muestran que la aceptación del cupo asignado, depende del área a la que pertenece la carrera, la categoría de la universidad, la prioridad de selección de la carrera y la provincia en la que está ubicada la universidad. La teoría de Lent se demostró parcialmente, sin embargo el estudio debe ampliarse al total de población de aspirantes a fin de orientar las políticas para garantizar la eficiencia de asignación de cupos.

PALABRAS CLAVE: Sistema de Admisión Universitario, Factores Asociados, Carrera Universitaria

FACTORS ASSOCIATED WITH THE ACCEPTANCE OF THE UNIVERSITY CAREER QUOTA

ABSTRACT

Since the implementation of the admission national system to public higher education of the Ecuador in 2011, no studies evaluating its efficiency are observed. In this context, the objective of the study is to estimate the factors associated with the acceptance of the university career quota, taking into account the personal, contextual and experiential characteristics contemplated in the Cognitive Social Theory of Professional Development proposed by Robert Lent. The study is carried out on the students residing in the Province of Pichincha and that they passed the examination of entrance in the second period 2013. The logistic multiple regression model was applied to estimate the probability of accepting the quota allocated through the admission system. The results show that the acceptance of the quota depends on the area to which the race belongs, the category of the university, the priority of selection of the race and the province in which the university is located. Lent's theory was partially demonstrated, however the study should be expanded to the total population of applicants in order to guide policies to ensure the efficiency of quota allocation.

JEL: I23

KEYWORDS: University Admission System, Associated Factors, University Career

INTRODUCCIÓN

En el Ecuador se implementó el Sistema Nacional de Nivelación y Admisión a la educación superior (SNNA), cuya finalidad es regular el ingreso garantizando la igualdad de oportunidades, mérito y capacidad. Se basa en la aplicación de un examen único de ingreso (ENES) que evalúa capacidades de razonamiento verbal, numérico y abstracto. La libre selección de varias opciones de carrera y universidad. La asignación automática de cupo en función de la nota total alcanzada en el ENES, los cupos otorgados por las universidades y la prioridad de postulación del aspirante. El proceso finaliza con la aceptación o no del cupo asignado, acción que determina la eficiencia del SNNA (Maldonado, 2015).

El objetivo de este trabajo es determinar los factores asociados a la aceptación del cupo de la carrera universitaria, tomando en cuenta características personales, contextuales y experienciales contempladas en la Teoría Cognitivo Social de Desarrollo de la Carrera propuesta por Robert Lent y colaboradores. Se aplicó el modelo de regresión múltiple logística para estimar la probabilidad de aceptación del cupo asignado a través del sistema de admisión. El documento se organiza como sigue. Se presenta una revisión de literatura sobre los factores que explican la elección de una carrera y las consecuentes fuentes de información requeridas para el estudio. En la metodología se describen las variables utilizadas para estimar la probabilidad de aceptación del cupo asignado a una carrera. Finalmente se exponen los resultados descriptivos del grupo de estudiantes, el modelo econométrico obtenido y las conclusiones respectivas.

REVISIÓN DE LITERATURA

La selección de la carrera universitaria podría considerarse como una acción intencionada del aspirante, que se debate entre el determinismo social y sus propios intereses, en un contexto caracterizado por la escasez del bien social que aspira (Aimino, 2011). En el contexto ecuatoriano, la educación se declara como un bien público al que todas y todos los ciudadanos tienen derecho, sin embargo cerca de 300.000 bachilleres aspiran ingresar a una universidad pública y apenas se ofertan aproximadamente 80.000 cupos (Maldonado, 2015). Por lo que esta perspectiva se ajusta perfectamente al estudio. Martínez (1998) propone que el desarrollo vocacional manifestado en la elección de una opción educativa, es el resultado de la interacción de factores individuales y contextuales o ambientales.

Esta perspectiva surge de la Teoría Cognitivo Social de Desarrollo de la Carrera propuesta por Robert Lent, Gail Hackett y Steven Brown, articulada a partir de la década de los noventa. Los factores que inciden en la elección educativa del aspirante se agrupan en tres categorías, personales, contextuales y experiencial (Carrasco, Zúñiga, & Espinoza, 2014). A partir de esta propuesta se despliegan un sin número de investigaciones empíricas para identificar los factores de los cuales dependen las selecciones educativas de los aspirantes. Peña, Inda y Rodríguez (2015) evaluaron un modelo factorial, Pineda (2015) a través de una regresión logística, Said-Hung, Gratacós y Valencia (2017) determinaron además de la situación socioeconómica, entorno familiar y nivel formativo, otros de orden motivacional. González, Castro y Bañuelos (2011) destacaron la importancia que tiene definir el perfil de ingreso como punto de partida de la trayectoria del estudiante. Instituto Nacional de Evaluación Educativa (INEVAL, 2017) a través de análisis factorial propone modelo para evaluar el rendimiento académico sin sesgos de índole socioeconómico.

METODOLOGÍA

Para el estudio se tomó como referencia el informe sobre la aplicación del ENES de septiembre 2013 presentado por la Dirección Técnica del SNNA. El trabajo se desarrolla para la provincia de Pichincha que es la segunda más importante en términos de población de aspirantes. Es una fase inicial de un posterior estudio comparativo, cuyos resultados apoyarán a la definición de políticas públicas orientadas a disminuir el impacto de ciertas condiciones que afectan a la eficiencia del SNNA. Siguiendo el modelo de regresión

logística se seleccionan aquellas variables independientes que más información aporta sobre las probabilidades de pertenecer a cualquiera de los dos grupos establecidos por los valores de la variable dependiente. Variables que se encuadran en los factores propuestos por la Teoría Cognitivo Social de Desarrollo de la Carrera (TCSDC). Para el estudio se establecieron las variables que se muestran en la Tabla 1.

Tabla 1: Variables Consideradas Para el Estudio

Dimensiones Según la TCSDC	Variable	Descripción
Personales	Aceptacioncarre	Variable categórica.
	Genero	Género del aspirante.
	Edad	Edad del aspirante.
Relacionadas a las condiciones intrínsecas de cada individuo.	Estadociv	Estado civil del aspirante.
	Discapacidad	Situación de discapacidad.
Contextuales	Arearesid	Área de residencia del aspirante.
	Tipounid	Tipo de financiamiento de la unidad educativa de donde proviene el aspirante.
Relacionadas a las condiciones externas del medio ambiente donde se desenvuelve el individuo.	Carreraasp	Área de la carrea en la que el aspirante obtuvo cupo.
	Modalida	Modalidad en la que se desarrolla la carrera.
	Categoría	Categoría de la IES en la cual obtiene cupo el aspirante.
		La categoría define la calidad educativa establecida por el CEAACES. Se considera A las que alcanzaron los mayores niveles de calidad a nivel nacional.
Experiencial	Provinciaies	Provincia de domicilio de la IES
	Notaenes	Nota obtenida en el examen de ingreso. Escala de 400 a 1000 puntos.
	Enesverbal	Nota obtenida en el área verbal del ENES. Escala de 400 a 1000 puntos.
Relacionadas a las condiciones resultantes de la propia vivencia o experiencia del individuo.	Eneslogica	Nota obtenida en el área lógica del ENES. Escala de 400 a 1000 puntos.
	Enesabstrac	Nota obtenida en el área abstracta del ENES. Escala de 400 a 1000 puntos.
	Oportunida	Número de veces que rinde el ENES.
	Prioridad	Es la prioridad en la que seleccionó la carrera el aspirante.

En esta tabla se observan las variables que intervienen en el estudio. La aceptación o rechazo del cupo de carrera asignado por el SNNA es la variable dependiente de tipo categórica dicotómica. Las variables independientes se agruparon en tres dimensiones según la TCSDC, personales, contextuales y experienciales.

RESULTADOS

Estadísticos Descriptivos

Del total de aspirantes que obtuvieron cupo, un 79,8% (4694) aceptaron el cupo y el 20,2% (1188) no aceptaron. En la Tabla 2 se muestra un resumen de resultados obtenidos en las tablas de contingencia generadas con 5882 datos válidos a través del programa SPSS.

Tabla 2: Resumen de Resultados Obtenidos en las Tablas de Contingencias Por Variables

Tabla de Contingencia	Resumen del Resultado	Interpretación
Tasa de aceptación de cupo de acuerdo al género del aspirante.	52,1% (2446) hombres aceptaron cupo, 47,9% (2248) mujeres. Mayor porcentaje de hombres aceptaron cupo, sin embargo la diferencia es apenas un 4% entre los dos grupos.	El condicionante de esta situación podría ser el entorno familiar que muchas veces incide en las decisiones de los aspirantes y sobre todo en las mujeres (Vega, 2003). Para el análisis del modelo esta variable no se tomará en cuenta, por la similitud de resultados entre los dos géneros.
Tasa de aceptación de cupo de acuerdo al estado civil del aspirante.	5,2% (245) de aspirantes casados, 93,2% (4374) de solteros, 1,1% (52) en unión libre, 4% (21) divorciados y 0% (2) viudos, obtuvieron cupo. Mayor porcentaje de casados, solteros y unión libre aceptaron cupo (80%). Divorciados y viudos, en ese orden, menos aceptaron cupo, 72,4% y 66,7% respectivamente.	Para el estudio de regresión logística no se tomará en cuenta esta variable, debido a que la mayor parte de aspirantes son solteros.
Tasa de aceptación de cupo de acuerdo a la discapacidad del aspirante.	El 99,6% (4677) de aspirantes no registran discapacidad, frente al 0,4% (17) que sí. Quienes más aceptaron cupo fueron los aspirantes sin discapacidad.	Se podría explicar debido a los obstáculos que significan los estudios en la carrera asignada, factores de tipo contextual. No se toma en cuenta por el bajo porcentaje de este grupo que registra discapacidad frente a los que no.
Tasa de aceptación de cupo de acuerdo al tipo de colegio de origen	Mayoría de aspirantes que obtuvieron cupo provienen de colegios fiscales, 63,8% (2995). Los que provienen de fiscomisional son los que más aceptaron el cupo de la carrera asignada (83%), seguido de los que provienen de municipales, fiscales y particulares (81%, 80,5% y 77,8%, respectivamente).	Se supondría que los aspirantes que provienen de colegios particulares, estarían en mejores condiciones económicas que el resto. Por lo tanto el impacto de otros factores los hace sensibles a no aceptar un cupo, porque tienen los medios para ir a una universidad privada.
Tasa de aceptación de cupo de acuerdo al área de residencia del aspirante	La mayor parte de los aspirantes que obtuvieron un cupo residen en la zona urbana de la Provincia de Pichincha, 73,9% (3473).	El porcentaje de aspirantes que aceptaron cupo no difiere entre los que residen en la zona rural o urbana, en ambos casos es de alrededor del 80%. Por tal motivo esta variable no se considera para el análisis logístico.
Tasa de aceptación de cupo de acuerdo al área de la carrera asignada	La mayor parte de aspirantes obtuvieron cupo en las carreras del área de ciencias sociales (28,8%), seguido de ciencias (16,5%), ingenierías (16%), educación (13,4%), salud y servicio social (9,2%), servicios (6,7%), humanidades y arte (3,6%), y agricultura (5,8%). Los cupos más aceptados fueron de las carreras del área de ingeniería (87,5%). Les sigue, ciencias (85,6%), ciencias sociales (81,4%), salud y servicio social (79,2%), agricultura (76,4%), servicios (74,5%), educación (71,9%), humanidades y arte (52,6%).	Resultados que coinciden con estudios que explican que la estructura social y familiar del aspirante influye en la valoración de ciertas profesiones en detrimento de otras. Se suma, diversos intereses individuales, como ganar más dinero, escalar posición social, tener más poder, aumentar más títulos académicos, entre otros (Villada, y otros, 2002).
Tasa de aceptación de cupo de acuerdo a la categoría de la IES de la carrera asignada.	El 84,4% de las carreras en las cuales se asignaron cupo pertenecen a una IES categoría A. El 84,7% de los aspirantes que obtuvieron un cupo en una carrera de una IES categoría A, aceptaron el cupo. Frente a un 56,9% de una categoría B, un 51,5% de una C y el 32,2% de una D.	Esta preferencia se podría explicar debido a que las IES categoría A representan aquellas que garantizan mayores niveles de calidad educativa y constituyen un referente en la sociedad ecuatoriana.
Tasa de aceptación de cupo de acuerdo a la prioridad de selección de la carrera.	La mayor parte de aspirantes aceptaron el cupo que obtuvieron en una carrera que seleccionaron en primera prioridad (55,5%), el porcentaje disminuye según ese orden (21,2%, 11,5%, 7,1%, 4,7%).	Situación que se explicaría por considerar que su primera prioridad es la de mayor interés y que quienes no aceptan otras prioridades de carrera, estarían seguros de su orientación vocacional.
Tasa de aceptación de cupo de acuerdo a la modalidad de la carrera.	La mayor parte de carreras en las que obtuvieron un cupo se desarrollan en la modalidad presencial (86%), seguida de la modalidad a distancia (13,6%) y en menor cantidad semipresencial (1,2%).	Este comportamiento podría explicarse en la medida que quienes optan por la modalidad a distancia, aspiran continuar sus estudios superiores en una modalidad que no interfiera con sus otras actividades (Juca, 2016).
Tasa de aceptación de cupo de acuerdo a la provincia de la IES.	El porcentaje de aspirantes que aceptan el cupo obtenido en una carrera de la modalidad presencial es 79,1%. En las carreras de modalidad a distancia aceptan cupo el 86,8% de aspirantes. Y en las de modalidad semipresencial el 63,5%. El 82,1% de aspirantes obtuvieron cupo en una IES de la Provincia de Pichincha. El 17,9% se distribuyen entre las 16 provincias restantes. El 86,7% de los aspirantes, aceptaron el cupo en una IES domiciliada en Pichincha. El porcentaje de aceptación disminuye en este orden: Cotopaxi Chimborazo, Imbabura, Santo Domingo de los Tsáchilas, Tungurahua, Bolívar,	Resultado coherente con las características de los aspirantes, residen en Pichincha. La mayoría seleccionó cupos de universidades ubicadas en esta provincia. La aceptación de cupo en una IES fuera del entorno provincial, podría advertir la presión por obtener un cupo en una carrera y no dejar pasar la oportunidad (Di Cauda, 2016).

Tasa de aceptación de cupo de acuerdo al número de veces que rindió el ENES.	Guayaquil, Azuay, Pastaza, Manabí, Santa Elena, Los Ríos, El Oro, Cañar y Esmeraldas.	Para el análisis logístico se recodifica la variable agrupando a quienes no se ubican en Pichincha, como OTRAS provincias (bajo porcentaje)
	El 80,1% de aspirantes rindieron el ENES por primera vez y el 19,9% rindieron en convocatorias anteriores por lo que esta vez fue su segunda oportunidad de rendir el examen.	Este porcentaje mayor se podría explicar debido al tiempo que se encuentran sin posibilidad de ingresar a la educación superior.
	El 79,6% de los que rindieron por primera vez aceptaron cupo, mientras que el 80,7% de los que rindieron por segunda vez aceptaron cupo.	Sin embargo, para el estudio no se considera esta variable puesto que prácticamente no existe diferencia entre los porcentajes de aspirantes que aceptan cupo de ambos grupos.

En esta tabla se observa el resumen de las salidas de las tablas de contingencia del SPSS para cada una de las variables categóricas y la interpretación de los mismos. Además, en caso de no considerar la variable para el análisis multivariado, se expone la justificación respectiva

Modelo de Regresión Logística

La variable dependiente que se quiere predecir es ACEPTACIONCARRE, representa la acción que realiza el aspirante, de aceptar o rechazar el cupo de carrera universitaria asignado por el SNNA. El estudio está orientado a pronosticar adecuadamente los factores que inciden en tal decisión. Del análisis de regresión logística se concluyó que existe un 82% de probabilidad de acierto en el resultado de la variable dependiente, cuando conozco el área de la carrera seleccionada, la categoría de IES, la provincia de ubicación de la IES y la prioridad de selección de carrera. El modelo logístico es el siguiente:

$$\hat{p}_i = 1 / 1 + e^{-(-1,953 + 0,36 * CARRERAASP(1) + 0,484 * CARRERAASP(2) + 0,099 * CARRERAASP(3) - 0,572 * CARRERAASP(4) - 0,721 * CARRERAASP(5) + 0,369 * CARRERAASP(6) + 0,959 * CARRERAASP(7) + 1,332 * CATEGORIA(1) + 1,194 * CATEGORIA(2) + 0,844 * CATEGORIA(3) + 1,424 * PROVINCIAIES(1) + 1,692 * PRIORIDAD(1) + 0,821 * PRIORIDAD(2) + 0,515 * PRIORIDAD(3) + 0,113 * PRIORIDAD(4)}$$

Variable CARRERAASP: representa el área de la carrera en la que obtuvo cupo el aspirante. Las áreas de carrera en la que el aspirante obtiene el cupo, que hacen que se incremente la probabilidad de que SI acepte el cupo, en orden descendente son: *Ingeniería* 0,959, *Ciencias* 0,484, *Salud* 0,369, *Agricultura* 0,36, *Ciencias Sociales* 0,099. Mientras que las áreas que hacen que la probabilidad de aceptación de cupo disminuya son: *Humanidades* y *Arte* 0,721, *Educación* 0,572. Estos resultados son coherentes con investigaciones realizadas alrededor de los factores que inciden en la elección de la carrera universitaria. Aquellos que coinciden en identificar el área de la carrera, sostienen también que las aspiraciones salariales podría definir la elección del aspirante (Pineda, 2015). En el Ecuador se asocia el mayor nivel salarial a carreras del área de ingeniería y el menor al de educación y artes.

Variable CATEGORIA: identifica las diferentes dimensiones a las que pertenecen las IES en el Ecuador, según su nivel de calidad alcanzado en la evaluación realizada por el CEAACES. Los resultados muestran que la probabilidad de que un aspirante acepte el cupo de carrera obtenido en una IES categoría A (1,332) es mayor que si pertenece a una categoría B (1,194) o C (0,844), en ese orden.

Variable PRIORIDAD: explica el orden en el que seleccionó la carrera en la que obtuvo cupo. Los resultados obtenidos concuerdan con el orden de prioridad. Si el estudiante obtuvo cupo en una carrera que seleccionó en primera prioridad, la probabilidad de que acepte cupo se incrementa respecto a las otras prioridades, en el siguiente orden: Primera prioridad 1,692, segunda prioridad 0,821, tercera prioridad 0,515 y cuarta prioridad 0,113. En la quinta prioridad no aporta a la probabilidad de que acepte el cupo.

Variable PROVINCIAIES: relacionada a la provincia en la que se domicilia la IES de la carrera en la que el aspirante obtuvo el cupo. Los resultados muestran que si el cupo obtenido es en una IES de la provincia de Pichincha, se incrementa la probabilidad de que el aspirante acepte el cupo (1,424).

CONCLUSIONES

Los factores relevantes propuestos en la Teoría Cognitivo Social de Desarrollo de la Carrera, que inciden en la elección educativa de un estudiante, se demostraron parcialmente. Puesto que las variables resultantes en el modelo de regresión logística se encuadran en las dimensiones contextual y experiencial. En la dimensión contextual con las variables, *categoría* de la IES y *provincias de ubicación* de la IES en donde obtuvo cupo. En la dimensión experiencial con la variable, *prioridad de selección de la carrera*. La predicción del comportamiento de los aspirantes a ingresar a la educación superior, en cuanto a la aceptación o no del cupo obtenido, constituye información importante para la definición de políticas tendientes a mejorar la eficiencia del SNNA. Puesto que a la fecha, existe un porcentaje representativo de cupos que no son utilizados por los aspirantes y que podrían ser cubiertos por otros que se quedan fuera del sistema de educación superior. La ventaja del estudio es que se contó con una base de datos confiable, puesto que se levantó a través del SNNA durante el proceso de registro del aspirante. Lo que permitirá en un segundo momento comparar con los resultados obtenidos en otras provincias y extender el estudio a toda la población. Esta ventaja constituye a la vez la mayor limitante, puesto que las variables del estudio se deben ajustar a los datos proporcionados por el SNNA.

BIBLIOGRAFÍA

- Aimino, A. (2011). Estudio sobre razones e intereses en la elección de carrera de los ingresantes universitarios de la Universidad Nacional de Villa María 2006. Las marcas neoliberales en la elección de carrera. Buenos Aires: Universidad Tecnológica Nacional.
- Carrasco, E., Zúñiga, C., & Espinoza, J. (2014). Elección de carrera en estudiantes de nivel socioeconómico bajo de universidades chilenas altamente selectivas. *Calidad en la educación* (40), 96-128.
- Di Caudo, M. V. (2016). Transformaciones universitarias y cupos en Ecuador: entre equidad, meritocracia y desarrollo. *Nómadas*, 167-183. Obtenido de <http://www.scielo.org.co/pdf/noma/n44/n44a10.pdf>
- González, A., Castro, E., & Bañuelos, D. (2011). Trayectorias escolares. El perfil de ingreso de los estudiantes de ciencias Químicas. *Revista Latinoamericana de Estudios Educativos*, XLI(3-4), 119-138. Obtenido de <http://www.redalyc.org/articulo.oa?id=27022351006>
- INEVAL. (2017). Instituto Nacional de Evaluación Educativa. Obtenido de <http://www.evaluacion.gob.ec/>
- Juca, F. (2016). La educación a distancia, una necesidad para la formación de los profesionales. *Universidad y Sociedad. Revista Científica de la Universidad de Cienfuegos*, 8(1), 106-111. Obtenido de <http://rus.ucf.edu.cu>
- Maldonado, B. (2015). El sistema nacional de admisión y nivelación del Ecuador desde la perspectiva de la Universidad de las Fuerzas Armadas - ESPE. *Revista San Gregorio*, 2(10), 43-60.
- Martínez, M. (1998). Orientación vocacional y profesional. *Papeles del Psicólogo*, 71. Obtenido de <http://www.papelesdelpsicologo.es/contenido?num=1071>
- Peña, J., Inda, D. I., & Rodríguez, D. C. (2015). La teoría cognitivo social de desarrollo de la carrera: evidencias del modelo con una muestra de estudiantes universitarios de la carrera científica. *Bordón, Revista de Pedagogía*, 67(3). doi:10.13042/Bordon.2015.67306

Pineda, L. (2015). Factores que afectan la elección de la carrera: Caso Bogotá. *Revista Vniversitas Económica*, 15(3), 1-35. Obtenido de http://cea.javeriana.edu.co/documents/153049/2786252/Vol.+15_N3_Oct_2015.pdf/f47b2452-c9c0-4a60-886e-118076bd9936

Said-Hung, E., Gratacós, G., & Valencia, J. (2017). Factores que influyen en la elección de las carreras de pedagogía en Colombia. *Investigación educativa*, 43(1), 31-48. doi:10.1590/S1517-9702201701160978

Vega, J. (2003). Influencia de los padres en la elección de carreras desde la perspectiva del estudiante universitario. Monterrey: Universidad Autónoma de Nuevo León.

Villada, C., López, L., Patiño, C., Ramírez, W., Jurado, C., & Ossa, J. (2002). Factores asociados a la elección de carrera y universidad. *Uni-pluriversidad*, 2(2), 23-30.

BIOGRAFÍA

Betzabé de Rosario Maldonado Mera es Magíster en Gestión de Organizaciones, Candidata a PhD en el programa doctoral de Ciencias de la Administración de la Universidad Nacional de La Plata – Argentina. Docente Investigadora de la Universidad de las Fuerzas Armadas ESPE. Departamento de Ciencias Económicas, Administrativas y de Comercio. Av. General Rumiñahui, Sangolquí, Ecuador.

José Javier Buenaño Cabrera es MBA especialidad Marketing, Candidato a PhD en el programa doctoral de Ciencias de la Administración de la Universidad Nacional de La Plata – Argentina. Docente Investigadora de la Universidad de las Fuerzas Armadas ESPE. Departamento de Ciencias Económicas, Administrativas y de Comercio. Av. General Rumiñahui, Sangolquí, Ecuador.

Karla Viviana Benavides Espinosa es MBA especialidad Marketing, Candidata a PhD en el programa doctoral de Ciencias de la Administración de la Universidad Nacional de La Plata – Argentina. Docente Investigadora de la Universidad de las Fuerzas Armadas ESPE. Departamento de Ciencias Económicas, Administrativas y de Comercio. Av. General Rumiñahui, Sangolquí, Ecuador.

DISEÑO DE MODELO DE COMPETENCIAS DIRECTIVAS Y SU PROCESO DE IMPLANTACION PARA PYME: EVALUACION DIAGNOSTICA DEL SECTOR COMERCIO AL POR MENOR

Melchor David Elizondo Sandoval, Universidad Autónoma de Coahuila, México

Jesús Alberto Montalvo Morales, Universidad Autónoma de Coahuila, México

Xóchitl Segura Lozano, Universidad Autónoma de Coahuila, México

José Andrés Muñoz, Texas A&M University, USA

Luis Daniel Muñoz, Early College High School, USA

RESUMEN

El cambio vertiginoso que imponen los mercados, cada vez más globales y competitivos, necesariamente impacta en el desempeño de las organizaciones, donde el reto es mejorar su productividad; en este contexto surgen las Competencias Directivas como un factor estratégico para la gestión del talento humano. Las PYME no escapan de esta realidad; declaran enfrentar problemas para encontrar directivos con las competencias gerenciales adecuadas, por lo que se puede sostener que existe una “brecha de Competencias directivas” que actúa como barrera al crecimiento de la productividad. Por esta razón, la presente investigación desarrolla un perfil de Competencias Directivas fundamentado en una metodología de fácil comprensión y adaptada a las PYME, que promueva el desarrollo de Competencias Directivas específicas que permitirá la disminución de la tasa de mortalidad y estabilidad en el desempeño financiero en la región. La metodología de investigación fue de tipo exploratoria y propositiva. Los datos aportados por el trabajo de campo en el sector servicios de las PYME se diseñó un perfil de competencias directivas y su metodología, que fueron validadas mediante su aplicación en cuatro estudios de caso, que reflejan la factibilidad de su implantación en dependencia del tamaño, sector y localización geográfica.

PALABRAS CLAVE: Modelo de Competencias Directivas, PYME

MODEL DESIGN OF MANAGEMENT COMPETENCES AND ITS IMPLEMENTATION PROCESS FOR SMEs: DIAGNOSTIC EVALUATION OF THE RETAIL SECTOR

ABSTRACT

The changing and globalizing environment in business with increasing competition in markets and sectors are factors that drive the search for better strategic management tools that increase business results. SMEs are at the center of this context with management needs and problems, in the search for human capital talent with the appropriate profiles and competencies that match the management requirements. The existence of this "competitive gap" is a barrier that impacts the survival and growth of SMEs. As stated, the present research proposes a design of a model of managerial competencies and its implementation process, which is easy to understand for SMEs, that increases the development of specific managerial competencies so that the impacts reduce the mortality rate and increase business as a result in the region. The research methodology was exploratory, descriptive and propositional. The sample size was determined from stratified probabilistic sampling with a 95% confidence level. The application of the research instrument was 371 surveys of partners and managers. The validity and reliability of the instrument was determined by Alpha de Cronbach with a score of 0.86. As a result of this research, a model of management

competencies is proposed and its implementation is established with its own design that provides a methodology that is new, non-theoretical in application, easy to understand, useful to SMEs, easy to use, and promotes the development of specific managerial competencies, selected by the manager or partner, which is important because of the growing role that this sector has had in the last twenty years. The model of managerial competencies seeks to impact the stability and survival of SMEs in the Municipality of Saltillo in the State of Coahuila.

KEYWORDS: Model of Management Competitions, SME

INTRODUCCION

El capital intelectual es parte del activo intangible organizacional, diseñar un modelo de competencias directivas con su implementación permitirá definir específicamente el perfil del factor humano, así como diagnosticar, evaluar y desarrollar el talento directivo. El modelo debe ser dinámico, integral y flexible, características que son parte de las “buenas prácticas de gestión”, que las PYME proactivas e innovadoras adoptan para enfrentar su futuro. En las PYME integrar a los directivos más competentes es la posibilidad de estabilizar su operación y desarrollarse en un entorno competitivo que exige una adaptación y rápidas decisiones estratégicas. Actualmente son pocas las PYME que basan su gestión de capital humano en las competencias directivas.

OCDE (2013) en su informe Perspectivas Económicas de América Latina y Políticas de PYME para el cambio estructural confirma: Las barreras que dificultan el crecimiento de la productividad de las PYME son muy diversas. Una de las dimensiones que la literatura reconoce como esencial para entender la productividad de una economía está vinculada con la dotación de capital humano y competencias directivas para el sector productivo. Los estudios sobre capital humano y mercado laboral coinciden en señalar un factor adicional que debe ser analizado para entender la baja productividad de las PYME.

En el sector comercio no existen estudios dado que la mayoría de ellos se centran en el sector manufacturero o industrial (Velarde. 2014, Martínez. 2010, Chinchilla. 2001, Medina et al, 2012; y Delgado, 2005) citados por Elizondo (2014), por lo cual esta investigación es una contribución significativa por presentar un diseño de perfil de competencias directivas y su implementación. Los datos aportados servirán para integrar una herramienta estratégica en la gestión de una PYME del sector comercio que influya en la disminución de la tasa de mortalidad de las PYME y la estabilidad de sus indicadores financieros y no financieros. 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 la propuesta del diseño de perfil de competencias directivas y su implementación.

METODOLOGÍA

El proceso de investigación fue a partir de la descripción del problema y objetivo del estudio, se seleccionó e investigó la bibliografía de los autores que son referencia. En tercer lugar se diseñó la investigación, instrumento, validando la muestra a los sujetos de estudio. La cuarta etapa llamada exploratoria fue la aplicación en campo de las 371 encuestas con índice de respuesta del 90%, lo anterior permitió describir y valorar las competencias directivas. La parte propositiva fue el diseño del perfil de competencias directivas para PYME sector comercio al por menor. El resultado de la revisión de la literatura y la aplicación del instrumento originó el diseño de una propuesta de Competencias Directivas y su Evaluación para PYME sector comercio en Saltillo Coahuila y su metodología de implementación.

Tabla 5: Población de Unidades Económicas Totales y Aplicación del Muestreo de PYME Sector Comercio al Por Menor del Municipio de Saltillo del Estado de Coahuila

Sub-Sector	Actividad	No. Unidades Económicas	Muestra
461	Abarrotes, alimentos, bebidas, hielo y tabaco.	4,994	157
462	Autoservicio y departamentales	570	25
463	Textiles, bisutería, accesorios de vestir y calzado.	1,162	28
464	Cuidado de la salud.	432	28
465	Papelería, esparcimiento y otros artículos de uso personal.	1,440	43
466	Enseres domésticos, computadoras, decoración de interiores y artículos usados.	813	21
467	Ferretería, tlapalería y vidrios	558	40
468	Vehículos de motor, refacciones, combustibles y lubricantes.	628	25
469	Comercio por internet, catálogos, impresos, televisión y similares.	7	4
Total		10,604	371

En la tabla 4 se muestra el sector comercio al por menor con subsectores en la segunda columna. Son significativas el número de las unidades económicas del subsector Abarrotes, alimentos, bebidas, hielo y tabaco (4,994), papelería, esparcimiento y otros artículos de uso personal (1,440) y textiles, bisutería, accesorios de vestir y calzado (1,162). Estos subsectores representan el 71.63% del total de unidades económicas. El tamaño de muestra de la investigación (371) fue obtenido a partir del muestro probabilístico estratificado, con un nivel de confianza del 95% mediante varianza máxima.

RESULTADOS

Descripción Socio Demográfica

Las características de los dueños, directores - gerentes y supervisores que conforman la muestra es la siguiente (tabla 3): El 49% se desempeña como dueño, de ellos un 31% tienen una antigüedad de 1 a 4 años, una formación universitaria con grado profesional el 47% y 10% de posgrado, mayoritariamente de sexo masculino (55%) y con una edad de menos de 40 años (49%) y de 40 a 55 años (40%). Ocupa como director o gerente en un 64% de género masculino y con experiencia en cargos de dirección de 1 a 4 años el 30%, de 5 a 9 años el 28% y más de 10 años el 30%. Las PYME del sector comercio al por menor del municipio de Saltillo Coahuila que participaron en el estudio empírico pertenecen al subsector abarrotes, alimentos, bebidas, hielo y tabaco (42%), artículos de papelería, para el esparcimiento y otros artículos de uso personal (12%) y artículos de ferretería, tlapalería y vidrios (11%). El tamaño de pequeña empresa es más representativo con un 61% y en cuanto a su madurez, en etapa consolidada 40% y desarrollo 33%.

Tabla 6: Autoevaluación de Competencias Directivas de Socios, Gerentes y Supervisores de PYME Sector Comercio al Por Menor

Competencia Directiva		Media	Lugar	
Generica	Especificas		Especificas	Generica
Comunicacion	Escucha	3.96	11	3.62
	Informes	3.31	19	
	Redacción	3.50	18	
Con la gente	Búsqueda Información	3.71	17	4.02
	Conflictos	4.03	6	
	Relaciones Personales	4.00	8	
	Trabajo en Equipo	3.96	10	
	Servicio al Cliente	4.10	2	
Administrativa	Seguimiento	4.05	5	4.00
	Efectividad de Recursos	3.93	14	
	Organización	4.07	3	
	Planeación	3.94	13	
Liderazgo	Desarrollo de la Gente	3.89	15	3.97
	Delegación	3.98	9	
	Control	4.06	4	
	Motivación	4.11	1	
	Estilo de Liderazgo	4.00	7	
	Impacto de Liderazgo	3.95	12	
	Coaching	3.83	16	

La tabla 4 muestra la autoevaluación de competencias directivas de los dueños, gerentes y supervisores de las PYME sector comercio al por menor donde las 3 competencias directivas específicas mejor autoevaluadas de mayor a menor son: “motivación”, “servicio al cliente” y “organización”. La competencia directiva genérica “con la gente” con la mejor autoevaluación. Con respecto a las competencias directivas con menor ponderación de menor a mayor se infiere que son: “informes”, “redacción” y “búsqueda de información”. La competencia directiva genérica “comunicación” resultó ser la de menor autoevaluación.

Análisis Mediante Contrastación de Variables

Mediante Chi cuadrada con un nivel de significación de 95% de confianza nos interesa determinar si existe asociación entre el nivel de desarrollo de las competencias directivas con la etapa de madurez, uso de los controles internos, genero del director o gerente general y con el desempeño empresarial.

H1 El nivel de desarrollo de las competencias directivas está asociado con la etapa de madurez de la PYME. Las etapas de madurez de las PYME consideradas en nuestra investigación son: crecimiento, desarrollo y consolidación. En el informe FAEDPYME Colombia (2012, p.33) concluye que teniendo en cuenta la edad de la empresa (Joven: menor o igual de 10 años de creada, o Madura: más de 10 años de creada), los resultados muestran una situación contraria a la presentada según el tamaño de la empresa; en él se observa que el 50% de las variables evaluadas tienen diferencias significativas: dispone de procesos internos más eficientes (jóvenes: 3.8), cuenta con clientes más satisfechos (maduras: 3.9), en tanto las demás variables no presentan diferencias significativas. Esto implica que la autopercepción frente a la competencia no está determinada por la edad de la MIPYME en estas variables y que ésta se conserva a lo largo de la vida empresarial.

Tabla 7: las Competencias Directivas y la Etapa de Madurez de las PYME

Competencia Directiva Generica	Resultados	Chi Cuadrado	GI	Sig. Asisntot.
Comunicación	Escucha	12.650	8	0.0243
	Informes	20.039	8	0.022**
	Redacción	18.447	8	0.219
	Búsqueda Información	22.719	8	0.008***
Con La Gente	Conflictos	14.129	8	0.155
	Relaciones Personales	6.137	8	0.636
	Trabajo en Equipo	11.536	8	0.198
	Servicio al Cliente	9.030	8	0.390
Administracion	Seguimiento	16.808	8	0.131
	Efectividad de Recursos	11.060	8	0.211
	Organización	15.613	8	0.085*
	Planeación	18.444	8	0.022**
Liderazgo	Desarrollo de la Gente	18.416	8	0.066*
	Delegación	8.856	8	0.413
	Control	13.876	8	0.162
	Motivación	11.770	8	0.263
	Estilo de Liderazgo	17.157	8	0.033
	Impacto de Liderazgo	9.285	8	0.324
	Coaching	7.205	8	0.546

Nivel de significación 0.01 ***0.05 **0.1* Precizando un valor de la significación con $\alpha = 10\%$, en los restantes los valores son >0.10 por tanto no se acepta en general la H1. Existe relación con valores significativos en "búsqueda de información, informes, planeación, organización y desarrollo de la gente". La tabla 7 confirma que la etapa de madurez y las competencias directivas no tienen relación significativa en la mayoría de las variables. Las etapas de madurez de las PYME consideradas en nuestra investigación son: crecimiento, desarrollo y consolidación.

H2 El nivel de desarrollo de las competencias directivas está asociado con el uso de los controles internos de la PYME Para la investigación se consideraron como controles internos (tabla 8): la calidad en el servicio, flujo de efectivo, control presupuestario, el análisis económico y financiero, auditoría interna y sistemas de calidad. El informe FAEDPYME Colombia (2012, p.69) establece que en un entorno tan competitivo como el actual, se hace imprescindible que las empresas utilicen todos aquellos instrumentos relacionados con la gestión de la información que están a su alcance.

La contabilidad genera información sobre la agregación de gastos y costes, así como de la posición económica y financiera de la misma a través del análisis de los estados contables. Por otra parte, el acceso y uso de las diferentes formas de financiación puede limitar la competitividad de la empresa. Por lo cual es fundamental: el uso que las empresas hacen de técnicas económico-contables tales como, el flujo de efectivo, la auditoría interna, la contabilidad de costos, la realización de presupuestos anuales, y el análisis económico y financiero.

Tabla 8: el Nivel de Desarrollo de Competencias Directivas y el Uso de los Controles Internos

Competencias Directivas		Signalitica Asintotica					
Genericas	ESPECIFICAS	CALIDA D SERVICI O	FLUJO EFFECTI VO	PRESUP UESTO	Analisis Financiero	Auditori a	Sistema Calidad
Comunicación	Escucha	.020**	.011**	.012**	.019**	.003***	.008***
	Informes	.036**	.011**	.000***	.000***	.000***	.000***
	Redacción	.129	.006***	.001***	.000***	.018**	.003***
	Búsqueda Información	.032**	.002***	.013**	.000***	.000***	.000***
Con la gente	Conflictos	.000***	.000***	.023**	.010**	.011**	.002***
	Relaciones Personales	.001***	.000***	.002***	.028**	.008***	.002***
	Trabajo en Equipo	.000***	.000***	.000***	.000***	.001***	.000***
	Servicio al Cliente	.000***	.018**	.006***	.005***	.116	.000***
Administración	Seguimiento	.000***	.000***	.000***	.002***	.001***	.001***
	Efectividad de Recursos	.000***	.000***	.000***	.000***	.000***	.000***
	Organización	.085*	.000***	.000***	.002***	.018**	.003***
	Planeación	.000***	.000***	.000***	.000***	.012**	.000***
Liderazgo	Desarrollo de la Gente	.001***	.000***	.000***	.002***	.005***	.014**
	Delegación	.003***	.000***	.000***	.009***	.200	.083*
	Control	.000***	.000***	.000***	.000***	.062*	.001***
	Motivación	.000***	.000***	.000***	.001***	.013**	.000***
	Estilo de Liderazgo	.000***	.000***	.000***	.000***	.000***	.000***
	Impacto de Liderazgo	.000***	.000***	.000***	.001***	.000***	.000***
	Coaching	.000***	.001***	.000***	.000***	.002***	.000***

Nivel de significación 0.01 ***0.05 **0.1* Teniendo en cuenta el valor de la significación con $\alpha = 10\%$, en los restantes los valores son $>0,10$ * se encuentra relación entre el nivel de competencias directivas y el uso de los controles internos de las PYME (tabla 8) en el 98% de las variables, por lo que se acepta la H2. Se infiere que existe la más alta relación entre el nivel de competencias directivas específicas y el uso de los controles internos en: "trabajo en equipo", "seguimiento", "efectividad de recursos", estilo de liderazgo, impacto de liderazgo y coaching. Se deduce que conforme las PYME requieren el uso de los controles internos la gestión directiva necesita utilizar esas competencias directivas específicas por considerarlas importantes en el control de su desempeño empresarial.

La Propuesta de Perfil de Competencias Directivas Para PYME de Comercio

El objetivo fundamental de la definición de un perfil de competencias es implantar un nuevo estilo de dirección en la empresa para gestionar efectivamente e integralmente el factor humano en la organización, Ernest y Young Consultores (1998), lista los siguientes objetivos:

- La mejora y la simplificación de la gestión integrada de los recursos humanos;
- La generación de un proceso de mejora continua en la calidad y asignación de los recursos humanos;
- La coincidencia de la gestión de los recursos humanos con las líneas estratégicas del negocio;
- La vinculación del directivo en la gestión de sus recursos humanos;
- La contribución al desarrollo profesional de las personas y de la organización en un entorno cambiante, y
- La toma de decisiones de forma objetiva y con criterios homogéneos.

Alles (2004) define claramente las características generales en la implantación con éxito de un sistema de gestión de recursos humanos por competencias:

- Que el sistema sea aplicable y no teórico;
- Comprensible por todos los integrantes de la organización;
- Útil para la empresa;
- Fiable;
- De fácil manejo, y
- Que en su conjunto permita el desarrollo profesional de las personas.

Las características más complejas de un puesto son las competencias de acuerdo a Spenser y Spenser (1993) y su Modelo del Iceberg explica que los conocimientos, las destrezas y habilidades están más en la superficie y son más fáciles de detectar, en cambio las actitudes y valores, el concepto de uno mismo y los rasgos más profundos de personalidad, siguiendo el Modelo del Iceberg, están debajo de la superficie y son más difíciles de evaluar.

Perfil de Competencias Directivas y sus Grados

La palabra perfil según el diccionario de la Real Academia Española define en Geometría como la figura que representa un cuerpo cortado real o imaginariamente por un plano vertical; en pintura contorno aparente de la figura, representado por líneas que determinan la forma de aquella y en conducta como los miramientos en la conducta o en el trato social.

Definición de la Competencia Genérica: Definición estándar de la competencia con aspectos de comunicación, con la gente, administrativas y de liderazgo.

Competencias Específicas : Según la clasificación de competencias propuesta obtenida de los 15 modelos de clasificaciones que integran 19 Competencias específicas: Escucha, redacción de informes, informes, búsqueda de información, gerencia de conflictos, relaciones personales, trabajo en equipo, servicio al cliente, planeación, organización, efectividad de recursos, seguimiento, desarrollo de la gente, control, delegación, motivación, estilo de liderazgo, impacto de liderazgo y coaching.

Niveles, Grados y comportamientos asociados : Se ha aplicado un esquema de competencias por niveles, en el que se han diferenciado tres grados para cada competencia:

Grado A: Alto, desempeño superior

Grado B: Óptimo, por encima del estándar

Grado C: Mínimo necesario para el puesto, pero dentro del perfil requerido

Descripción de Competencias Directivas Por Grados

El establecer una redacción correcta permitirá situar al evaluado en comportamientos específicos para ser evaluados posteriormente. De cada competencia genérica se describen las específicas por grado.

Evaluación y Análisis de las Competencias Directivas del Personal

La reflexión sobre este apartado apunta al significado conceptual de la Evaluación del Desempeño, con referencia a ello Chiavenato (2002) sostiene: Se trata de una apreciación sistemática del desempeño de cada persona en el cargo o del potencial de desarrollo futuro, toda evaluación es un proceso para estimular o juzgar el valor, la excelencia, las cualidades de alguna persona. La evaluación de los individuos puede llevarse a cabo utilizando varios enfoques, que reciben denominaciones como Evaluación del Desempeño.

Validación de las Competencias Directivas

La reflexión sobre este apartado apunta al significado conceptual de la Evaluación del Desempeño, con referencia a ello Chiavenato (2002) sostiene: “Se trata de una apreciación sistemática del desempeño de cada persona en el cargo o del potencial de desarrollo futuro, toda evaluación es un proceso para estimular o juzgar el valor, la excelencia, las cualidades de alguna persona. La evaluación de los individuos puede llevarse a cabo utilizando varios enfoques, que reciben denominaciones como Evaluación del Desempeño.

El resultado será determinado en el siguiente procedimiento:

Se determinará la media de la evaluación 360/180 grados.

Se determina un máximo y mínimo de desempeño por competencia directiva

La diferencia entre el resultado de la valoración y el máximo corresponde es el área de desarrollo que evidencia la brecha de la Competencia Directiva Específica.

El incremento en el desempeño en la evaluación inicial a la nueva valoración la brecha cubierta que es el resultado del proceso de gestión por competencias directivas.

Implantación del Perfil de Competencias Directivas y su Evaluación

En la figura 3 mostramos la propuesta definitiva de un diseño de Competencias Directivas y su Evaluación para PYME sector Comercio en Saltillo Coahuila de acuerdo al proceso que permitirá contar con un perfil dinámico y flexible. Los grados de desempeño permitirán encontrar tres escenarios de desempeño de la PYME de los socios/directivos y jefes/supervisores. Describir los comportamientos observables es el punto de partida que será evaluado a 360 o 180 grados; mediante afirmaciones con una escala Likert para obtener un diagnostico (personal, departamental, sucursal, unidad de negocio y nivel jerárquico). Lo anterior permitirá validar y aplicar el diseño de competencias directivas y su evaluación para PYME sector comercio en Saltillo Coahuila.

Metodología de Intervención Para Implantación de Perfil de Competencias Directivas Para Pyme

La propuesta a los Directivos de la intervención para implantar el diseño de perfil de competencias Directivas en las PYME es el paso 1 de la metodología propuesta (figura 4) que busca que el activo intangible más valioso empleado sea identificado con competencias específicas ubicando su desempeño real y su futuro crecimiento. El socio o directivo establecerá las bases en el formato diseñado para el inicio de la metodología, seleccionando las Competencias Directivas específicas (paso 2). Hamel y Prahalad (1995) reconocen “en todo caso, para gestionar el hecho del stock de competencias esenciales de una empresa, los altos ejecutivos deben ser capaces de desagregar las competencias esenciales en sus componentes, hasta llegar a las personas específicas que poseen un talento específico”.

En su nueva visión de la estrategia Hamel y Prahalad (1995) afirman que hay que imaginar el futuro, pero también construirlo; mencionan que se reconoce la necesidad de algo más que una planeación anual/incrementalista, y se requiere de una arquitectura estratégica que proporcione un plano para construir las competencias necesarias para dominar los mercados futuros. Seleccionar e identificar las Competencias directivas específicas (paso 2) es colocar el primer trazo en el diseño de una arquitectura estratégica para las PYME. Se ha aplicado un esquema de competencias por niveles, en el que se han diferenciado tres Grados para cada competencia (paso 3): Grado A: Alto, desempeño superior; Grado B: Óptimo, por encima del estándar; Grado C: Mínimo necesario para el puesto, pero dentro del perfil requerido).

CONCLUSIONES

Las Competencias Directivas es un tema actual, urgente y pertinente para investigar, ya que como objeto de estudio es bastante reciente. Así, hemos intentado que esta investigación ponga de manifiesto referentes teóricos actualizados y datos significativos para los interesados. Quedan muchos aspectos que recién comienzan a investigarse y dentro de estos referentes surgen variados temas que pueden considerarse como futuras investigaciones, a saber:

Implementación en casos de estudio de la propuesta de diseño de competencias directivas y su metodología de intervención para contrastarlos con nuestra investigación.

La oportunidad de reconocer nuevos perfiles de gestión por competencias directivas y su evaluación y que son requeridos por las PYME no solo del sector comercio (servicios e industrial).

El desarrollo del talento en el directivo a partir de la evaluación de competencias

Nuestro reto es lograr la continuidad de la presente investigación en el diseño de perfiles de competencias directivas para socios, directivos, gerentes, jefes y supervisores del sector servicio e industrial en el Municipio de Coahuila y la metodología de implantación de ese modelo de gestión que impactaría a la estabilidad y sobrevivencia de las empresas en la Región.

BIBLIOGRAFÍA

Alles, M. (2004). Diccionario de Comportamientos. Gestión por Competencias. Buenos Aires. Argentina: Ediciones Granica.

Chiavenato, I. (2002). Gestión del Talento Humano (Quinta Edición ed.). México, DF: McGraw Hill. p.198.

Elizondo, D., Armenteros, C., & Molina, V. (2014). Competencias Directivas para PYME: una evaluación diagnóstica en el sector servicios en Saltillo Coahuila. Revista Internacional Administración y Finanzas, 7(7), 21.

Ernest y Young, C. (1998). Selección de Personal. Barcelona, España: Manual del Director de Recursos Humanos. p. 3 y 20.

FAEDPYME. (2012). Informe MIPYME Colombia. Cartagena, España: Universidad Politécnica de Cartagena. p.33,69-70.

Hamel, G., & Prahalad, K. (1995). Compitiendo por el futuro. Estrategía crucial para crear mercados del mañana. Barcelona, España: Ariel. p.410.

OCDE. (2013). Informe Perspectivas Económicas de América Latina y Políticas de PYME para el cambio estructural. Paris: OCDE Publications. p.142.

Spenser, L., & Spenser, S. (1993). Competencias en el trabajo: modelos para un rendimiento superior. Diputación Barcelona, Papers de Formación Municipal, 57.

BIOGRAFIA

Melchor David Elizondo Sandoval, Mexicano. Licenciado en Administración de Empresas. Maestro en Administración por la Universidad Autónoma de Nuevo León. Doctor en Administración y Alta Dirección por la Universidad Autónoma de Coahuila (UAdeC). Profesor e investigador en la Facultad de Ciencias de la Administración. Consultor en Criterio Empresarial S.C. Dirección Institucional: FCA-UAdeC, Unidad Saltillo. Km. 5 Carretera Saltillo - Piedras Negras. CP: 25107. Saltillo, Coahuila, México.

Jesús Alberto Montalvo Morales, Mexicano. Licenciado en Administración de Empresas. Maestro en Administración y Finanzas. Doctor en Administración y Alta Dirección por la Universidad Autónoma de Coahuila (UAdeC). Profesor e Investigador por la Facultad de Ciencias de la Administración. Actualmente Director de la Facultad de Ciencias de la Administración, Saltillo (UAdeC). Dirección Institucional: FCA-UAdeC, Saltillo Unit. Km. 5 Carretera Saltillo - Piedras Negras. 308. CP: 25107. Saltillo, Coahuila, México

Xochitl Segura Lozano. Mexicana. Licenciada en Matematicas, Maestría en Matematicas Aplicadas, Candidato a Doctor en Administración y Alta Dirección, Por la Universidad Autónoma de Coahuila (UAdeC), Profesor e Investigador en La Facultad de Ciencias de la Administración de la UAdeC. Dirección Institucional: FCA-UAdeC, Unidad Saltillo. Km. 3.5 Carretera Saltillo - Piedras Negras. CP: 25107. Saltillo, México

Jose Andres Muñoz, Americano. Estudiante de Texas A&M University en la Carrera de Ingeniería Civil. Dirección Institucional: 400 Bizzell St, College Station, Tx 77843.

Luis Daniel Muñoz, Americano. Estudiante en la Early College High School localizada en Mercedes, Tx. Dirección Institucionalss: 837 S Ohio Ave, Mercedes, Tx 78570.

EL PERFIL DEL TRABAJADOR EN LA INDUSTRIA MAQUILADORA EXPORTADORA DE ENSENADA, B.C.

Victor Daniel Melendres Carlos, Universidad Autónoma de Baja California
Mónica Fernanda Aranibar Gutiérrez, Universidad Autónoma de Baja California

RESUMEN

La Industria Maquiladora ha sido un factor relevante para el desarrollo económico de México. Ha ocupado los primeros lugares en número de establecimientos y de empleos generados, así como en volumen de exportación, convirtiéndose en un motor de la economía sobre todo de la Frontera Norte. El trabajador operativo de una empresa es sin duda alguna una pieza fundamental dentro de ella. Por lo que, es importante conocer las características de los trabajadores, pues, es a través de la estabilidad y permanencia del recurso humano cualificado como se logran los objetivos de toda empresa. En esta investigación, se describe cuáles son las características de los trabajadores que se encuentran operando en la Industria Maquiladora Exportadora de la ciudad de Ensenada, B.C. Con el fin de obtener un banco de indicadores que permita diseñar estrategias contextualizadas que coadyuven a la mejora de la productividad de la Industria Maquiladora Exportadora, así como de mejorar las condiciones de trabajo, valorar la utilidad y personal cualificado, de dichos sujetos. Para determinar los resultados se realizó la aplicación de un instrumento a una muestra representativa de la industria maquiladora, que permitió medir las variables acordes a los perfiles: 1) Perfil sociodemográfico, 2) Perfil académico, 3) Perfil del trabajo.

PALABRAS CLAVE: Perfil Sociodemográfico, Perfil Académico, Perfil del Trabajo, Industria Maquiladora Exportadora, Personal Operativo

THE PROFILE OF THE WORKER IN THE MAQUILA INDUSTRY EXPORT OF ENSENADA, B.C.

ABSTRACT

The Maquiladora Industry has been a relevant factor for the economic development of Mexico. It has occupied the first places in number of establishments and generated jobs, as well as in volume of export, becoming an engine of the economy mainly of the North Border. The operational staff of a company is undoubtedly a fundamental piece within it. Therefore, it is important to know the characteristics of workers, because it is through the stability and permanence of the qualified human resource how the objectives of every company are achieved. In this research, we describe the characteristics of the workers who are operating in the Maquila Industry Export of the city of Ensenada, B.C. In order to obtain an updated bench of indicators, which allows the design of contextualized strategies that help to improve the productivity of the Maquila Industry Export, as well as to improve working conditions, to assess the usefulness and qualified personnel of these subjects. To determine the results, an instrument was applied to a representative sample of the maquiladora industry, which allowed the measurement of the variables according to the profiles: 1) Sociodemographic profile, 2) Academic profile, 3) Job profile.

JEL: L67, L69, M53, M54, O15

KEYWORDS: Sociodemographic Profile, Academic Profile, Job Profile, Maquila Industry Export, Operational Staff

INTRODUCCIÓN

Desde hace varias décadas, la rotación de personal ha sido una de las problemáticas latentes a las que se deben enfrentar tanto la empresa como los individuos. En este sentido, para la empresa, la rotación de personal implica altos costos, en el trabajador que se capacitó y que ahora rota de empresa. Mientras que para el individuo porque tiene que dedicar tiempo, esfuerzo y recursos a buscar un nuevo empleo y adaptarse a las condiciones del mismo. Por otro lado, en las empresas los costos conducen a la disminución del capital humano o social. Por consiguiente, aún en la actualidad existe una preocupación por disminuir la rotación de personal o bien, prevenir que el personal rote. Por otra parte, las maquiladoras son organizaciones que tienen su principal activo en los recursos humanos y dependen de la estabilidad de su personal para alcanzar tanto objetivos como metas propuestas, que garanticen su subsistencia y su competitividad en el mercado. La gestión exitosa de los recursos humanos debe alcanzarse a través de mecanismos que permitan la permanencia del personal con mayor proyección y mejor cualificados con potencial para generar mayor competitividad. Por ello, se deben impulsar estrategias, incentivos y políticas que promuevan su capacitación, promoción y bienestar de los trabajadores. Sin duda, uno de los problemas que se identifica en las maquiladoras de Ensenada consiste en la falta de un análisis de las características de trabajadores rotadores de la Industria Maquiladora Exportadora de la ciudad de Ensenada. Por ello, es necesario diseñar e implementar una estrategia efectiva para retener al personal más valioso. Sin embargo, en las maquiladoras de Ensenada, B.C., cada vez más se están adoptando estrategias que incentivan y motivan al trabajador para que se sienta satisfecho con lo que hace y tenga una mayor productividad; empero, no se están llevando a cabo con la efectividad que se requiere. Por tanto, no permite visualizar el alcance y la forma en que estos mecanismos se ponen en práctica. Además, no se conocen con precisión, las características promedio de los trabajadores de las maquiladoras.

Por lo que, promover el talento humano y retener a los mejores trabajadores, una vez que los han reclutado es un reto para las empresas. Por ello, con los resultados de esta investigación se busca que sirvan a las maquiladoras de la región a incentivar una mejor práctica en cuanto a la retención de sus trabajadores mediante el conocimiento del perfil de los trabajadores. Por tanto, el objetivo del presente estudio consiste, en describir las características de los trabajadores de la Industria Maquiladora Exportadora de la ciudad de Ensenada, y obtener un banco de indicadores que permita diseñar estrategias contextualizadas que coadyuven a la mejora de la productividad de la Industria Maquiladora Exportadora, así como de mejorar las condiciones de trabajo, valorar la utilidad y personal cualificado, de dichos sujetos. Lo anterior, conlleva a plantear las siguientes preguntas de investigación: ¿Cuáles son las características de los trabajadores que se encuentran operando y que rotan en la Industria Maquiladora Exportadora de la ciudad de Ensenada, B.C.? ¿Cuál es perfil del trabajador rotador en la Industria Maquiladora Exportadora de Ensenada, B.C.? Esta investigación se presenta organizada como sigue. En la sección de revisión literaria se presenta una breve reseña de los estudios más relevantes realizados sobre las maquiladoras, sobre todo a los que se refieren a las maquiladoras, la rotación de personal y datos sociodemográficos. Posteriormente se presenta la metodología utilizada, este trabajo se enmarca en el enfoque cuantitativo, parte del diseño no experimental-transversal y tiene un alcance descriptivo. Seguidamente se describen los resultados del instrumento el cual fue aplicado a 377 empleados de las empresas de la Industria Maquiladora de Ensenada, Baja California. Finalmente, las conclusiones, limitaciones y futuras líneas de investigación son presentadas.

REVISIÓN LITERARIA

Desde 1998 hasta la fecha, en el ámbito nacional, se han realizado diversas investigaciones referentes a las maquiladoras. Algunas de las investigaciones más destacadas que se han realizado en el ámbito nacional son aquellos que analizan su evolución tecnológica y organizativa, así como las que exponen las condiciones precarias de trabajo (AMAC-INDEX, 2016). Por otro lado, en el estado de Baja California, los estudios realizados sobre este tema están relacionados con la rotación de personal, la cual se enfoca en el

operador de la industria maquiladora de exportación Tijuana (Flores Ortiz, Vega López, & Solís Quinteros, 2013; Moreno, López, & Marín, 2015). Con lo anterior, se destaca que en los diferentes puntos del país se han realizado estudios sobre la industria maquiladora, analizando desde los factores que originan la rotación (Flores Ortiz, Vega López, & Solís Quinteros, 2013; Chaparro Rintha, Guzmán Rodríguez, Naizaque Pérez, Ortiz Figueroa, & Jiménez Barbosa, 2015, AMAC-INDEX, 2016) hasta el ausentismo laboral. Es importante mencionar, que para fines del estudio, solo se presentan algunas investigaciones que aportan dimensiones e indicadores que permitieron mediante un análisis clasificar e identificar las variables más recurrentes que han sido estudiadas y aquellas que la literatura recomienda analizar en cuanto a la rotación de personal como se muestra en la Tabla 1.

Tabla 1: Estudios Realizados Acerca de la Rotación de Personal en la IME

Autores	Investigación	Dimensiones	Factores E Indicadores	
Verduzco (1998)	La rotación de trabajadores en las maquiladoras, con especial atención en la experiencia en Tijuana	Características del empleo	Situación económica	Salario Bonificaciones (productividad, puntualidad, asistencia) Ascensos en el escalafón Aburrido y monótono Carácter simple o sofisticado del empleo
		Características sociodemográficas	Características de la organización de la empresa	
			Edad Estatus migratorio Antigüedad del obrero Integración al grupo de trabajo (tiene familiares trabajando en la maquiladora)	
Flores (2008)	Factores que originan la rotación de personal en las empresas mexicanas	Factores internos Factores externos Condiciones laborales Salarios Contenido del trabajo	Política salarial de la organización. Situación de oferta y demanda de Recursos Humanos Insatisfacción laboral Baja remuneración Selección incorrecta	
García & Cox (2010)	Cross border industries in Mexico with low organizational attachment	Motivación por el trabajo Satisfacción personal Compromiso organizacional Sociodemográficos		
			Genero Estado Civil Escolaridad Edad Hijos	
Flores Ortiz et al. (2013)	Factores de contingencia que inciden en la profesionalización de las empresas familiares del sector servicios de Tijuana, B.C., México	Factores de contingencia	Cultura organizacional Proceso de profesionalización Selección Capacitación Liderazgo	

Nota: Estos son algunos estudios que datan desde 1998 hasta 2016, sobre la rotación de personal en la IME, los cuales aportan dimensiones e indicadores acerca de la rotación del personal. Fuente: Elaboración propia.

Si bien es cierto, que los estudios sobre las maquiladoras en la Frontera Norte de México son abundantes, sin embargo no hay suficientes estudios, específicamente sobre la ciudad de Ensenada. Sin embargo, se destacan algunos estudios que datan desde 2005 hasta 2015, sobre la rotación de personal en la IME, los cuales permitieron mediante un análisis clasificar e identificar las variables más recurrentes que han sido estudiadas y aquellas que la literatura recomienda analizar en cuanto al perfil del trabajador y sus características como se muestra en la Tabla 2.

Tabla 2: Estudios en los Que se Analizan las Características de los Trabajadores en la IME

Autores	Investigación	Dimensión	Indicadores
García (2005)	Propuesta y análisis de un modelo que permita describir y correlacionar las variables que determinan la rotación del personal obrero en la industria maquiladora de exportación	Perfil del obrero	Edad Genero Tiempo de trabajar en la empresa Estado civil Escolaridad
Andrade (2010)	Análisis de la rotación del personal y elaboración de una propuesta para su optimización en la Pasamanería S.A. de la ciudad de Cuenca	Carácter personal	Salario Edad Sexo Estado civil Nivel de instrucción (escolaridad) Tiempo que laboró Ingresos Horas de trabajo Incentivos recibidos ¿Por qué salió de su empleo?
México (2014)	First Estudio nacional de sueldos y rotación de empleo en el sector de TI	Sociodemográfico	Nivel de estudios Genero Años de experiencia Edad Hijos Capacitación Actualización Certificación
Chaparro, Guzmán, Naizaque, Ortiz & Jiménez (2015)	Factores que originan la rotación del personal auxiliar de odontología	Sociodemográfico	Tiempo Genero Edad Estado civil Hijos Experiencia Años de trabajar en el lugar Tiempo que duró en el último trabajo
Gómez, Perales y Medina (2015)	El impacto de la jornada laboral y el salario en la rotación del personal de los empleados de las maquiladoras de ciudad victoria	Sociodemográfico	Estado civil Edad Permanencia Tiempo de jornada laboral

Nota: Estos son algunos estudios que datan desde 2005 hasta 2015, sobre las características de los trabajadores en la IME, los cuales permitieron mediante un análisis clasificar e identificar las variables más recurrentes que han sido estudiadas y aquellas que la literatura recomienda analizar en cuanto al perfil del trabajador y sus características. Fuente: Elaboración propia.

Perspectiva Conceptual de la Rotación de Personal

En un acercamiento preliminar, se puede afirmar que la rotación de personal no es más que, el movimiento o migración de los empleados o trabajadores que se da de una empresa u organización a otra en un determinado periodo de tiempo y por causas diversas. Es decir, la salida y la entrada laboral por parte del personal de una empresa a otra. Partiendo de la premisa que la mayoría de los trabajadores en cualquier parte del mundo intentarán marcharse de sus trabajos y buscarán nuevas oportunidades de empleo, porque consideran que un nuevo trabajo les dará mayores beneficios, mayor seguridad laboral, nuevas experiencias o simplemente les permitirá evitar los conflictos en el actual empleo, por lo que se considera que la rotación de personal es inevitable (Allen, 2006; Morales, 2011). De acuerdo con Morales (2011) existen dos tipos de rotación de personal: 1) La rotación externa: Se refiere a la entrada y salida de personal de la organización. Éste tipo de rotación puede ocurrir en casos como: la muerte del trabajador, jubilación, incapacidad permanente, renuncia del trabajador, despido, mala selección e inestabilidad familiar. Y 2) La rotación interna: Se define como el número de trabajadores que cambian de puesto, sin salir de la empresa, “La rotación interna ha demostrado ser una importante herramienta no solo de desarrollo para el personal, sino también se ha convertido en un elemento motivador eficaz frente a la rutina” (Morales, 2011: 20). Sin

duda, una alta tasa de rotación de personal es muy grave para la empresa, por la pérdida de productividad, de negocios para competir o los altos costos que se tienen que pagar en el reclutamiento y el entrenamiento. Estos efectos negativos y la importancia del tema han permitido el desarrollo y la evolución de la literatura, donde encontramos teorías, tipos y modelos de rotación de personal en las empresas. La rotación de personal como objeto de estudio se ha abordado desde diferentes disciplinas ya sea desde la psicología, la economía o la sociología. La explicación de este fenómeno obtiene diversas respuestas dependiendo de su perspectiva. Desde el punto de vista de la economía se ha subrayado por ejemplo, su costo, su relación con la oferta y la demanda del empleo, la inflación, el crecimiento de la economía. Desde la psicología se busca la explicación de la rotación de personal voluntaria en la falta de motivación y en la insatisfacción del personal, se subrayan necesidades, actitudes, o percepciones, dentro de la organización; desde el punto de vista social, se trata de identificar el perfil sociodemográfico y los problemas de carácter social que influyen en la rotación de personal (Morales, 2011).

Perspectivas de las Variables Analizadas Sobre la Rotación de Personal

De acuerdo con Morales (2011) las variables por los economistas, la rotación voluntaria de personal puede tener varias causas sociodemográficas como son la edad, el género, el nivel educativo, la antigüedad en el empleo, el apego a la industria, el estatus familiar y la membresía sindical. Aunque estas variables están intercorrelacionadas entre sí, la edad es la variable que influye más. También el nivel general de la rotación fluctúa con la demanda de mano de obra. Por otro lado, dentro de las variables propuestas por psicólogos, la satisfacción en el trabajo juega un papel importante en el proceso de rotación (Steel, 2002) lo mismo que el compromiso con la organización (Mcfarlane & Martin, 1989). Otro elemento que ha sido estudiado como explicación de la rotación de personal es el salario, pues es un determinante significativo cuando se cumple alguna de las siguientes condiciones: Primero, si el pago es importante para los empleados y segundo, si se percibe el pago como óptimo. El segundo determinante se refiere a la participación del empleado en grupos primarios con los que tiene afinidad. El tercer determinante se refiere a la comunicación como la transmisión de información entre los miembros de la organización. El cuarto determinante es la centralización y se refiere a la distribución del poder dentro de la organización. La rotación de una organización, según su hipótesis, es baja si el pago, el grupo primario y la comunicación son altos, mientras que un alto nivel de centralización, resultaba en una alta rotación. Del mismo modo, variables propuestas por sociólogos, consideran que debido a que la rotación es alta en los nuevos empleados en una organización, se ha sugerido, por ejemplo, y se han desarrollado tácticas de socialización por parte de la organización para los nuevos empleados que puedan influir en la inserción del nuevo trabajador y evitar la rotación (Allen, 2006). Las tácticas de socialización tratan de ayudar a los nuevos trabajadores a una pronta adaptación y a reducir la incertidumbre y la ansiedad propia, que se genera al unirse a una nueva organización y al mismo tiempo adquirir las actitudes, los comportamientos y los conocimientos necesarios. De acuerdo con Morales (2011) las variables propuestos por practicantes, consideran que hay una brecha entre los académicos y los practicantes (gerentes y administrativos) por lo que no inciden significativamente sus resultados de investigación en la práctica.

METODOLOGÍA

El objetivo del presente estudio consiste, en describir las características de trabajadores de la Industria Maquiladora Exportadora de la ciudad de Ensenada, el cual permita diseñar estrategias contextualizadas que coadyuven a la mejora de la productividad de la Industria Maquiladora Exportadora, así como de mejorar las condiciones de trabajo, valorar la utilidad y personal cualificado, de dichos sujetos.

Diseño de Investigación

El presente trabajo se realizó en el Municipio de Ensenada, Baja California en la Industria Maquiladora Exportadora, se enmarca en el enfoque cuantitativo, parte del diseño no experimental-transversal y tiene un alcance descriptivo.

Participantes

Para la aplicación del instrumento se contempló un muestreo no probabilístico por conveniencia. Con el fin de conocer el tamaño de la población se consultó el registro de Estadística Integral del Programa de la Industria Manufacturera, Maquiladora y de Servicios de Exportación 2016-2, realizado por el Instituto Nacional de Estadística y Geografía (INEGI) la cual es de 21,055 empleados en 86 establecimientos en la ciudad de Ensenada. A partir de estos datos, se definió un tamaño muestral de 377 empleados (nivel de confianza 95%). Cabe destacar, que se realizó un pilotaje del cuestionario en el cual se encuestó a 191 empleados (nivel de confianza 95%). Para la determinación de la muestra se aplicó la fórmula para una población finita propuesta por Gabaldon (1980), utilizada cuando conocemos el total de la población y deseamos saber cuántos del total hay que estudiar, como se muestra en la Figura 1:

Figura 1: Formula Para Determinar la Población Finita

$$n = \frac{Z^2 NPQ}{e^2 (N-1) + Z^2 PQ}$$

Nota: La fórmula para determinar una población finita, se utiliza cuando se conoce el total de la población y se desea conocer cuántos del total hay que estudiar. Los valores son remplazados y a partir de ello, se define el número o cantidad que hay que estudiar. Para realizar posteriormente, la aplicación de las encuestas, los valores pueden variar según los investigadores deseen el nivel de confianza, entre otras cuestiones.

Los valores utilizados en la formula son:

N = tamaño de la población

Z = 95% Coeficiente de confianza

P = proporción poblacional ajustada (Q = 1-P)

e = 5% error máximo admisible

n = tamaño de la muestra

Los sujetos de estudio de la presente investigación son los trabajadores operativos de las maquiladoras de Ensenada, B.C. de los distintos sectores industriales, puesto que interesaba recibir información importante proporcionada por los mismos acerca de sus características y con ello obtener un perfil.

Diseño y Construcción del Instrumento

Las variables, dimensiones y categorías a evaluar se construyeron a partir del marco conceptual de referencia. Tras las estrategias de revisión de fuentes secundarias, del análisis de contenido y del diálogo con algunos expertos en el área, se definieron las variables, dimensiones, indicadores y los ítems, utilizando una encuesta diseñada *ex profeso*.

Particularidades del Cuestionario

El instrumento de recolección de datos utilizado fue un cuestionario, diseñado *ex profeso*, como se muestra en la Tabla 3, conformado por 24 ítems: 7 destinados a la detección del perfil sociodemográfico (características personales), 3 al perfil académico (características académicas del sujeto), 14 al perfil del trabajo (características del trabajo actual, del último trabajo y de búsqueda de empleo).

Tabla 3: Distribución Temática del Instrumento

Variable	Dimensión	Indicadores	Item
Perfil sociodemográfico	1.Características personales	Sexo	1
		Edad	2
		Estado civil	3
		Número de hijos	4
		Ingreso semanal	5
		Características de la vivienda	6
		Horas laborales semanales	7
Perfil académico	2.Características académicas del sujeto	Escolaridad	8-9
		Horas semanales dedicadas al estudio	10
Perfil del trabajo	3.Características del trabajo actual	Formación en el trabajo	11-12
		Motivo de trabajo	13
		Experiencia en el trabajo actual	14-15
		Percepción del trabajo actual	16-17
		Bonos e incentivos	18-19
		Motivación del personal	20
	4.Características del último trabajo	Experiencia de trabajo	21-22
	5.Características de búsqueda de empleo	Tiempo en encontrar trabajo	23
		Medio	24

Nota: La distribución del instrumento y sus componentes parten de las variables, dimensiones, indicadores e ítems, que fueron utilizados en la aplicación del instrumento. Se compone por 24 ítems: 7 destinados a la detección del perfil sociodemográfico (características personales), 3 al perfil académico (características académicas del sujeto), 14 al perfil del trabajo (características del trabajo actual, del último trabajo y de búsqueda de empleo). Fuente: Elaboración propia a partir de una revisión de las variables sobre los perfiles.

Trabajo De Campo

Para llevar a cabo la aplicación del cuestionario propuesto en esta investigación, se enviaron correos electrónicos y se realizaron llamadas telefónicas solicitando citas con los Gerentes de Recursos Humanos, para que nos apoyaran en la aplicación del cuestionario al personal operativo logrando así concertar visitas personales a las maquiladoras para poder aplicar el instrumento a los encuestados. Cada encuesta tuvo una duración aproximada de 20 minutos, en los cuales se les explicaba brevemente sobre el contenido y la dinámica de la encuesta, como así también, se les informaba que los datos obtenidos serían totalmente confidenciales y utilizados para un proyecto de investigación, por lo que le agradecíamos su valioso tiempo e información proporcionada. Una vez hecha la introducción procedíamos a leer cada pregunta del cuestionario dándoles tiempo para contestar y resolver sus dudas cuando era requerido.

RESULTADOS

A continuación se describe de manera empírica los resultados del instrumento el cual se aplicó a 377 empleados de empresas de la Industria Maquiladora Exportadora de Ensenada, Baja California, con la finalidad de obtener una descripción de las variables correspondientes a las características de los sujetos. Por ello, se presentan los perfiles promedios de los trabajadores encuestados: 1) Perfil sociodemográfico, 2) Perfil académico y 3) Perfil del trabajo.

Perfil Sociodemográfico

Características personales: El encuestado promedio es hombre. La media de edad es de 22 años. Es casado, no tiene hijos. Trabaja 47 horas por semana. Percibe un salario de \$1,200 pesos a la semana. Es propietario de la vivienda en la que vive.

Perfil Académico

Características académicas del sujeto: La mayoría de los encuestados terminó el nivel medio superior. Actualmente no estudia.

Perfil del Trabajo

Características del trabajo actual: El encuestado recibió capacitación al inicio del trabajo, y de manera constante recibe distintos cursos de capacitación. Además, el encuestado ingresó a la empresa en la que actualmente trabaja por las prestaciones y el percibir un mejor salario esto como principal motivo. La media tiene más de 20 meses trabajando en la empresa y no tiene intenciones de abandonar su trabajo. Sin embargo, las razones por las que ingresó son las mismas por las cuales cambiaría de trabajo, ya que no recibe bonos ni incentivos. Empero, una de las estrategias utilizadas por la empresa para motivar a su personal, son los premios y algunos beneficios sociales, como las prestaciones en el periodo vacacional y vales de alimentos.

Características del último trabajo: El promedio de los encuestados duró en su antiguo trabajo más de 20 meses. Dentro de los motivos que influyeron para que cambiara de trabajo fueron el salario y las prestaciones, tiene más de 20 meses que renunció.

Características de búsqueda de empleo: La media de los encuestados tardó en encontrar trabajo entre cero y cinco meses. Se enteró de su actual trabajo por un anuncio colocado en la empresa en la que trabaja. Fue contratado de inmediato.

CONCLUSIONES

Sin duda alguna, las empresas maquiladoras se enfrentan a los nuevos retos tratando de incrementar su eficacia, su eficiencia, sus estándares de calidad y el potencial del capital humano. Siendo necesario cada vez más, que las organizaciones se preocupen por crear las condiciones óptimas de trabajo que permita generar el bienestar laboral de las personas que laboran en las mismas, haciéndolos sentir parte de la empresa, brindando flexibilidad ante las situaciones o problemáticas que se les presente, permitiendo oportunidades académicas o profesionalizantes, así como escuchar y reconocer su trabajo, mantener un buen ambiente y clima laboral y brindándoles salarios, prestaciones e incentivos para motivar a los trabajadores para que estos a su vez logren desarrollar una mayor productividad para la empresa. Si bien, los resultados obtenidos en esta investigación permitieron de manera positiva describir las características de trabajadores de la Industria Maquiladora Exportadora de la ciudad de Ensenada, mismos que se espera que permitan ser una base sólida para el diseño de estrategias contextualizadas que coadyuven a la mejora de la productividad de la Industria Maquiladora Exportadora, así como de mejorar las condiciones de trabajo, valorar la utilidad y personal cualificado, de dichos sujetos. Además, dichos resultados respondieron las preguntas de investigación: ¿Cuáles son las características de los trabajadores que se encuentran operando y que rotan en la Industria Maquiladora Exportadora de la ciudad de Ensenada, B.C.? ¿Cuál es perfil del trabajador rotador en la Industria Maquiladora Exportadora de Ensenada, B.C.?, mismas que fueron planteadas al inicio del proyecto con el fin de obtener información relevante y de gran importancia para la Industria Maquiladora Exportadora de la ciudad de Ensenada, B.C., así como para las instancias gubernamentales para la toma de medidas en apoyo a los trabajadores.

Limitaciones

Abordar el fenómeno de la rotación de personal en las maquiladoras de Ensenada de B.C., destacando de manera general, las características de trabajadores rotadores, desde la perspectiva de los trabajadores operativos, es una visión valorable. Una de las limitaciones del presente trabajo de investigación, se debe

a que en algunas maquiladoras no contestaron los correos ni las llamadas telefónicas que se realizaron para solicitar apoyo en la aplicación del cuestionario esto no permitió la obtención de una mayor información, como se hubiera deseado, para profundizar en los temas pertinentes. Por otra parte, el tiempo brindado por las empresas fue solamente durante el espacio de hora de comida de los trabajadores, lo cual se considera que no hubo un gran apoyo e interés por las empresas en colaborar, sin embargo los trabajadores presentaron un gran interés por apoyar en la contestación de las encuestas siempre y cuando fueran anónimas, y esperando que dichos resultados se presentaran a la empresa, a los mismos trabajadores e incluso algunos expresaron que se publicaran en medios para que se les prestara mayor atención y valoración de y a su trabajo.

Recomendaciones

Se recomienda aplicar el instrumento en los diferentes empleados que operan en la Industria Maquiladora Exportadora. Lo cual, permitirá describir las características de trabajadores de la Industria Maquiladora Exportadora, esto con el fin de diseñar estrategias contextualizadas que coadyuven a la mejora de la productividad de la Industria Maquiladora Exportadora, así como de mejorar las condiciones de trabajo, valorar la utilidad y personal cualificado de los trabajadores. Cabe destacar, que se espera que los resultados sean utilizados por la Industria Maquiladora Exportadora, y expertos para implementar en las empresas estrategias que ayuden a incentivar la permanencia de los trabajadores, y así disminuir los costos y consecuencias para las organizaciones de este fenómeno laboral. También, es importante considerar seguir impulsando investigaciones que se relacionen con la rotación de personal en la industria maquiladora, para incrementar su utilidad y sus beneficios múltiples, poniendo énfasis en los incentivos para los empleados; con la mejora del clima organizacional y la satisfacción laboral para de este modo retener a los empleados más valiosos y de mayor productividad. Si bien, las investigaciones sobre las maquiladoras, se pueden ampliar a los directivos y administrativos para observar su comportamiento organizacional y los salarios que perciben de acuerdo o no a su productividad. Del mismo modo, realizar futuras investigaciones sobre una valoración de los costos y consecuencias de la rotación de personal en las maquiladoras, así como detectar su valoración sobre los métodos y procedimientos de la rotación de personal.

BIBLIOGRAFÍA

Allen, D. (2006) "Do Organizational Socialization Tactics Influence Newcomer Embeddedness and Turnover?," *Journal of Management*, vol. 32(2), p. 15-27

AMAC-INDEX. (2016) "Rotación y ausentismo en la industria maquiladora: Datos de AMAC-INDEX," *GACETA CASEEM*, vol. 61(1), p. 9-14

Andrade, M. (2010) "Análisis de la rotación del personal y elaboración de una propuesta para su optimización en la Pasamanería S.A. de la ciudad de Cuenca," *Tesis de licenciatura*, UPS, Cuenca

Chaparro, D., Guzmán, A., Naizaque, L., Ortiz, D., & Jiménez, W. (2015) "Factores que originan la rotación del personal auxiliar de odontología," *Universitas Odontologica*, vol. 34(72), p. 75-89

Flores, M., Vega, A., & Solís, M. (2013) "Factores de contingencia que inciden en la profesionalización de las empresas familiares del sector servicios de Tijuana, B.C., México," *Revista Internacional Administracion & Finanzas*, vol. 6(5), p. 29-44

Flores, R. (2008) "Factores que originan la rotación de personal en las empresas mexicanas," *International Journal of Good Conscience*, vol. 3(1), p. 65-99

Garcia, B. (2005). "Propuesta y análisis de un modelo que permita describir y correlacionar las variables que determinan la rotación del personal obrero en la industria maquiladora de exportación," *Tesis de doctorado*, IPN, México

Garcia, B. & Cox, J. (2010) "Cross border industries in Mexico with low organizational attachment," vol. (231), p. 79–102

Gómez, J., Perales, E. & Medina, J. (2015). "El impacto de la jornada laboral y el salario en la rotación del personal de los empleados de las maquiladoras de ciudad victoria," *Memoria del XX Congreso Internacional de Contaduría, Administración e Informática*, México, D.F.

Mcfarlane, L. & Martin, H. (1989) "Job satisfaction and organizational commitment in relation to work performance and turnover intention," *Human Relations*, vol. 42(7), p. 625-638

México First. (2014). "Estudio nacional de sueldos y rotación de empleo en el sector de TI," *Reporte Final*, México.

Morales, J. (2011) "Evaluación de los factores que determinan la rotación voluntaria de personal directo en empresas maquiladoras de Tijuana, B.C. México, 1999-2009," *Tesis Doctoral*, UABC, México

Moreno, L., López, V., & Marín, M. (2015) "Comportamiento de la tasa de rotación laboral en la industria maquiladora en Mexicali, Baja California, 2009-2013," *Revista Global de Negocios*, vol. 3(4), p. 11–26

Steel, R. (2002) "Turnover theory at the empirical interface: Problems of fit and function," *Academy of Management Review*, vol. 27, p. 346–360

Verduzco, G. (1998) "La rotación de trabajadores en las maquiladoras, con especial atención en la experiencia en Tijuana," vol. 10, p. 47–63

RECONOCIMIENTOS

Proyecto Financiado por la Subsecretaria de Educación Superior, Dirección general de Educación Superior Universitaria. Programa para el Desarrollo Profesional Docente para el Tipo Superior (PRODEP). Proyecto Financiado por la Universidad Autónoma de Baja California (UABC), Facultad de Ciencias Administrativas y Sociales (FCAyS), Campus Valle Dorado.

BIOGRAFÍA

Victor Daniel Melendres Carlos es licenciado en Ciencias de la Educación por la Universidad Autónoma de Baja California. Se puede contactar en la Facultad de Ciencias Administrativas y Sociales, en Blvd. Zertuche y Blvd. De los lagos s/n, Fraccionamiento Valle Dorado.

Mónica Fernanda Aranibar Gutiérrez es Doctora en Ciencias Administrativas por la Universidad Autónoma de Baja California. Se puede contactar en la Facultad de Ciencias Administrativas y Sociales, en Blvd. Zertuche y Blvd. De los lagos s/n, Fraccionamiento Valle Dorado.

IMPLEMENTACIÓN DE PRÁCTICAS INNOVADORAS PARA GENERAR UN APRENDIZAJE SIGNIFICATIVO EN ESTUDIANTES UNIVERSITARIOS DE LA CIUDAD DE GUAYAQUIL

Jodie Padilla Lozano, Universidad de Buenos Aires

Danny Arévalo-Avecillas, Universidad Católica de Santiago de Guayaquil

RESUMEN

En la actualidad, la situación económica del Ecuador inspira a la sociedad a desarrollar propuestas con un alto grado de innovación sostenible. Por este contexto, en el ámbito universitario precisamente, resulta indispensable contar con prácticas que fomenten la creatividad de los estudiantes para la resolución de problemas del sector empresarial. Al analizar la realidad de la carrera de Diseño Gráfico de una institución de educación superior de la ciudad de Guayaquil – Ecuador, se corrobora la necesidad de implementar prácticas innovadoras en la actividad docente vigente. La presente investigación consideró una naturaleza de los datos de metodología mixta, es decir que sigue un enfoque cualitativo por medio de estrategias a implementar en el aula y cuantitativo por la medición del impacto por su consideración en las actividades diarias. De tipo no experimental, con alcance descriptivo y de horizonte de tiempo transversal, los datos fueron obtenidos por una única vez en el tiempo por medio de datos primarios y secundarios. La muestra incluyó a 92 participantes de 4 paralelos de dos asignaturas con flujo en la malla curricular de dicha carrera. El problema identificado, corroborado también por investigaciones similares de estudiantes universitarios de otros países, sugiere la generación de un aprendizaje significativo pues las prácticas actuales no dan paso al desarrollo de iniciativas disruptivas dentro y fuera de las aulas; el programa vigente no atiende al perfil del estudiante y demanda ser modificado. Para la presente investigación, el objetivo considerado ha sido abordar el diseño actual de la clase para establecer las formas de representación más relevantes a discurrir en la programación de las clases. Este trabajo pretende realizar una propuesta de implementación de prácticas innovadoras para fomentar un aprendizaje significativo en los estudiantes universitarios relacionados con la gestión de medios de comunicación. Posteriormente, se aplican las herramientas de medición respectivas para verificar la utilidad del modelo planteado.

JEL: I21, O35

PALABRAS CLAVE: Aprendizaje, Educación, Innovación Social, Investigación y Desarrollo (I+D)

IMPLEMENTATION OF INNOVATIVE PRACTICES TO GENERATE A SIGNIFICANT LEARNING IN UNIVERSITY STUDENTS OF GUAYAQUIL CITY

ABSTRACT

The economic situation of Ecuador inspires society to develop proposals with a high degree of sustainable innovation. Due to this context, in the university sphere, it is essential to have practices that encourage the creativity of students in order to solve problems in the business sector. When analyzing the reality of the graphic design career of a higher education institution in the city of Guayaquil - Ecuador, the need to implement innovative practices in current teaching activity is corroborated. The present investigation

considered a mixed methodology: a qualitative approach by means of strategies to be implemented in the classroom and a quantitative approach by measurement of the impact on its consideration in the daily activities. Of a non-experimental type, with a descriptive scope and a transverse time horizon, the data were obtained once. The sample included 92 participants of 4 parallels from two subjects with flow in the curricular mesh of said career. The identified problem, corroborated by similar researches from other countries, suggests the generation of 'significant learning' because current practices do not develop disruptive initiatives inside and outside the classroom. This work aims to make a proposal for the implementation of innovative practices to encourage 'significant learning' in university students related to media management. Subsequently, the respective measurement tools are applied to verify the usefulness of the proposed model.

JEL: I21, O35

KEYWORDS: Learning, Education, Social Innovation, Research & Development.

INTRODUCCIÓN

En la actualidad, existe una constante búsqueda de nuevas formas de atraer a una generación que se caracteriza por tener un interés especial por las novedades, por tener un comportamiento cambiante y por inclusive acortar los ciclos de vida habituales de los productos y servicios que consumen (Libedinsky, 2011). Esto se replica en toda instancia de la vida de esta generación, por ello los docentes también deben conocer a profundidad los principales intereses y necesidades, su realidad y lo que esta exige (Serres, 2014); a fin de facilitar la recordación de lo aprendido (Novak, Gowin, & Otero, 1988) para su ejecución en la vida profesional y empresarial del educando. El filósofo francés Michel Serres (2014) indica que es necesario tomarse el tiempo para mirar a los jóvenes, pues la gestión de una universidad debe considerar que se dirige a una generación que tiene una brecha profunda con las anteriores. Serres (2014) no sólo invita a mirar a estos jóvenes y sus costumbres, sino también a reflexionar sobre el rol de los docentes de transmitir saberes; por ello, si se reprocha todo tipo de individualismo, es posible percatarse de que los estudiantes del aula de clases actual se presentan como mentes que no están vacías, que tienen acceso a información a todas horas y que requieren de una mayor variedad de herramientas para fomentar su creatividad y un aprendizaje adecuado (Ausubel, 1963). Al conocer a los educandos y las características que condicionan la enseñanza en el aula, el siguiente paso es dar atención a las principales problemáticas que allí se desarrollan. Cabe recordar que los docentes no se limitan a la mera actividad de interpretar los contenidos a revisar, sino que su tarea se centra además en inspirar al ser humano, en influenciar positivamente su comportamiento en beneficio de la sociedad; esto se alcanza al dar uso de los medios adecuados para formen un profesional ético, capaz de responder a las exigencias del entorno.

REVISIÓN DE LITERATURA

Según Altopiedi & Murillo Estepa (2011) la innovación educativa parte de términos de cambio y mejora de la educación superior, siendo el cambio educativo aquella acción de conversión de la estructura general del sistema educativo o de la organización de cada establecimiento de enseñanza en el interior de las aulas. De allí que se considera que su concepto tiene distintos dominios de aplicación, por motivo de que la innovación educativa puede estar asociada a otros constructos teóricos próximos como: nuevo/cambio, mejora, renovación, reforma, entre otros (Sánchez, 2005). De igual manera, la “mejora” educativa corresponde al aumento de los resultados de aprendizaje de los alumnos y el control de los centros de su propio desarrollo (Hopkins, 1996). Antúnez (1998) y Tejada (1998) llegan a diferenciar que la “renovación” conlleva una transición de un estado inútil y antiguo a uno que es imprescindible superar. Otros autores esclarecen que el término “reforma” abarca una dimensión mucho mayor que la afectada por la innovación (Antúnez, 1998; Bolívar, 2002; Murga, 2002). Shulman (1986) asegura que al innovar, se mejoran: (a) los contextos, comunidades e involucrados al proceso de enseñanza y/o aprendizaje; (b) los pensamientos que

construyen los educandos con la responsabilidad del profesional (Lucarelli, 2006); y (c) las acciones, al diseñar tareas más representativas para la clase y para los estudiantes, consiguiendo una comunicación plena y una interacción liberadora y empática. De esta manera se comprende cómo el planteamiento de prácticas innovadoras propicia una cultura que consolida la forma de entender y preparar a los educandos en las competencias básicas del entorno – incluido el empresarial –, tal como lo indican Medina y Salvador (2009).

Se identifica que la innovación educativa se trata de “la incorporación de modificaciones que afectan de forma puntual y directa a los procesos de enseñanza y de aprendizaje, en el ámbito del aula” (Altopiedi & Murillo, 2011; pág. 50). Pero el proceso de innovación, al considerar una determinada perspectiva, debe centrar sus esfuerzos – es decir, concretar las prácticas de innovación – únicamente a la gestión institucional (Macías, 2006; Malagón, 2006), al curriculum o la enseñanza (Libedinski, 2001); lo que más tarde se constituye como “innovación institucional”, “innovación curricular” o “innovación didáctica”, respectivamente (Barraza, 2005). En lo que respecta al aprendizaje de un estudiante, el mismo depende de la estructura cognitiva previa que posea y cómo esta se relaciona con la nueva información adquirida. La estructura cognitiva se conoce como todo el conjunto de conceptos e ideas que un individuo posee en un campo de conocimiento específico (Ausubel, 1963). Por su parte, el aprendizaje se constituye como un cambio del comportamiento que puede tener un carácter estable y duradero.

Cabe destacar que un comportamiento puede llegar a ser reemplazado por otro, es decir que también puede ser mejorado, teniendo ambos momentos una estabilidad en el tiempo, por ello es que llega a tener un papel crucial (Davini, 2008). A partir de esto se diferencia el aprendizaje significativo del aprendizaje mecánico; siendo el primero, según la noción elaborada por Ausubel (1963), aquel que produce una interacción entre los conocimientos ya adquiridos más relevantes de la estructura cognitiva con la nueva información, estableciendo relaciones y un significado sustancial. Es decir, que el aprendizaje significativo se da cuando la nueva información se vincula con un concepto relevante y pre existente en la estructura cognitiva, de modo que los nuevos conceptos o ideas son aprendidos en la medida en que las otras ideas y conceptos estén lo suficientemente claras en el educando para que sirvan de anclaje para las nuevas informaciones (Ausubel, 1963). Dado a que la innovación educativa se trata de un complejo proceso de innovación que parte de una perspectiva concreta que aportará a la gestión institucional (Macías, 2006; Malagón, 2006), al curriculum o la enseñanza (Blanco & Messina, 2000; Morrish, 1978; Libedinski, 2001); se reconoce la necesidad de desarrollar un conjunto de prácticas de innovación educativa que incentiven el aprendizaje profundo y duradero de los educandos, al aprovechar sus conocimientos previos y desarrollar momentos memorables que funcionen en beneficio del aprendizaje superior. Es importante reconocer la diversidad de alumnos que participa en una clase, situación que invita también a utilizar múltiples procedimientos y tareas en la gestión de la actividad pedagógica. Esto requiere que el docente tome decisiones respecto al proceso de enseñanza empleado, sin perder su razón de ser y sin optar por prácticas que privilegien lo informativo y dejen de lado lo académico (Serrano, 2002).

METODOLOGÍA

El grado de abstracción del presente trabajo es una investigación aplicada cuyo objetivo es resolver problemas prácticos. La naturaleza de los datos son de metodología mixta, es decir que siguen un enfoque cualitativo por medio de estrategias a implementar en el aula y cuantitativo por la medición del impacto por implementación de estrategias en las actividades diarias. De tipo no experimental, con alcance descriptivo y de horizonte de tiempo transversal, en donde los datos serán obtenidos por una única vez en el tiempo por medio de datos primarios y secundarios. El enfoque cualitativo tiene características como exploración de fenómenos a profundidad en donde los significados se extraen de los datos; el proceso es inductivo y su bondad es la obtención de los significados a profundidad. Mientras que el enfoque cuantitativo se caracteriza por medir fenómenos, es un proceso secuencial y analiza la realidad objetiva de proceso deductivo; como se indicó, esta investigación utilizará su combinación (Hernández, Fernández, & Baptista,

2010). Las fuentes primarias corresponden a dos fases: en una primera instancia se recopiló información por medio de un cuestionario con preguntas abiertas y cerradas a los cuatro cursos evaluados, y en la segunda instancia se realizó un análisis comparativo de los cursos de estudio para determinar si se generó o no un aprendizaje significativo. Para poder medir el impacto de las prácticas innovadoras, se aplicaron dos programas distintos a cada curso, siendo el de Medios de Comunicación I el curso en el que se aplicó el programa propuesto y el de Medios de Comunicación II aquel en el que no se hizo modificación alguna. En la primera materia se incluyó el uso de casos, temas de actualidad y demás herramientas; luego se aplicó la técnica de lluvia de ideas estructurada, cuyo resultado permitió concluir si ha sido posible o no generar un aprendizaje significativo. Mientras que en la segunda materia no se implementaron tareas creativas con el fin de concluir si estas acciones generaban o no un aprendizaje memorista. Las fuentes secundarias son recursos como casos, artículos científicos, libros y data para interpretación, los mismos que fueron utilizados en la presente investigación. Para poder resumir la información sobre los participantes se utilizó estadística descriptiva con el motivo de obtener una conclusión certera sobre los resultados de los cursos de medios de comunicación estudiados.

El objetivo general de la presente propuesta consistió en proponer el uso de prácticas innovadoras para lograr un aprendizaje significativo en cursos relacionados a la gestión de medios de comunicación. A partir de ello se establecen los siguientes objetivos específicos, es decir que con la aplicación de esta propuesta se busca: (a) determinar el perfil del estudiante universitario de la carrera de diseño gráfico, (b) descubrir actividades académicas atractivas que favorezcan el proceso creativo en la gestión de medios de comunicación, e (c) incorporar una innovación educativa adaptada a las condiciones institucionales actuales a partir de la comparación de los resultados de un aprendizaje mecánico versus un aprendizaje significativo. De esta manera, se efectúa el aporte puntual de una modalidad de trabajo que incluirá, además de las actividades pedagógicas que generan un aprendizaje mecánico, prácticas para el desarrollo de un aprendizaje trascendente en estudiantes que representan una generación de educandos con competencias que no responden a las vigentes exigencias empresariales, por tratarse de propuestas diseñadas para satisfacer las necesidades de otro momento socio-histórico (Ibáñez, Cuesta, Tagliabue, & Zangaro, 2008) en un mercado laboral cada vez más dinámico y cambiante, que exige un gran esfuerzo creativo y estratégico en la gestión de medios de comunicación. Unidad de análisis La información fue tomada durante el año 2016 en el primer periodo o semestre A-2016 y corresponde a los estudiantes de la carrera de Diseño Gráfico en la Escuela Superior Politécnica del Litoral de la ciudad de Guayaquil. La muestra o unidad de análisis fueron cuatro cursos, el primer grupo con 63 alumnos, quienes cursaron la materia de Medios de Comunicación I y un segundo grupo con 29 alumnos quienes tomaron la materia de Medios de Comunicación II.

RESULTADOS Y DISCUSIÓN

La implementación de innovaciones se enfrenta constantemente a resistencias que acrecientan en momentos de incertidumbre (Larrondo, Domingo, Erdal, Masip, & Van den Bulck, 2016), en especial porque considera el aspecto motivacional y de habilidades de los profesionales involucrados (Palomo & Palau-Sampio, 2016). Por ello resulta indispensable reconocer el perfil del estudiante universitario de Diseño Gráfico para realizar una propuesta valedera que verificará si efectivamente se da uso de los medios adecuados para lograr que un grupo produzca ideas innovadoras. Mediante la recopilación de información de fuentes primarias y secundarias, se ha reconocido el perfil del estudiante de Diseño Gráfico (Escuela de Diseño y Comunicación Visual, 2016; Malhotra, 2008) así:

Tabla 9: Reconocimiento del Perfil del Profesional en Diseño Gráfico

Perfil del Diseñador Gráfico	Dominio de competencias	
	Analizar	la situación del mercado
	Reconocer	oportunidades o problemas
	Diseñar	la implementación
	Ilustrar/Interpretar	la información
	Comunicar	de forma coherente
	Seleccionar	métodos y técnicas precisas
	Aplicación de competencias	
	Cognitivas	Ciencias básicas, humanidades y artes.
	Procedimentales	Operar programas de diseño, de análisis de información, ilustración de propuestas, establecimientos de estrategias comunicacionales.
	Interpersonales	Capaz de percibir situaciones e interpretar señales de terceros.
	Competencias en función del foco material	
	Fundamentales	Creatividad y ciencias sociales.
	Disciplinarias	Bellas artes y comunicación.
	Específicas o profesionales	Investigación de mercados.
	Contextos de desempeño	
	Organizacionales	Asociado a organización o ejercicio individual
	Condiciones de ejercicio	Equipamiento electrónico
	Localización	Regional, extranjero, internacional
	Perfil profesional	

Profesionales creativos, innovadores, éticos y emprendedores, con capacidad investigadora y pensamiento crítico en el área de la comunicación visual gráfica, para diseñar soluciones visuales tales como: mensajes y campañas publicitarias, señalética, stands, soportes gráficos y proyectos editoriales para medios impresos y electrónicos mediante el dominio de herramientas tecnológicas, el desarrollo de conceptos, la planificación y la producción gráfica y publicitaria.

Con lo antes expuesto, se reconoció que, dentro de las técnicas utilizadas, se destaca la consideración de la lluvia de ideas grupal para fomentar el desarrollo del proceso creativo, sin embargo no se certifica que dicha actividad alcance los resultados esperados. Campbell (1999) asegura, al igual que otros autores, que las sesiones tradicionales de lluvia de ideas no resultan en verdaderas ideas nuevas, por lo que termina siendo una actividad bastante decepcionante. Si bien es cierto, la lluvia de ideas se presenta como una de las prácticas que normalmente se usa para fomentar la creatividad en la resolución de problemas complejos (Varkey, Hernandez, & Schwenk, 2009), y es que, tal como se corroboró en la observación estructurada, existe una necesidad de dar soluciones innovadoras que se ha vuelto crítica en la actualidad ya que constantemente se deben tomar decisiones importantes, por lo tanto el estudio de distintas técnicas de esta índole son necesarias para el futuro profesional (Brown & Paulus, 2002; Paulus & Yang, 2000; Serrano, 2002; Varkey, Hernandez, & Schwenk, 2009).

La presente propuesta constituye un rediseño por motivo de que representa una propuesta de enseñanza desde una perspectiva actual, basada en las oportunidades reconocidas en el perfil del egresado de la carrera y del análisis de la propia disciplina para transformar el conocimiento adquirido de la materia en una representación didáctica que resulte en un aprendizaje significativo para los educandos (Bolívar, 2005). De esta manera, previo a plantear las formas de representación, se procede a realizar la programación de la enseñanza según lo indicado por Davini (2008), considerando el punto de partida y marco general del currículo formal para establecer los propios espacios de decisión del docente. De allí que se contesta a las preguntas del para qué, qué y cómo, así como demás interrogantes planteadas en función de las clases rediseñadas.

Universidad: Escuela Superior Politécnica del Litoral

Carrera: Diseño Gráfico

Materia: Medios de Comunicación I y II

Tema que desarrollará: Innovación en la gestión de Medios de Comunicación, que corresponde al tema final de la materia.

Periodo: Semestre B – 2016

Momento del semestre/Clases comprometidas: 2 clases finales por cada curso

Considerando que la programación desarrolla los núcleos del plan y organiza la enseñanza, el hecho de programar la enseñanza implica lo siguiente (Davini, 2008):

Clarificar los propósitos educativos y definir los objetivos de aprendizaje específicos: Propósito.– la intención educativa del docente con la propuesta de enseñanza es la de incentivar el carácter creativo e innovador en el desarrollo del trabajo práctico de la materia. Objetivos.– Cambio conceptual al considerar conocimientos previos (aprendizaje significativo), capacidad de resolución de problemas de forma creativa, transferencia a las prácticas y trabajo cooperativo. (b) Organizar los contenidos: Se realiza una selección de los contenidos con base en el análisis previo de los educandos, también se consideran temas de actualidad y se establece el periodo de tiempo que tomará revisar dicho material. La secuencia y jerarquía que se manejará consiste en iniciar un repaso de los conocimientos previos para luego revisar el nuevo material que agrupa a las temáticas de mayor interés como creatividad, innovación, leyes de comunicación vigentes, entre otros. (c) Diseñar la estrategia particular de enseñanza: En primera instancia el docente hará énfasis en la instrucción, es decir que la clase tendrá como protagonista al especialista; más tarde se desarrollará una clase con énfasis en la guía pues comprenderá a la parte práctica con mayor protagonismo del grupo de estudiantes. De igual manera, la clase será en primera instancia predominada por la asimilación de contenidos para luego desarrollar las habilidades de los educandos. (d) Diseñar una secuencia de actividades de aprendizaje y su distribución en el tiempo, incluyendo las formas de seguimiento y evaluación: Actividades de apertura.– preguntas sobre la comprensión de cada temática a modo de examen inicial o de lluvia de ideas tradicional. Actividades de desarrollo.– desarrollo de casos, revisión de temas de actualidad y lluvia de ideas estructurada. Actividades de integración final: Uso de herramientas tecnológicas para la presentación del trabajo grupal. Actividades de revisión del proceso seguido: Retroalimentación entre pares como parte de la valoración de la presentación final. (e) Organizar el ambiente, seleccionando los materiales y los recursos: Las clases considerarán recursos tales como soportes de comunicación (ejercicios, estudios de caso y mapas conceptuales), herramientas de conocimiento (textos y videos) y materiales operativos (materiales concretos y computadoras).

Aunque constantemente se invita a los estudiantes a pensar fuera de la caja, realmente no se dan uso de los medios adecuados para lograr que un grupo efectivamente produzca ideas innovadoras. Para poner en evidencia lo aseverado se realizó un estudio comparativo de los resultados obtenidos en la gestión práctica de la materia Medios de Comunicación I versus Medios de Comunicación II, en donde la primera materia desarrolló la temática de la clase según la noción de aprendizaje significativo aplicando la propuesta planteada (considerando la aplicación de una práctica innovadora), y la segunda se llevó sin modificación alguna para verificar el aprendizaje mecánico. El tema tratado fue “Innovación en la gestión de Medios de Comunicación”, que se centra en las dos clases finales de ambos cursos pero se destaca que darán uso de actividades y estrategias diferentes (para valorar el aprendizaje mecánico y el aprendizaje significativo). En estas clases los estudiantes realizarán una práctica previa a su aplicación en la tutoría o proyecto final, para que se compruebe el medio conveniente para propiciar la innovación en la gestión de su plan de medios, pues hasta esta instancia han recopilado y analizado la información del mercado, por lo que el paso final es realizar un cronograma de comunicación con una propuesta pertinente (arte, mensaje, etc.). Para ello el programa modificado consiste en que los estudiantes apliquen una lluvia de ideas estructurada, en donde los estudiantes son agrupados con base a un análisis previo de sus habilidades de liderazgo para obtener los resultados esperados (Ministerio de Educación, 2012).

Tabla 10: Rediseño de Clases

Programación de la/S Clase/S - Unidades de Contenido	
Clase 1 <i>Predominantemente teórico</i> <ol style="list-style-type: none"> 1 Tipos de promoción 2 Componentes de anuncio 3 Elementos publicidad 4 Anuncio vs publicidad 5 Ley general de publicidad 6 Creatividad e innovación 7 Marketing de guerrilla 8 Presupuestos de marketing 9 Comunicación impersonal 10 La eficacia publicitaria 	Clase 2 <i>Predominantemente práctico</i> <ol style="list-style-type: none"> 1 Cualidades y aptitudes 2 Lluvia de ideas estructurada 3 Presentación de propuestas
Propósitos Educativos Generales <ul style="list-style-type: none"> - Desarrollar un programa de estudio que cumpla con los requerimientos de innovación, creatividad publicitaria y cambios del macroentorno. 	
Selección y organización de los contenidos <ul style="list-style-type: none"> - Se agregará un tema de clase adicional al finalizar el marco general ya establecido. 	
Características centrales de la enseñanza que se propone <ul style="list-style-type: none"> - Consideración de enseñanza que fomente el aprendizaje significativo 	
Principales herramientas o recursos <ul style="list-style-type: none"> - Videos, casos, material de apoyo, herramientas tecnológicas (programas) y técnicas innovadoras. 	

El objetivo de esta iniciativa es dar uso de los aprendizajes previos a la materia y de la interacción que puedan tener con los nuevos conocimientos, además de identificar: las fortalezas de los estudiantes, cómo la gestión de estas pueden favorecer a las actividades que exigen un alto grado de iniciativa y creatividad, y la importancia de promover un aprendizaje significativo por encima del mecánico, el cual indudablemente se relaciona a esta rutina en la que se cae cotidianamente mientras el docente transmite conocimientos. Su aplicación se realizó una vez que los estudiantes terminaron de revisar todo el material, quedando pendiente esta última temática (Innovación en la gestión de Medios de Comunicación), con ello se revisó un caso práctico de innovación pero que sea de otra área y que no se centre en la gestión de los medios de comunicación. Por ende van a existir puntos comunes o situaciones similares que estarán atados a los conocimientos previos adquiridos sobre innovación en medios y sobre las temáticas que ya se analizaron en la lluvia de ideas básica, permitiendo el desarrollo del aprendizaje significativo. La forma de emplearlo será realizando la actividad de lluvia de ideas y su proceso requerirá de 2 clases, en esta última se realizará una retroalimentación. En la primera clase se realizará la revisión teórica y en la segunda se realizará la actividad de lluvia de ideas estructurada cuyos resultados se apreciarán por medio de la presentación de los grupos y sus propuestas de gestión de la innovación de los medios de comunicación. Finalmente, desde una perspectiva general se asevera que entre los productos que se quieren lograr con el presente proyecto se está considerando una recreación o reconstrucción del contenido de acuerdo a las perspectivas propias y el contexto de la clase, así: al desarrollar un aprendizaje significativo, aprovechar las cualidades del grupo de estudiantes, favorecer el desempeño grupal, dar conocimiento de nuevas herramientas tecnológicas y promover actividades por medios no utilizados en la actualidad (Bolívar, 2005). Todos estos aspectos atienden a lo que en primera instancia se reconoció como “una buena clase” pues se están considerando todas las herramientas posibles que hagan del rediseño de clases un proyecto más dinámico y participativo.

CONCLUSIONES

La propuesta de trabajo aplicada a los estudiantes de la carrera de Diseño Gráfico de la materia de Medio de Comunicación I y II de la Escuela Superior Politécnica del Litoral – ESPOL, se desarrolló en función del objetivo general planteado como: determinar los beneficios que genera la consideración de prácticas innovadoras por los docentes en la interacción de los conocimientos más relevantes de la estructura cognitiva y las nuevas informaciones receptadas por los educandos; de tal modo que se pueda efectuar una propuesta de gestión de la actividad pedagógica, que se realiza en clase, en atención a los requerimientos de aprendizaje. Sin embargo, antes de proponer la aplicación de una práctica innovadora, se identificaron las necesidades e intereses de estos futuros profesionales, por lo que se estableció del perfil del estudiante de Diseño Gráfico, reconociendo sus habilidades, capacidades, entre otros aspectos. Así se reconoció que se trata de un individuo creativo, innovador, ético y emprendedor, con capacidad investigadora y pensamiento crítico en el área de la comunicación visual gráfica, capaz de dominar herramientas tecnológicas, desarrollar conceptos, planificar y producir gráfica y publicitariamente.

A pesar de ello, los estudiantes no materializaban su papel profesional, de allí que la propuesta del presente proyecto se centra en la consideración de prácticas innovadoras para potenciar las funciones del Diseñador Gráfico en el mercado laboral. La práctica innovadora aplicada en este proyecto, es decir la lluvia de ideas estructurada en función de las habilidades de liderazgo, atiende a la necesidad detectada en el desarrollo de la enseñanza y es posible incorporarla de manera puntual en la programación de las clases de Medios de Comunicación I y II. Esta práctica a su vez va de la mano con la modificación del actual proceso creativo de la materia pues, para que se desarrolle un aprendizaje significativo, se han agregado herramientas que atienden a sus principios como medio estratégico del docente para desenvolverse acertadamente en la sociedad contemporánea. Con esta propuesta se obtuvieron avances importantes en aspectos como: recordación de temas principales, asociación de saberes y aplicación teórica. Al comparar los resultados de la retroalimentación de la clase normal (Medios de Comunicación II) y la clase propuesta (Medios de Comunicación I), se observa que una clase sólo teórica conlleva a un aprendizaje mecánico, mientras que una clase con herramientas de ejemplificación, no centralizadas en el libro de texto y que tienen al aprendiz como perceptor, conlleva a un aprendizaje significativo y duradero.

El programa propuesto demuestra que los estudiantes poseen una mayor comprensión del material revisado en clases, inclusive no sólo brinda beneficios para el alumno sino también para el docente pues se produce un diálogo entre ambas partes que refuerza el proceso de generación y dictado de conocimientos. La retroalimentación actúa además como un optimizador de aprendizajes porque aporta con información importante para realizar los cambios convenientes de las falencias detectadas del modelo. Con los resultados de la experiencia de cada educando, tanto en el programa de clases normal como en el propuesto, se reconocen las actividades que más aportan a desarrollar un aprendizaje significativo, al igual que aquellas que no generan mayores cambios. Dentro de las actividades que más impactan los aspectos considerados se encuentran: asociación con la realidad nacional y la comparación con un caso modelo. Así mismo, los estudiantes dieron conocimiento de cómo resulta afectado su proceso creativo y capacidad de desarrollar ideas innovadoras. De igual manera, se comprueba que una lluvia de ideas normal no genera mayores resultados innovadores, mientras que con la lluvia de ideas estructurada a partir de la evaluación de las habilidades de liderazgo de los estudiantes, permite formar equipos con mayores probabilidades de obtener los resultados esperados respecto a creatividad y objetividad. Por medio de este proyecto se verifica la utilidad de la lluvia de ideas estructurada y por ende de la aplicación de prácticas innovadoras. Finalmente, a partir del análisis de los resultados esperados del presente trabajo se da respuesta a la problemática inicial y se concluye que: la propuesta representa una modalidad de trabajo viable que incluye, además de las actividades pedagógicas que generan un aprendizaje mecánico, prácticas innovadoras para el desarrollo de un aprendizaje significativo de estudiantes que requieren de un gran esfuerzo creativo y estratégico en la gestión de medios de comunicación en su futuro ejercicio profesional.

REFERENCIAS

Altopiedi, M., & Murillo, P. (2011). Prácticas innovadoras en escuelas orientadas hacia el cambio: Ámbitos y modalidades. *Profesorado*, 14(1).

Antúnez, S. (1998). Claves para la organización de centros escolares. Barcelona: ICE-Horsori.

Ausubel, D. P. (1963). The psychology of meaningful verbal learning.

Barraza, A. (2005). Una conceptualización comprehensiva de la innovación educativa. *Innovación Educativa*, 5(28), 19-31.

Bolívar, A. (2005). Conocimiento didáctico del contenido y didácticas específicas. *Profesorado. Revista de currículum y formación del profesorado*, 9(2), 1-39.

Brown, V. R., & Paulus, P. B. (2002). Making group brainstorming more effective: Recommendations from an associative memory perspective. *Current Directions in Psychological Science*, 11(6), 208-212.

Campbell, S. (1999). Tools@ work: Two ways to better brainstorming. *The Journal for Quality and Participation*, 22(1), 36-37.

Davini, M. (2008). Métodos de enseñanza. Buenos Aires: Santillana.

Hernández, R., Fernández, C., & Baptista, M. d. (2010). *Metología de la Investigación* (15 ed.). México D.F.: Mc Graw Hill.

Hopkins, D. (1996). Estrategias para el desarrollo de los centros educativos. . Congreso Internacional de Dirección Participativa y Evaluación de Centros. Bilbao.

Ibáñez, E., Cuesta, M., Tagliabue, R., & Zangaro, M. (2008). La generación actual en la universidad: el impacto de los millennials. V Jornadas de Sociología de la UNLP. Universidad Nacional de La Plata.

Facultad de Humanidades y Ciencias de la Educación. Departamento de Sociología, La Plata.

Larrondo, A., Domingo, D., Erdal, I. J., Masip, P., & Van den Bulck, H. (2016). Opportunities and Limitations of Newsroom Convergence: A comparative study on European public service broadcasting organisations. *Journalism Studies*, 17(3), 277-300.

Libedinsky, M. (2011). La innovación en la enseñanza: diseño y documentación de experiencias de aula. *Docencia Universitaria*, 12, 139-141.

Lucarelli, E. (2006). Prácticas innovadoras en la formación del docente universitario. *Educação*, 27(3).

Medina, A., & Salvador, F. (2009). *Didáctica General*. Madrid: Pearson Educación.

Ministerio de Educación. (2012). Ministerio de Educación. Recuperado el 19 de Agosto de 2016, de Documentos: <http://educacion.gob.ec/wp-content/uploads/downloads/2012/08/Liderazgo-Educativo.pdf>

Novak, J. D., Gowin, D. B., & Otero, J. (1988). *Aprendiendo a aprender*. Barcelona: Martínez Roca.

Palomo, B., & Palau-Sampio, D. (2016). El periodista adaptativo. Consultores y directores de innovación analizan las cualidades del profesional de la comunicación. *El profesional de la información*, 25(2), 188-195.

Paulus, P., & Yang, H. C. (2000). Idea generation in groups: A basis for creativity in organizations. *Organizational Behavior and Human Decision Processes*(82), 76-87.

Sánchez, J. M. (2005). La innovación educativa institucional y su repercusión en los centros docentes de Castilla-La Mancha. *REICE: Revista Electrónica Iberoamericana sobre Calidad, Eficacia y Cambio en Educación*, 3(1), 637-664.

Serrano, S. (2002). La evaluación del aprendizaje: dimensiones y prácticas innovadoras. *Educere: Revista Venezolana de Educación*, 19, 247-257.

Serres, M. (2014). *Pulgarcita*. Barcelona: Editorial GEDISA.

Shulman, L. S. (1986). Paradigms and research programs in the study of teaching: A contemporary perspective.

Tejada, J. (1998). Los agentes de la innovación en los centros educativos. Profesores, directivos y asesores. Archidona: Aljibe.

Varkey, P., Hernandez, J. S., & Schwenk, N. (2009). 6 techniques for creative problem solving. *Physician executive*, 35(3), 50-53.

FACTORES QUE INFLUYEN EN LA SATISFACCIÓN LABORAL DE LOS TELETRABAJADORES EN EMPRESAS MEXICANAS

Ana Isabel Ordóñez Parada, Universidad Autónoma de Chihuahua
Luis Raúl Sánchez Acosta, Universidad Autónoma de Chihuahua
Carmen Romelia Flores Morales, Universidad Autónoma de Chihuahua
Irma Leticia Chávez Márquez, Universidad Autónoma de Chihuahua

RESUMEN

Los cambios que sufre la sociedad por diferentes factores como la información; la comunicación; y, los cambios en las organizaciones, generan nuevas formas de desempeño laboral, como es el teletrabajo, el cual presenta una forma flexible de organización de trabajo dentro de la organización cuyos elementos son la situación geográfica, el uso de la tecnología de información y la forma de organización. Ante estos cambios los teletrabajadores modifican sus procesos laborales. El presente estudio tiene como objetivo determinar qué factores influyen en la satisfacción laboral de los teletrabajadores en empresas mexicanas. Se analizaron 247 teletrabajadores de diferentes empresas. Se trabajó con la variable dependiente satisfacción laboral del teletrabajador y las variables independientes, cantidad de trabajo, tareas a su cargo, capacitación, condiciones ambientales, independencia de trabajo, posibilidades de ascenso, relación con supervisor, estabilidad y seguridad laboral. Se concluye que el trabajador siente satisfacción laboral con las tareas que tiene asignadas a su cargo, la capacitación que obtiene de la empresa para la cual trabaja la relación con su supervisor y las condiciones ambientales del lugar de trabajo. La estabilidad y seguridad laboral estadísticamente tienen una relación baja con la satisfacción laboral del teletrabajador.

PALABRAS CLAVE: Teletrabajo, Factores, Satisfacción Laboral, Empresas Mexicanas

FACTORS INFLUENCING JOB SATISFACTION IN TELEWORKERS IN THE CITY OF CHIHUAHUA

ABSTRACT

The changes suffered by society by different factors such as information; communication; And, changes in the organization will generate new forms of work performance, such as teleworking, which presents a flexible form of organization of work within the organization whose elements are the geographical situation, the use of the technology of Information and the form of organization. In view of these changes the telecommuters modify their labor processes. This study aims to determine what factors influence the job satisfaction of teleworkers in Mexican companies. We analyzed 247 teleworkers from different companies. We worked with the dependent variable job satisfaction of the Teleworker and the independent variables, amount of work, tasks in charge, training, environmental conditions, independence of work, possibilities of ascent, relationship with Supervisor, stability and occupational safety. It is concluded that the worker feels job satisfaction with the tasks assigned to him, the training he obtains from the company for which he works the relationship with his supervisor and the environmental conditions of the workplace. The stability and safety of work statistically have a low relationship with the job satisfaction of the Teleworker.

JEL:M12, M55, O3,031,032

KEYWORDS: Teleworking, Factors, Job Satisfaction, Mexican Companies

INTRODUCCIÓN

Los cambios tecnológicos generan nuevas formas en los estilos de vida y cambios relevantes en el mundo del trabajo. Como resultado de ello las organizaciones deben generar nuevas estrategias que reflejen las características de la fuerza laboral actual. Entre estas características están presentes las condiciones de trabajo, las relaciones laborales, la productividad, la satisfacción laboral, resultando importante que la empresa se asegure de lograr un equilibrio en las necesidades familiares y el desarrollo profesional del trabajador. En estos cambios tecnológicos el teletrabajo juega un papel muy importante, ya que se presenta como una alternativa de organización laboral actual que refleja la nueva fuerza de trabajo. El teletrabajo tiene 3 elementos importantes según lo planteado por Ugarte (2004) y por Thibault (2001) estos son: Elemento geográfico o locativo: esta particularidad supone que el teletrabajo es ante todo un tipo de trabajo a distancia. Elemento tecnológico o cualitativo: además del trabajo a distancia, el teletrabajo requiere como uno de sus elementos definitorios la utilización intensiva de una determinada tecnología que permita precisamente el desarrollo de una tarea productiva fuera del centro de funcionamiento de la organización.

Elemento organizativo: teletrabajar no es sólo trabajar a distancia y utilizando las telecomunicaciones y/o la informática, es servirse de estos elementos para prestar servicios de un modo diferente. En base a ello, no sería teletrabajador todo aquel que emplea las herramientas propias del teletrabajo sino aquel que al llevarlo a cabo escapa de la forma tradicional de trabajar dentro de la organización. Por lo tanto, se debe entender que el teletrabajo es una forma de organización y de realización de trabajo distinta, en un contexto de descentralización de actividades laborales que antes eran realizadas en la empresa (Vittorio, 2004). Bauregard y Henry (2009) evidencian que los empleados que teletrabajan suelen experimentar niveles más altos de satisfacción que quienes no lo hacen. Como inconvenientes, en el teletrabajador puede existir la sensación de aislamiento; la falta de supervisión por los superiores de trabajo, falta de motivación; reacciones negativas a los cambios de gestión cuando estos no son aceptados por los directivos o el personal de la empresa se dificulta la seguridad de la información por fluir por redes externas a la empresa, disminuye el contacto entre superiores y subordinados mencionado por Gala (2001) en su artículo teletrabajo y sistema de seguridad social en las relaciones laborales.

Según el estudio el enriquecimiento trabajo-familia: nuevo enfoque en el estudio de la conciliación y la satisfacción laboral de los empleados Pérez (2014), menciona la relación existente entre la disponibilidad y adopción de prácticas flexibles con la satisfacción laboral y el compromiso organizativo de los empleados, que los empleados que cooperan para poder teletrabajar obtienen recursos sociales de la comunicación e interacción con sus compañeros. Este tipo de recursos pueden funcionar como recursos de apoyo social mediante el estímulo de experiencias positivas en el trabajo que lleven a un sentimiento general de afecto positivo, de confianza y energía personal adicional que impulse a los empleados tanto en el área personal como laboral (Hunter et al., 2010). Osio, (2010), en su estudio El Teletrabajo: Una opción en la era digital menciona que el no acudir a un lugar de trabajo y no tener relaciones con otros trabajadores puede producir sensación de aislamiento en el trabajador, lo cual afectaría su rendimiento. La presente investigación tiene como objetivo determinar qué factores influyen en el desempeño laboral de los teletrabajadores, se pretende demostrar que variables están estadísticamente relacionadas con las relaciones laborales de los teletrabajadores. La estructura del presente estudio se divide en: Revisión literaria la cual presenta el origen de teletrabajo y los factores asociados con desempeño laboral del teletrabajador, se utilizó como instrumento de medición un cuestionario estructurado, en la sección de metodología se explica el proceso que se llevó a cabo para determinar los factores que están relacionados con el desempeño laboral del teletrabajador y se trabajó con fórmulas estadísticas de correlación, los datos fueron calculados con el paquete estadístico Minitab 17, así como el uso del Excel para graficar los resultados esperados.

REVISIÓN DE LITERATURA

Teletrabajo fue definido por primera vez en la década de 1970 por Jack Nilles, como: “cualquier forma de sustitución desplazamientos relacionados con la actividad laboral por tecnologías de la información” Thibault (2001). El teletrabajo es una forma flexible de organización del trabajo que consiste en el desempeño de la actividad profesional sin la presencia física del trabajador en la empresa, e implica el uso permanente de algún medio de comunicación para el contacto entre el trabajador y las empresas (Gray, Hodson & Gordon, 1995). La finalidad de la salud en el trabajo consiste en lograr la promoción y mantenimiento del más alto grado de bienestar físico, mental y social de los trabajadores en todas las labores (OTI, 2003). Sparks, Faragher & Cooper (2001) anotan que los cambios generados por las nuevas condiciones de trabajo están dando lugar a nuevas concepciones de lo que debería ser el bienestar organizacional y la salud y seguridad en el trabajo.

Satisfacción e Insatisfacción Laboral: Según estudios en los factores implicados en producir satisfacción (y motivación) en el trabajo son algo separados y distintos de aquellos que llevan a la insatisfacción en el trabajo. Puesto que se tiene que considerar factores separados, dependiendo si se analiza la satisfacción o insatisfacción En el trabajo se deduce, que estos dos sentimientos no son opuestos entre si lo opuesto a satisfacción en el trabajo no es insatisfacción sino, en cambio falta de satisfacción y, de forma pareja, lo opuesto de insatisfacción no es satisfacción, sino falta de insatisfacción. La teoría bifocal de Herzberg afirma que la motivación se genera por la búsqueda de una satisfacción óptima de ciertas necesidades, las que producen satisfacción laboral (López, 2005). Dado que el trabajo es un aspecto central en la vida de las personas (Luque, Gómez & Cruces 2000), definen que los trabajadores deben tener un ambiente de trabajo seguro y saludable; las organizaciones, además de preocuparse por promover ambientes de trabajo saludables que propicien la satisfacción con el trabajo y el bienestar y una calidad de vida laboral óptima (Seabury, Lakdawalla y Reville 2005). En base a ello se analizaron los siguientes factores asociados con Satisfacción laboral:

Cantidad de trabajo : La regulación del horario de trabajo ha experimentado un cambio importante al menos en la redacción; antes estaba establecido que fuera fijado libremente por el empleador; de hecho, el establecimiento de esta potestad a favor del cabeza de familia se produce en atención a sus necesidades organizativas y porque es quien ha de distribuir el modo de proceder a la cobertura de las necesidades domésticas, pero la nueva norma expresamente contempla que el horario sea fijado por acuerdo entre las partes. Es previsible que a la postre continúe siendo el titular del hogar familiar quien establezca unilateralmente el horario, pero la nueva dicción, cuando menos está expresando una evolución en el sentir de la regulación que habrá de dejar cierto margen (Nieves, 2010).

Tareas en el trabajo : Burawoy (1985) sostiene que los capitalistas continuamente transforman la producción por medio de la extensión del día laboral, la intensificación del trabajo y la introducción de nuevas máquinas que buscan producir al menor costo posible (Higuera, 2010). Inclusive, sin preocuparse por el bienestar de los trabajadores. Desde la perspectiva económica podría argumentarse que la eficiencia está relacionada con el uso racional de los recursos (Koontz, 1999, p. 12).

Capacitación Laboral: un proceso de capacitación se compone de varias fases, que deben dominarse y aplicarse, antes de realizar cualquier acción de capacitación. Al hablar de capacitación para el cambio, las fases son las mismas, pero el contenido y el alcance de cada una de ellas es diferente. Determinación de las necesidades, establecimiento de los objetivos, determinación de las acciones (plan de capacitación), elaboración de los programas, desarrollo de la metodología, medición de los resultados, seguimiento lo anterior citado por (González & Tarragó, 2008) en su investigación capacitación para el cambio.

Condiciones ambientales: según el estudio Construcción de un índice de condiciones laborales por estados para México muestra que los estados con mejores condiciones son en general los estados del norte: Coahuila, BCS, Aguascalientes, Nuevo León, BC y Chihuahua (Rodríguez & Oreggia, 2009).

Independencia de trabajo: Beltrán y Sánchez (2002) sostienen que la aparición del teletrabajo trae grandes beneficios a las empresas, tales como el aumento de la productividad, independencia laboral, la disminución del ausentismo, la reducción de costos fijos y la flexibilización de la jornada de trabajo, entre otros.

Ascenso laboral: muchos teletrabajadores temen que el hecho de no ser vistos en la oficina o de no establecer relaciones personales, “cara a cara” con sus jefes sea una desventaja. Sin embargo, un estudio realizado por la Small Business Administration en 1993 concluyó que los teletrabajadores obtienen promociones en mayor proporción que los que van todos los días a la oficina. La firma neoyorquina Find/SVP asegura que Una proporción creciente de estos teletrabajadores está empleada en empresas medianas y pequeñas. (Finquelievich, 1998)

*Relación laboral :*un elemento contextual que puede moderar los efectos del teletrabajo es el estilo de gestión del supervisor consecuente con este Wiesenfeld, Raghuram, y Garud (1999) habían señalado que los métodos de control para la supervisión del trabajador pueden ser disfuncionales para quienes teletrabajan. A la vez Pyöriä (2011) y Golden (2009) mencionan que para que el teletrabajo funcione se necesita de supervisores que dejen la gestión tradicional basada en control y se enfoquen más en una gestión basada en resultados. La conclusión anterior también es reafirmada por Mello (2007) al manifestar que el funcionario adecuado del teletrabajo depende de que el supervisor se sienta comfortable delegando las responsabilidades de toda la unidad de trabajo y brindando discreción a la forma como el subordinado completa las asignaciones del trabajo. Además la flexibilidad le permite al teletrabajador organizar mejor su tiempo, lo cual le permite tener un menor conflicto entre el trabajo y la familia (Kossek, Lautsch y Eaton, 2006).

*Estabilidad y seguridad laboral :*el tema de costos y flexibilización, se comenzaron a establecer regulaciones en el campo de la seguridad en el trabajo y salud ocupacional, pensando en el “buen empleo”, lo que está asociado a las condiciones de calidad de vida laboral (Bourhis & Mekkaoui, 2010).

METODOLOGÍA

El presente trabajo de investigación se llevó a cabo en la ciudad de Chihuahua con diferentes empresas mexicanas que emplean teletrabajadores, la forma para teletrabajar consiste en el uso de la computadora desde sus hogares para actividades laborales. Según datos del Instituto Nacional de Estadística y Geografía se analizó la población con disponibilidad y uso de tecnologías de la Información en los Hogares (INEGI, 2015) se procedió a la selección de la muestra. Según las características de la unidad de análisis, el muestreo fue probabilístico. Se aplicaron 247 encuestas a teletrabajadores, con un nivel de confianza de 95% y margen de error máximo de 6.25%. Las variables del estudio que se evaluaron fueron la satisfacción laboral como variable dependiente, cantidad de trabajo, tareas a cargo, capacitación, condiciones ambientales, independencia de trabajo, posibilidades de ascenso, relación con el supervisor, estabilidad y seguridad laboral, con variables independientes. Se tomó como instrumento de medición base el realizado por Solís (2015), validado por Gutek, Searle y Klepa (1991) con el coeficiente alfa de Cronbach y el instrumento utilizado por Saxena, Ansari y Shankar (1995). Se encuestaron trabajadores que cumplieran con las condiciones establecidas de un teletrabajo en diferentes empresas mexicanas. Las variables consideradas se presentan a continuación. Satisfacción Laboral: Fue medido mediante un ítem que indica que tan satisfecho se encuentra el teletrabajador. La escala de respuesta utilizada para este ítem fue: Muy Satisfecho, satisfecho, ni satisfecho ni insatisfecho, insatisfecho, muy insatisfecho.

Las variables independientes: Cantidad de trabajo, tareas en el trabajo, capacitación laboral, condiciones ambientales, independencia de trabajo, posibilidades de ascenso laboral, relación con el supervisor,

estabilidad y seguridad, fueron evaluadas mediante un ítem y la escala de respuesta utilizada para este ítem fue: Muy Satisfecho, satisfecho, ni satisfecho ni insatisfecho, insatisfecho, muy insatisfecho. Las variables control fueron sexo y edad. Se trabajó con fórmulas estadísticas de correlación, los datos fueron calculados con el paquete estadístico Minitab 17, así como el uso del Excel para graficar los resultados esperados.

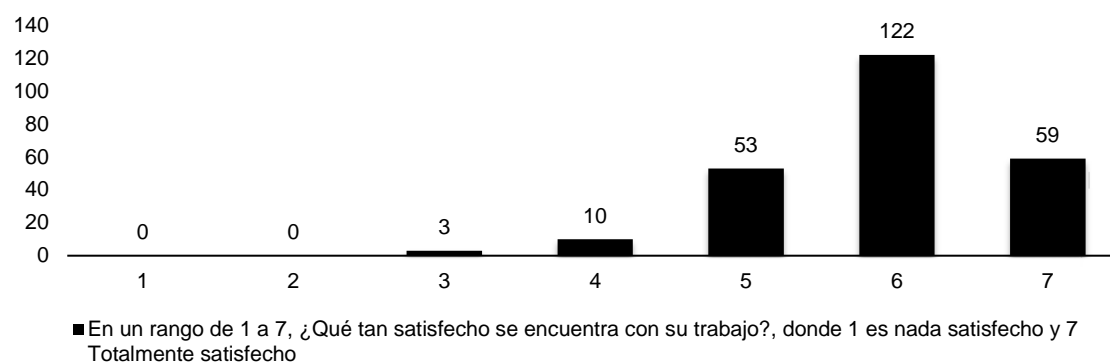
RESULTADOS

Tabla 1: Medias, Desviación Estándar y Correlaciones de las Variables en Estudio

Variables	M	DE	Satisfacción Laboral	Cantidad de Trabajo	Tareas a Cargo	Capacitación	Condiciones Ambientales	Independencia de Trabajo	Posibilidades de Ascenso	Relación con Supervisor	Estabilidad y Seguridad Laboral
Cantidad de trabajo	3.891	0.848	0.355								
Tareas a cargo	3.960	0.731	0.446	0.666							
Capacitación	3.822	0.967	0.398	0.536	0.605						
Condiciones ambientales	3.798	0.906	0.419	0.563	0.583	0.525					
Independencia de trabajo	3.676	1.400	0.392	0.307	0.460	0.450	0.381				
Posibilidades de ascenso	3.656	1.051	0.339	0.449	0.468	0.587	0.447	0.418			
Relación con supervisor	3.927	0.951	0.354	0.424	0.469	0.467	0.365	0.516	0.576		
Estabilidad y seguridad laboral	3.911	0.980	0.274	0.354	0.386	0.528	0.287	0.314	0.511	0.490	0.460

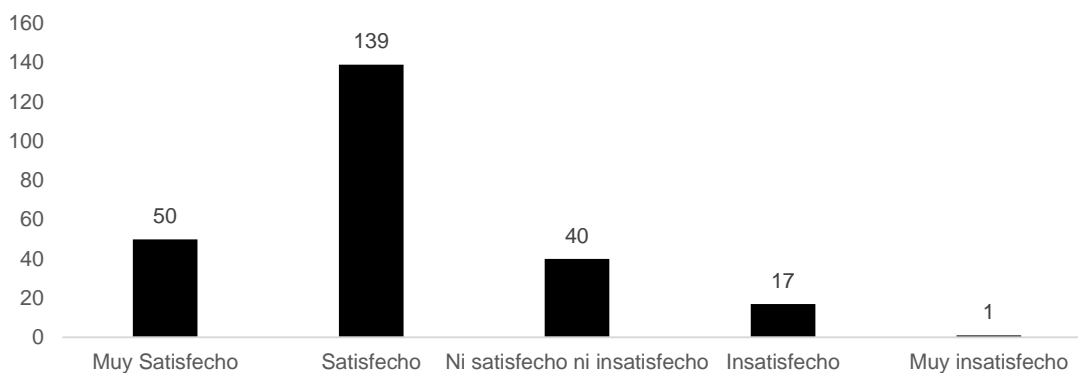
Mediante una correlación bivariada, se considera representativa la relación entre las variables que obtuvieron una correlación de Pearson con una significancia estadística. Las tareas que tiene asignadas a su cargo el teletrabajador, la capacitación que obtiene de la empresa para la cual trabaja, la relación con su supervisor y las condiciones ambientales del lugar de trabajo. La estabilidad y seguridad laboral así como independencia de trabajo y posibilidades de ascenso estadísticamente tienen una relación baja con la satisfacción laboral del teletrabajador

Figura1: en un Rango de 1 a 7, ¿Qué Tan Satisfecho Se Encuentra con su Trabajo, Donde 1 es Nada Satisfecho y 7 Totalmente Satisfecho?



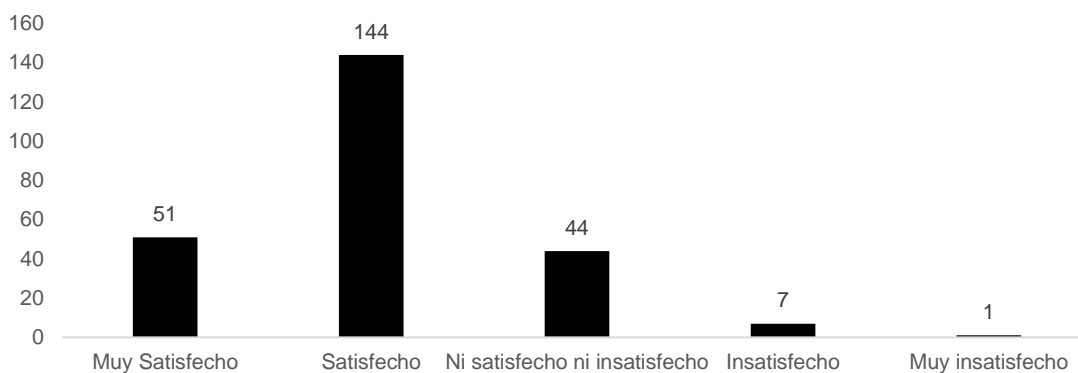
De los 247 Teletrabajadores encuestados en su mayoría comentan estar satisfechos con su relación laboral, indicándolo según se muestra en la (figura 1).

Figura 2: Cantidad de Trabajo



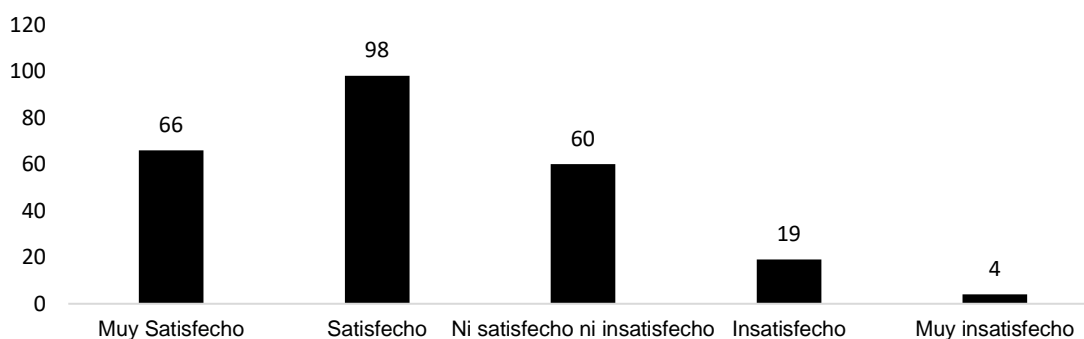
Según se muestra en la Figura 2 los teletrabajadores en su mayoría (189) indican estar satisfechos y muy satisfechos con la cantidad de trabajo asignada por parte de empresa en la cual desempeña sus actividades.

Figura 1: las Tareas Que Tiene a Cargo



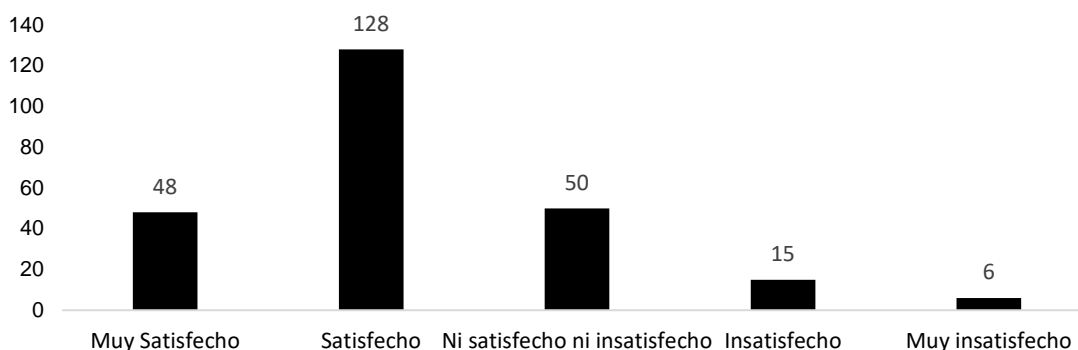
De acuerdo a la (figura 3), los teletrabajadores (144) se encuentran satisfechos con las tareas que realizan, 55 de ellos se encuentran muy satisfechos, 44 ni satisfechos ni insatisfechos, 7 insatisfechos y 1 muy insatisfecho.

Figura 4: Posibilidades de Capacitación o Formación



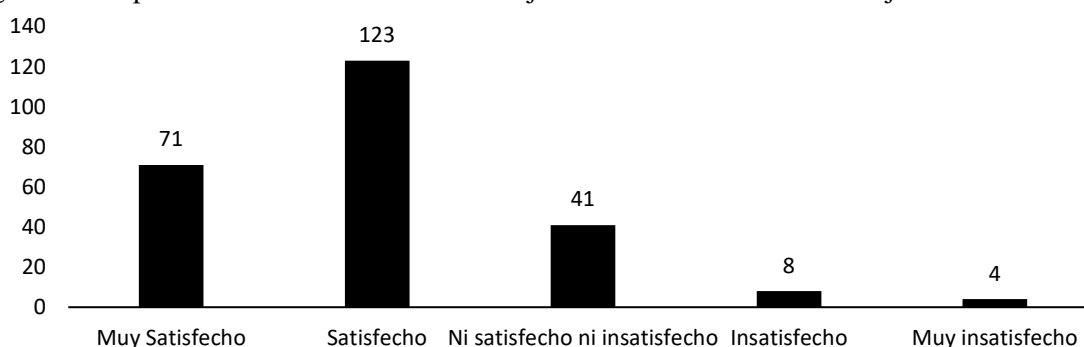
De acuerdo a la (Figura 4) de los teletrabajadores, encuestados manifiestan estar satisfechos y muy satisfechos 164 con la capacitación en su empresa, 60 de ellos indican no estar satisfechos ni insatisfechos, 19 insatisfechos y 4 de ellos muy insatisfecho con la capacitación otorgada por su empresa.

Figura 5.- Las Condiciones Ambientales del Lugar Donde Trabaja la Mayor Parte del Tiempo (Espacio Físico, Ruido, Ventilación, Iluminación)



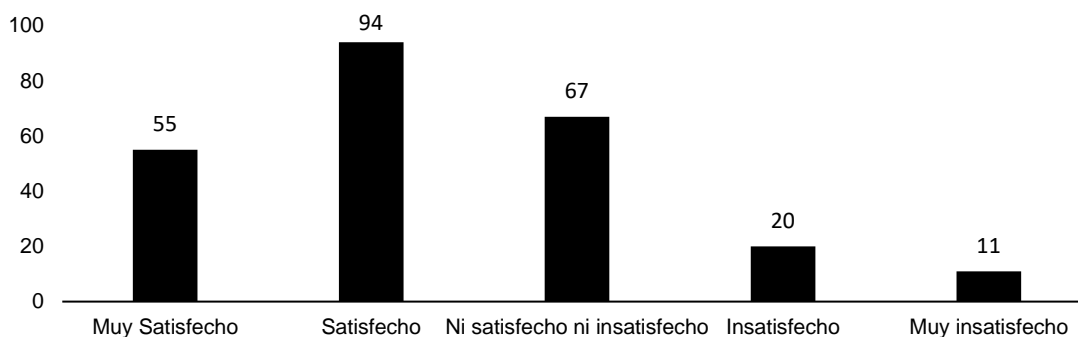
La (figura 5) muestra que 178 teletrabajadores encuestados manifiestan estar satisfechos y muy satisfechos con la condiciones ambientales del hogar donde teletrabaja, 50 de ellos manifiestan estar ni satisfechos ni insatisfechos, 15 de ellos insatisfechos y 6 de ellos manifiestan estar muy insatisfechos.

Figura 6: Independencia Para Realizar el Trabajo Como a Usted le Parece Mejor



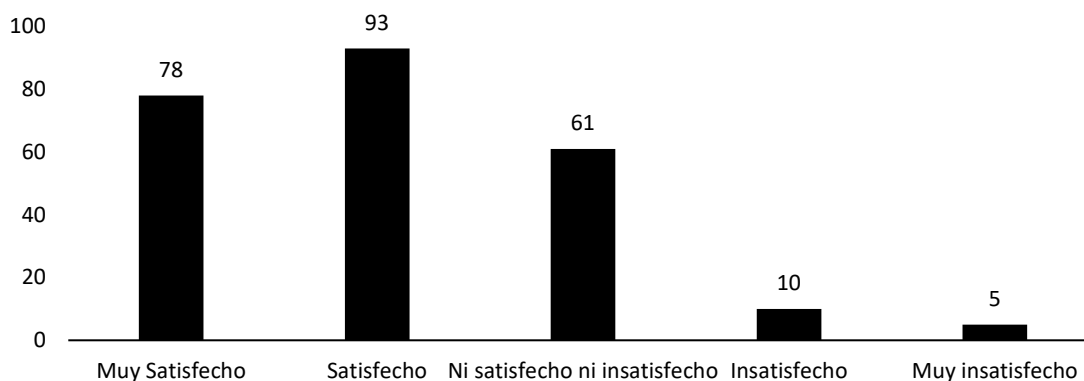
Se muestra en la (figura 6) que 164 de los teletrabajadores encuestados manifiestan estar satisfechos y muy satisfechos en tener independencia para realizar el trabajo asignado en la empresa, 41 indican estar ni satisfechos ni insatisfechos, 8 insatisfechos y solo 4 de los encuestados indican estar muy insatisfechos con la independencia que les otorga la empresa para realizar su trabajo

Figura 7: Posibilidades de Ascenso o Crecimiento



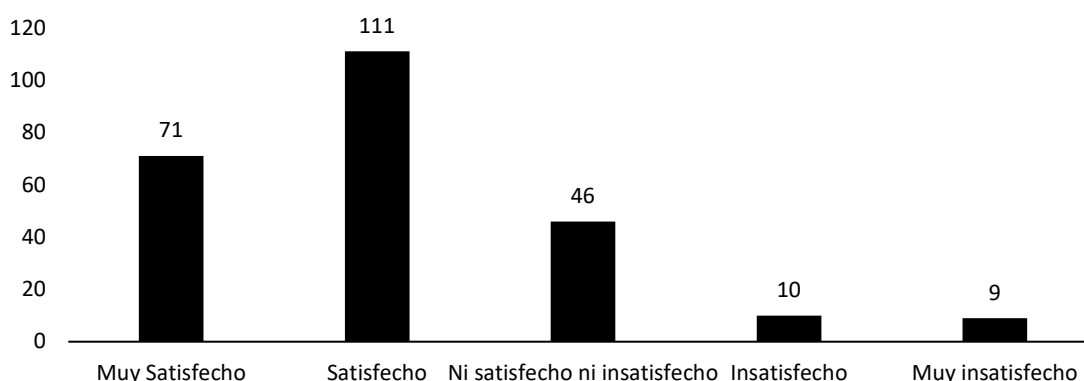
La (figura 7) indica que 149 teletrabajadores mencionan estar satisfechos y muy satisfechos con tener posibilidades de ascensos en la empresa donde teletrabajan, 67 respondieron estar ni satisfechos ni insatisfechos, 20 de ellos insatisfechos y muy insatisfechos 11 teletrabajadores.

Figura 8: Relación Con Su Supervisor Inmediato



La (Figura 8) indica cómo se siente el teletrabajador en la relación con su supervisor, indicando 171 teletrabajadores estar satisfechos y muy satisfechos con la relación con el supervisor inmediato 61 de ellos indican estar ni satisfechos ni insatisfechos 10 insatisfechos y 5 teletrabajadores muy insatisfechos con la relación con su supervisor superior.

Figura 9: la Estabilidad y Seguridad Laboral



En la (figura 9) correspondiente a estabilidad y seguridad laboral 182 trabajadores respondieron estar satisfechos y muy satisfechos con su estabilidad y seguridad laboral ,46 respondieron estar ni satisfechos ni insatisfechos, 10 insatisfechos y 9 muy insatisfechos con su estabilidad y seguridad laboral.

CONCLUSIONES

Esta investigación pone de manifiesto los siguientes aspectos: Los teletrabajadores que ingresaron a dicha encuesta son en un 60% del sexo masculino y en un 40% de sexo femenino su edad oscila entre 22 y 61 años. Los teletrabajadores se encuentran en su mayoría satisfechos en el ámbito laboral. En su trabajo en un 66% están satisfechos con las tareas asignadas a su cargo por parte de la empresa para la cual trabajan. Los teletrabajadores consideran en un 66% estar satisfechos con la capacitación que se les otorga para llevar a cabo sus tareas laborales. En relación a las condiciones ambientales del lugar el 72% de los teletrabajadores encuestados manifiestan sentirse satisfechos en cuanto a el espacio físico, el ruido, la ventilación, e iluminación del lugar en donde teletrabajan. El 69% de los teletrabajadores indican tener una buena relación con su supervisor. En cuanto a posibilidades de ascensos, estabilidad y seguridad laboral el porcentaje baja en relación a que tan satisfechos se encuentran los trabajadores en estos aspectos laborales.

BIBLIOGRAFÍA

- Bauregard, T.A.; Henry, L.C. (2009) "Making the link between work-life balance practices and organizational performance", *Human Resource Management Review*, Vol. 19,p. 9–22.
- Beltrán, A. & Sánchez, L. (2002). Las relaciones laborales virtuales: el teletrabajo.
- Tesis de grado, Facultad de Ciencias Jurídicas, Pontificia Universidad Javeriana, Bogotá D.C., Colombia.
- Bourhis, A. & Mekkaoui, R. (2010). Beyond work-family balance: Are familyfriendly organizations more attractive *Relations industrielles / industrial relations* 65-1.
- De Nieves , N, El tiempo de trabajo en las relaciones laborales especiales, Civitas, Madrid, 2010,p. 124.
- Di I Martino, Vittorio. 2004. El teletrabajo en América Latina y el Caribe.
- Finkelievich, S (1988)Teletrabajo: previsiones, fantasías y realidades. En <http://enredando.com/enredantes.htm> Ginebra. Fuente: www.idrc.ca (Consultado el: 26-10-2017)
- Gala Durán,Carolina."Teletrabajo y sistema de Seguridad Social en Relaciones Laborales",No15-16.2001.p115-140.
- González, María del Carmen, & Tarragó Montalvo, Consuelo. (2008). Capacitación para el cambio. ACIMED, 17(4) Recuperado en 31 de octubre de 2017, de http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S102494352008000400002&lng=es&tlng=es.
- Gray, N., Hodson, N. y Gordon,"El teletrabajo". Colección Forum, Universidad-Empresa. Madrid.1995. 431
- Hunter, E.M.; Perry, S.J.; Carlson, D.S.; Smith, S.A. (2010) "Linking team resources to work–family enrichment and satisfaction", *Journal of Vocational Behavior*, Vol. 77, núm. 2, p. 304-312.
- López,J.(2005).Motivación laboral y gestión de recursos humanos en al teoría Federick Herzberg.Gestión en el Tercer Milenio,págs.26-29
- Luque, P., Gómez, T. y Cruces, S. (2000). El trabajo: fenómeno psicosocial. En C. Guillen Gestoso. (Ed.) *Psicología del Trabajo para relaciones laborales*.Madrid: Mc Graw Hill.
- O.I.T. Organización Internacional del Trabajo (2003). Actividades normativas de la OIT en el ámbito de la seguridad y la salud en el trabajo: estudio detallado para la discusión con miras a la elaboración de un plan de acción sobre dichas actividades. 91ª. Conferencia Internacional del Trabajo. Suiza.
- Osio,H.Lubiza.(2010).El teletrabajo una opción en la era digital,Revista Venezolana No.5.
- Rodríguez-Oreggia, Eduardo, & Silva Ibarguren, Lautaro. (2009). Construction of a Labor Condition Index at the State Level for Mexico. *Gestión y política pública*, 18(1), 149-178. Recuperado en 02-Nov-2017.
- Saxena, S., Ansari, M. A., & Shankar, A. (1995). Work-Family Interference and Satisfaction Among Indian Women. *Pakistan Journal of Psychological Research*, Vol. 10, Nos. 1-4, 39-47.

Sparks, K., Faragher., B. y Cooper, C. L. (2001). Well-being and occupational health in the 21st century work place. *Journal of Occupational and Organizational Psychology*, 74,489-509.

Solis. (2015). *Teletrabajo: Condiciones que impactan de manera positiva y negativa el balance trabajo - familia*. Obtenido de Universidad del Valparaíso Chile:
http://faceauv.cl/cladea2015/images/stories/track7/CLADEA_2015_submission_3.pdf

Seabury, S. A., Lakdawalla, D. y Reville, R. T. (2005). The economics of integrating injury and illness prevention and health promotion programs. Working Paper. RAND, Institute for Civil Justice.

Thibault, A. (2001). *El Teletrabajo en España: Perspectiva Jurídico Laboral*. España: Ministerio de Asuntos Sociales.

Thibault, A. J. (2011). La retribución del personal laboral del sector público cuatro años después del Estatuto Básico del Empleado Público. *Revista del Ministerio del Trabajo e Inmigración*, No. 93, 211-230.

Ugarte, C. J. (2004). *Derecho del Trabajo, Flexibilidad Laboral y Análisis Económico del Derecho*. Santiago de Chile: LexisNexis.

BIOGRAFIA

Ana Isabel Ordoñez Parada es Doctora en Administración Pública por el Instituto Internacional del Derecho y del Estado. Profesora asociada en la Universidad Autónoma de Chihuahua, Facultad de Contaduría y Administración, adscrita a la Cátedra de Tecnologías y Manejo de la Información, Metodología de la Investigación. Se puede contactar en la Facultad de Contaduría y Administración, Universidad Autónoma de Chihuahua, Circuito Universitario 1, Campus II UACH, 31125 Chihuahua, Chih., México.

Luis Raúl Sánchez Acosta es Maestro en Finanzas por la Facultad de Contaduría y Administración de la Universidad Autónoma de Chihuahua. Director de la Facultad de Contaduría y Administración de la Universidad Autónoma de Chihuahua. Se puede contactar en la Facultad de Contaduría y Administración, Universidad Autónoma de Chihuahua, Circuito Universitario 1, Campus II UACH, 31125 Chihuahua, Chih., México.

Carmen Romelia Flores Morales es Doctora en Administración por la Facultad de Contaduría y Administración de la Universidad Autónoma de Chihuahua. Secretaria de Planeación en la Facultad de Contaduría y Administración de la Universidad Autónoma de Chihuahua. Se puede contactar en la Facultad de Contaduría y Administración, de Universidad Autónoma de Chihuahua, Circuito Universitario 1, Campus II UACH, 31125 Chihuahua, Chih., México.

Irma Leticia Chávez Márquez es Doctora en Administración Pública por el Instituto Internacional del Derecho y del Estado. Y doctora en Administración por la Facultad de Contaduría y Administración de la Universidad Autónoma de Chihuahua. Profesora asociada en la Universidad Autónoma de Chihuahua, Facultad de Contaduría y Administración, adscrita a la Cátedra de Metodología de la Investigación. Se puede contactar en la Facultad de Contaduría y Administración, Universidad Autónoma de Chihuahua, Circuito Universitario 1, Campus II UACH, 31125 Chihuahua, Chih., México.

CAPACIDADES OPERATIVAS Y VENTAJA COMPETITIVA EN EMPRESAS MANUFACTURERAS DE LA REGIÓN CENTRO DEL ESTADO DE COAHUILA

Nidia Estela Hernández Castro, Universidad Autónoma de Coahuila

María del Rosario Demuner Flores, Universidad Autónoma del Estado de México

Zóchitl Araiza Garza, Universidad Autónoma de Coahuila

Liza Mariana Villarreal Moreno, Universidad Autónoma de Coahuila

RESUMEN

Las capacidades operativas se refieren a la utilización de la infraestructura y a las actividades necesarias para producir y otorgar bienes o servicios a sus clientes, y, si el propósito es exceder el desempeño de los competidores, es necesario que las empresas desarrollen adecuadamente sus capacidades que les permita mantener una ventaja competitiva sostenible. Por lo anterior, este trabajo se enfoca en predecir cuales de las siguientes capacidades operativas (mejora, cooperación, respuesta, innovación, personalización y reconfiguración) reconocidas como estratégicas, explican la ventaja competitiva percibida en empresas manufactureras de la región centro del estado de Coahuila. La metodología empleada fue de enfoque cuantitativo y consistió en la aplicación de un cuestionario estructurado a 270 empleados de nivel medio/superior a finales del año 2015; la información se analizó a través del software estadístico SPSS. Los resultados muestran que la ventaja competitiva queda explicada en un 31.1% solamente por las capacidades de respuesta y de innovación.

PALABRAS CLAVE: Capacidad de Mejora, Capacidad de Respuesta, Capacidad de Innovación, Ventaja Competitiva.

OPERATIONAL CAPABILITIES AND COMPETITIVE ADVANTAGE IN MANUFACTURING COMPANIES OF THE COAHUILA STATE CENTER REGION

ABSTRACT

Operational capabilities refer to the use of infrastructure and the activities necessary to produce and provide goods or services to its customers, and, if the purpose is to exceed the performance of competitors, it is necessary for companies to adequately develop their capabilities that allow them to maintain a sustainable competitive advantage. Therefore, this work focuses on predicting which of the following operational capabilities (improvement, cooperation, response, innovation, customization and reconfiguration) recognized as strategic, explain the perceived competitive advantage in manufacturing companies in the central region of the state of Coahuila. The methodology used was a quantitative approach and consisted in the application of a structured questionnaire to 270 employees at the middle/upper level at the end of 2015; the information was analyzed through the statistical software SPSS. The results show that the competitive advantage is explained in a 31.1% only by the response and innovation capabilities.

JEL: O32

KEYWORDS: Capacity for Improvement, Response Capacity, Capacity for Innovation, Competitive Advantage

INTRODUCCIÓN

Obtener y mantener una ventaja competitiva depende de qué tan bien se puedan combinar las capacidades distintivas, algunas son más importantes que otras y resulta más difícil de imitar la acertada combinación de ellas que individualmente una a una. El desafío entonces consiste en encontrar, controlar y conjugar las capacidades críticas de tal forma que la competencia no tenga posibilidades de imitar, así se podrá crear ventajas competitivas sostenibles (Baghai, Coley, & White 1999). Esta investigación tiene como objetivo identificar cuales son las capacidades operativas que explican la ventaja competitiva en las empresas de la región centro del estado de Coahuila. El trabajo se ha organizado en cuatro apartados: primeramente se presenta una revisión de literatura relacionada con el tema de las capacidades operativas y ventaja competitiva. En un segundo apartado se describe el método utilizado; en una siguiente sección se incluyen los resultados derivados de la información recabada y finalmente, se presentan las conclusiones de este trabajo y las líneas futuras de investigación.

REVISIÓN LITERARIA

El término de capacidades (Helfat y Peteraf, 2003), las definen como habilidades organizacionales que permiten desarrollar un grupo coordinado de tareas, utilizando los recursos disponibles, a fin de lograr un resultado final determinado. El concepto más claro de capacidades es la propuesto por Teece (2007), quien las define como aquellas capacidades de la empresa difíciles de imitar, necesarias para adaptarse a clientes cambiantes y a las nuevas oportunidades tecnológicas y a configurar el entorno en el que opera, desarrollar nuevos productos y procesos y diseñar e implementar modelos de negocio factibles. 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). Una capacidad puede visualizarse como la fortaleza o eficiencia del grupo de rutinas interrelacionadas para llevar a cabo determinadas tareas (Peng, Schroeder y Shah, 2008). Luego, para una organización resultan relevantes no solamente los recursos que tiene sino lo que hace con ellos (Ndofor, Sirmon, y He, 2011), y es por esto que debe precisarse que la creación de capacidades no es el resultado únicamente de unir o agregar varios recursos (Grant, 1991).

Contar con las mejores capacidades, permite que las empresas elijan e implementen de forma eficiente las actividades necesarias para producir y entregar bienes o servicios a sus clientes (Collis, 1994). Sin embargo, debe señalarse que si el propósito es exceder el desempeño de los competidores, es necesario que las capacidades se desplieguen de forma superior (Day, 1994). Las capacidades son cruciales para comprender y explicar la variabilidad en el desempeño (Flynn, Wu, y Melnyk, 2010). La taxonomía de capacidades operativas desarrollada por Flynn *et al.* (2010) y Wu *et al.* (2010) incluyen: las capacidades de mejora, de cooperación, de respuesta, de innovación, de personalización y de reconfiguración. La capacidad de mejora representa al grupo de habilidades, procesos y rutinas que permiten mejorar radicalmente los procesos existentes de operaciones o para crear e implementar nuevos y únicos procesos de operaciones para atender a los clientes existentes (Flynn *et al.*, 2010 y Wu *et al.* 2010). La capacidad de cooperación son las habilidades, procesos y rutinas para la creación de relaciones sanas y estables con personas de diferentes áreas internas; los empleados se involucran en el proceso de desarrollo de nuevos productos y en el proceso de modificación de los productos actuales, por lo que es frecuente el uso de equipos conformados por individuos de distintas áreas (Phan, Abdallah y Matsui, 2011). La capacidad de respuesta se refiere a la capacidad de ajustar rápidamente los procesos de fabricación para hacer frente a los cambios en los requisitos de producción. Estudios anteriores han demostrado que la capacidad de respuesta al cliente es un determinante importante de la ventaja competitiva (Stalk y Hout, 1990) y está influenciada por las relaciones con los proveedores (Handfield y Bechtel, 2002). La capacidad de innovación la definen como el conjunto de habilidades, procesos y rutinas para mejorar radicalmente sus procesos existentes de operaciones o para crear e implementar nuevos y únicos procesos de operaciones Flynn *et al.* (2010) y Wu *et al.* (2010). La capacidad de personalización se refiere a la producción rápida y variedad de bienes y

servicios que cubran las necesidades específicas de los clientes, a la par de mejorar la calidad, y mantener altos volúmenes de producción sin modificar los niveles de precios (Ahmad, Schroeder, y Mallick, 2010). La capacidad de reconfiguración son las habilidades, procesos y rutinas para llevar a cabo las transformaciones necesarias, a fin de restablecer el ajuste o reconfiguración entre la estrategia operativa y el ambiente del mercado Flynn et al. (2010). Por otro lado, la ventaja competitiva se refiere a todos aquellos elementos que se poseen y permiten establecer diferencias con otros entes y a la vez permiten producir mejoras o superioridades de uno con relación al otro. De esta manera, desde la visión de un cliente, será apreciada la ventaja competitiva cuando al adquirir un bien o servicio de una empresa en vez de otra, le permiten obtener mejor calidad, menor costo, fácil ubicación, entre otros (Kraaijenbrink et al., 2010).

METODOLOGÍA

La estrategia metodológica se basó en un estudio cuantitativo, empírico y de sección transversal, para lo cual se utilizó el método de encuesta, aplicada en el año 2015 mediante un cuestionario estructurado de 26 ítems para las capacidades operativas y 5 ítems para la ventaja competitiva, se administró a 270 empleados de nivel mando medio y superior en cinco grandes empresas manufactureras de la región centro del estado de Coahuila. El muestreo fue de tipo no probabilístico selectivo, ya que la intención fue contar con casos que pudieran ser representativos de la población de estudio (Rojas, 2010), el perfil de participantes incluyó gerentes, supervisores, analistas, ingenieros y técnicos del contexto antes descrito. Los indicadores se midieron con una escala de Likert de 5 puntos, en donde 1 es totalmente en desacuerdo, 2 indica en desacuerdo, 3 es ni de acuerdo ni en desacuerdo, 4 es de acuerdo y 5 totalmente de acuerdo. Los datos se estimaron con apoyo del software estadístico SPSS Ver 21.

RESULTADOS

A continuación se presentan los análisis estadísticos, primeramente se presenta una tabla descriptiva para conocer el nivel de desarrollo de las capacidades operativas así como las correlaciones entre las capacidades operativas y la ventaja competitiva. Para validar el nivel de predicción de las capacidades operativas a la ventaja competitiva se presenta una regresión lineal. El instrumento fue completado por 270 empleados. La confiabilidad del instrumento de 26 ítems fue determinada mediante el cálculo del coeficiente de *Cronbach Alpha*, obteniéndose un coeficiente de 0.827. Los participantes del estudio fueron mayormente hombres con un 74.4% de la muestra. El 62.6% de los participantes contaban con estudios de licenciatura. La Tabla 1 muestra los estadísticos descriptivos del nivel de desarrollo de las capacidades operativas, estos datos indican niveles muy similares, sin embargo, se aprecia que la capacidad de Reconfiguración (3.81) es el valor mas bajo. La capacidad de Personalización (4.03) y la capacidad de Mejora (4.00), son las medias más altas. Con estos resultados se identificó que las empresas cuentan con habilidades, procesos y rutinas para satisfacer las necesidades de los clientes, así como con habilidades para incrementar la eficiencia y productividad de los recursos existentes. Por otro lado en cuanto a la capacidad de Reconfiguración, tal parece que falta un poco ajustar la estrategia de operaciones con el entorno del mercado.

Tabla 1: Estadísticas Descriptivas del Desarrollo de las Capacidades Operativas

Capacidades Operativas	N	Media	Desviación Estándar
Mejora	270	4.00	0.59
Cooperación	270	3.92	0.69
Respuesta	270	3.99	0.66
Innovación	270	3.94	0.74
Personalización	270	4.03	0.60
Reconfiguración	270	3.81	0.71

En esta Tabla se aprecia que las dos capacidades más desarrolladas en las empresas fueron: la capacidad operativa de personalización (4.03) y la capacidad operativa de mejora (4.00); por otro lado, la capacidad operativa de reconfiguración es la menos desarrollada (3.81).

Se calculó una correlación de *Pearson* para describir la fortaleza y dirección de las capacidades operativas con la ventaja competitiva. Las seis capacidades operativas reflejan relaciones lineales positivas al ser contrastadas con la ventaja competitiva (Tabla 2). Las correlaciones de mayor fortaleza fueron la capacidad de Respuesta (0.482) y la capacidad de Innovación (0.440). Estos resultados sugieren que a mayor capacidad de Respuesta y mayor capacidad de Innovación, mayor será la Ventaja competitiva.

Tabla 2: Correlación de *Pearson* Entre las Capacidades Operativas y Ventaja Competitiva (n=270)

	Mejora	Cooperación	Respuesta	Innovación	Personalización	Reconfiguración
Ventaja competitiva	0.335**	0.131**	0.482**	0.440**	0.312**	0.295**

** $p < 0.01$. La correlación es significativa al nivel 0.01 (bilateral). La tabla presenta los valores de correlación de *Pearson* entre las Capacidades Operativas y Ventaja Competitiva. Se aprecia que la correlación más fuerte se da en la capacidad de Respuesta y la capacidad de Innovación.

Por otro lado, se realizó una regresión lineal para determinar el nivel de predicción de las capacidades operativas para la ventaja competitiva. Los resultados de la regresión lineal entre las capacidades operativas explican el 31.1% de la varianza de la ventaja competitiva ($R^2=0.311$, $p < 0.000$). Las capacidades que más contribuyen a explicar la ventaja competitiva son la capacidad de Respuesta y la capacidad de Innovación con un beta de 0.414 y 0.286 respectivamente. Las restantes cuatro capacidades operativas no contribuyen significativamente a explicar la ventaja competitiva.

Tabla 3: Coeficientes de las Capacidades Operativas.

	Coeficientes No Estandarizados		Coeficientes Estandarizados	T	Sig.
	B	Std. Error	Beta		
Mejora	0.161	0.079	0.132	2.030	0.043
Cooperación	-0.123	0.065	-0.118	-1.884	0.061
Respuesta	0.414	0.082	0.381	5.071	0.000
Innovación	0.286	0.063	0.292	4.545	0.000
Personalización	-0.033	0.078	-0.028	-0.427	0.670
Reconfiguración	-0.071	0.073	-0.070	-0.974	0.331

Esta Tabla muestra el resultado del análisis de regresión lineal entre las capacidades operativas y la ventaja competitiva como variable dependiente. La capacidad de Respuesta y la capacidad de Innovación obtuvieron el valor beta más alto con valores significativos $p < 0.000$.

CONCLUSIONES

Los análisis descriptivos identificaron un buen nivel de desarrollo en las seis capacidades operativas; esto lo demuestra el análisis de las medias donde las valoraciones mas altas las obtuvieron las capacidades de personalización con 4.03 y de mejora con 4.00, seguidas por poca diferencia, por la de respuesta con 3.99, de innovación con 3.94, de cooperación con 3.92 y finalmente con la menor valoración, la capacidad de reconfiguración con 3.81. Estos resultados tienen sustento con la literatura, la cual indica que al identificar e integrar estas capacidades la empresa obtiene una fuente potencial de ventaja competitiva (Peng, Schroeder y Shah, 2008; Wu, Melnyk y Flynn, 2010). Por otro lado, aplicando la correlación de *Pearson* para identificar las correlaciones de las capacidades operativas con la ventaja competitiva, se detectó que todas presentan una relación positiva y significativa, sobresaliendo de mayor fortaleza la capacidad de Respuesta y la capacidad de Innovación. La capacidad de respuesta y la capacidad de innovación son vistas como dos pilares que explican la ventaja competitiva. Se recomienda para futuras investigaciones complementar el estudio con dimensiones exógenas como factores demográficos que den forma a la ventaja competitiva.

REFERENCIAS

Ahmad, S., Schroeder, R. G., y Mallick, D. N. (2010). The relationship among modularity, functional

coordination, and mass customization. Implications for competitiveness. *European Journal of Innovation Management*, 13 (1), 46-61.

Baghai, Mehrdad A.; Coley, Stephen C.; White, David. Turning capabilities into advantages. *The McKinsey Quarterly*, 1999 Number 1, pp. 100–109

Collis, D. J. (1994). Research Note: How valuable are organizational capabilities? *Strategic Management Journal*, 15 (Supplement: Trustworthiness as a Source of Competitive Advantage), 143-152.

Dávila, J. C. (2010). The creation of organizational capabilities: evidence from a multinational company. *Management Research: The Journal of the Iberoamerican Academy of Management*, 8 (3), 183-202.

Day, G. S. (1994). The capabilities of Market-Driven Organizations. *The Journal of Marketing*, 58 (4), 37-52.

Flynn, B. B., Wu, S. J., y Melnyk, S. (2010). Operational capabilities: Hidden in plain view. *Business Horizons*, 53 (3), 247-256.

Grant, R. (1991). A resource based theory of competitive advantage: Implications for strategy formulation, *California Management Review*, 33(3). pp. 114-135.

Helfat, C. E., y Peteraf, M. A. (2003). The dynamic resource-based view: Capability Lifecycles. *Strategic Management Journal*, 24 (10), 997-1010.

Handfield, R. B., y Bechtel, C. (2002). The role of trust and relationship structure in improving supply chain responsiveness. *Industrial Marketing Management*, 31(4), 367–382.

Kraaijenbrink, J., Spender, J. C. y Groen, A. J. (2010). “The Resource-Based View: A Review and Assessment of Its Critiques”, *Journal of Management*, vol. 36, núm. 1, pp. 349-372.

Ndofor, H. A., Sirmon, D. G., y He, X. (2011). Firm resources, competitive actions and performance: investigating a mediated model with evidence from the in-vitro diagnostics industry. *Strategic Management Journal*, 32 (6), 640-657.

Phan, A. C., Abdallah, A. B., y Matsui, Y. (2011). Quality management practices and competitive performance: Empirical evidence from Japanese manufacturing companies. *Int. J. Production Economics*, 133, 518-529.

Peng, D. X., Schroeder, R. G., y Shah, R. (2008). Linking routines to operations capabilities: A new perspective. *Journal of Operations Management*, 26 (6), 730-748.

Rojas Soriano, R. (2010). *Guía para realizar investigaciones sociales*. México: Plaza y Valdés.
Samson, D., y Terziovski, M. (1999). The relationship between total quality management practices and operational performance. *Journal of Operations Management*, 17, 393-409.

Teece, D. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance, *Strategic Management Journal*, 28, 1319-1350.

Wu, S. J., Melnyk, S. A., y Flynn, B. B. (2010). Operational Capabilities: The Secret Ingredient. *Decision Sciences*, 41 (4), 721-754.

NUEVO ESQUEMA DE FACTURACIÓN ELECTRÓNICA EN MÉXICO

Adriana Guadalupe Chávez Macías, Universidad Autónoma de Coahuila-México

Maricela Carolina Peña Cárdenas, Universidad Autónoma de Coahuila-México

Cristina del Pilar López Saldaña, Universidad Autónoma de Coahuila-México

Marlene Graciela Medina Vara, Universidad Autónoma de Coahuila-México

RESUMEN

La autoridad fiscal en México, en la búsqueda de reforzar la recaudación de impuestos, siguiendo la tendencia a nivel mundial, ha implementado una serie de medidas enfocadas en fortalecer tal actividad, las adecuaciones consisten en la incorporación de un nuevo formato para la expedición de la factura electrónica que ampare la obtención de los ingresos y pagos, en el cual se incorporan datos que facilitarán las actividades de fiscalización a los contribuyentes. Considerando los cambios que implica no solo la adaptación de los sistemas actuales, sino la forma de llenado y expedición, se otorgó un plazo de cinco meses para efectuar la transición del esquema anterior al nuevo, por lo que en próximas fechas será de carácter obligatorio su aplicación, lo que a su vez será motivo para la imposición de sanciones en caso de no cumplir en tiempo y forma. La investigación es cualitativa y se centra en el estudio y análisis de las modificaciones al esquema de facturación electrónica para su aplicación y expedición, lo cual impactará en el cumplimiento correcto y oportuno de las disposiciones fiscales, para tal efecto, se revisará la legislación fiscal aplicable, disposiciones reguladoras y demás información relacionada con el tema.

PALABRAS CLAVE: Factura Electrónica, Reforma, Nueva Versión

NEW ELECTRONIC BILLING SCHEME IN MEXICO

ABSTRACT

The fiscal authority in Mexico, in the search to reinforce the tax collection, following the trend at the global level, has implemented a series of measures focused on strengthening such activity, the adjustments consist in the incorporation of a new format for the issuance of the electronic invoice that protects the obtaining of the income and payments, in which it incorporates data that will facilitate the activities of fiscalization to the taxpayers. Considering the changes that imply not only the adaptation of the current systems, but the form of filling and dispatch, a period of five months was granted to make the transition from the previous scheme to the new one, so that in future dates will be of obligatory character Their application, which in turn will be motive for the imposition of sanctions in case of not meeting in time and form. The research is qualitative and focuses on the study and analysis of the modifications to the electronic billing scheme for its application and dispatch, which will impact on the correct and timely fulfillment of the fiscal provisions, for this purpose, revise applicable tax legislation, regulatory provisions and other information related to the subject.

KEY WORDS: Electronic Invoice, Refurbishment, New Version.

INTRODUCCIÓN

La factura electrónica fue incorporada a la legislación mexicana desde el año 2004 y con el paso del tiempo han sido modificadas las disposiciones que la regulan, tanto para fortalecer su control como para incorporar nuevos contribuyentes obligados a utilizarla, siendo el año 2014 a partir del cual la obligatoriedad de su

elaboración se generaliza para todos los regímenes fiscales aplicables a personas físicas y morales. Sin embargo, uno de los cambios que mas impacto ha causado es el correspondiente a la creación de una nueva versión, cuya entrada en vigor fue el 1 de julio del ejercicio 2017, con la cual le permite a la autoridad fiscal facilitar su labor de fiscalización, por esta reforma se ha otorgado a los contribuyentes un plazo de cinco meses para la implementación de los cambios en sus sistemas de facturación, con pleno conocimiento que de no hacerlo se harán acreedores a las sanciones específicamente señaladas para tal situación. La investigación tiene como objetivo el estudio y análisis de las modificaciones al esquema de facturación electrónica para su aplicación y expedición, lo cual impactará en el cumplimiento correcto y oportuno de las disposiciones fiscales, para tal efecto, se revisaron la legislación fiscal aplicable, disposiciones reguladoras y demás información relacionada con el tema.

REVISIÓN BIBLIOGRÁFICA

Factura Electrónica

De acuerdo con (Hernández y Serrano, 2009), la factura electrónica es aquella que utilizando un sistema electrónico transmite de forma automática las transacciones comerciales mediante el uso de las tecnologías de la información y comunicación, se genera un archivo electrónico que sustituye el documento físico en papel. Es a partir del año 2004 que se incorpora la facturación electrónica a la regulación fiscal mexicana como instrumento de comprobación fiscal de las actividades económicas que realicen los contribuyentes, el cual recibe el nombre de comprobante fiscal digital por internet (CFDI), dicho comprobante ha ido evolucionando con el paso de los años para reforzar su seguridad tanto para el contribuyente como para la autoridad (García, 2014), a su vez este documento digital debe cumplir los requisitos regulados para tal efecto, mismos que garantizaran su contenido y efectos para ambas partes (Jurado, 2011).

Nuevo esquema de facturación

A partir del 1 de julio del presente año entra en vigor el nuevo formato de la factura electrónica versión 3.3, la cual representa un gran cambio con respecto a la versión anterior 3.2, dicho cambio va enfocado a mejorar la información contenida en los comprobantes lo cual facilitará la fiscalización a las autoridades fiscales, dado que la factura electrónica es la base para la elaboración de las declaraciones de impuestos de los contribuyentes, su mejora en la expedición y vigilancia fortalecerá la recaudación fiscal. Con la actualización del Anexo 20 de la Resolución Miscelánea Fiscal (RMF 2017), el cambio en el nuevo esquema de facturación incluye la incorporación de dos conceptos más en la clasificación de los comprobantes, el de la recepción de pagos que facilitará la conciliación del pago con su factura y el comprobante de nómina, que será emitido por los pagos realizados de sueldos y salarios y asimilados a estos. Se modifican las reglas de validación, esto es que al momento de expedirla automáticamente será verificado el Registro Federal de Contribuyente (RFC) del cliente y de existir algún error en el mismo la factura será rechazada. Con la nueva versión, los registros de impuestos serán identificados tanto la base como el tipo de factor para su determinación, para la verificación de su cálculo, los cuales deberán incluir los datos del catálogo de impuestos emitido por la autoridad.

El registro de descuentos se integrará por cada concepto dentro del comprobante, es decir, se ubicará al producto o servicio en la división correspondiente incluyendo la categoría, clase y subclase. Se incorpora el complemento de la recepción de pagos, el cual consiste en un comprobante que será emitido cuando se realice el pago de una factura en parcialidades o de forma diferida, el cual podrá emitirse por cada pago recibido o de forma conjunta en el mes, si se trata de un mismo cliente. En caso de que la factura sea liquidada en el momento de la compra, no será necesario emitir el complemento de la recepción de pagos. Otra adición es la correspondiente a la solicitud al cliente del uso que le dará al comprobante, seleccionando uno del catálogo creado para tal efecto, hasta la fecha la autoridad contempla que, en caso de no dar el uso señalado en la factura, no procederá ninguna sanción o limitante en su uso. También se incluye la

confirmación de monto total de la factura, esto es que cuando la factura rebase el monto máximo de cien millones de pesos, o los tipos de cambio sean muy bajos o altos comparado con el valor de mercado, se pedirá un folio de confirmación al proveedor, el cual será incluido en la factura respectiva. Uno de los cambios que posiblemente ha retrasado más la transición al nuevo esquema es el correspondiente a la asignación de la clave del producto o servicio de acuerdo con el catálogo publicado para tal efecto, el cual está estandarizado a nivel internacional, esto es que por cada producto o servicio que sea comercializado, deberá clasificarse con el código oficial, por lo que se debe observar la actividad de cada contribuyente para seleccionar el que corresponda de manera individual. Se incorporan los catálogos para estandarizar el lugar de expedición tales como el estado o municipio. Los cambios mencionados deberán ser aplicados a más tardar para el día último del mes de noviembre de 2017, ya que las facturas emitidas a partir del 1 de diciembre únicamente serán válidas con la nueva versión 3.3. siendo obligatoria su utilización, de no ser así, estará imposibilitado el contribuyente a expedir facturas que amparen sus actividades, pudiendo ser afectado en su economía al no recibir pagos en tanto no realice la actualización correspondiente en su sistema electrónico, así como también la posibilidad de ser sancionado por las autoridades al no cumplir correctamente en materia de expedición de comprobantes fiscales.

METODOLOGÍA

La investigación es de tipo cualitativa y se centra en el estudio y análisis de las modificaciones al esquema de facturación electrónica el cual consiste en la migración de la versión 3.2 a la versión 3.3 para su correcta implementación y expedición, lo cual impactará en el cumplimiento oportuno de las disposiciones fiscales, para tal efecto, se revisó y analizó la legislación fiscal aplicable, disposiciones reguladoras y demás información tales como artículos publicados en revistas relacionados con el tema, dicho análisis permitió determinar el impacto que dichos cambios tendrá en los contribuyentes en la forma de expedición de comprobantes fiscales.

RESULTADOS

Del estudio y análisis de las disposiciones fiscales aplicables y demás información relacionada, se puede determinar que el impacto de la modificación al esquema actual de facturación ha sido principalmente la gran cantidad de adecuaciones que se realizaron de la versión 3.2 a la versión 3.3, haciendo énfasis en dos puntos centrales, la clasificación de los productos y servicios comercializados y la incorporación del complemento de la recepción de pagos. La clasificación de los productos o servicios se ha dificultado por la gran cantidad de dudas al elegir el código correcto, dentro de los aproximadamente 18,000 productos, y a su vez, que el catálogo a utilizar no fue elaborado por el Servicio de Administración Tributaria, sino que se adoptó el Catálogo de Productos y Servicios Estándar de las Naciones Unidas el cual en su versión en español esta redactado en español castellano y no en español mexicano, por lo que la localización de artículos ha sido más complicado (Ramírez, 2017).

Por lo que respecta al complemento de la recepción de pagos, se incorpora como requisito la expedición de un comprobante que ampare cada pago recibido en las operaciones realizadas en parcialidades o pagos diferidos, de tal forma que el control que actualmente se utilice de manera interna de la cobranza a clientes, deberá ser complementado con un comprobante fiscal que indicará la fecha, la forma de pago y a que documento corresponde dicho pago o abono, así como el saldo pendiente, únicamente quedan eximidos de expedir este complemento por aquellas operaciones que sean liquidadas en el momento de la transacción, este requisito obligará a los contribuyentes a monitorear de manera estricta la obtención del comprobante que ampare el pago de los productos o servicios, ya que de no tenerlo dentro del plazo de 10 días hábiles posteriores al pago, la operación no será deducible. Los resultados obtenidos nos indican la necesidad de poner especial atención y cuidado en la expedición de los comprobantes fiscales, que le asegure al contribuyente el correcto cumplimiento con sus obligaciones al respecto.

CONCLUSIONES

Con la finalidad de mejorar la recaudación fiscal, las autoridades han implementado medidas que le apoyen en su objetivo, y las tecnologías de la información han sido su mejor aliado al respecto, con la reciente modificación al esquema de facturación electrónica, es de vital importancia que los contribuyentes tengan cuidado particular en la aplicación de todos los requisitos que fueron adicionados para su oportuno y correcto cumplimiento, ya que de no hacerlo, pueden verse perjudicados con sanciones por su expedición errónea o con la limitación de la deducibilidad por la falta de verificación de aquellos comprobantes que reciba. Por lo anterior se recomienda la familiarización con las tecnologías de la información y la verificación del sistema de facturación para asegurarse que se cumplirá en tiempo y forma con las nuevas disposiciones fiscales.

REFERENCIAS

Anexo 20, Resolución Miscelánea Fiscal, 2017, Secretaría de Hacienda y Crédito Público. México. Código Fiscal de la Federación, 2017. México.

García Salinas, Paulina Y. (2014). *La Factura electrónica como medida para evitar la evasión de impuestos*. Universidad Autónoma de Querétaro, Repositorio Institucional. <http://hdl.handle.net/123456789/1010>.

Hernández Ortega, B. y Serrano Cinca, C. (2009). *¿Qué induce a las empresas a adoptar facturación electrónica? Efecto de las percepciones y del entorno competitivo*. (Spanish). Universia Business Review, Científicas de Red de Revistas Científicas de América Latina y el Caribe, España y Portugal (Redalyc.org).

Jurado Alberto (2011), *Valor Probatorio del Documento Electrónico*. Revista Cuestiones Jurídicas, Universidad Rafael Urdaneta de Venezuela, Vol. V No. 1 pág. 51 - 68.

Ley del Impuesto Sobre la Renta, 2017. México.

Ramírez, Eréndira. (2017). *¿De dónde viene el catalogo para el llenado de CFDI 3.3.?. IDC Online*. México.

BIOGRAFIA

Adriana Guadalupe Chávez Macías, Maestra en Impuestos, Docente de Tiempo Completo de la Facultad de Contaduría y Administración – Unidad Norte, de la Universidad Autónoma de Coahuila, en México.

Maricela Carolina Peña Cárdenas, Maestra en Administración de Empresas, Catedrático Investigador en la Facultad de Contaduría y Administración – Unidad Norte de la Universidad Autónoma de Coahuila, en México.

Cristina del Pilar López Saldaña, Maestra en Administración de Empresas, Docente de Tiempo Completo de la Facultad de Contaduría y Administración – Unidad Norte de la Universidad Autónoma de Coahuila, en México.

Marlene Graciela, estudiante del octavo semestre de la Licenciatura en Contaduría y colabora en los proyectos de investigación desarrollados en la Facultad de Contaduría y Administración – Unidad Norte de la Universidad Autónoma de Coahuila en México.

IMPACTO DE LOS FUTUROS DE ACCIONES SOBRE EL MERCADO ACCIONARIO COLOMBIANO (RESULTADOS PRELIMINARES)

Julian Alberto Rangel Enciso, Universidad del Tolima - Colombia
Oscar Hernán López Montoya, Universidad del Tolima - Colombia
Enrique Ramírez Ramírez, Universidad del Tolima - Colombia

RESUMEN

Este documento presenta los resultados preliminares de una investigación mediante la cual se busca determinar el impacto sobre la volatilidad del mercado accionario Colombiano debido a la negociación de futuros sobre el índice accionario COLCAP. La modelación de las rentabilidades diarias del índice bursátil entre los años de 2008 y 2016 se realizó con base en modelos econométricos simétricos y asimétricos de volatilidad condicional del tipo GARCH. Los resultados muestran que desde el punto de vista estadístico, la introducción de los futuros sobre el índice bursátil COLCAP no ha afectado significativamente la volatilidad del mercado accionario Colombiano. Con la culminación de la investigación, se esperan determinar otros efectos como son el cambio en la estructura de la volatilidad y el impacto en los efectos de apalancamiento de los precios de las acciones del mercado Colombiano.

PALABRAS CLAVES: Mercados de Capitales, Derivados Financieros, Futuros, Volatilidad, GARCH

IMPACT OF THE STOCK FUTURES ON THE COLOMBIAN STOCK MARKET (PRELIMINARY RESULTS)

ABSTRACT

This document presents the preliminary results of a research that seeks to determine the impact on the volatility of the Colombian stock market due to the introduction of the COLCAP index futures. The modeling of the daily returns of the stock index between the years of 2008 and 2016 was based on econometric symmetric and asymmetric models of conditional-volatility of the GARCH type. The results show that from the statistical point of view, the introduction of the COLCAP index futures haven't significantly affected the volatility of the Colombian stock market. With the culmination of the investigation, it is expected to determine other effects such as the change in the volatility structure and the impact of the leverage effects on the share prices in the Colombian stock market.

JEL: G10, G15

KEYWORDS: Capital Markets, Financial Derivatives, Futures, Volatility, GARCH

INTRODUCCIÓN

El desarrollo del mercado de capitales es sin duda un factor fundamental para el progreso económico de un país al facilitar el traspaso en forma eficiente y segura de los excedentes de recursos de ahorradores e inversionistas a empresas e individuos que los requieren para adelantar proyectos productivos que incrementan la disponibilidad de bienes y servicios que requiere una sociedad.

En los mercados de capitales más desarrollados, el mercado de derivados financieros es un componente primordial que permite la protección contra algunos de los más importantes riesgos que deben soportar los diversos actores que participan en los procesos productivos de una economía. En un mercado de derivados, riesgos como el de mercado, tasa de cambio y tasa de interés, entre muchos otros, pueden ser manejados y/o transferidos en forma eficiente entre sus diversos actores. El mercado de derivados a su vez afecta el funcionamiento y eficiencia del mercado del activo subyacente correspondiente (mercado spot). En condiciones normales de operación, estos efectos son generalmente favorables permitiendo el propio crecimiento y desarrollo del mercado spot. Sin embargo, en determinadas situaciones, los efectos no son positivos. Por ejemplo, en algunos casos la entrada en operación del mercado de derivados de acciones en algunos países ha representado un incremento considerable en los niveles de volatilidad del mercado accionario del país. Por supuesto, esta situación es motivo de preocupación y alarma entre los inversionistas del mercado de capitales que buscan entender mejor no solamente la interacción entre los mercados de derivados y los mercados spot de los activos subyacentes correspondientes, sino también los riesgos involucrados en la operación de estos mercados y la manera de hacer un adecuado manejo y diversificación de un portafolio de inversión. El tema es de tal relevancia que, según algunos analistas, la poca transparencia del mercado derivados fue una de las causas que contribuyó a la crisis financiera internacional de los años 2008 y 2009 (Bodie et al., 2013).

Específicamente, esta investigación busca explicar como el mercado de futuros de acciones afecta la volatilidad del mercado spot de acciones en Colombia. Como mercados de estudio y modelación se tomarán los mercados de acciones y de futuros de acciones de la Bolsa de Valores de Colombia –BVC. Es de anotar que en la BVC funcionan los únicos mercados autorizados para la negociación de acciones y de futuros de acciones en el país.

REVISIÓN LITERARIA

A nivel internacional, son numerosos los estudios que se han realizado sobre el impacto del mercado de futuros de acciones sobre la volatilidad del mercado spot de acciones. Por ejemplo, en un artículo aparecido en el volumen 20 del Journal of Futures Markets del año 2000 de Gules, H. y Mayhew S. titulado “Stock index futures trading and volatility in international markets”, se puede leer lo siguiente: “Our results indicated that in the largest two markets, the United States and Japan, volatility may have increased after the listing of stock index futures. On the other hand, volatility decreased or stayed roughly the same in most of the other countries in our sample, with statistically significant decreases in many cases”. Más recientemente, en países en desarrollo como Turquía, India, China y otros, la preocupación por el tema se ve reflejada en las numerosas investigaciones del efecto sobre la volatilidad del mercado spot del activo subyacente una vez comienza la negociación de los futuros sobre los índices bursátiles que miden el comportamiento del mercado de acciones. Por ejemplo, Caglayan (2011) sostiene en una investigación sobre el mercado Turco que después de la introducción de los futuros se presentó una disminución en la volatilidad, producto de la estrecha relación entre estos dos mercados y la consiguiente posibilidad de transferencia de la volatilidad entre ellos. También numerosos investigadores Indios como Shenbagaraman (2004), Gupta (2003) y otros, han explorado el tema con resultados mixtos sobre el impacto en la volatilidad en el mercado spot por la operación del mercado de futuros. A pesar de las numerosas investigaciones internacionales, las investigaciones en Colombia sobre este tema son particularmente escasas, debido probablemente a lo joven del mercado de derivados en el país. Sin embargo, las implicaciones sobre el manejo de portafolios de inversión y la actualización en materia regulatoria hacen imprescindible ahondar más en el tema en la búsqueda de mercados de capitales cada vez más eficientes y desarrollados.

METODOLOGÍA

En 1982 Engle propuso los modelos ARCH con el fin de analizar procesos estocásticos con varianza condicionada no constante dependiente de los cuadrados de los errores de períodos anteriores. En 1986,

Bollerslev propone los modelos GARCH en los cuales la varianza condicionada no constante depende no solo de los cuadrados de los errores sino también de las varianzas o volatilidades de períodos anteriores. El modelo GARCH(p,q) básico establece que la varianza de los residuales de una variable aleatoria R_t de la forma:

$$R_t = x_t' b + \varepsilon_t \quad \text{con errores} \quad \varepsilon_t \sim N(0, \sigma_t^2) \quad (1)$$

se puede modelar de la siguiente manera:

$$\sigma_t^2 = \omega + \sum_{i=1}^q \alpha_i \varepsilon_{t-i}^2 + \sum_{j=1}^p \beta_j \sigma_{t-j}^2 \quad (2)$$

En la ecuación (1), $x_t' b$ es un conjunto de variables exógenas y el término de error tiene una distribución normal con una media de cero y una varianza condicionada σ_t^2 . En la ecuación (2), ω es una constante, ε_{t-i}^2 se conoce como el término ARCH y σ_{t-j}^2 se conoce como el término GARCH. Además, p es el orden del proceso GARCH y q es el orden del proceso ARCH. Adicionalmente, $\omega \geq 0$, $\alpha_i \geq 0$, $\beta_j \geq 0$ y $\sum_{i=1}^q \alpha_i + \sum_{j=1}^p \beta_j \leq 1$ para asegurar la estacionariedad.

Los coeficientes α_i , muestran el impacto de las noticias nuevas en la volatilidad, mientras que los coeficientes β_j muestran el impacto o persistencia en la volatilidad de las noticias más antiguas. Ver Bologna and Cavallo (2002) para más detalle. Los modelos GARCH permiten analizar series de tiempo, especialmente de tipo financiero, debido a que las mismas normalmente presentan volatilidades no constantes. Precisamente, esta característica es la que permite medir si la volatilidad del mercado accionario colombiano cambió, desde el punto de vista estadístico, con la entrada en funcionamiento del mercado de futuros sobre el índice accionario COLCAP. Para determinar si la volatilidad del mercado accionario (mercado spot) cambia después de la entrada del mercado de futuros sobre el índice accionario (mercado de derivados), la mayoría de estudios añaden una variable dummy a la ecuación de volatilidad. En este caso, la ecuación de varianza del modelo GARCH(p,q) básico tendrá la forma:

$$\sigma_t^2 = \omega + \sum_{i=1}^q \alpha_i \varepsilon_{t-i}^2 + \sum_{j=1}^p \beta_j \sigma_{t-j}^2 + \rho D \quad (3)$$

Donde D es la variable dummy que toma el valor de 0 antes de la entrada en operación del mercado de futuros del índice bursátil y 1 después de esta fecha. Si la estimación muestra que el coeficiente ρ es significativamente mayor que 0, entonces es posible concluir que la volatilidad del mercado spot de acciones se incrementó con la entrada en funcionamiento del mercado de futuros sobre el índice accionario. Por el contrario, si el coeficiente ρ es significativamente menor que 0, la volatilidad disminuyó y si el coeficiente es 0 desde el punto de vista estadístico, la volatilidad permanece inalterada.

Después de los modelos GARCH, otros modelos han sido desarrollados con el fin de manejar diferentes características de las series de tiempo, como por ejemplo los modelos GARCH en media o GARCH-M propuesto por Engle, Lilien and Robins en 1987, GARCH exponencial o EGARCH propuesto por Nelson en 1991, ARCH de potencia asimétrica o APARCH desarrollado por Ding, Granger and Engle en 1993, Glosten-Jagannathan-Runkle GARCH o GJR-GARCH desarrollado por sus autores en 1993, entre otros. Es de anotar que el modelo GARCH básico no distingue entre noticias positivas y negativas, es decir el modelo considera la volatilidad como una variable simétrica, por lo que no logra captar el efecto de apalancamiento (leverage effect), es decir, el hecho que una disminución en precios o noticia negativa normalmente produce más fluctuaciones en los precios de las acciones que un aumento de precios o noticia positiva. Los modelos EGARCH, APARCH y GJR-GARCH permiten representar la volatilidad asimétrica, lo cual es más cercano a la realidad de los mercados financieros. En la Tabla 1 se presenta un resumen de

estos modelos de volatilidad condicional.

Tabla 1: Modelos de Volatilidad Condicional

Modelo	Ecuación de varianza
ARCH (1)	$\sigma_t^2 = \omega + \alpha_1 \varepsilon_{t-1}^2$
GARCH (1,1)	$\sigma_t^2 = \omega + \alpha_1 \varepsilon_{t-1}^2 + \beta_1 \sigma_{t-1}^2$
GARCH-M (1,1)	$\sigma_t^2 = \omega + \alpha_1 \varepsilon_{t-1}^2 + \beta_1 \sigma_{t-1}^2$
EGARCH (1,1)	$\ln(\sigma_t^2) = \omega + \gamma \left(\frac{\varepsilon_{t-1}}{\sigma_{t-1}} \right) + \alpha \left(\frac{ \varepsilon_{t-1} }{\sigma_{t-1}} - \left(\frac{2}{\pi} \right)^{0.5} \right) + \beta \ln(\sigma_{t-1}^2)$
GJR-GARCH (1,1)	$\sigma_t^2 = \omega + \alpha_1 \varepsilon_{t-1}^2 + \beta_1 \sigma_{t-1}^2 + \gamma D_{t-1}^- \varepsilon_{t-1}^2$
APARCH (1,1)	$\sigma_t^2 = \omega + \alpha_1 (\varepsilon_{t-1} - \gamma_1 \varepsilon_{t-1})^\delta + \beta_1 \sigma_{t-1}^\delta$

Esta tabla muestra los diferentes modelos de volatilidad condicional. El ARCH (1) modela la volatilidad condicional como una constante más un término de error al cuadrado con un rezago al período anterior. El GARCH(1,1) incluye el término GARCH correspondiente a la volatilidad condicional con un rezago al período anterior. Adicionalmente, $\omega \geq 0$, $\alpha_1 \geq 0$, $\beta_1 \geq 0$ y $\alpha_1 + \beta_1 \leq 1$ para asegurar la estacionariedad. El modelo GARCH-M(1,1) se diferencia del modelo GARCH(1,1) en que la ecuación de media para el primer modelo incluye un término que depende de la varianza condicional. El modelo EGARCH(1,1) representa una forma logarítmica. En el modelo GJR-GARCH(1,1) la variable dummy D_{t-1}^- toma el valor de 1 si ε_{t-1} es menor que 0 y toma el valor de cero en los otros casos. α_1 mide el impacto de las buenas noticias y β_1 la persistencia de la varianza condicional. En el modelo APARCH(1,1) el efecto de apalancamiento es medido por el coeficiente γ_1 . Fuente: Paper “The Impact of Stock Index Futures on the Turkish Spot Market” de Ebru Caglayan publicado en el Journal of Emerging Market Finance (2011).

Datos

Los datos de análisis corresponden al valor de cierre diario del índice bursátil COLCAP de la Bolsa de Valores de Colombia -BVC desde el 15 de Enero de 2008, fecha en la cual comenzó a calcularse, hasta el 29 de Diciembre de 2016. El COLCAP, considerado el índice más representativo del mercado accionario Colombiano, mide el comportamiento de los precios de las 20 acciones más líquidas de la BVC, donde el valor de capitalización bursátil de cada empresa, es decir el precio multiplicado por el número total de acciones, determina su nivel de ponderación. Los valores del COLCAP fueron obtenidos de la página web de la BVC www.bvc.com.co. El mercado de futuros sobre el índice accionario COLCAP comenzó operaciones en la BVC el 28 de febrero de 2011, lo cual divide el horizonte de análisis en dos periodos para efectos de determinar si la operación del mercado de futuros sobre el índice bursátil afecta la volatilidad del mercado accionario Colombiano: un primer período correspondiente a la operación del mercado accionario Colombiano antes del lanzamiento del mercado de futuros sobre el índice bursátil con 762 datos (15 de Enero del 2008 hasta el 28 Febrero de 2011) y un segundo período después del lanzamiento del mercado de futuros con 1426 datos (28 de Febrero de 2011 hasta el 29 de Diciembre de 2016), para un total de 2188 datos en todo el horizonte de análisis. Para examinar la volatilidad, las tasas de retornos diarias compuestas continuamente del índice COLCAP fueron calculadas como:

$$R_t = [\ln(\text{COLCAP}_t) - \ln(\text{COLCAP}_{t-1})] * 100 \quad (4)$$

Donde COLCAP_t representa el valor de cierre del índice accionario en el día t .

RESULTADOS

La Tabla 2 presenta los estadísticos descriptivos de las rentabilidades diarias del índice bursátil para los períodos antes y después de la entrada en operación del mercado de futuros y para todo el horizonte de análisis, de acuerdo con lo descrito anteriormente.

Tabla 2: Estadísticos Descriptivos de las Rentabilidades Diarias del Índice Accionario COLCAP

Estadístico	Período Completo (Todo el Horizonte de Análisis) (2188 Datos)	Período Antes de la Entrada del Mercado de Futuros (762 Datos)	Período Después De La Entrada Del Mercado De Futuros (1426 Datos)
Media	0.0140	0.0706	-0.0162
Desviación estándar	1.0985	1.3520	0.9344
Asimetría	-0.3523	-0.5388	-0.1124
Exceso de Curtosis (eye)	7.5677	8.0757	2.2150
Jarque-Bera test	5279.8995 p-value = 0.0000	2122.6376 p-value = 0.0000	291.3866 p-value = 0.0000
Ljung-Box Q-test (5)	39.2560 p-value = 0.0000	7.0224 p-value = 0.2190	48.6760 p-value = 0.0000
Ljung-Box Q-test ² (5)	1039.00 p-value = 0.0000	409.18 p-value = 0.0000	170.89 p-value = 0.0000

Esta tabla muestra los estadísticos descriptivos para los retornos diarios del índice COLCAP de todo el período de análisis y para antes y después de la entrada en operación del mercado de futuros. La prueba Jarque-Bera permite verificar si los datos de la muestra tienen una asimetría y una curtosis de una distribución normal. Las pruebas Ljung-Box-Pierce Q-test (5) y Ljung-Box-Pierce Q-test² (5) permiten detectar una correlación serial en los retornos y en los retornos al cuadrado hasta de (5) quinto orden. Fuente: Elaboración Propia.

Para el período antes del lanzamiento del futuro sobre el índice COLCAP, la desviación estándar de los retornos de este índice accionario es de 1.3520. Para el período posterior al lanzamiento y comienzo de la negociación del futuro sobre el índice COLCAP, la desviación estándar disminuye a 0.9344, lo cual permite concluir que la comercialización del mercado de futuros sobre el COLCAP al menos no desestabilizó el mercado accionario Colombiano.

Por otra parte, para los tres períodos la asimetría es negativa aunque cercana a cero, lo cual implica que la rentabilidad del COLCAP presenta una distribución levemente asimétrica hacia la izquierda. Adicionalmente, el exceso de curtosis -valores mayores al de la distribución normal de 3- para todo el período completo y el período antes del lanzamiento del futuro sobre el índice COLCAP, sugiere que la distribución de los retornos de este índice bursátil presenta leptocurtosis (colas pesadas).

La prueba Jarque-Bera permite verificar si los datos de la muestra tienen una asimetría y una curtosis de una distribución normal, es decir, una asimetría de cero y una curtosis de 3.0. Para todos los períodos analizados, se rechaza la hipótesis nula de normalidad teniendo en cuenta que los estadísticos (p-values) son todos significantes a un nivel del 1%.

Las pruebas Ljung-Box Q-test muestran que no se puede rechazar la hipótesis nula que no hay correlación en los datos (es decir, que los datos se distribuyen en forma independiente) para el período antes de la entrada en operación del mercado de futuros. Por el contrario, después de la entrada del mercado de futuros, los datos están correlacionados.

La prueba Ljung-Box Q-test² muestra que existen efectos ARCH debido a que los estadísticos para todos los períodos son significantes a un nivel razonable.

Con base en los anteriores resultados, se puede concluir que la distribución normal en la modelación de los datos no es la adecuada y se requiere utilizar distribuciones con colas pesadas. Este comportamiento de la distribución de probabilidades es característico de las series de tiempo de tipo financiero. El ejercicio de modelación utilizará entonces dos tipos de estas distribuciones: la t-student y la distribución de error generalizada (GED en inglés), con el fin de mejorar la confiabilidad de los resultados. Adicionalmente, la modelación de la volatilidad se puede hacer utilizando modelos GARCH que incluyen los efectos ARCH detectados.

Para modelar la ecuación de media o de rentabilidad se utilizó un modelo ARMA(n,m), en la que los posibles parámetros n y m fueron determinados con una prueba PACF (Partial Autocorrelation Function) o función parcial de autocorrelación serial en el caso del componente autoregresivo AR(n) y con una prueba ACF (Autocorrelation Function) o función de autocorrelación serial en el caso del componente de promedio móvil MA(m). Los resultados de las pruebas mostraron que tanto los parámetros n y m podían tomar los valores 1 y 4 (además de 0).

Para determinar el modelo correcto de estimación de media y de volatilidad condicional se consideraron dos elementos centrales. El primer elemento es que en la modelación todos los parámetros o coeficientes tuvieran niveles de significancia bajos y el segundo que el modelo presentará los menores valores de Akaike Information Criterion-AIC y Bayesian Information Criterion-BIC y el más alto valor de Log Likelihood-LL.

Con base en estos criterios, los resultados muestran que el modelo ARMA(1,0)-GARCH(1,1) con una distribución t-student y con la variable dummy para simular la entrada en operación del mercado de futuros sobre el índice bursátil modela muy bien la ecuación de media y la volatilidad. La Tabla 3 presenta los resultados detallados de este modelo para el índice COLCAP para todo el período de análisis.

Tabla 3: Resultados Detallados del Modelo ARMA(1,0)-GARCH-(1,1) para el Índice COLCAP para todo el Horizonte de Análisis (2188 Datos).

Parámetro	Valor	Desviación Estándar	T-value	P-value
Parámetros estimados para la Ecuación de media, ARMA(1,0): $R_t = \mu + \delta_1 R_{t-1} + \varepsilon_t$				
μ	0.0443	0.0188	2.3500	0.0187
δ_1	0.0968	0.0224	4.3067	0.0000
Parámetros Estimados para la Ecuación de Varianza, GARCH(1,1): $\sigma_t^2 = \omega + \alpha_1 \varepsilon_{t-1}^2 + \beta_1 \sigma_{t-1}^2 + \rho D$				
ω	0.0653	0.0189	3.4468	0.0005
α_1	0.1645	0.0283	5.7971	0.0000
β_1	0.7831	0.0359	21.7586	0.0000
ρ	0.0000	0.0130	0.0000	1.0000

Esta tabla muestra los parámetros estimados del modelo ARMA(1,0)-GARCH(1,1) con una distribución t-student. El t-value corresponde al valor estimado del parámetro dividido la desviación estándar. El modelo GARCH(1,1) incluye un término ARCH correspondiente al rezago del error ε_{t-1}^2 y un término GARCH correspondiente al rezago de la volatilidad condicional σ_{t-1}^2 . Adicionalmente, $\omega \geq 0$, $\alpha_1 \geq 0$, $\beta_1 \geq 0$ y $\alpha_1 + \beta_1 \leq 1$ para asegurar la estacionariedad. Fuente: Elaboración Propia.

Como puede observarse en la Tabla 3, todos los coeficientes o parámetros tienen p-values menores a un nivel de significancia del 1%, a excepción del coeficiente μ del modelo AR(1) con un p-value significativo al 5%. Lo anterior muestra que el modelo captura muy bien el comportamiento de la rentabilidad y la volatilidad durante todo el período de análisis. Adicionalmente, el modelo estima un coeficiente ρ igual a cero desde el punto de vista estadístico, dado que el p-value es de 1.0, es decir, que no podemos rechazar

la hipótesis nula que el comienzo de la negociación de contratos de futuros sobre el índice COLCAP no tuvo impacto en la volatilidad del mercado accionario Colombiano.

El resultado anterior, es consistente con algunos estudios sobre las consecuencias de la entrada en operación del mercado de derivados sobre el mercado spot accionario en otros países en desarrollo, como por ejemplo en China e India. Sin embargo, como ya se ha mencionado, esta no es una regla general y aún persiste la controversia sobre este particular.

CONCLUSIONES

El impacto sobre el mercado accionario Colombiano debido a la entrada en operación del mercado de futuros sobre acciones es un tema que ha tenido poco estudio y discusión debido quizás a lo joven que es este mercado de derivados en el país. Sin embargo, el tema es de mucha importancia e investigación tanto en países desarrollados como en naciones en desarrollo cuyos mercados financieros y de capitales han evolucionado con la negociación de derivados financieros los cuales ofrecen nuevas alternativas para el manejo de los diferentes riesgos que deben soportar los distintos actores que participan en los procesos productivos de una economía.

Esta investigación explora precisamente este tema por medio de la utilización de los modelos econométricos GARCH, los cuales han mostrado su versatilidad y precisión para modelar series de tiempo de tipo financiero. Específicamente, este estudio busca determinar si la introducción de los futuros sobre el índice bursátil COLCAP ha afectado la volatilidad del mercado accionario Colombiano y si ha tenido un impacto en el efecto de apalancamiento de los precios del activo subyacente (mercado spot). Los datos analizados corresponden al valor de cierre diario del índice bursátil COLCAP de la Bolsa de Valores de Colombia - BVC desde el 15 de Enero de 2008 hasta el 29 de Diciembre de 2016.

Los resultados preliminares del estudio muestran que la volatilidad del mercado accionario Colombiano no cambió con la comercialización de los futuros sobre el índice COLCAP. La modelación de la introducción de los futuros a través de una variable dummy en un modelo GARCH resulta en un valor que no es significativo, por lo cual la variable no tiene ningún impacto en explicar la ecuación de varianza o de volatilidad. La anterior conclusión es consistente con algunos estudios en otros países en desarrollo, como por ejemplo en China e India. Sin embargo, como esta no es una regla general y cada mercado puede mostrar un comportamiento diferente de acuerdo con sus condiciones particulares.

En la medida en que avance esta investigación, se espera abordar el segundo tema correspondiente a determinar el efecto de apalancamiento sobre el mercado spot.

REFERENCIAS

- Bodie, Z., Kane, A. y Marcus, A. *Essential of Investments*. 9th Edition, 2013, McGraw Hill. 1056 p.
- Bollerslev, T. (1986) "Generalized Autoregressive Conditional Heteroskedasticity," *Journal of Econometrics*, vol. 31(3), p. 307-327.
- Caglayan, E. (2011) "The Impact of Stock Index Futures on the Turkish Spot Market," *Journal of Emerging Market Finance*, vol. 10(1), p. 73-91.
- Chiang and Wang (2002), "The impact of Futures Trading on Spot Index Volatility Evidence from Taiwan Index futures," *Applied Economic Letters*, vol. 9, p. 381- 385.
- Eun, C. y Resnick, B. *International Financial Management*, 7th Edition, 2014, McGraw-Hill. 523 p.

Gulen, H. y Mayhew, S. (2000) “Stock index futures trading and volatility in international markets,” *The Journal of Futures Markets*, vol. 20(7), p. 661– 685.

Lerma, H., Metodología de la Investigación. 3 ed. Bogotá. D.C., 2004, Ecoe Ediciones. 166 p.

Shapiro, A. Multinational Financial Management, 10th Edition, 2013, John Wiley Publisher. 728 p.

Shiqing, X. Y Taiping, M. (2013) “Index Futures Trading and Stock Market Volatility in China: A Difference-in-Difference Approach,” *The Journal of Futures Markets*, vol. 34(3), p. 282–297.

Tamayo, M., El Proceso de la Investigación Científica. 4 ed. México, 2004, Limusa, 435 p.

Tshgfkjkj (seudónimo). (2009). El impacto de las operaciones del mercado de derivados en la volatilidad del mercado spot: el caso de las tasas de interés de corto plazo en México. www.bmv.com.mx

RECONOCIMIENTOS

La investigación que da origen a esta ponencia ha sido posible gracias al apoyo y patrocinio de la Universidad del Tolima, Colombia, institución con la cual los autores están profundamente agradecidos.

BIOGRAFÍA

Julián Alberto Rangel Enciso, Ingeniero Eléctrico y Magister en Administración de la Universidad de los Andes, M.Sc. in Finance de Louisiana State University. Actualmente profesor de planta adscrito a la Facultad de Ciencias Económicas y Administrativas de la Universidad del Tolima (Colombia).

Oscar Hernán López Montoya, Administrador de Empresas con maestría en la Universidad Nacional de Colombia. Actualmente profesor de planta de pregrado y postgrados adscrito a la Facultad de Ciencias Económicas y Administrativas de la Universidad del Tolima (Colombia).

Enrique Ramírez Ramírez, Administrador Público con Maestría en Administración con Énfasis en Finanzas. Especialista en Finanzas Públicas. Especialista en Evaluación Social de Proyectos. Actualmente profesor de planta de pregrado y postgrados adscrito a la Facultad de Ciencias Económicas y Administrativas de la Universidad del Tolima (Colombia).

VALORACIÓN DE LA TUTORÍA UNIVERSITARIA: DESDE LA MIRADA DE LOS AGENTES IMPLICADOS

Zoila Margarita García Ríos, Universidad Michoacana de San Nicolás de Hidalgo

Alma Rosa García Ríos, Universidad Michoacana de San Nicolás de Hidalgo

Yenisey Castro García, Universidad Michoacana de San Nicolás de Hidalgo

Ma. del Carmen Arias Valencia, Universidad Michoacana de San Nicolás de Hidalgo

RESUMEN

En este artículo se realiza el análisis comparativo de la organización y desarrollo de la tutoría universitaria, en el que se implica a coordinadores, profesores tutores y estudiantes tutelados por medio de contrastes no paramétricos dado que los grupos establecidos no cumplen con las hipótesis de normalidad ni homocedasticidad. Los análisis estadísticos se han realizado, mediante el programa R (R Development Core Team, 2012, versión 2.15) de los aspectos siguientes: “estructura administrativa de la tutoría”; “articulación de las tutorías con el currículum”; “retroalimentación entre tutoría y docencia”; “evaluación colegiada de la tutoría”; “evaluación y seguimiento de tutores”. Los resultados ponen de manifiesto que en la totalidad de los pares de comparaciones entre tutorados y coordinadores y entre tutorados y tutores se observan diferencias estadísticamente significativas. Se concluye que los estudiantes valoran la acción tutorial y ponen en ella altas expectativas, por su parte los profesores tutores y coordinadores reflejan el compromiso con el quehacer tutorial.

PALABRAS CLAVE: Valoración, Desarrollo, Organización, Tutoría, Agentes Implicados

VALUATION OF UNIVERSITY TUTORING: FROM THE LOOK OF THE AGENTS INVOLVED

ABSTRACT

In this article, a comparative analysis of the organization and development of university tutoring is carried out, in which coordinators, tutors and supervised students are involved through non-parametric contrasts given that the established groups do not fulfill the hypothesis of normality nor homocedasticity. The statistical analyzes have been carried out, through the program R (R Development Core Team, 2012, version 2.15) for the following aspects: “administrative structure of tutoring”; “articulation of the tutorial work with the curriculum”; “feedback between tutoring and teaching”; “collegiate assessment of mentoring”; “evaluation and monitoring of tutors”. The results show that in all the pairs of comparisons between tutors and coordinators and between tutoreds and tutors statistically significant differences are observed. It is concluded that the students value the tutorial action and put in it high expectations, on the other hand the tutors and coordinators reflect the commitment with the tutorial task.

JEL: I2, I21, I23

KEYWORDS: Assessment, Development, Organization, Tutoring, Agents Involved

INTRODUCCIÓN

En este trabajo se recupera la información de tres instrumentos aplicados, se procedió a realizar el análisis comparativo de los resultados de las valoraciones otorgadas por los diferentes agentes implicados en el

estudio: 26 coordinadores, 129 tutorados y 109 tutores, en relación a una batería de elementos significativos para el conocimiento de las prácticas tutoriales en las Unidades Académicas de la Universidad Michoacana de San Nicolás de Hidalgo que tienen implementado el Programa de Tutoría. Dicha batería comprende los aspectos siguientes: “*estructura administrativa de la tutoría*”; “*articulación de las tutorías con el curriculum*”; “*retroalimentación entre tutoría y docencia*”; “*evaluación colegiada de la tutoría*” y “*evaluación y seguimiento de tutores*”. Con el propósito de hacer una valoración integral de la organización y desarrollo de la tutoría, desde la percepción de los agentes implicados. Para concluir esta breve introducción en relación con el trabajo desarrollado, hemos de concretar que la envergadura del mismo no puede ser comprendida sin un conjunto de tablas y figuras que lo fundamentan y avalan.

REVISIÓN LITERARIA

Uno de los aspectos fundamentales del proceso de investigación lo constituye la metodología (Latorre, 2005); a partir de los años sesenta del pasado siglo XX la investigación evaluativa ha conocido un desarrollo sin precedentes (Cordray, 1978b) debido a la necesidad de constatar la eficacia relativa de los programas educativos. El concepto de investigación evaluativa es muy amplio y su definición depende de las concepciones previas de evaluación y de programa (De la Orden, 1985). Como ya se mencionó, el objeto de esta investigación se centra en la evaluación de un programa institucional de tutoría, por lo que se requiere, de una forma de investigación educativa aplicada que intente determinar el valor del programa educativo de acuerdo con determinados criterios. Bajo la denominación de paradigma se han englobado metodologías compartidas por investigadores y educadores que adoptan una determinada concepción del proceso del proceso educativo (Escudero, 1987, 2003; De Miguel, 1988, 2006b). Cada paradigma se caracteriza por una forma común de investigar en el seno de la comunidad científica considerando las perspectivas *empírico-analítica* y humanístico-interpretativas; sin embargo desde la óptica metodológica que nos ocupa, y según De Miguel (1988) y Keeves (1988), el paradigma crítico participa de los postulados que caracterizan al paradigma interpretativo, añadiendo un componente ideológico. La investigación evaluativa, que es la que se ha utilizado en este trabajo, se enfoca a confrontar un paradigma con la realidad, de tal manera que se pueda establecer comparaciones que permitan observar cuánto se aleja o se acerca la realidad al modelo previamente planteado. Precisamente nos interesa evaluar los resultados de la acción tutorial y por ellos esta metodología es especialmente adecuada y nos conduce a elaborar un informe evaluativo a partir del cual se toman decisiones para mejorar el programa institucional de tutoría (PIT).

MÉTODOLÓGIA

En este estudio se utilizaron tres muestras la primera corresponde al grupo de coordinadores de Programa de Tutoría, la segunda a Profesores Tutores y la tercera al grupo de Estudiantes Tutorados. Dado que los grupos establecidos no cumplen con las hipótesis de normalidad ni homocedasticidad se ha debido recurrir a contrastes no paramétricos. En concreto, dada las escalas de medida de las variables objeto de análisis, el número de grupos considerado y los desiguales tamaños muestrales de los mismos, se ha empleado la prueba H de Kruskal-Wallis para la comparación de medias entre los grupos de coordinadores, tutores y estudiantes o tutorados. El nivel de significación de referencia para la toma de decisiones estadísticas ha quedado establecido en un $\alpha = 0.05$, por lo que se considera que hay diferencias significativas en aquellos contrastes que alcanzan una probabilidad p inferior al citado nivel de 0.05. Los análisis estadísticos se han realizado, mediante el programa R (R Development Core Team, 2012, versión 2.15 (R: A language and environment for statistical computing. Manual de software informático. Viena, Austria. Disponible en <http://www.r-project.org>). Los elementos analizados son: “*estructura administrativa de la tutoría*”; “*articulación de las tutorías con el curriculum*”; “*retroalimentación entre tutoría y docencia*”; “*evaluación colegiada de la tutoría*” y “*evaluación y seguimiento de tutores*”.

RESULTADOS

Para analizar la información que aportan los diferentes agentes en relación a la “estructura administrativa de la tutoría” y determinar si el comportamiento de la variable difiere según los diferentes grupos de estudio, a partir de los estadísticos descriptivos se ha utilizado la prueba H de Kruskal-Wallis para contrastar la igualdad de medias de los grupos. La tabla 1 muestra los valores sometidos a contraste.

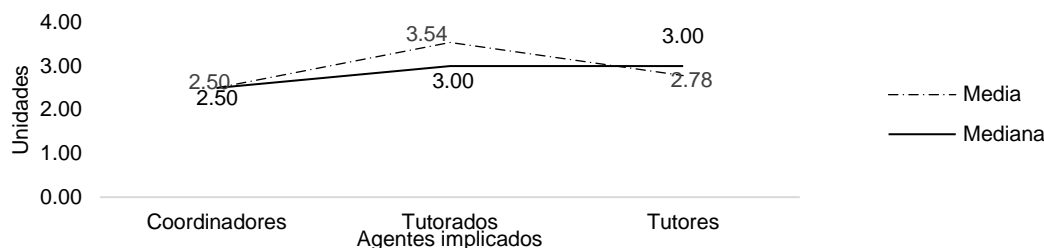
Tabla 1: Estructura Administrativa de la Tutoría.

Agentes Implicados	N	Media	Mediana	D. T.
Tutorados	129*	3.54**	3.00**	1.26***
Coordinadores	26*	2.50**	2.50**	0.76***
Tutores	109*	2.78**	3.00**	0.69***

En esta tabla se describen los agentes implicados en el estudio, el Tamaño muestral de los grupos comparados*, los estadísticos de tendencia central media y mediana** y la dispersión*** (desviación típica). Fuente: Elaboración propia.

La prueba de hipótesis indica que debe rechazarse la hipótesis nula de igualdad de las medias ($p < 0.01$). Es decir, no cabe manifestar que las medias de las puntuaciones proporcionadas por los diferentes agentes en relación a la estructura administrativa de la tutoría puedan considerarse iguales. Esto es, los grupos comparados difieren en la valoración que otorgan a la “estructura administrativa de la tutoría”. Este resultado aconseja recurrir a alguna prueba “post-hoc” para conocer entre qué grupos se dan tales diferencias. Para ello se ha utilizado la prueba de Nemenyi (1968). Para una más clara y sencilla visión de los resultados se presenta a continuación la figura 1.

Figura 1: Comportamiento de la Valoración de la Estructura Administrativa de la Tutoría



En esta figura se representan de las respuestas de los grupos comparados (Coordinadores, tutores y estudiantes tutelados) y estadísticos de tendencia central (media y mediana) de la estructura administrativa de la tutoría. La media se representa con línea de punto y raya donde los estudiantes proporcionan el valor más alto (3.54). La mediana se representa con una línea continua donde los coordinadores otorgan un 2.50, manteniéndose constante la valoración de los tutores y tutorados con 3.00. Fuente: Elaboración propia.

Los resultados informan que en las comparaciones grupo a grupo, en las tres posibles comparaciones, se detectan diferencias significativas entre tutorados y tutores, por un lado, y entre tutorados y coordinadores, por el otro lado (en ambos casos $p < 0.0001$), mientras que no se encuentran diferencias en la comparación tutores-coordinadores ($p = 0.43$). A partir del resultado de los análisis comparativos realizados sobre la “estructura administrativa de la tutoría” cabe indicar que:

Desde un punto de vista descriptivo, los estudiantes proporcionan una valoración media más alta a la estructura administrativa de la tutoría que los tutores y los coordinadores.

Los coordinadores presentan la valoración más baja en relación a este aspecto de la tutoría.

La perspectiva comparativa pone de relieve que, esa valoración más alta otorgada por los tutorados es, en términos estadísticos, significativamente más alta que la que consideran los otros dos grupos de agentes implicados en la acción tutorial.

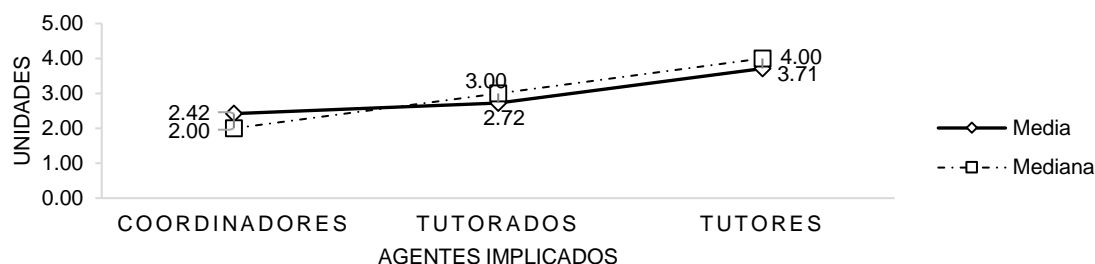
Además, entre tutores y coordinadores, la diferencia en la valoración que realizan sobre la estructura administrativa de la tutoría, no es significativa desde un punto de vista estadístico. Estos resultados implican y ponen de manifiesto las siguientes cuestiones: Los estudiantes valoran positivamente más alta la estructura administrativa de la tutoría debido a las expectativas que tienen de los beneficios del programa, mientras que entre tutores y coordinadores no hay diferencias significativas en relación a esta valoración ya que conocen la estructura administrativa de la tutoría más a fondo. En relación a la “articulación de tutorías con el currículum” se analizan las valoraciones realizadas por los diferentes agentes informantes para conocer si en esta variable se producen o no diferencias significativas entre las puntuaciones de los diferentes grupos objeto de estudio (coordinadores, tutores, tutorados). La tabla 2 muestra los valores descriptivos empleados para realizar los contrastes y la figura 2 presenta una clara y sencilla visión de los resultados.

Tabla 2: Articulación de las Tutorías con el Currículum

Agentes Implicados	N	Media	Mediana	D. T.
Tutorados	129*	3.71**	4.00**	1.24***
Coordinadores	26*	2.42**	2.00**	0.86***
Tutores	109*	2.72**	3.00**	0.65***

En esta tabla se describen los agentes implicados en el estudio, el Tamaño muestral de los grupos comparados*, los estadísticos de tendencia central media y mediana** y la dispersión*** (desviación típica). Fuente: Elaboración propia.

Figura 2: Comportamiento de la valoración de la articulación de las tutorías con el currículum



En esta figura se muestra el comportamiento de la valoración que otorgan los agentes implicados en el estudio (Coordinadores, tutores y estudiantes tutelados) así como, estadísticos de tendencia central (media y mediana) de la articulación de las tutorías con el currículum. La media se representa con línea continua donde los tutores proporcionan el valor más alto (3.71) seguido de estudiantes tutorados (2.72) comparado con el valor que proporcionan los coordinadores (2.42). La mediana se representa con un línea a punto y raya donde los coordinadores otorgan un valor de 2.00 unidades, manteniéndose en constante ascenso con la valoración de 3.00 unidades que otorgan los tutorados, siendo los tutores quienes mejor valoran este aspecto con 4 unidades. Fuente: Elaboración propia.

La prueba no paramétrica H de Kruskal-Wallis indica que debe rechazarse la hipótesis nula de igualdad de las medias ($p < 0.01$). Por tanto, no puede decirse que las medias de las puntuaciones proporcionadas por los informantes en relación a la articulación de las tutorías con el currículum puedan considerarse iguales. Es decir, los grupos comparados difieren en la valoración que hacen sobre la “articulación de las tutorías con el currículum”. El resultado estadístico nos lleva a conocer entre qué grupos se presentan las diferencias. La prueba de Nemenyi nos permite afirmar que en las comparaciones grupo a grupo, se detectan diferencias significativas entre tutorados y tutores, y entre tutorados y coordinadores (en ambos casos $p < 0.0001$), mientras que no se encuentran diferencias en la comparación tutores-coordinadores ($p = 0.40$). Los análisis comparativos desarrollados sobre la “articulación de las tutorías con el currículum” permiten realizar los siguientes comentarios:

Desde un punto de vista descriptivo los tutorados proporcionan una valoración media más alta a la articulación de la tutoría con el curriculum que los tutores y los coordinadores.

Los coordinadores proporcionan la valoración más baja en este aspecto.

La diferencia de valoración que hacen tutores y coordinadores en este aspecto, no es significativa desde un punto de vista estadístico.

Sin embargo desde un punto de vista descriptivo, los tutores proporcionan un valor un poco más alto a la articulación de las tutorías con el curriculum que los propios coordinadores, debido seguramente por ser los operarios directos del Plan Tutorial y conocer más de cerca las implicaciones de la tutoría con el curriculum. Estos resultados, constatan que la percepción de los estudiantes es más positiva de lo que en principio pudiera pensarse, y también el profesorado. Con independencia de la responsabilidad que asuman como tutores o coordinadores en el Plan Tutorial, tienen un nivel de exigencia alto sobre la coherencia que existe y la que debería existir entre tutorías y curriculum académico. Con el fin de determinar si el comportamiento de la variable “retroalimentación entre tutoría y docencia” difiere según los distintos niveles de la variable Grupo se han realizado diversos contrastes. En la tabla 3 aparecen en forma resumida los principales valores estudiados.

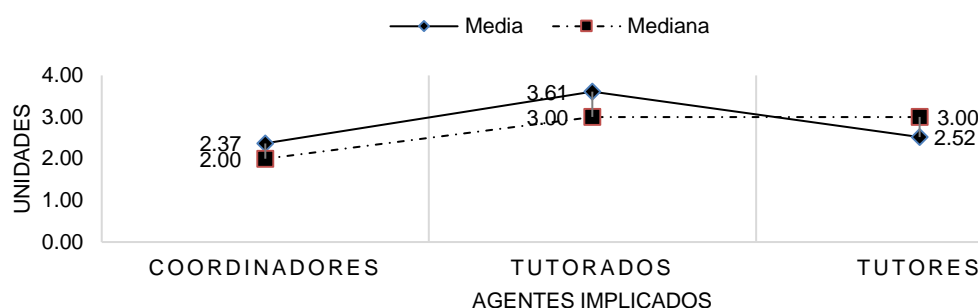
Tabla 3: Retroalimentación Entre Tutoría y Docencia

Agentes Implicados	N	Media	Mediana	D. T.
Tutorados	129*	3.61**	3.00**	1.26***
Coordinadores	26*	2.27**	2.00**	0.83***
Tutores	109*	2.52**	3.00**	0.82***

En esta tabla se describen los agentes implicados en el estudio, el Tamaño muestral de los grupos comparados*, los estadísticos de tendencia central media y mediana** y la dispersión*** (desviación típica). Fuente: Elaboración propia.

Se concluye que se rechaza la hipótesis de que las medias son iguales una vez aplicado el test de Kruskal-Wallis, resultando $p\text{-valor} < 0.01$). Es decir, no se puede considerar que las medias de las puntuaciones proporcionadas por los diferentes grupos en relación a la retroalimentación tutoría docencia y grupo puedan considerarse iguales. Se aplicó el test de Nemenyi para detectar los pares en los que existían diferencias: tutorados-tutores y tutorados-coordinadores ($p\text{-valor} < 0.0001$) en ambos casos. Para el resto de comparaciones tutores-coordinadores se concluye que no existen diferencias ($p\text{-valor} = 0.57$). Los resultados de las valoraciones de los grupos participantes se presentan en la figura 3 para su mejor comprensión.

Figura 3: Retroalimentación Entre Tutoría y Docencia



En esta figura se representa con línea continua la “media” donde los coordinadores proporcionan un valor de 2.37 unidades, seguido de los profesores tutores que otorgan 3.00 unidades y la valoración más alta es proporcionada por los estudiantes tutorados (3.61) comparado con la “mediana” (línea a punto y raya) el valor que proporcionan los coordinadores (2.00) es el más bajo, manteniéndose en 3.00 unidades la valoración otorgada por los tutorados y los tutores. Fuente: Elaboración propia.

A partir del resultados de los análisis comparativos realizados sobre la “retroalimentación tutoría docencia y grupo” cabe indicar que:

Los estudiantes proporcionan una valoración media más alta a la retroalimentación de la tutoría y docencia que los tutores y coordinadores desde un punto de vista descriptivo.

La perspectiva comparativa pone de manifiesto que, esa valoración más alta otorgada por los tutorados, es en términos estadísticos, significativamente más alta que la que consideran los otros dos grupos implicados en la acción tutorial.

Los coordinadores proporcionan la valoración más baja en el aspecto de retroalimentación entre tutoría y docencia.

En la valoración que otorgan los tutores y coordinadores a este aspecto de retroalimentación de la tutoría y docencia no existen diferencias por lo que estadísticamente no es significativa.

Los resultados obtenidos manifiestan la valoración positiva que los tutorados conceden a la retroalimentación de la tutoría y docencia, presumiblemente por los beneficios que perciben de la acción tutorial y que seguramente se reflejan en los resultados de las evaluaciones académicas. Mientras que entre tutores y coordinadores no existen diferencias significativas en relación a esta valoración, independientemente de la responsabilidad que asuman como tutores o coordinadores en el Plan Tutorial, tienen un nivel de exigencia alto sobre la coherencia que existe y la que debería existir entre tutorías y docencia. La información que aportan los diferentes agentes en relación a la “*evaluación colegiada de la tutoría*”. Se muestran en la tabla 4 los valores sometidos a contraste.

Tabla 4: Evaluación Colegiada de la Tutoría

Agentes Implicados	N	Media	Mediana	D. T.
Tutorados	129*	3.81**	4.00**	1.24***
Coordinadores	26*	2.12**	2.00**	0.77***
Tutores	109*	2.52**	3.00**	0.89***

En esta tabla se describen los agentes implicados en el estudio, el Tamaño muestral de los grupos comparados, los estadísticos de tendencia central media y mediana** y la dispersión*** (desviación típica). Fuente: Elaboración propia.*

Se concluye que se rechaza la hipótesis de que las medias sean iguales (test de Kruskal- Wallis), $p\text{-valor} < 0.01$. Se aplicó el test de Nemenyi para detectar los pares en los que existían diferencias: tutorados-tutores y tutorados-coordinadores resultando $p\text{-valor} < 0.0001$ en ambos casos. Para el resto de comparaciones tutores-coordinadores, se concluye que no existen diferencias ($p = 0.24$). En la figura 4 se presenta una gráfica de líneas de los grupos comparados y estadísticos de tendencia central (media y mediana) y dispersión (desviación típica).

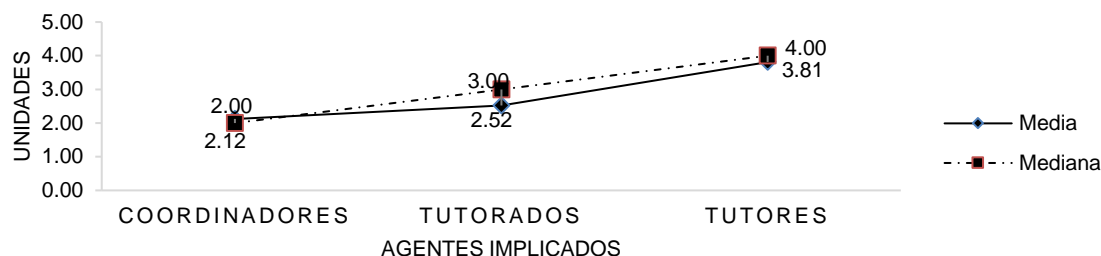
Desde un punto de vista descriptivo, los estudiantes proporcionan una valoración media más alta a evaluación colegiada de la tutoría, que los tutores y coordinadores.

Los tutores proporcionan una valoración media, alta a este aspecto de la evaluación colegiada de la tutoría en la acción tutorial.

Los coordinadores presentan la valoración media más baja, en este aspecto de la evaluación colegiada de la tutoría.

La perspectiva comparativa pone de relieve que, esa valoración más alta otorgada por los tutorados es, en términos estadísticos, significativamente más alta que la otorgan los otros dos grupos implicados en la acción tutorial.

Figura 4: Comportamiento de la Evaluación Colegiada de la Tutoría



En esta figura se representa con línea continua la "media" donde los coordinadores proporcionan un valor de 2.12 unidades, seguido de los profesores tutores que otorgan 2.52 unidades donde la valoración más alta es proporcionada por los estudiantes tutorados (3.81) comparado con la "mediana" (línea a punto y raya, el valor que proporcionan los coordinadores (2.00) es el más bajo, comportándose en forma ascendente con 3.00 unidades la valoración otorgada por los tutorados y 4 unidades que otorgan los tutores. Fuente: Elaboración propia.

De los resultados de los análisis comparativos realizados sobre la evaluación colegiada de la tutoría se puede decir que:

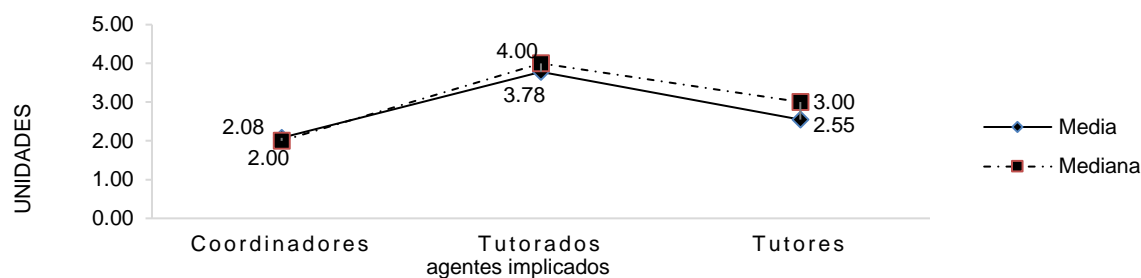
5. Por último la diferencia de la valoración que hacen sobre la variable evaluación colegiada de la tutoría entre los grupos: tutores-coordinadores, no es significativa desde el punto de vista estadístico. El resultado pone de manifiesto lo siguiente: Los estudiantes proporcionan una valoración positivamente más alta a la evaluación colegiada de la tutoría, también los tutores por su parte otorgan una valoración media, más alta que los coordinadores a este aspecto de la evaluación colegiada de la tutoría desde el punto de vista descriptivo. Sin embargo estadísticamente no existen diferencias entre tutores-coordinadores de la valoración que otorgan a este aspecto. Contrario a lo que pudiera esperarse los coordinadores son el grupo que otorga la valoración más baja. Independientemente de la responsabilidad que asuman como coordinadores o tutores en el Plan tutorial, tienen un nivel de exigencia en este aspecto de la evaluación colegiada. La información que aportan los diferentes agentes implicados en la acción tutorial respecto a la variable "evaluación y seguimiento de tutores" difiere según los diferentes grupos de estudio. En la tabla 5 aparecen en forma resumida los valores sometidos a contraste así mismo la figura 5 muestra el comportamiento de este aspecto.

Tabla 5: Evaluación y Seguimiento de Tutores

Agentes Implicados	N	Media	Mediana	D. T.
Tutorados	129*	3.78**	4.00**	1.23***
Coordinadores	26*	2.08**	2.00**	0.63***
Tutores	109*	2.55**	3.00**	0.80***

En esta tabla se describen los agentes implicados en el estudio, el Tamaño muestral de los grupos comparados*, los estadísticos de tendencia central media y mediana** y la dispersión*** (desviación típica). Fuente: Elaboración propia.

Figura 5: Comportamiento de la Evaluación y Seguimiento de Tutores



En esta figura se representa con línea continua la "media" donde los coordinadores proporcionan un valor más bajo (2.08), seguido de los profesores tutores que otorgan 2.55 unidades y la valoración más alta es proporcionada por los estudiantes tutorados (3.78) comparando con la "mediana" (línea a punto y raya, el valor que proporcionan los coordinadores (2.00) es el más bajo, es de 4 unidades la valoración otorgada por los tutorados y 3 unidades que otorgan los tutores. Fuente: Elaboración propia.

La prueba de hipótesis indica que debe rechazarse la hipótesis nula de igualdad de las medias (test de Kruskal-Wallis, $p < 0.01$). Es decir, no cabe manifestar que las medias de las puntuaciones proporcionadas por los diferentes agentes en relación a la evaluación y seguimiento de tutores puedan considerarse iguales. Puesto que, los grupos comparados difieren en la valoración que otorgan a la evaluación y seguimiento de tutores. El resultado aconseja recurrir a una prueba "post-hoc" para conocer entre qué grupos se dan tales diferencias. Para ello se ha utilizado la prueba de Nemenyi, encontrando que existen diferencias entre: tutorados-tutores y tutorados-coordinadores ($p\text{valor} < 0.0001$) en ambos casos. Para el resto de comparaciones tutores-coordinadores se concluye que no existen diferencias ($p\text{valor} = 0.08$). Para una más clara y sencilla visión de los resultados se presenta la figura 5. A partir de las diferencias detectadas en los análisis comparativos realizados sobre evaluación y seguimiento de tutores se puede decir que:

Desde un punto de vista descriptivo, los estudiantes proporcionan una valoración media más alta a la variable evaluación y seguimiento de tutores, que los tutores y coordinadores.

Los tutores proporcionan una valoración media, "alta" a este aspecto de la tutoría.

Los coordinadores proporcionan la valoración más baja sobre la evaluación y seguimiento de tutores.

La diferencia de la valoración que hacen sobre la variable evaluación y seguimiento de tutores entre los grupos: tutores-coordinadores, no es significativa desde el punto de vista estadístico.

La perspectiva comparativa pone de relieve que, esa valoración más alta otorgada por los tutorados es, en términos estadísticos, significativamente más alta que la que otorgan los otros dos grupos implicados en la acción tutorial. Los resultados obtenidos ponen de manifiesto que los estudiantes proporcionan una valoración positiva más alta a la evaluación y seguimiento de tutores, ya que desde el punto de vista descriptivo consideran adecuada la evaluación y el seguimiento de tutores. Los tutores por su parte otorgan una evaluación positiva media "alta" a este aspecto de evaluación y seguimiento de tutores, ya que es necesaria la evaluación y seguimiento de tutores, para conocer los errores a corregir, y, de esta manera retroalimentar su acción tutorial. Aunque estadísticamente en los grupos tutores-coordinadores no existen diferencias significativas en la valoración que otorgan en este aspecto de la acción tutorial, los coordinadores otorgan una valoración más baja que los otros grupos.

CONCLUSIONES

A partir de los análisis realizados, tanto descriptivos como comparativos, se han elaborado las tablas que figuran a continuación, con objeto de presentar de manera resumida los principales resultados. En la primera de ellas, (tabla 6), se muestran los valores de los tamaños muestrales de los agentes implicados en el estudio,

los estadísticos de tendencia central (media aritmética y mediana) y de variabilidad (desviación típica) de cada uno de los agentes implicados en el estudio (tutorados, coordinadores y tutores) en cada uno de los elementos sometidos a valoración en la escala relativa a (Estructura administrativa de la tutoría; Articulación de las tutorías con el curriculum; Retroalimentación entre tutoría y docencia; Evaluación colegiada de la tutoría y, Evaluación y seguimiento de tutores. Además se ha incluido el nivel de significación de la prueba no paramétrica H de Kruskal-Wallis utilizada para la comparación de las medias de cada puntuación en cada elemento, entre los tutorados, los coordinadores y los tutores (el nivel de significación de contraste considerado es el de $\alpha = 0.05$).

Tabla 6: Estadísticas Descriptivas y Comparativas de los Agentes Implicados

Elementos Sometidos A Valoración	Tutorados				Coordinadores				Tutores				H Kruskal-Wallis (sign. p)
	N *	Media **	Mediana ***	D.T. ****	N *	Media **	Mediana ***	D.T. ****	N *	Media **	Mediana ***	D.T. ****	
Estructura	129	3.54	3.00	1.26	26	2.50	2.50	0.76	109	2.78	3.00	0.69	< .01
Articulación	129	3.71	4.00	1.24	26	2.42	2.00	0.86	109	2.72	3.00	0.65	< .01
Retroalimentación	129	3.61	3.00	1.26	26	2.27	2.00	0.83	109	2.52	3.00	0.82	< .01
Evaluación	129	3.81	4.00	1.24	26	2.12	2.00	0.77	109	2.52	3.00	0.89	< .01
Seguimiento	129	3.78	4.00	1.23	26	2.08	2.00	0.63	109	2.55	3.00	0.80	< .01

*Muestra, **media, ***mediana y desviación típica de las puntuaciones de los tutorados, coordinadores y tutores en los elementos relativos a $\alpha = 0.05$. Significación de la prueba H de Kruskal-Wallis.

Como se observa en la tabla 6, la totalidad de los contrastes han resultado significativos, como se ha ido mostrando y analizando en cada uno de los elementos considerados en esta tabla de elementos analizados. En vista de tales significaciones, resulta pertinente indagar entre qué agentes se producen esas diferencias significativas. Por ello se ha procedido a emplear la prueba de Nemenyi que permite identificar entre qué pares de grupos se observan tales diferencias. La significación de los respectivos contrastes entre los pares de grupos (agentes) aparece recogida en la tabla 7. El análisis de esos resultados permite poner de manifiesto que en la totalidad de los pares de comparaciones entre tutorados y coordinadores y entre tutorados y tutores se observan diferencias estadísticamente significativas. Esas diferencias se inclinan, en todos los casos, hacia los tutorados, tanto en las comparaciones frente a los coordinadores como en las comparaciones frente a los tutores. Mientras que en la comparación entre coordinadores y tutores no se dan argumentos para rechazar la hipótesis nula, es decir, no hay diferencias significativas, o dicho en otros términos, las diferencias que se detectan, siempre inclinadas hacia los tutores frente a los coordinadores, no son significativas.

Tabla 7: Significación de la prueba de Nemenyi.

Elementos Sometidos A Valoración	Tutorados-Coordinadores	Tutorados-Tutores	Coordinadores-Tutores
Estructura	< .0001	< .0001	P= .43
Articulación	< .0001	< .0001	P= .40
Retroalimentación	< .0001	< .0001	P= .57
Seguimiento	< .0001	< .0001	P= .08

Esta tabla contiene los elementos sometidos a valoración de los tres agentes implicados así como la significación de la prueba de Nemenyi.

Estos resultados muestran que los tutorados otorgan puntuaciones más elevadas que los tutores y éstos más que los coordinadores a todos los elementos considerados en materia de los aspectos analizados. Esto supone que, los estudiantes valoran la acción tutorial y ponen en ella altas expectativas, por su parte los profesores tutores y coordinadores reflejan el compromiso con el quehacer tutorial. Para no incurrir en interpretaciones sesgadas de los resultados, y en concreto de los niveles de significación de los contrastes, es conveniente tener en consideración los tamaños muestrales de los grupos, particularmente el de los coordinadores.

BIBLIOGRAFÍA

Cordray, D. (1987b). “*Evaluation studies for 1986*”. Program evaluation and programa research. En D.S.

Cordray y M.W. Lipsey (Eds.) *Evaluation studies*. Review anual.Vol.11. Londres: Sage.

De la Orden, A. (1985). “*La investigación Educativa*”. Diccionario Ciencia Educación. Madrid: Anaya.

De Miguel, M. (1988). “*Paradigmas de la investigación educativa*”. En I Dendaluze (Ed.) Aspectos Metodológicos de la Investigación Educativa. Madrid Narcea.

De Miguel, M. (2006b). “*Metodológica de enseñanza y aprendizaje para el desarrollo de competencias*”. Madrid: Alianza Editorial.

Escudero J. (1987). “*La investigación-acción en el panorama actual de la investigación educativa: algunas tendencias*”. Revista de innovación e investigación educativa, 3, 5-9.

Escudero J. (2003). “*Educación de calidad para todos entre todos. Seminario expertos*”. Universidad de Murcia. Consultado el 25 de diciembre de 2015 desde: www.debateeducativo.mec.es.

Kirk R.E. (1968.). “*Experimental design: procedures for the behavioral sciences*”. Brooks/Cole Publishing Company; Belmont, California: Cap.13.

Kruskal H. W. & Wallis A.W. (1952). “*Use of ranks in one-criterion analysis*”. Journal of the American Statistical Association 47 (260): 583-621 December.

Latorre, A. (2005). “*Bases Metodológicas de la Investigación Educativa*”. Barcelona, España. Ediciones Experiencia, S.L.

LAS RELACIONES PÚBLICAS COMO DISCIPLINA PROFESIONAL Y COMUNICACIÓN ESTRATÉGICA EN LAS ORGANIZACIONES

Ma. del Carmen Arias Valencia, Universidad Michoacana de San Nicolás de Hidalgo
Yenisey Castro García, Universidad Michoacana de San Nicolás de Hidalgo
Marcela Patricia Del Toro Valencia, Universidad Michoacana de San Nicolás de Hidalgo

RESUMEN

Las Relaciones Públicas son un tipo de relaciones humanas mediante las cuales se establecen vínculos entre las personas y entre grupos que integran todo tipo de organización y, se busca a través de ellas, insertar a las organizaciones dentro de una sociedad. Para llegar a las Relaciones Públicas es preciso establecer primeramente por las Relaciones Humanas, en consecuencia es difícil programar una imagen propicia de cualquier organización si esta no conforma un grupo único, en el que prevalece una emoción de simpatía, colaboración y entendimiento. Mientras que lo primordial en las Relaciones Humanas es el vínculo entre las personas, en las Relaciones Públicas es entre grupos. Ambas se requieren para el establecimiento de adecuada comunicación y por tanto, de relaciones entre individuos y grupos que conforman la organización. El objetivo del presente estudio fue describir y analizar la importancia de las Relaciones Públicas como disciplina profesional a través del empleo de una metodología descriptiva, concluyéndose que las Relaciones Públicas son un componente de la comunicación estratégica, consideradas como el insumo que tienen las compañías, instituciones educativas y entidades de gobierno para fortalecer y generar un vínculo, con sus públicos de interés, ya sean estos internos o externos.

PALABRAS CLAVES: Relaciones Públicas, Relaciones Humanas, Disciplina Profesional, Organizaciones, Comunicación Estratégica

ABSTRACT

Public Relations are a type of human relations by which they are integrated between people and groups that integrate all types of organizations and, through them, inserting organizations within a society. In order to reach Public Relations, it is necessary to establish Human Relations first; as a consequence, it is difficult to program an appropriate image for any organization, if this is not a single group, in which an emotion of sympathy, collaboration and understanding prevails. While the main thing in Human Relations is the bond between people, in Public Relations it is between groups. Both are required for the establishment of an adequate communication and, therefore, of the relations between the individuals and the groups that make up the organization. The objective of the study consisted of an analysis and analysis of the importance of public policies for the adoption of a descriptive methodology, concluding that public relations is a component of strategic communication, considered as the input that companies have, educational institutions and government entities to strengthen and generate links with their stakeholders, whether internal or external.

KEYWORDS: Public Relations, Human Relations, Professional Discipline, Organizations, Strategic Communication.

INTRODUCCIÓN

El hombre siempre en cualquier momento y lugar, ha manifestado la necesidad de comunicarse con otros seres humanos buscando ser experto en el proceso que implica la comunicación. La técnica primitiva de esta disciplina, se desarrolló en el campo de la ciencia política. En efecto, fue en este plano, cuando el hombre comenzó a percibir que existían métodos más eficaces que la fuerza para convencer a los demás, fue cuando se sentaron las bases de las relaciones públicas. Con el correr de los siglos, se mistificó la escritura; en Grecia y Roma surgieron la literatura y la filosofía, las que pueden interpretarse como vínculos de relaciones públicas. Pero realmente la primera mención técnica registrada sobre las Relaciones Públicas la llevó a cabo Eaton en 1882, abogado y profesor de la Yale University de los EE.UU. El mismo fue quien en 1882 tituló sus conferencias "The Public Relations and the Duties of the Legal Profession", fijando la necesidad de dar la debida atención a las ciencias humanísticas en la expansión de los negocios. Las Relaciones Públicas (RRPP) son un componente de la comunicación estratégica, consideradas como el insumo que tienen las compañías, instituciones educativas y entidades de gobierno para fortalecer y generar un vínculo, con sus públicos de interés, ya sean estos internos o externos.

REVISIÓN DE LA LITERATURA

Definición de las Relaciones Públicas

El termino de relaciones públicas se acuñó en 1923 en el libro *Cristallizing Public Opinion* de Edward Bernays (1923, citado en Arévalo, 2014) en el cual se afirmó que las relaciones públicas eran una función administrativa que evaluaba las actitudes del público, identificaba las políticas y procedimientos de un individuo u organización con respecto al interés del público, y a partir de eso se planeaba un programa de acción para ganar el entendimiento y aceptación del público. Para la Asociación Internacional de Asociaciones Públicas, las relaciones públicas son una actividad de dirección de carácter permanente y organizado; a través de ellas, una empresa, entidad o público busca obtener o mantener la comprensión, la simpatía o la participación de los que en ella tienen o pueden tener que ver. Para el centro belga de relaciones públicas, éstas son la política sistemática de un individuo o de una organización pública o privada y su puesta en marcha para entretener y mejorar sus relaciones con los diferentes públicos, para hacer nacer una mejor comprensión de su actividad y suscitar alrededor de ella un espíritu de confianza y simpatía.

Tipos de Relaciones Públicas

Políticas o legales: Desde los postulados legales se ha reglamentado la profesión de las relaciones públicas. En este ámbito se entenderá por relaciones públicas aquella actividad que, ejercida profesionalmente de modo planificado y habitual, tienda a crear una recíproca corriente de comunicación, conocimiento y comprensión entre una persona natural o jurídica y los públicos a los que se dirige. Se acostumbra el uso de medios de comunicación masiva para beneficio de los partidos políticos, en el uso de las campañas, altruismo en medios de comunicación.

Personales o tradicionales: Son usadas a beneficio de una imagen personal, para que esta sea pulcra y limpia, a vista de las personas que le rodean o que le buscan, tal y como lo hace un artista o figura pública.

Empresariales o gerenciales: A partir de los años sesenta se plantean las relaciones públicas desde la perspectiva de cómo se puede mejorar su actividad desde las propias organizaciones. Se teoriza sobre el papel de las relaciones públicas y el cómo es que debe de ser su participación en la elaboración, planificación y ejecución de las estrategias de relaciones públicas. Las grandes compañías privadas o públicas pretenden siempre mantener buena relación con el público, para que la sociedad las visualice como empresas que benefician a la misma sociedad y es por ello que las usan a favor, por medio de la elaboración de campañas benéficas.

Internacionales: Los tratados con otros países y las buenas relaciones que existen entre ellos debido al manejo de las relaciones públicas con fines de mantener buenas relaciones con otros países. Relación existente entre las relaciones públicas y otras disciplinas. La publicidad tiene muchos antecedentes. Uno de los primeros signos de publicidad que se conoce corresponde a la época prehistórica ya que los hombres de esa época, escribían con dibujos y representaciones, y se cree que esto pudo haber sido la voz de los primeros instrumentos para comunicar tradiciones a sus herederos. La publicidad es una actividad comunicativa de carácter informativo ya que se proporciona información dirigida la cual emite el conocimiento a través del reconocimiento. Las relaciones públicas y la publicidad son conceptualmente similares: ambas buscan incrementar la conciencia sobre alguna compañía o algún producto de forma positiva. Esta se distingue de otras formas de comunicación de masas, ya que establece su éxito en la medida en la que se puede producir un cambio en las normas de consumo de una vasta población. Sus canales y herramientas son los medios de comunicación de los que se vale y su impacto va mucho más allá de la promoción de ventas. Siendo así los medios de comunicación juegan un rol sumamente importante, los cuales se valen de la publicidad para proyectarse, han sido evaluados y analizados buscando siempre su mejor proyección tomando en cuenta objetivos y público meta (Antonio Castillo Esparcia. Año 2009. Relaciones Públicas, Teoría e Historia. Barcelona España. Editorial UOC. P. 15).

El mensaje de Relaciones Públicas debe ser elaborado teniendo en cuenta el interés y el nivel cultural del público al cual va dirigido, porque en caso contrario, para muchos puede resultar pueril y para otros sumamente elevados. Tanto las relaciones públicas, como la publicidad y el periodismo, utilizan la comunicación para el cumplimiento de sus objetivos. Las primeras relaciones públicas tienen algunas características que la diferencian tanto de la publicidad como del periodismo:

La comunicación de relaciones públicas es dialogada, en tanto que las del periodismo son unilaterales. El mensaje de relaciones públicas es personalizado, es elaborado especialmente para un determinado público teniendo en cuenta el interés y el nivel cultural de los integrantes del mismo. En tanto que el periodismo o en publicidad los mensajes son indiscriminados, igual para todos. La misma noticia o anuncio la ven o leen todos sin distinción. La comunicación de relaciones públicas no puede ser pensada para un periodo determinado. Es indefinido en el tiempo, dado que su intención es dialogar con el público a objeto de hacerse apreciar por los mismos y llegar a concordar intereses para beneficio de ambas partes. Sin embargo, la comunicación periodística o publicitaria puede ser programada para un lapso determinado. Las Relaciones Públicas constituyen una disciplina profesional que a partir de un análisis multidisciplinario e integrador de la comunicación en las organizaciones, está dirigida a crear y desarrollar relaciones de comprensión y confianza entre estas últimas y sus públicos, teniendo en cuenta el tratamiento de las características y objetivos de ambos.

Política. Las relaciones públicas son importantes en la vida diaria de los ciudadanos. No son sólo importantes para los negocios, sino también para las instituciones y los gobiernos. Los gobiernos deben establecer buenas relaciones entre sí y con la ciudadanía en general. En tiempos electorales el desarrollo de las campañas políticas siempre se ha tenido en consideración el papel importante de las relaciones públicas para promover sus propuestas. Normalmente, las campañas de los gobiernos y las instituciones son sin ánimo de lucro. Así que tener una financiación dada para una buena estrategia de marketing y un buen departamento de relaciones públicas es clave para difundir sus mensajes. Los partidos políticos normalmente usan de manera adecuada las relaciones públicas para convencer a la gente. Las relaciones públicas tienen por objeto, el logro de vínculos entre el público y las entidades. Las relaciones públicas políticas, sin embargo, tienen un papel fundamental en la mediación de los mensajes entre el gobierno y el público, por ello requiere de las relaciones públicas para hacerlo correctamente. Otro concepto que está relacionado con las relaciones públicas en la comunicación política es la consolidación de una imagen, crucial para los personajes políticos. La imagen una percepción que tiene el público y es muy frágil, puesto que la más mínima información pública negativa puede dañarla seriamente y es muy

costoso y de arduo trabajo su reconstrucción. El logro de una buena imagen en la política es crucial dada la falta de interés en la población en general.

Lo más importante es que el trabajo de relaciones públicas en la política es presentar imágenes veraces y creíbles, ya que la imagen es la suma de lo que un individuo siente y sabe acerca de un personaje y gobierno. En los modelos políticos de las relaciones públicas se tiende a resaltar la importancia del poder, del conflicto y de los intereses diversos en la organización, encuentra en la organización el foro donde los individuos y los grupos luchan por el poder, y por ende los públicos al encontrarse en un medio simbiótico bien pueden ser partícipes del poder. Así que las relaciones públicas circulan en una vía de doble sentido, y la existencia permanente de este canal permite la manera continua de conducir una opinión hacia la decisión del poder.

Psicología. Esta ciencia le aporta a las relaciones públicas el conocimiento individual y grupal de las conductas, motivaciones y necesidades de las personas. De esta concepción se ramifica la psicología a la psicología del color, psicología de las masas y la psicología institucional. La psicología del color es muy importante en las relaciones públicas ya que detrás de toda su teoría, resulta en una práctica que termina por conectar con una parte emocional, con el objetivo de que los públicos interpreten los mensajes a través de una comunicación visual. La psicología institucional tiene que ver con los procesos de los sentidos, con las palabras y comportamientos de los integrantes dentro de una organización. Por último, la psicología de las masas, en esta área es primordial conocer las inclinaciones humanas, ya que se trata con diferentes tipos de caracteres, esto por tratarse de personas, las cuales tienen comportamientos inesperados, y más aún cuando se trata de comportamientos agrupados, situación en la cual todo puede cambiar de un momento a otro por influencia de otras personas. Así pues se determina que las relaciones públicas están íntimamente conectadas a la psicología.

Sociología. Esta más que comprobado que la conducta humana impacta directamente en las relaciones públicas, dado que esta ciencia filosófica pretende informar y persuadir en el pensamiento de su público. Así pues esta ciencia ligada a las relaciones públicas es un proceso de participación entre la empresa, organismo o institución y el receptor del mensaje, para de esta de esta manera, asegurarse un apoyo por parte de la opinión pública (Opinión de Lydia Natour - 24 noviembre, 2013). Periodismo y su uso en las relaciones públicas. Lombardi menciona que el papel de las relaciones públicas y el del periodismo son herramientas fundamentales en la construcción de la imagen de la empresa y en su posicionamiento institucional. Y que el servicio del periodismo es una forma válida de hacer conocer un emprendimiento. La estrategia con los medios trata de tener como objetivo transformar la información de lo que la empresa comunique en noticia, y, de esta manera, aumentar la credibilidad del material difundido, tener una mejor aceptación en la opinión pública y diferenciarse claramente de la publicidad.

Mientras que Según John Lloyd y Laura Toogood periodista e investigadora respectivamente, hacen mención de que tanto el periodismo como las relaciones públicas han tenido una relación difícil, caracterizada principalmente por la dependencia mutua y muchas veces de la existencia de gran desconfianza mutua también. Sin embargo, a últimas fechas las relaciones públicas ya no dependen tanto del periodismo, si no que el periodismo ahora depende de las relaciones públicas más que nunca. El enérgico uso de internet y de las redes sociales, han dado paso a una peligrosa intercomunicación de los usuarios en contra de la reputación de las compañías, y a la vez ha servido también para que tanto las empresas como los gobiernos puedan comunicarse directamente con la población. Con el objetivo de proteger la marca, ahora las relaciones públicas son ahora una profesión de primera línea, mientras que el periodismo lucha por sobrevivir.

Tendencias Actuales Sobre Relaciones Públicas en México en Empresas de Comunicación (TV, Radio y Medios Electrónicos)

En la actualidad las empresas de comunicación en México, ponen especial atención en sus relaciones públicas, y en la imagen que proyectan hacia la sociedad con el fin de proponer vías de solución que puedan

aplicarse a problemas de la sociedad, de las personas, instituciones u organizaciones. Entre algunos actores sociales de las relaciones públicas prevalece la tendencia en la percepción de que no se trata de una carrera profesional, sino que obtiene preferencia y buena voluntad de medios de comunicación, de otras organizaciones públicas e instituciones gubernamentales. De aquí se parte para afirmar que, se requiere conocer y analizar la relación entre la responsabilidad social empresarial y las tendencias de la industria de relaciones públicas en México, no solo a partir de las acciones de sus profesionales en sí mismos y de las que ejercen en términos de construir la responsabilidad social empresarial de sus clientes, sino de las obligaciones que tienen las empresas para las que trabajan como subsistemas integrantes del estado. Es notable el desarrollo de los conceptos de relaciones públicas y responsabilidad social empresarial. Estos aspectos resaltados por los responsables de las relaciones públicas en empresas de comunicación, fueron analizados a la luz de la responsabilidad social empresarial a fin de demostrar algunas fortalezas y áreas de oportunidad existentes en este ejercicio profesional en beneficio del desarrollo de los grupos de interés involucrados en el mismo. Además del hecho de que la práctica de relaciones públicas la realizan profesionales de distintas áreas. Con toda esta especialización e incremento de la oferta de las agencias de relaciones públicas en el país, y de su creciente reputación como organizaciones socialmente responsables, es puesta en duda cuando prevalece el enfoque de que solo se ocupan de conseguir la denominada buena voluntad para sus clientes por sobre cualquier otro aspecto y bajo cualquier circunstancia. El desarrollo de la responsabilidad social se caracteriza por el cumplimiento legal, más allá de un enfoque integrado a la planeación estratégica u operativa de las organizaciones (Por Rebeca Iliana Arévalo Martínez. Primera revista electrónica en Iberoamérica especializada en comunicación). Tendencias actuales sobre relaciones públicas en México en empresas de turismo.

Para la industria turística, son de suma importancia las relaciones públicas, al hablar de un hotel se habla de sus instalaciones, servicios, gente, localización y los beneficios que, en comparación con otros hoteles proporciona a sus huéspedes. Las relaciones públicas en este concepto no son solo una nota informativa de prestigio, son el resultado positivo de esas instalaciones y esa atención, por lo que para una empresa hotelera las relaciones públicas y el servicio a los clientes se unen y complementan. El objetivo de las relaciones públicas en este ámbito es el de apoyar a los esfuerzos del área de ventas y de operación, haciendo notar los servicios y la atención personalizada, creando así una imagen de atención, cordialidad y servicio. Para que se lleve a cabo la función de las relaciones públicas cumpla con su objetivo, debe existir absoluta coordinación y cooperación entre diferentes departamentos, así como diversos esfuerzos cívicos y sociales por parte de los residentes de cada una de las ciudades donde actúa la empresa.

La organizaciones pueden contar con los servicios de asesores en relaciones públicas para que, a nivel nacional, proporcionen apoyo a cada uno de las según sus necesidades (Enrique Figueroa. Año 1997. Relaciones públicas. Enrique Figueroa, Editorial EDAMEX. pp. 93-125). La organizaciones pueden contar con los servicios de asesores en relaciones públicas para que, a nivel nacional, proporcionen apoyo a cada uno de las según sus necesidades (Enrique Figueroa. Año 1997. Relaciones públicas. Enrique Figueroa, Editorial EDAMEX. pp. 93-125). Tendencias actuales sobre relaciones públicas en México en empresas de alimentos. En México, al hablar de las relaciones públicas, existe una creciente especialización en el desarrollo de servicios para las compañías de alimentos y bebidas, así como para servicios financieros, tecnologías, información, cultura y entretenimiento, ya que son los más redituables.

El área de las relaciones públicas busca la empatía con las personas que de alguna manera están relacionados. El público externo a la empresa es muy numeroso, pero es normal voltear la mirada hacia los prospectos de clientes, y a quienes se ha de dirigir las actividades para difundir la imagen que se pretende proyectar de la empresa. Así mismo, con el personal interno se pretende colaborar con la información de un equipo de trabajo, sólido, leal y comprometido con ésta. El área de relaciones públicas forma parte importante dentro de la empresa, organización o institución, ya que con una imagen positiva, se establece un compromiso con la comunidad y el medio ambiente local, lo cual otorga un valor agregado a su trabajo y se extiende a nuevos niveles. También se mantiene una buena relación con el turista, ya que constantemente se les está

proporcionando información, la cual le servirá para obtener una mejor atención y servicio, y a los proveedores la ruta correcta para proporcionarlos, de esta manera se convierte en una relación de ganar (Yuridia Torres. 31/08/2016. El Financiero).

CONCLUSIONES

Las relaciones públicas son el conjunto de acciones que crean o mantienen una imagen sólida y respetable, tanto de las personas, como de los gobiernos, empresas, etc. Son de suma importancia, ya que ellas son el vínculo entre el consumidor y las empresas, determinando las necesidades, gustos, costumbres, deseos, etc. del mismo. Una persona con habilidades de relaciones públicas tiene las puertas abiertas de cualquier lugar al que quiera ingresar, ya que su empatía y trato con las personas son las que destacarán al momento de tener que hacer algún tipo de comparación entre las demás personas de la sociedad.

BIBLIOGRAFIA

Aguadero, F. (2013). Relaciones Públicas y comunicación, un enfoque estratégico. México: LID.

Arévalo, R. (2014). Comunicación aplicada a la responsabilidad social empresarial desde las relaciones públicas. Razón y Palabra, 18 (87). Consultado el 18 de septiembre de 2017 en: http://www.razonypalabra.org.mx/N/N87/M87/02_Arevalo_M87.pdf

Castillo, A. (2009). Relaciones Públicas, Teoría e Historia. Barcelona España: UOC.

Figuerola, E. (1997). Relaciones públicas. México: EDAMEX. pp. 93-125.

Torres, Y. (31 de agosto de 2016). Credibilidad en Crisis. Periódico El Financiero. Consultado el 20 de septiembre del 2017 en: <http://www.elfinanciero.com.mx/power-tools/credibilidad-en-crisis.html>

LA GLOBALIZACION EN MEXICO; DESDE LO UNIVERSITARIO A LO HABITUAL

Leticia Sesento García, Colegio Primitivo y Nacional de San Nicolás de Hidalgo
 Griselda Sesento García, Colegio Primitivo y Nacional de San Nicolás de Hidalgo
 Patricia Serna González, Colegio Primitivo y Nacional de San Nicolás de Hidalgo

RESUMEN

En las últimas dos década, hemos sido testigos de un fenómeno creciente a nivel mundial; la globalización. Este fenómeno ha provocado una serie de cambios visibles en prácticamente en todos los países. La influencia de la globalización se ha reflejado no solo en el ámbito económico, también se ha visto sus afectos en todos los aspectos de la vida en los diferentes grupos sociales. La globalización no es un asunto solamente económico o comercial, sino que va a impactar en la vida cotidiana de las personas. En este artículo se analiza este fenómeno mundial que ha impactado todos los aspectos de la vida de la sociedad y, de manera específica, la de los seres humanos. Para muchos economistas, sociólogos y filósofos, el problema de la globalización es ya preocupante, porque como utopía no ha mejorado la vida de las personas; al contrario, los índices de pobreza han aumentado catastróficamente. Estudios realizados por organizaciones no gubernamentales y por organizaciones mundiales como la UNESCO y la ONU, proporcionan datos alarmantes en cuanto al índice de pobreza real que la globalización ha afectado. Es por ello que hace falta reflexionar en torno a este “utopía” de la modernidad, para comprender sus intereses, sus sustentos y, sobre todo, el impacto real que tiene en las conciencias de todos. Un aspecto fundamental es que en medio de esta globalización que entra a todos los aspectos de la vida íntima de las personas, es necesario recuperar el papel que tiene la escuela y, desde luego, los maestros, quienes deben constituirse como intelectuales actuales que orienten no solamente a sus estudiantes, sino que sean portadores de imágenes críticas, de ideas novedosas que permitan a los sujetos posibilidades de vida mejores. Es la escuela la que debe encargarse de aclarar panoramas, de atender a quienes lo solicitan. Aun cuando la reforma educativa actual impulsada por el gobierno federal intenta apoderarse no de las escuelas, sino de las mentalidades de los ciudadanos a través de la pedagogía sustentada en las competencias, el maestro no debe dejar de constituirse como ese sujeto crítico.

PALABRAS CLAVES: Globalización, Educación, Maestro, Escuela Crítica, Violencia

GLOBALIZATION IN MEXICO; FROM THE UNIVERSITY TO THE HABITUAL

ABSTRACT

In the last two decades, we have witnessed a growing phenomenon worldwide; the globalization. This phenomenon has caused a series of visible changes in practically all countries. The influence of globalization has been reflected not only in the economic sphere, it has also seen its affects in all aspects of life in different social groups. Globalization is not only an economic or commercial issue, but it is going to have an impact on the daily life of people. This article analyzes this global phenomenon that has impacted all aspects of the life of society and, specifically, that of human beings. For many economists, sociologists and philosophers, the problem of globalization is already worrisome, because as a utopia it has not improved the lives of people; On the contrary, poverty rates have increased catastrophically. Studies conducted by non-governmental organizations and by global organizations such as UNESCO and the UN,

provide alarming data regarding the real poverty rate that globalization has affected. That is why we need to reflect on this "utopia" of modernity, to understand its interests, its livelihoods and, above all, the real impact it has on the consciences of all.

A fundamental aspect is that in the midst of this globalization that enters all aspects of the intimate life of the people, it is necessary to recover the role of the school and, of course, the teachers, who should be constituted as current intellectuals that guide not only to its students, but to be carriers of critical images, of novel ideas that allow the subjects better life possibilities. It is the school that should take charge of clarifying scenarios, of attending to those who request it. Even when the current educational reform promoted by the federal government tries to seize not of the schools, but of the mentalities of the citizens through the pedagogy supported by the competences, the teacher must not stop constituting himself as that critical subject.

JEL: A20, A12, A14

KEYWORDS: Globalization, Education, Teacher, Critical School, Violence.

INTRODUCCIÓN

Frente al horizonte que brinda el proceso de globalización, es preciso promover acciones con relaciones entre Universidades e Iniciativa privada en función de que las primeras componen la formación de recursos humanos, y el avance de la investigación científica, tecnológica el desarrollo de la infraestructura. Las condiciones generadas por el mercado profesional encerrada en el ámbito de la globalización forman una fuerte necesidad de un contacto entre los profesionales de los otros países con terminaciones de homologación de razonamientos y enunciación de encomiendas a sus concernientes gobiernos para reflexionar sobre la importancia del ejercicio de una profesión más allá de los contornos geopolíticas. Por tal motivo la globalización continúa impactando en la vida de las instituciones educativas de nuestro país.

Tal aproximación entre los profesionistas admitirá que las ventajas de intercambio con experiencias prácticas y la caracterización de procesos a partir de vínculos más desarrollados y sus correspondencias en caso uno de los países colaboradores. En este rubro la universidad pública, los colegios asociaciones y gremios profesionales están convocados a jugar un papel preciso en la enunciación de una nueva cultura profesional donde las políticas de calidad en el ejercicio profesional se instituyan positivas y vivan distinguidas por la sociedad a que favorecen.

Antes estos esquemas favorecidos por la globalización, brota una nueva cultura profesional, la actualización y la certificación juegan un papel central en la clasificación y demarcación de los perfiles profesionales provenientes. Consecuentemente, es imperioso en la actualidad una revalorización de los procesos de información por ende del profesionista como beneficiario de conocimientos inclinados formar las reconsideraciones de los actores sociales, cuyo acción profesional que implica tanto en la productividad y en avance social, como en producir a la mesa de discusión elementos de revalorización y controversia de políticas no solo en ámbito de la función social de la universidad pública, donde también tendrán que involucrar en la discusión de orientaciones, misiones y fines de políticas de desarrollo social equitativo.

Por otra parte si reflexionamos sobre el papel que ha venido ejerciendo la escuela en los últimos años, partir de ubicar y criticar el papel reproductor del maestro y el papel de dominación de la escuela, con objetivos contrarios, al logro verdadero de desarrollo, en su mayoría desconectados a los cambios drásticos del mercado del trabajo tras el proceso de globalización.

Si antes no se soluciona el problema de la enunciación o el tipo de sociedad a la que se desea y para el cual se pretende establecer un sistema educativo, no será viable una política educativa que, entre distintas cosas, especifique lo concerniente con el imperioso de ¿En qué formarse? ¿Porque qué aprender?.

Una vez que el sistema educativo forma estos recursos, es el mercado a través de la oferta y la demanda adecuada de conocimientos y habilidades para cada puesto lo que establecen su regulación. Del mismo modo este es un enfoque de la correspondencia educación empleo que podrían reflexionarse como preciso de la perspectiva que se adopte para plantar el desarrollo social.

Los contextos que se anticipan para la educación están directamente concernientes con el futuro y el progreso de las nuevas representaciones de producción. Específicamente, tendrá que reflexionar los cambios que se están originando rápidamente, en nuestro país y en el mundo, acerca de las formas, capacitación, mayor producción y mayor remuneración. Ya que en casi 40 años los Modelos educativos no han logrado todo lo que en teoría pretendían. En el presente trabajo se pretende realizar un análisis sobre el impacto de la globalización sobre todo en el campo educativo en la vida de todas las personas que conformamos.

REVISIÓN DE LITERATURA

La palabra de “globalización” es un término relativamente moderno a pesar de que algunos analistas en el tema convienen que asumió sus inicios con la Revolución Industrial en el siglo XVII; algunos estudiosos, señalan, la globalización como un proceso económico, tecnológico, socio-político y cultural. Es oportuno señalar el concepto de globalización nació como un término económico únicamente; sin embargo, afecta a todos los aspectos de la vida social; como son las ideas, los gustos, las costumbres, las formas de vestir y pensar, y todos los aspectos de la vida cotidiana de sus hombres y mujeres.

Asimismo, los avances tecnológicos, la innovación de las telecomunicaciones, el desarrollo de los medios de transporte y el auge del Internet han permitido que la globalización sea una realidad ineludible que impulsa una creciente comunicación e interdependencia entre los distintos países del mundo unificando sus mercados, sociedades y culturas. Por ejemplo, en educación, la actual reforma educativa del 2016, es una clara manera de cómo se va a pensar lo educativo. Al quitarle al maestro sus derechos laborales, surge un nuevo maestro “idóneo” pero idóneo para un sistema capitalista, globalizado, donde el nuevo docente será evaluado como un obrero por contrato en una empresa. “El magisterio ha quedado aislado de la realidad nacional y su papel en la escuela se ha limitado a ser proveedores de información y conocimientos inútiles que atiborran la cabeza de sus educandos” (Del Río, 2016: 77).

A lo largo de la historia de nuestro país, se han visto enormes procesos de globalización, un ejemplo claro es el proceso globalizador del imperio español que inicio en 1492, y el más importante en exponer su independencia del mismo imperio en 1810. Con su levantamiento de 1910, fue asimismo primero de los levantamientos de una sociedad inconforme con la situación que estaban viviendo.

Como antecedentes del proceso de globalización y liberación de los mercados, podemos señalar las políticas de globalización de Thatcher y Reagan en los 80, en México se iniciaron políticas de liberalización, internacionalización y privatización en los negocios. Asimismo, los caminos más substanciales en la incursión de México a la globalización acrecentaron: El ingreso al GATT (ahora la Organización Mundial del Comercio-OMC) en 1986. La apertura hacia el capital extranjero constituido por la corporación del Fondo NAFIN en 1989 y su mercado gubernamental ulterior en la Bolsa de Nueva York (New York Stock Exchange-NYSE) en 1991. La privatización de los bancos entre 1991 y 1992. En el espacio de globalización se consolidó con el establecimiento del Tratado de Libre Comercio (TLC) en 1994, y el ingreso a la OCDE en el siguiente año. Como podemos apreciar el proceso de globalización en México data de muchas décadas anteriores.

Podemos señalar, como efectos negativos para el país, la crisis económica que sufrió México en 1994, como producto de la globalización. No obstante las dificultades por el gigantesco horizonte de progreso de sus proveedores nacionales de capital y dinero, por la extenso medio de instrumentos de inversión y agudeza de las instituciones financieras extranjeras en su método financiero, además los envíos de una gran cantidad de productos conteniendo metales preciosos, México llega a constituirse como uno de los proveedores emergentes más sustanciales por el tamaño y sofisticación del sistema financiero. La crisis en ese año afectó bastante a la sociedad, pero de alguna manera el país no se derrumba. México es un país que actualmente ha entrado al mundo de la globalización; presionado por instancias internacionales se ha visto obligado a adelgazar el aparato gubernamental, lo que ha ocasionado una serie de problemas en la sociedad. La globalización ha aumentado el nivel de inseguridad y de incertidumbre. La pobreza es cada vez más latente, y, sobre todo, aquella que los sociólogos denominan como la extrema pobreza.

Hoy en día la globalización es un término que pretende definir el mundo como un todo conectado que va más allá de fronteras nacionales, diferencias étnicas, religiosas, culturales, políticas y económicas está unificado como una sola sociedad. Es decir, lo que suceda en un país repercutirá en los demás y viceversa. Del mismo modo, este concepto de globalización es considerado un movimiento de carácter financiero, político y social debido a los avances tecnológicos, la apertura, expansión de los mercados y por qué todas aquellas transacciones de bienes y servicios realizados a nivel mundial. Sin embargo, anteriormente esta unión mundial solamente consideraba como importante el ámbito económico, por el intercambio de bienes entre los países (comercio y mercado capital) lo cual causó que las economías de las naciones cada vez estuvieran más entrelazadas dándose inicio al libre comercio de productos.

De modo que, al ir creciendo cada vez más, esta extensión no sólo se enfocaba a la economía que un país podía generar con el libre comercio, sino que se enfocó también en los avances de los medios de transporte y del uso de nuevas tecnología de información y de comunicación. Si bien es cierto que la globalización ha contribuido al bienestar material de los seres humanos, para algunos especialistas (San Pedro, 2002) se hace necesario convocar a una sociedad más humanitaria y más justa. Él supone que aun en la globalización del mundo se puede llegar a vivir de una mejor manera. Existe cierto optimismo en la globalización. Optimismo que no comparten muchos estudiosos de la economía y la sociología. Más bien se muestran críticos a un mundo globalizado.

Como ya se señaló, una de las principales características de la globalización, es el libre intercambio de bienes y/o servicios el cual fue primordial factor ante el cual se consideraba a la globalización como un simple trato económico sin ver que en realidad es mucho más que eso. El Fondo Monetario Internacional (FMI) señala que la globalización es “la interdependencia económica creciente en el conjunto de los países del mundo, provocada por el aumento del volumen y de la variedad de las transacciones fronterizas de bienes y servicios así como de los flujos internacionales de los capitales, al mismo tiempo que por la difusión acelerada y generalizada de la tecnología”. (Mateus & Brasset, 2002: 66). Si bien es cierta esta definición, pero lo interesante es que no debe ocultar la otra cara, la de la pobreza.

Los niveles de pobreza han traído otros problemas; por ejemplo, la extrema violencia que se vive en todas partes del mundo. Para muchos especialistas, pensadores y críticos: “La primera y fundamental causa de la delincuencia y la violencia, es el incumplimiento histórico por parte del Estado de su función” (Sefchovich, 2014: 59). Los ciudadanos están abandonados a su suerte. La globalización señala un adelgazamiento del estado, y con ello la incertidumbre envuelve a muchos habitantes que no tienen la manera de defenderse ante un mundo así. La seguridad está en manos de la iniciativa privada, y la pregunta es: ¿Cuántos pueden pagar por este servicio? Globalización implica una nueva manera de mirar a la sociedad.

Bauman (2006) señala que la sociedad posmoderna considera a sus miembros como consumidores, no como productores. Pensar la vida como productores implica la constatación del trabajador, de sus derechos, de

un trabajo, de una vida digna. En cambio, pensar la sociedad como consumidores es pensar en la seducción, por deseos volátiles de consumismo, y no por reglas. Actualmente la globalización ha implicado una nueva manera de pensar en los sujetos; estar en el confort es lo principal, la diferencia entre un sujeto y otro es lo que cada uno puede adquirir. Así, el consumismo se vuelve una espiral sin fin, una ideología capitalista muy sutil que la globalización impulsa. Todo lo anterior conlleva a la conformación de una sociedad marcada por el individualismo marcado. Como lo señala Lipovetsky (1996) a una era del vacío.

Indudablemente, la globalización no solo permite el enriquecimiento o acumulación de riqueza por parte de los dueños de las grandes transnacionales; no concluye ninguna política para el desarrollo integral de la población; debido a esto, todas las naciones han tenido que cambiar sus estrategias económicas creando nuevos patrones culturales. Cabe también recordar que la globalización no empezó como un modelo económico social, sino como un “marco regulatorio de las relaciones económicas internacionales” (Mateus & Brasset, 2002,68).

Sin embargo, este nuevo orden económico no ha traído un mejoramiento ni a la educación ni a la vida cotidiana de la gran mayoría de la sociedad; en realidad el neoliberalismo económico ha provocado un cambio de mentalidad en las personas que ha favorecido, entre otros aspectos, la poca criticidad de la sociedad. Como señala Gee (2002), habrá que analizar lo que se esconde detrás del discurso neocapitalista. Con la globalización, la derecha en México, compuesta por los empresarios, los medios de comunicación y los gobiernos que se corrompen, hacen esfuerzos enormes porque la gente acepte la cuestión social actual como algo natural. Y cualquier intento de algún grupo o ciudadano por romper el “orden” es borrado, señalado como enemigo de la nación. Es justamente ahí donde entra la educación y, de manera especial, el trabajo de los maestros críticos. Las aportaciones de la pedagogía crítica de McLaren habrá que retomarlas.

CONCLUSIÓN

Cuando hablamos sobre globalización, se piensa en un acumulado de relaciones económicas, políticas y sociales que han transformado esencialmente a la organización mundial. Debido a esto, es muy sustancial este tema, ya que es un proceso que ha tomado cada vez más impulso. Por un lado, los países llamados primer mundistas son los que siempre han tenido los avances en todos los sentidos y, por consecuencia, los países tercermundistas serán los que tendrán las desventajas de todo ello. Incluso estos conceptos de sociedades de primer mundo y de tercer mundo han sido prácticamente borrados de los tratados económicos y sociológicos, ya que no es conveniente que la sociedad tome interés en este tema. La sociedad global hace que estos conceptos casi desaparezcan, como lo señala Lipovetsky (2000), lo importante es lo efímero, como la moda.

En otro sentido, la globalización es un término de doble carácter. Primero está el ofensivo, el que afecta a los países (los menos desarrollados) causando consumismo, ideología errónea y pobreza. Pero después también está el carácter defensivo, que es el que beneficia a los países proporcionando mejoramiento de la economía y facilidades impresionantes. Por esto es importante analizar detenidamente las dos caras de la moneda al hablar sobre este proceso globalizador.

Dentro del contexto nacional, cualquier actividad de desarrollo debe tener como objetivo la conformación de una sociedad incluyente, madura, participativa y feliz, teniendo como principal fin que el ser humano sea el centro de todas las estrategias pertinentes para que así, cualquier ciudadano cuente con el derecho de contribuir a la realización de un plan de desarrollo y que el proceso de elaboración de plan sea altamente abierto, participativo y democrático; recordando que dentro de la multiculturalidad las minorías deben participar también.

¿Suenan utópicos? La realidad es completamente diferente a la teoría. La globalización ha sido avasallante para casi todas las culturas del planeta, provocando cambios acelerados e inciertos, incluso en aquellos

países supuestamente desarrollados, ya que el aspecto económico ha sido un gran condicionante, de tal manera que los supuestos aspectos positivos de este sistema económico no son sino ideas creadas por las propias empresas transnacionales a manera de propaganda. El único camino viable es la educación de la sociedad; una educación basada en el pensamiento crítico, para que la sociedad en general tenga la posibilidad de participar y, en la medida de lo posible, acercarse lo más posible a ese ideal utópico donde la ciudadanía toma de sí misma y trabaja para lograr el respeto a los derechos humanos y el bienestar general.

Como se señala: “Uno de los aspectos más significativos de la producción de discursos y políticas educativas dominantes es identificable en los supuestos beneficios universales de las reformas educativas. Si bien es la globalización lo que exige tales reformas, el cambio debe entenderse siempre beneficioso para todos, y especialmente para los grupos sociales más desfavorecidos.

En efecto, cualquiera de las reformas que forman parte de la agenda educativa global, como veremos, identifica ventajas directas o indirectas sobre los grupos sociales más excluidos o vulnerables. Los efectos potencialmente perjudiciales para dichos grupos, en cambio, tienden a ser minimizados”. (Bonafant, 2006: 656). La reforma en la educación es un claro ejemplo de un sistema capitalista inhumano que cada vez más les quita derechos a los ciudadanos. El presidencialismo en México tal como está, solo ha servido para legislar para beneficio de aquellos que el sistema sí les beneficia.

Finalmente, señalar que debemos tomar atención a varios principios, si deseamos internacionalizarnos y globalizarnos. La globalización si bien es una realidad mundial, sin embargo, los gobiernos de cada país del mundo deben reflexionar seriamente en torno a los beneficios de la misma. No han de pensar que la mundialización es la panacea que va a solucionar todos los problemas del país. La autonomía de cada nación es un valor que no debe perderse. Empezar a cuestionar el por qué debemos acatar como válidas las evaluaciones en educación de un organismo internacional. Si bien es cierto que es interesante las observaciones externas, pero solo deben ser consideradas como puntos de vista internacionales. Las decisiones importantes habrán de tomarlas directamente la sociedad mexicana.

El mundo globalizado impone a los países más pobres, endeudados y marginados, una política en todos los órdenes de la vida; la educación es uno de los campos que más son vigilados por instancias internacionales. Por ejemplo, en México, muchas de las reformas educativas son impuestas a través de la prueba PISA que sirve para evaluar la educación en todos los países. Como señala Jurjo Torres (2012), el mecanismo de control internacional se hace mediante la intervención de la OCDE, la cual va a señalar qué tan bien estamos en materia educativa. Recuperando las ideas críticas de este autor, habremos de cuestionar este tipo de evaluaciones que son impuestas desde instancias externas. México, al igual que todos los países de Latinoamérica, debe defender su autonomía en todos los campos, especialmente en lo educativo.

Es en la autonomía donde cada espacio habrá de definir qué es lo que le conviene de acuerdo a sus intereses, necesidades, e idiosincrasia. Para ello, habrá que no temer a la formación de una sociedad con sujetos críticos, donde los jóvenes sobre todo sean los portadores e impulsores de nuevas formas de existencia y de convivencia humana. La sociedad actual requiere de iniciativas novedosas, que permitan que cada sujeto encuentre un espacio para desarrollar sus potencialidades humanas, técnicas y de convivencia más humana.

REFERENCIAS BIBLIOGRÁFICAS

- Bauman, Zigmunt. (2007). Vida de consumo. 1ª. Edición. México; Editorial Fondo de Cultura Económica.
- Bauman, Zigmunt. Modernidad Líquida. (2006). 1ª. Edición. 6ª. Reimpresión. Buenos Aires. Fondo de Cultura Económica.

Beck, U (S.f). ¿Qué es la globalización? Recuperado https://ocw.uca.es/pluginfile.php/1496/mod_resource/content/1/beckulrichqueeslaglobalizacion.pdf. Consultado 04/03/17.

BONAL, X. y TARABINI, A. (2006). Focalización educativa y lucha contra la pobreza: una discusión acerca de los límites y posibilidades del programa Bolsa Escola. In: BONAL, X. (Ed.). Globalización, educación y pobreza en América Latina: ¿hacia una nueva agenda política? Barcelona: CIDOB. Revista Scielo.

Del Río, García Eduardo. (2016). La reforma educativa. 1ª. Edición. 6ª reimpresión. México; Editorial Penguin Random House Grupo Editorial S. A. de C.V.

Eaton, D. F. (2001) México y la globalización. 2ª. Edición. Editorial Trillas. México.

Gee, James Paul. Glynda Hull y Colin Lankshear. (2002). El nuevo orden laboral. Lo que se oculta tras el lenguaje del capitalismo. 1ª. Edición. Barcelona. Editorial Pomares S.A. de C.V.

Lipovetsky, Gilles. (1996). La era del vacío. Ensayos sobre el individualismo contemporáneo. 9ª. Edición. Barcelona; Editorial Anagrama.

Lipovetsky, Gilles. (2000). El imperio de lo efímero. La moda y su destino en las sociedades modernas. 7ª. Edición. Barcelona; Editorial Anagrama. Colección Argumentos.

Mateus, j, & Brasset, d. W. (2002). La globalización sus efectos y bondades. Bogotá; Fundación Universidad Autónoma de Colombia.

Pereña, Francisco. (2004). De la violencia a la crueldad. Ensayo sobre la interpretación, el padre y la madre. 1ª. Edición. Madrid. Editorial Síntesis S.A.

San Pedro, José Luis. (2002). El mercado y la globalización. 1ª. Edición. Barcelona; Editorial Destino.

Sefchovich, Sara. (2014). Atrévete. Propuesta hereje contra la violencia en México. 1ª. Edición. México; Editorial Aguilar.

Torres, Santomé Jurjo. (2012). La justicia curricular. El caballo de Troya de la cultura escolar. 2ª. Edición. Barcelona; Editorial Morata.

BIOGRAFIA

Dra. Leticia Sesento García, Colegio Primitivo y Nacional de San Nicolás de Hidalgo, Facultad de Derecho y Ciencias Sociales, Facultad de Psicología

Dra. Griselda Sesento García, Colegio Primitivo y Nacional de San Nicolás de Hidalgo, Facultad de Derecho y Ciencias Sociales, Facultad de Psicología

Dra. Patricia Serna González, Colegio Primitivo y Nacional de San Nicolás de Hidalgo, Facultad de Derecho y Ciencias Sociales, Facultad de Psicología

RESPONSABILIDAD SOCIAL UNIVERSITARIA DESDE LA MIRADA DE LOS DIFERENTES ACTORES INTERESADOS

José Javier Buenaño Cabrera, Universidad de las Fuerzas Armadas ESPE
Betzabé del Rosario Maldonado Mera, Universidad de las Fuerzas Armadas ESPE
Karla Viviana Benavides Espinosa, Universidad de las Fuerzas Armadas ESPE

RESUMEN

El objetivo es analizar la responsabilidad social desde la perspectiva de las partes interesadas para establecer si las universidades han avanzado en su concepción. La investigación es exploratoria y concluyente descriptiva de diseño de muestra transversal individual. Se consideraron actores internos y externos de las universidades públicas domiciliadas en Quito. Los resultados evidenciaron que los directivos relacionan este concepto con acciones de vinculación con la colectividad, pertinencia de la oferta académica y rendición de cuentas. Los estudiantes, con formación en valores y actividades filantrópicas. El personal administrativo, con beneficios laborales. El sector empresarial, con la respuesta a sus necesidades de innovación. El gobierno con, la respuesta para constituirse en el motor de transformación económica, productiva y social del país. Se concluye que la responsabilidad social universitaria es aplicada de manera parcial, lo que se traduce en modelos de gestión que no la incorporan como una variable explícita de su accionar.

PALABRAS CLAVE: Responsabilidad Social Universitaria, Rendición de Cuentas, Actores Interesados

UNIVERSITY SOCIAL RESPONSIBILITY FROM THE PERSPECTIVE OF THE DIFFERENT STAKEHOLDERS

ABSTRACT

The objective is to analyze social responsibility from the stakeholder perspective to establish whether universities have advanced in their conception. The research is exploratory and conclusive descriptive of the cross-sectional sample. The internal and external stakeholders of the public universities domiciled in Quito were taken into account. The results showed that university managers related this concept with actions of connection with community, the relevance of the academic offer and the accountability. Students with training in values and philanthropic activities. Administrative staff, with work benefits. The business sector, with the answer to their needs of innovation. The government with the answer to become the engine of economic, productive and social transformation of the country. It is concluded that university social responsibility is applied in a partial way, which translates into management models that do not incorporate it as an explicit variable of their actions.

JEL: I23.

KEYWORDS: University Social Responsibility, Accounts Surrender, Stakeholders

INTRODUCCIÓN

Los nuevos objetivos mundiales y la agenda 2030 para el desarrollo sostenible, ratifican el compromiso social de las universidades frente a las comunidades con quien interactúa y a la educación en general como

el pilar fundamental para cumplir estos objetivos (UNESCO, 2015). El Ecuador a tono con el compromiso mundial, incorpora al marco normativo de la educación superior, los niveles esperados de exigencia en sus funciones esenciales. En donde subyacen las dimensiones de RSU que conjuntamente con la rendición de cuentas y participación en la planificación nacional constituyen principios sobre los cuales se debe sustentar el ejercicio de autonomía universitaria (Calle y Santacruz, 2011). Si bien los modelos de evaluación de la calidad educativa del Ecuador no señalan categóricamente que la RSU constituye un eje transversal, las dimensiones que abordan responden al marco normativo en donde éste concepto se introduce como principio fundamental. A la luz de estos resultados, es importante establecer si las IES han avanzado hacia una práctica consciente de la RSU como principio de mejora continua, y más aún, determinar si su concepción supera la lógica tradicional del asistencialismo. Frente a esta problemática, se propone determinar cómo se concibe la RSU desde la percepción de las diferentes partes interesadas en el quehacer de las universidades públicas de Quito. Al no evidenciar propuestas que orienten un ejercicio consciente e intencionalmente planificado de RSU, el aporte del trabajo se encamina a visibilizar la concepción multidimensional con la que se debe incorporar en la gestión institucional. El documento se estructura como sigue. Se expone una revisión bibliográfica de varios autores versados en el tema de RSU, que permitió identificar desde diferentes ópticas, las dimensiones de su composición. Posteriormente se expone la metodología de investigación y seguidamente los resultados del análisis comparativo entre las dimensiones de RSU y valoración de sus impactos que son señaladas por las partes interesadas. Se concluye puntualizando el avance en la concepción de la RSU en las universidades objeto de esta investigación.

REVISIÓN LITERARIA

Siguiendo a Olarte y Ríos (2015) en las múltiples acepciones de RSU se pueden identificar diversos enfoques. Según su propuesta, desde la revisión de varios autores se identifican cinco enfoques que se detallan en la Tabla 1.

Tabla 1: Conceptos y Ámbitos de RSU Según Varios Autores

Ámbito considerado en la concepción de RSU	Concepto de RSU	Autores representativos
Curriculo	Comportamiento ético de las universidades que a través de la transformación de sus currículos y su modelo pedagógico, buscan dar respuesta a las necesidades de la comunidad a través de una formación cívica y profesional integral.	(Ruiz y Soria, 2009); (Ganga y Navarrete, 2012); (Bryant y otros, 2012); (Martínez y Hernández, 2013)
Político	Conjunto de principios y valores personales, sociales e institucionales, en base de los cuales se establecen las políticas que influyen en la gestión y establecimiento de la cultura universitaria. Observándose un cambio gradual en el comportamiento individual y de conjunto, de toda la comunidad universitaria hacia un compromiso cívico.	(Atunes y Martínez, 2008); (Reybold, 2008); (Bryant, et.al., 2012); (Martínez y Hernández, 2013)
Extensión universitaria	Eje misional a través del cual la universidad cumple su deber ser de formar profesionales éticos integrales. Permite generar acciones de interacción con su entorno para dar respuesta a las demandas sociales y culturales.	(Ruiz y Soria, 2009); (Martínez y Hernández, 2013); (Dima y otros, 2013)
Desarrollo sostenible	Relacionada con la política de la UNESCO de la formación de profesionales integrales que puedan forjarse un futuro sostenible. La RSU se conceptualiza como una forma de incentivar modelos de consumo responsables que permeen desde el interior de la universidad hacia la sociedad. Se incluye el fomento de la sostenibilidad desde la investigación.	(UNESCO, 1998); (Atunes y Martínez, 2008)
Formación para educación cívica	Inserta en los modelos pedagógicos en procura de motivar comportamientos socialmente responsables, sustentados en principios de calidad, pertinencia y equidad. En donde la comunicación y manejo de la información constituyen los pilares para asegurar el éxito en la toma de decisiones.	(Butcher y otros, 2011); (Atunes y Martínez, 2008); (Goni y otros, 2013)

En la tabla se clasifican los conceptos de RSU según el ámbito de RSU que involucra, así mismo se hace referencia a los autores que coinciden en su concepción de RSU. Elaboración propia basada en Olarte y Ríos (2015).

Según el filósofo francés Vallaey (2008) la RSU debe ser aplicada de manera transversal al quehacer universitario, guardando el principio de pertinencia en todas sus funciones. Además subraya como característica fundamental la gestión de los impactos que genera la universidad en su entorno sobre los stakeholders. Agrupa los impactos en cuatro grandes categorías, organizacional, educativa, cognitiva y social. Estos impactos determinan cuatro ejes sobre los cuales las universidades deben plantear sus propias estrategias de RSU.

METODOLOGÍA

Para el estudio se consideró la propuesta de modelo de autoevaluación de RSU de Vallaey y otros (2009), se tomó cuenta como partes interesadas a docentes, estudiantes, administrativos, autoridades, empresas y organismos reguladores de la educación superior, con quienes las universidades se vinculan. En la Tabla 2 se describen las dimensiones, los impactos y los criterios de medición.

Tabla 2: Dimensiones e Impactos de la RSU

Dimensión	Definición de Impactos Sobre Las Dimensiones	Medición A Través de
Organización	La organización de la universidad impacta en la calidad de vida de sus actores internos (docentes, personal administrativo, estudiantes), en el ámbito ambiental y social.	Buenas prácticas laborales.
		Sistemas de gestión ético y transparente.
Cognición	La forma cómo la universidad produce conocimiento impacta en definiciones sociales, científicas y de pensamiento. Incentiva la integración de saberes, articulación de la relación entre tecnología, ciencia y sociedad, posibilita el control y apropiación social del conocimiento. Se pregunta por la pertinencia social, por sus destinatarios.	Buenas prácticas ambientales.
		Promoción de la inter y transdisciplinabilidad.
Participación	La acción universitaria incide como referente y actor en el progreso de un país, en la creación de capital social. La participación de estudiantes a través de actividades de vinculación con la realidad exterior. La participación directa en el acompañamiento del desarrollo social, a través de su participación en la resolución de problemas fundamentales.	Pertinencia social de la investigación.
		Responsabilidad social de la ciencia.
Educación	La universidad interviene directamente en la formación de ciudadanos y profesionales integrales, en su escala de valores, la manera cómo interpretan y se comportan en el mundo. La pertinencia de una formación de jóvenes profesionales socialmente responsable.	Comunidades incluyentes de aprendizaje.
		Redes de capital social.
		Proyectos de desarrollo socialmente sostenibles.
		Mallas curriculares socialmente consensuadas.
		Aprendizaje socialmente pertinente y solidario.
		Formación ciudadana y profesional responsable.

En esta tabla se describen las dimensiones de RSU y los impactos sobre los actores interesados de la universidad, así mismo la forma de medición de estos impactos que permitirá evaluar el nivel de RSU que observa la institución. Elaboración propia en base al modelo de Vallaey, De la Cruz y Sacia (2009).

Se trabajó con las universidades públicas domiciliadas en la ciudad de Quito, Universidad de las Fuerzas Armadas ESPE (ESPE), Universidad Central de Ecuador (UCE) y Escuela Politécnica Nacional (EPN). El estudio es de naturaleza empírica con una investigación exploratoria y concluyente descriptiva, de diseño de muestra transversal individual. Para la recolección de datos se utilizó la entrevista en profundidad y la encuesta, esta última aplicada a una muestra probabilística aleatoria. El procesamiento de la información se realizó a través software estadístico SPSS. Se levantaron 257 encuestas a docentes, de las cuales 40,1 % pertenecen a la UCE, 28% a la EPN y 31,8% a la ESPE. De un total de 598 encuestas realizadas a estudiantes, el 50,5 % corresponde a la UCE, el 24,9% a la EPN y el 24,92% a la ESPE. En cuanto al

personal administrativo, se aplicaron 588 encuestas, 49,4% a personal que trabaja en la UCE, 25,4% en la EPN y 25,2% en la ESPE. El criterio de los altos directivos de las universidades involucradas en el estudio, se obtuvo a través de entrevistas estructuradas, al igual que o a gerentes de empresas públicas, privadas y ONG's reconocidas por su labor en el ámbito de responsabilidad empresarial. Del mismo modo a los representantes de los organismos reguladores de la educación superior del Ecuador, Consejo de Educación Superior (CES), Secretaría Nacional de Ciencia y Tecnología (SENESCYT) y Consejo Nacional de Evaluación, Acreditación y Aseguramiento de la calidad de la educación superior (CEAACES).

RESULTADOS

Los resultados muestran en términos generales, que la RSU se visualiza de manera parcial según los intereses individuales de los diferentes grupos de actores internos. Esta parcialidad observa una realidad extendida en el ámbito universitario toda vez que su concepto se incorpora recientemente y se podría decir que aún está en construcción. Resultados que coinciden con varios estudios desarrollados en otros países (Urdaneta, 2016; López A. , 2016). Desde una mirada externa a la universidad se mantiene la parcialidad en la percepción de la RSU, aunque en el conjunto de los grupos se logra obtener una visión más integral. Por su parte, las autoridades universitarias también asumen a la RSU de manera parcial, lo que explica la no inclusión de manera explícita en los modelos de gestión. En consecuencia la RSU no se aplica de manera sistémica y únicamente se evidencian esfuerzos aislados, no articulados intencionalmente en cada parte del sistema universitario (Gaete, 2016). Esta parcialidad en la percepción de RSU se cuantifica a través de índice de valoración de la RSU que se puede visualizar en la en la Tabla 1.

Tabla 4: Índice de Percepción de la RSU Desde la Mirada de los Diferentes Actores Interesados

Actores	Índice de Percepción Parcial de RSU	Valoración Escala 1 a 10			
		Organización	Cognición	Participación	Educación
Docentes	8,11	5,67	7,13	7,49	7,41
Estudiantes	6,15				
Administrativos	4,48				
Empresas	3,89	5	5,42	3,33	9,17
Órganos reguladores de la educación superior	6,94				
Autoridades Universitarias	6,67				
Índice de percepción global de RSU	6,04				

En esta tabla se observan los valores del Índice de percepción parcial y el Índice de percepción global de RSU. El primero calculado en base a la media observada por grupo de interés, el segundo que corresponde a la media de los índices parciales. Siendo 1 el máximo valor del índice de percepción de RSU y 0 el mínimo, el máximo valor se obtiene cuando todos los ámbitos y factores de impacto son considerados en la percepción de RSU, y cero cuando ningún ámbito ni factor de impacto es referido por los actores.

En suma, el índice de percepción parcial constituye una forma cuantitativa de valorar cómo cada grupo de actores de interés conceptualiza la RSU respecto a las dimensiones y factores de impacto, definidos en el modelo de autoevaluación de RSU considerado para el estudio. El estudio develó que los representantes del sector empresarial que intervinieron en el estudio, son quienes en menor grado perciben de manera integral la RSU, el Índice de Percepción de RSU fue de 3,89. Los impactos considerados en conjunto por el sector empresarial público son: las *buenas prácticas ambientales*. Mientras que el privado enfatiza en la *buenas prácticas ambientales, pertinencia de la investigación y responsabilidad social de la ciencia*.

El sector que representa a los organismos reguladores de la educación superior, en conjunto consideran todos los ámbitos e impactos. Sin embargo se diferencia la parcialidad con la que se asume desde la individualidad de cada organismo. Se destaca el CES quien relaciona RSU con todos los impactos con excepción de *proyectos de desarrollo social sostenibles*. El Índice de percepción de RSU alcanzó un valor de 6,94. Los docentes asumen la RSU desde todas las dimensiones e impactos, se destaca la dimensión *educación* y sin mayor diferencia, *participación*, *cognición* y *organización*. Es importante destacar que en esta última, el impacto sobre *buenas prácticas laborales* obtuvo el mayor porcentaje. El Índice de percepción de RSU alcanzado es de 8,11 y constituye el mayor obtenido entre todas las partes de interesadas consultadas. El Índice de percepción de RSU alcanzado en el grupo de estudiantes es de 6,15, la relacionaron con las dimensiones de *educación* principalmente, y en menor medida con *participación*, *organización* y *cognición*, en ese orden. El personal administrativo obtuvo un Índice de percepción de RSU de 4,48, coinciden con los estudiantes en las cuatro dimensiones de la RSU. Sin embargo, pusieron énfasis en *cognición*, seguido de *participación*, *organización* y *educación*. En conjunto las autoridades universitarias conciben la RSU desde todos los impactos, con excepción de las *buenas prácticas laborales* y *redes de capital social*. Obtuvieron un valor de Índice de percepción de RSU de 6, 67.

Según las dimensiones e impactos que se exponen en la Tabla 1, se identifican los enfoques que subyacen en la concepción de RSU desde la mirada de los diferentes actores. Así, para el grupo empresarial se puede concluir que su concepción se acerca a un enfoque de desarrollo sostenible. Los docentes conciben la RSU desde la mirada de los enfoques de currículo, extensión universitaria, desarrollo sostenible y formación para educación cívica. Lo que significa que este grupo es el que en mayor grado observan la integralidad de la RSU. En el grupo de estudiantes el enfoque predominante es el de currículo y en menor énfasis extensión universitaria. En el personal administrativo el enfoque predominante es de extensión universitaria, le sigue el político. El conjunto de las autoridades universitarias conciben la RSU desde todos los enfoques, aunque si se consideran los resultados individuales de cada institución, cada autoridad asume desde una mirada parcial y no desde la integralidad. Coinciden los resultados con los obtenidos por Gaete (2015) al analizar el concepto de RSU desde la comprensión que manifiestan los directivos de algunas universidades de Chile.

Finalmente, las partes interesadas que se consideraron en el estudio coinciden en la urgencia de acortar distancias entre la universidad, Estado y sector empresarial. De modo que se generen vínculos consistentes que estimulen una interrelación dinámica como estrategia para alcanzar el desarrollo de la sociedad ecuatoriana en todas sus dimensiones. Hernández y Alvarado (2015) coinciden en su análisis con la acepción multidimensional de la RSU. Destacan la importancia de impulsar la relación universidad, empresa y Estado para propiciar entre otros, el desarrollo de investigación.

CONCLUSIONES

La apreciación multidimensional de la RSU es común entre todos los grupos de interesados en el desempeño universitario. Sin embargo, la conciben parcialmente respecto a las dimensiones e impactos descritos en el estudio. Las divergencias en las dimensiones e impactos definidos por cada grupo, se explican por los distintos intereses que movilizan su participación dentro o fuera del sistema universitario, así como también por su propia interpretación del concepto de RSU. Esta perspectiva parcializada, sobre todo de las autoridades universitarias, se traduce en modelos de gestión que no incorporan la RSU como una variable explícita de su quehacer universitario. Una limitación importante fue que en ninguna de las universidades en donde se desarrolló el estudio, se ha instituido, de manera consiente, la RSU como parte del quehacer cotidiano, únicamente se la percibe como un conjunto de indicadores que deben ser cumplidos en el marco de la acreditación de calidad a la que se encuentran obligadas por ley. Esto no sucede en el sector empresarial, en donde la relacionan a la responsabilidad social empresarial, cuyo concepto tiene un mayor nivel de desarrollo.

Otra limitación para la investigación, tiene relación con la variedad de acepciones encontradas sobre RSU, que en su mayoría se derivan de estudios puntuales, lo cual no permite llegar con facilidad a generalizaciones de la evolución del concepto. Sin embargo, se pudo establecer tendencias a nivel mundial que se desprenden principalmente de la función social otorgada a la universidad en los encuentros mundiales de la UNESCO. Se propuso un Índice de Percepción de RSU que facilita la cuantificación de cómo cada grupo de actores de interés la conceptualizan respecto a las dimensiones y factores de impacto, definidos en el modelo de autoevaluación de RSU considerado para el estudio. Con el fin de validar el Índice de Percepción de RSU será necesario replicar la metodología de estudio en otros espacios.

REFERENCIAS

- Calle Ramírez, D. C.; Santacruz Moncayo, T. (2011). Modelo de responsabilidad social universitaria aplicado a la Universidad Politécnica Salesiana sede Cuenca. (Tesis inédita de Maestría en Administración de Empresas CUE). Localización <http://dspace.ups.edu.ec/handle/123456789/1331>.
- Gaete, Q. R. (2015). La Responsabilidad Social Universitaria desde la perspectiva de las partes interesadas: un estudio de caso. *Actualidades Investigativas en Educación*, 15(1), 1-29. <http://search.ebscohost.com>
- Gaete, Q. R. (2016). Iniciativas internacionales y redes interuniversitarias de responsabilidad social universitaria. *Ciencia, docencia y tecnología*, 75-102. <http://www.scielo.org.ar/pdf/cdyt/n53/n53a04.pdf>
- Hernández, R.; Alvarado, J. (2015). Responsabilidade social na relação universidade-empresa-Estado. *Educador y Educadores*, 18(1), 95-110. doi:<http://dx.doi.org/10.5294/edu.2015.18.1.6>.
- Olarte, D.; Ríos, L. (2015). Enfoques y estrategias de responsabilidad social implementadas en Instituciones de educación Superior, una revisión sistemática de la literatura científica de los últimos 10 años. *Revista de la Educación Superior*, 3(175), 19-40. doi:<https://doi.org/10.1016/j.resu.2015.10.001>
- UNESCO. (2015). UNESCO. Obtenido de <http://www.un.org/sustainabledevelopment/es/>
- Urdaneta, M.; Cova, M.; Chirinos, A.; González, X. (2016). Responsabilidad social en las universidades del municipio de Maracaibo del estado de Zulia. *Revista venezolana de gerencia*, 21(73), 65-85. Obtenido de <http://www.produccioncientificaluz.org/index.php/rvg/article/view/21057>
- Vallaes, F. (2008). Responsabilidad Social Universitaria: una nueva filosofía de gestión ética e inteligente para las universidades. *Educación Superior y Sociedad*, 13(2), 191-220. <http://dspace.ups.edu.ec/handle/123456789/1331>
- Vallaes, F.; De la Cruz, C.; Sasía, P. (2009). Responsabilidad social universitaria. Manual de primeros pasos. BID. Mc Graw Hill. <https://publications.iadb.org/handle/11319/245>

RECONOCIMIENTO

Los autores agradecen la colaboración de las autoridades, docentes, personal administrativo y estudiantes de las universidades que participaron en el estudio. Así mismo a las autoridades de los organismos rectores y empresarios por su gran apertura y contribución al desarrollo de la investigación.

BIOGRAFÍA

Betzabé de Rosario Maldonado Mera es Magíster en Gestión de Organizaciones, Candidata a PhD en el programa doctoral de Ciencias de la Administración de la Universidad Nacional de La Plata – Argentina. Docente Investigadora de la Universidad de las Fuerzas Armadas ESPE. Departamento de Ciencias Económicas, Administrativas y de Comercio. Av. General Rumiñahui, Sangolquí, Ecuador.

José Javier Buenaño Cabrera es MBA especialidad Marketing, Candidato a PhD en el programa doctoral de Ciencias de la Administración de la Universidad Nacional de La Plata – Argentina. Docente Investigadora de la Universidad de las Fuerzas Armadas ESPE. Departamento de Ciencias Económicas, Administrativas y de Comercio. Av. General Rumiñahui, Sangolquí,

Karla Viviana Benavides Espinosa es MBA especialidad Marketing, Candidata a PhD en el programa doctoral de Ciencias de la Administración de la Universidad Nacional de La Plata – Argentina. Docente Investigadora de la Universidad de las Fuerzas Armadas ESPE. Departamento de Ciencias Económicas, Administrativas y de Comercio. Av. General Rumiñahui, Sangolquí, Ecuador.

FACTORES DETERMINANTES PARA EL DESARROLLO Y COMPETITIVIDAD DE LAS MIPYMES EN LA REGIÓN GUANAJUATO, MÉXICO

Martín Romero Castillo, Escuela Nacional de Estudios Superiores Unidad León, Universidad Nacional Autónoma de México

RESUMEN

La presente investigación se basa en analizar las características de las micro, pequeñas y medianas empresas (MIPYMES) que permita identificar los factores debido a la interrelación regional en un donde se encuentran inmersas estas pequeñas empresas. La metodología contempla el análisis empírico, mediante una encuesta a 544 MIPYMES distribuidas aleatoriamente en las regiones del estado de Guanajuato, durante el periodo de 2017. El método de aplicación es un análisis discriminante que consiste en encontrar la máxima diferencia entre las regiones (centroides) donde se localizan las empresas. Al obtener los resultados se presentaron diferencias significativas entre los factores de interrelación regional, y que son un elemento fundamental para detonar el desarrollo y la competitividad en el estado de Guanajuato, México.

PALABRAS CLAVE: Desarrollo, financiamiento, productividad, factores críticos, MIPYMES

DETERMINANTS FOR THE DEVELOPMENT AND COMPETITIVENESS OF MSMES IN THE REGION OF GUANAJUATO, MEXICO

ABSTRACT

This research is based on analyzing the characteristics of micro, small and medium enterprises (MSMEs) that can identify factors due to the regional interrelation in a where these small businesses are immersed. The methodology contemplates empirical analysis, by means of a survey of 544 MSMEs randomly distributed in the regions of the state of Guanajuato, during the period of 2017. The methodology considers the empirical analysis, through a survey of 544 MSMEs randomly distributed in the regions of the State of Guanajuato, during the period of 2017. The method of application is a discriminant analysis that is to find the maximum difference between the regions (centroids) where are located the companies. To get the results there were significant differences among the factors of interrelationship regional, and that they are a critical element to detonate the development and competitiveness in the state of Guanajuato, Mexico.

KEYWORDS: Discriminant analysis, MSMES, funding, financial institutions, regional distribution.

JEL: M10, M20, R11

INTRODUCCIÓN

Las micro, pequeñas y medianas empresas (MIPYMES) son de gran importancia en el ámbito nacional, regional y en particular en el estado de Guanajuato. Las MIPYMES tienen una importante contribución en la economía nacional y en Guanajuato, al aportar el mayor número de unidades económicas (99.6%), generan el 52% del Producto Interno Bruto (PIB) y 72% del empleo (INEGI, 2015); de ahí la relevancia que reviste este tipo de empresas y la necesidad de fortalecer su desempeño, crecimiento y continuidad. El estudio de las MIPYMES es fundamental dada su aportación en la generación de empleo, el desarrollo

económico, pero principalmente en el bienestar y la reducción de la pobreza para las personas y las familias (Molina et al. 2011). Dada la importancia económica y social de las MIPYMES como principal generadora de empleo y su contribución a la economía en México, nuestro interés por analizar esta investigación es identificar los factores que impiden acceder al financiamiento, debido a la interrelación regional donde se desenvuelven estas empresas; para que las pequeñas empresas puedan comprender cuáles son las estrategias y políticas públicas que favorezcan el crecimiento y competitividad en el estado de Guanajuato. La idea central de esta investigación es identificar los factores que impiden el desarrollo y crecimiento de las MIPYMES, debido a factores de interrelación regional en un entorno complejo en donde se localizan estas pequeñas empresas; y así comprender cuáles son las estrategias para apoyar y fortalecer su crecimiento, continuidad y competitividad en la región del estado de Guanajuato. Las preguntas clave a responder son: ¿Qué factores debido al efecto de interrelación regional son importantes para el desarrollo y competitividad de las MIPYMES?. Este estudio se basa en la hipótesis en que existe una relación como factor de influencia de las MIPYMES debido a la interrelación regional en un entorno complejo, y que son un elemento esencial para el desarrollo y la competitividad en las regiones donde se localizan. El documento se estructura como sigue, se presenta una revisión de la literatura relacionada con diversos enfoques en el análisis del contexto regional debido a la distribución territorial de las empresas y del acceso al financiamiento en la región. A continuación, se presenta la metodología que consiste en un estudio empírico mediante el análisis de una muestra de 544 encuestas aplicadas en forma aleatoria a las MIPYMES distribuidas en las regiones del estado de Guanajuato, durante el periodo de abril a junio del 2015. Al final se presentan las conclusiones obtenidas del análisis realizado.

REVISIÓN LITERARIA

En el año 2014 existían en Guanajuato 259,343 empresas, de las cuales el 99.5% son micro, pequeñas y medianas empresas (MIPYMES). Por tamaño de la empresa, el 94.2% de éstas eran microempresas, el 3.9% pequeñas empresas, el 1.3% empresas medianas y solo el 0.5% se consideraban grandes empresas (INEGI, 2015). Las micro, pequeñas y medianas empresas (MIPYMES) tienen una importancia socioeconómica y territorial, en la generación de empleos y el desarrollo económico en la región, pero principalmente en el bienestar y la reducción de la pobreza para las personas y las familias (Estrada, García y Sánchez, 2009).

Las MIPYMES es el segmento empresarial que más obstáculos enfrenta para su desarrollo y crecimiento; el financiamiento es una de las principales factores que impiden que la pequeña empresa puede invertir en innovación y desarrollo, que es un elemento esencial para su crecimiento y sobrevivencia en un mercado competitivo y globalizado (Flores y García, 2012). La falta de acceso a financiamiento por las MIPYMES restringe la obtención de recursos, dificultando su acceso al conocimiento e innovación, tecnología y recursos humanos, que son factor clave para su desarrollo y crecimiento (Bialkowski, Bohl y Serwa, 2006). La supervivencia, éxito o fracaso de las MIPYMES en un entorno de interdependencia regional, competitivo y globalizado, suele estar ligado, a las ventajas competitivas que logren desarrollar de una manera interna o externa dentro de los mercados en que se encuentran inmersas (Palacín-Sánchez y Pietro, 2015). Por otra parte, Maté y Ramón (2016) en su estudio a una muestra de PYMES ubicadas en las regiones de España, encontraron que existen diferencias regionales, encontrando que las empresas PYMES que se localizan en regiones más desarrolladas son capaces de obtener mayor acceso de financiamiento que las empresas que se localizan en regiones menos desarrolladas (Mercieca, Schaeck y Wolfe, 2009).

Financiamiento de las MIPYMES en la Región

Molina et al. (2011) mencionan que en México las MIPYMES tienen serias dificultades para sobrevivir en su primer año de operaciones, por factores como la inexperiencia en el área de negocios, la falta de innovación y la fragilidad de sus estructuras financieras (Soriano, 2005). En este sentido, el financiamiento al ser identificado como un factor crítico en las MIPYMES, se hace necesario identificar y analizar los factores y estrategias, tales como el financiamiento y la innovación, en el desempeño de las empresas, y

dado que el financiamiento es un elemento sustancial para lograr la innovación y el desarrollo (Gómez, García y Marín, 2009). Según datos INEGI (2014), en México únicamente el 13% de las MIPYMES han solicitado algún tipo de crédito bancario; de este porcentaje, el 76% ha recibido dicho crédito de los cuales el 88% lo otorgó la banca comercial, mientras que el 1.4% de las mismas lo obtuvieron a través de la banca de desarrollo. Siendo las principales causas por las cuales se les niega el crédito, el desinterés del banco hacia el sector, la falta de garantías, y la indiscutible falta de información en esta materia (Lecuona, 2009).

Garrido y García (2011) señalan que las políticas de financiamiento a las MIPYMES, por las instituciones públicas y privadas, es de primordial importancia para facilitar y potenciar su desarrollo, crecimiento y continuidad de estas empresas en la región. Asimismo, Gómez et al. (2009) comenta que el apoyo con financiamiento e innovación a las MIPYMES es fundamental, ya que promueve el desarrollo y crecimiento económico, así como la creación de empleos proporcionando alivio de la pobreza en México y las regiones (Yamori, 2010). Por otra parte, Federico, Rabetino y Kantis (2012) analizaron los efectos determinantes del crecimiento de las PYMES por región, encontrando que existen variaciones significativas en el crecimiento de la empresa según la región donde se localizan. Por otra parte, Gómez et. al (2009) señalan que el financiamiento es una parte fundamental para el crecimiento y desarrollo de las MIPYMES, y en consecuencia es evidente la importancia del financiamiento para el desarrollo y el crecimiento de las empresas en la región.

Análisis Discriminante Por Región

El análisis discriminante ayuda a identificar las características que diferencian o discriminan los factores de las MIPYMES en dos o más grupos localizadas en las regiones, y cuántos de estos factores son necesarios para alcanzar la mejor clasificación posible (Mures, García y Vallejo, 2005). Por su parte, González, Correa, y Acosta (2002) analizaron los factores económicos y financieros que condicionan la rentabilidad financiera a una muestra de 258 PYMES en España. Se utilizó el análisis discriminante con el propósito de analizar la influencia de la rentabilidad financiera de la empresa, encontrando diferencias significativas en los factores que ejercen el comportamiento económico y financiero de la empresa rentable con respecto de las empresas no rentables. En otro estudio, Fontalvo (2012) examinó la evaluación de la productividad a una muestra de 23 MIPYMES en Colombia. El método utilizado es el análisis discriminante, encontrándose diferencias significativas en los indicadores de productividad.

METODOLOGÍA

La metodología utilizada es de tipo cuantitativo, mediante el método del análisis discriminante aplicado a un estudio empírico a una muestra de 544 MIPYMES localizadas en las regiones del estado de Guanajuato. La información se recopiló durante el periodo del abril a junio del 2017, la encuesta abarcó un total de 23 (50%) municipios distribuidos en las regiones del estado de Guanajuato. Para la recolección de los datos mediante la aplicación de encuestas, se utilizó el muestreo probabilístico por racimos ya que se enfocará solamente en las empresas MIPYMES localizadas en la región. El cuestionario constará de preguntas relacionadas con el tema y se aplicará al azar a las empresas seleccionadas en las regiones del Estado, en particular a los directivos o representantes de cada empresa para evaluar el grado de apreciación de cada una de las variables objeto del presente estudio. Se tuvo una tasa de respuesta de 570 representantes de cada empresa MIPYME, de los cuales se desecharon 26 cuestionarios incompletos, para completar el total de los 544 cuestionarios completos de acuerdo a la muestra estimada (ver Tabla 1).

Tabla 1: Estructura de las Encuestas Aplicadas en las Regiones del Estado de Guanajuato, 2017

Región	Total de Municipios	Municipios Aplicaron las Encuestas	Municipios Encuestados	Encuestas Aplicadas a MIPYMES	Porcentaje de Encuestas Aplicadas
I Noreste	8	4	San Luis de la Paz, Santa Catarina, Tierra Blanca y Victoria	55	10.1%
II Norte	6	4	Dolores Hidalgo, Guanajuato y San Miguel de Allende	96	17.7%
III Centro	16	7	León, Irapuato, Celaya, Silao, San Francisco del Rincón, Purísima del Rincón y Romita	257	47.2%
IV Sur	16	8	Abasolo, Cuerámaro, Manuel Doblado, Moroleón, Pénjamo, Uriangato, Valle de Santiago y Yuriria	136	25%
Estado de Guanajuato	46	23		544	100%

La primera columna de la Tabla 1 presenta las regiones que conforman el territorio del estado de Guanajuato. En la segunda columna se muestra el total de Municipios por región. En la tercera columna se presenta los Municipios donde se aplicaron las encuestas por región. La cuarta columna describe el nombre de los municipios que conforman cada región, y las columnas cinco a la columna siete presentan el porcentaje, de los Municipios entrevistados, el número y porcentaje de las encuestas aplicadas a una muestra de 544 MIPYMES. La información se recopiló durante el periodo de abril a junio de 2017. Fuente: Elaboración propia.

RESULTADOS

La Tabla 2 presenta los factores de influencia de las MIPYMES que benefician a las regiones, destaca en primer lugar la generación de empleo con 26.8%, el segundo lugar lo ocupa mejorar la economía de la región con 10.5%, en tercer lugar es generan autoempleo familiar con 7.5%, en cuarto lugar son una fuente de ingreso familiar con 6.8%, le siguen las variables de influencia ofrecen productos a la población local (5.7%), generan ventas con precios más accesibles (4.6%), ofrecen servicio al cliente (4.4%) y generan mayor movimiento de ventas (3.7%) del total de las 544 MIPYMES entrevistadas. Lo anterior indica que las MIPYMES son un factor fundamental en el empleo, la economía familiar y el desarrollo de la región.

Tabla 2: Influencia de las MIPYMES en las Regiones del Estado de Guanajuato, 2017

Influencia de las MIPYMES en la Región	Empresas Por Región				
	Región I Noreste	Región II Norte	Región III Centro	Región IV Sur	Total empresas 544
Generan Empleo	0.6	3.9	16.2	6.3	26.8
Mejoran la Economía de la región	0.2	0.6	8.5	1.3	10.5
Generan autoempleo familiar	1.1	1.3	3.3	1.8	7.5
Fuente de ingreso familiar	0.7	1.7	2.8	1.7	6.8
Ofrecen productos a la población local	0.6	1.1	2.4	1.7	5.7
Generan ventas con precios más accesibles	0.4	0.7	1.5	2.0	4.6
Ofrecen Servicio al cliente	0.7	1.1	2.0	0.6	4.4
Generan mayor movimiento de Ventas	0.6	0.4	1.8	0.9	3.7
Competencia de precios afectan a las MIPYMES	0.4	1.1	0.0	2.0	3.5
Competencia excesiva de negocios y empresas	0.6	0.9	0.9	0.9	3.3
Elaboran productos propios de la región	0.4	0.6	2.0	0.4	3.3
Atraen más negocios y empresas	0.2	1.1	0.9	0.7	2.9
Ofrecen productos a la población rural	1.7	0.4	0.2	0.7	2.9
Elaboran artesanías propias de la región	0.6	0.7	0.9	0.6	2.8
Otros factores de influencia	2.2	2.9	4.8	4.0	14.0
Total	10.1	17.6	47.2	25.0	100.0

La primera columna de la Tabla 2 presenta las ventajas de la región para las MIPYMES. En las siguientes columnas se muestra el porcentaje de las MIPYMES para cada una de las regiones del Estado, de acuerdo a la percepción que contestaron los empresarios de una muestra de 544 MIPYMES aplicadas en el estado de Guanajuato. El periodo de la muestra fue de abril a junio de 2017. Fuente: Elaboración propia.

Financiamiento Regional de las MIPYMES

En esta sección se presenta el análisis sobre el financiamiento a las MIPYMES en las regiones del estado de Guanajuato, de acuerdo a la percepción que manifestaron las empresas entrevistadas de una muestra de 544 MIPYMES, durante el periodo de abril a junio de 2017. En la Tabla 3 se presentan los resultados que respondieron los pequeños empresarios al preguntar sobre las principales fuentes de financiamiento, los resultados son la principal fuente de financiamiento proviene de recursos propios, familiares y de los proveedores con 62.7%, mientras que las instituciones financieras representaron una menor participación con 37.3%. Del total de las instituciones financieras, las cajas de ahorro o sociedad de ahorro y préstamo destacan como la principal fuente de financiamiento con 18.4%. En segundo lugar está la banca privada con 11.6%, lo cual indica que está institución tiene un valor menor como opción para solicitar financiamiento por las MIPYMES. El tercer lugar lo ocupan las Microfinancieras con 5.3%, en cuarto lugar están las Casas de empeño o prestamistas con 2.8%, le siguen el gobierno con 1.3% del total de las 544 MIPYMES entrevistadas, como se puede observar en la Tabla 3.

Tabla 3: Fuentes de Financiamiento Por Región en el Estado de Guanajuato, 2017

Fuentes de financiamiento de las MIPYMES	Empresa por Región				Total
	Región I Noreste	Región II Norte	Región III Centro	Región IV Sur	
Recursos propios	1.8	4.4	21.7	9.2	37.1
Caja de ahorros o Sociedad de ahorro y préstamo	1.7	2.8	9.2	4.8	18.4
Familiar	2.2	2.9	6.1	2.8	14.0
Banca privada	1.1	3.1	4.8	2.6	11.6
Proveedores	1.3	2.0	3.5	2.0	8.8
Microfinanciera	1.1	1.3	1.7	1.3	5.3
Casas de préstamo o empeño	0.6	0.6	0.2	1.5	2.8
Gobierno	0.2	0.4	0.2	0.6	1.3
Personas físicas prestamistas	0.2	0.2	0.0	0.4	0.7
Total	10.1	17.6	46.1	25.0	100.0

La primera columna de la Tabla 3 presenta las fuentes de financiamiento que señalaron las micro, pequeños y medianas empresas (MIPYMES) como la principal opción para solicitar financiamiento. En las siguientes columnas se muestra el porcentaje de las MIPYMES para cada una de las regiones del Estado, de acuerdo a la percepción que contestaron los empresarios de una muestra de 544 empresas aplicadas en el estado de Guanajuato. El periodo de la muestra fue de abril a junio de 2017. Fuente: Elaboración propia.

Análisis Discriminante Regional de las MIPYMES

El análisis discriminante ayuda a identificar las características que diferencian o discriminan los factores de las MIPYMES en dos o más grupos localizadas en las regiones, y cuántos de estos factores son necesarios para alcanzar la mejor clasificación posible. La lambda de Wilks permite contrastar la hipótesis nula de que las medias multivariantes de los grupos o regiones son iguales. La Tabla 3 presenta el contraste de las tres funciones obtenidas. En la primera línea (1 a la 3) muestra que valor de lambda de Wilks tiene asociado un nivel de significancia menor de 0.01, por lo que el modelo presenta diferencias significativas en las medias de las regiones. En la segunda línea (2 a la 3) se muestra la posibilidad de discriminar al menos, dos de los grupos regionales, ya que la lambda de Wilks tiene asociado un nivel de significancia menor a 0.01.

Tabla 4: Lambda de Wilks. Contraste de las Funciones del Modelo

Contraste de las Funciones	Lambda de Wilks	Chi-Cuadrado	Grados de Libertad	Significancia
1 a la 3	0.318	609.844	24	.000
2 a la 3	0.916	46.864	14	.000
3	0.967	18.021	6	.006

La primera columna de la Tabla 4 presenta el contraste de las 3 primeras funciones. En la segunda columna se muestra el estadístico lambda de Wilks la cual contrasta las tres funciones del modelo. En las siguientes columnas se muestran los estadísticos del modelo multivariante, Chi-cuadrado, los grados de libertad y el nivel de significancia que es menor al 1%. Se utilizó el método Análisis Discriminante derivado de la aplicación del SPSS (versión 22). Fuente: Elaboración propia.

Coeficientes Estandarizados de la Función Discriminante

La Tabla 5, presenta la primera función de clasificación o discriminante, la cual tiene una mayor importancia a la hora de predecir el grupo de pertenencia por región. La primera función discrimina, principalmente a las variables la *Influencia de las MIPYMES en la región*, *Productividad laboral* y *Financiamiento de las MIPYMES* puesto que presentan una mayor puntuación en la función discriminante. Mientras que las variables: *Obstáculos para obtener el crédito* y *Principal problema de las MIPYMES en la región* tienen una menor importancia, ya que sus puntuaciones son negativas en la función discriminante a la hora de predecir el grupo de pertenencia por región. En forma similar, en la segunda línea de la Tabla 5, muestran los coeficientes para cada una de las variables que componen la función discriminante, las cuales se expresan de la forma:

$D1 = 0.120 \text{ Apoyar a empresas en la región} + 0.021 \text{ Financiamiento de las MIPYMES} + 0.067 \text{ Falta mejorar al interior de la empresa} + 0.347 \text{ Influencia de las MIPYMES} - 0.215 \text{ Obstáculos para obtener el crédito} - 0.062 \text{ Principal problema en la región} + 0.502 \text{ Productividad laboral}$

$D2 = 0.382 \text{ Apoyar a empresas en la región} + 0.380 \text{ Financiamiento de las MIPYMES} + 0.542 \text{ Falta mejorar al interior de la empresa} + 0.347 \text{ Influencia de las MIPYMES} - 0.373 \text{ Obstáculos para obtener el crédito} - 0.289 \text{ Principal problema de MIPYME en la región} - 0.132 \text{ Productividad laboral}$

(5)

Tabla 5: Coeficientes Estandarizados de las Funciones Discriminantes Canónicas

Matriz de estructura	Función	
	1	2
Apoyar a las empresas en la región	0.120*	0.382*
Financiamiento de las MIPYMES	0.021*	0.380*
Falta mejorar al interior Empresa	0.067*	0.075*
Influencia de las MIPYMES en la región	0.347*	0.542*
Obstáculos para obtener el crédito	-0.215*	-0.373*
Principal problema de la MIPYME en la región	-0.062*	-0.289*
Productividad laboral	0.502*	-0.132*

*Correlaciones intra-grupo combinadas entre las variables discriminantes y las funciones discriminantes canónicas tipificadas. Variables ordenadas por el tamaño de la correlación con la función. La primera columna de la Tabla 5 presenta las variables independientes incluidas en el modelo. En las siguientes columnas se muestran los coeficientes estandarizados para las tres funciones discriminantes. * El nivel de significancia es menor al 5%. Se utilizó el método Análisis Discriminante derivado de la aplicación del SPSS (versión 22). Fuente: Elaboración propia.*

CONCLUSIONES

Se realizó un estudio empírico a través del análisis de la información obtenida mediante la aplicación de una encuesta aplicada a 544 MIPYMES distribuidas aleatoriamente en 23 municipios en las regiones del estado de Guanajuato, en el periodo de abril a junio del 2017. En una primera etapa se realizó un análisis descriptivo, con información obtenida al entrevistar a las MIPYMES, mediante la aplicación del instrumento. Al preguntar a los pequeños empresarios ¿Qué factores debido al efecto de interrelación regional son importantes para el desarrollo y competitividad de las MIPYMES? se obtuvieron los siguientes resultados: generación de empleo con 26.8%, el segundo lugar lo ocupa mejorar la economía de la región con 10.5%, en tercer lugar es generan autoempleo familiar con 7.5%, en cuarto lugar son una fuente de ingreso familiar con 6.8%, le siguen las variables de influencia ofrecen productos a la población local (5.7%), generan ventas con precios más accesibles (4.6%), ofrecen servicio al cliente (4.4%) y generan mayor movimiento de ventas (3.7%) del total de las 544 MIPYMES entrevistadas, como se puede observar en la Tabla 4 de la sección de resultados. Lo anterior indica que las MIPYMES son un factor fundamental en el empleo, la economía familiar y el desarrollo de la región.

En una segunda etapa, se realizó un análisis de las preguntas del instrumento aplicado a una muestra de 544 MIPYMES distribuidas en las cuatro regiones del estado de Guanajuato. Se realizó el método de análisis discriminante para identificar las diferencias significativas entre los factores de las MIPYMES debido a la interrelación regional. El nivel de significancia es del 5%. Los resultados presentan para la primera función discriminante diferencias significativas entre los factores la *Influencia de las MIPYMES en la región*, *Productividad laboral*, *Financiamiento de las MIPYMES*, *Apoyar a empresas en la región* y *Falta mejorar al interior de la empresa* puesto que presentan una mayor puntuación en la función discriminante. Mientras que los factores *Obstáculos para obtener el crédito* y *Principal problema de las MIPYMES* tienen una menor importancia, ya que sus puntuaciones son negativas en la función discriminante a la hora de predecir el grupo de pertenencia por región, como se expresa en la Tabla 5 y en la ecuación 5 en la sección de resultados. De lo anterior, se cumple el objetivo, dado que se puede concluir que existen diferencias significativas atribuidas a las preguntas que respondieron los empresarios de las MIPYMES sobre los factores la *Influencia que ejercen las MIPYMES en la región*, el *acceso al financiamiento de las MIPYMES en la región*, y la *Productividad laboral*, y que éstas diferencias regionales pueden afectar el crecimiento, la continuidad y la competitividad de las MIPYMES, distinguiendo las diferencias regionales donde se desarrollan a estas empresas, y que es esencial para que las micro y pequeñas empresas puedan financiarse y aprovechar las ventajas comparativas en la región y en particular en el estado de Guanajuato.

La contribución del presente trabajo es que no existe un estudio para el estado de Guanajuato en el que se considere la importancia de distinguir los factores regionales de las MIPYMES como un factor de influencia en la región donde se ubican, el factor de acceso al financiamiento y la productividad laboral, que son un elemento fundamental en el crecimiento y la continuidad de las MIPYMES. Una limitación del presente estudio es que las entrevistas realizadas en campo sobre factores que influyen en el crecimiento y desarrollo de las MIPYMES son de auto percepción. Por lo que la etapa siguiente de este trabajo estará orientada hacia la ampliación de la información en relación a identificar otros aspectos que pueden tener un factor de influencia en la distribución regional de las MIPYMES y que son importantes para el desarrollo y la competitividad en la región.

REFERENCIAS

- Bialkowski, J., Bohl, M. T. y Serwa, D. (2006). "Testing for Financial Spillovers in Calm and Turbulent Periods", *The Quarterly Review of Economics and Finance*, 46, pp. 397-412.
- Estrada, R.; García, D. y Sánchez, V. (2009). "Factores determinantes del éxito competitivo en la Pyme: Estudio Empírico en México", *Revista Venezolana de Gerencia*, ISSN 1315-9984 versión impresa, Vol.14 Núm. 46, Maracaibo.
- Federico, J., Rabetino, R. y Kantis, H. (2012). "Comparing Young SMEs' growth determinants across regions", *Journal of Small Business and Enterprises Development*, Vol. 19, Núm. 4, pp. 575-588.
- Flores, P., Lucio y García, M. L. (2012): "El financiamiento a las micro-empresas en los espacios mexicanos". *Revista Académica de Economía*, ISSN 1696-8352, en Observatorio de la Economía Latinoamericana, N°174, 2012. Texto completo en <http://www.eumed.net/cursecon/ecolat/mx/>
- Fontalvo, T.J. (2012). "Aplicación de análisis discriminante para evaluar la productividad como resultado de la certificación BASC en las empresas de la ciudad de Cartagena". *Contaduría y Administración*, Vol. 59, Núm. 1, pp. 43-62.

- Garrido, C. y García, B. (2011) “Políticas para impulsar conductas innovadoras en las PYMES en México” en Marco Dinni y Giovanni Stumpo (compiladores). Políticas para la Innovación en las pequeñas y medianas empresas, CEPAL, Colección Documentos de Proyectos.
- Gómez, A.; García, D; Marín, S. (2009). “Restricciones a la financiación de la PYME en México: una aproximación empírica”, *Revista Análisis Económico*, Num. 57, vol. XXrV, Tercer cuatrimestre de 2009, México.
- González, A.; Correa, A. y Acosta, M. (2002). “Factores determinantes de la rentabilidad financiera de las PYMES”. *Revista Española de Financiación y Contabilidad*, Vol. XXXI, Núm. 112.
- INEGI (2014). “Censos Económicos 2014, Principales resultados por AGEB y manzana urbana”, México. Consultado en mayo de 2016. <http://www.inegi.org.mx>.
- Lecuona, R. (2009). “El financiamiento a las Pymes en México: La experiencia reciente”, *Economía UNAM*, Vol. 6, Núm. 17, pp. 46-68, México.
- Maté, M. L., Ramón, M. C. (2016). “La incidencia de los entornos regionales sobre las restricciones financieras en pequeñas y medianas empresas”, *El Trimestre Económico*, Vol. LXXXII (1), Núm. 329, pp. 37-60.
- Mercieca, S., Schaeck, K. y Wolfe, S. (2009). “Bank market structure, competition, and SME financing relationships in european regions”, *J Financ Serv Res*, No. 36, pp. 137–155, UK.
- Molina, V. M.; Medina, M; Armenteros, M.; Barquero, D.; Espinoza, J. (2011). “Sobrevivencia de las PYME en el estado de Coahuila, México”, *Revista Internacional Administración & Finanzas*, Vol. 4(1), 47-66. Universidad Autónoma de Coahuila-Torreón, México
- Montanero, J. (2014). “*Análisis Multivariante*”. Espacio Europeo de Educación Superior. Colecciones manualesuex-59, Universidad de Extremadura.
- Mures, M.J.; García, A. y Vallejo E. (2005). “Aplicación del Análisis Discriminante y Regresión Logística en el estudio de la morosidad en las entidades financieras. Comparación de resultados”. *Pecunia*, Núm. 1, pp. 175-199, España.
- Palacín-Sánchez, M.J., Pietro, F. (2015). “The Role of the Regional Financial Sector in the Capital Structure of small and Medium-Sized enterprises (SMEs)”, *Regional Studies*, Vol. 50, No. 7, pp. 1232-1247, Spain.
- Peña, D. (2002). “Análisis de Datos Multivariantes”. S.A. McGraw-Hill / Interamericana de España.
- Seltman, H. (2015). “*Experimental Design and Analysis*”, Carnegie Mellon University, USA. http://www.stat.cmu.edu/_hseltman/309/Book/Book.pdf.
- Toutenburg, H., Shalabh (2009). “*Statistical Analysis of Designed Experiments*”, Third ed. Springer New York, USA.
- Soriano, C. (2005). “El 80% de las pymes fracasa antes de los cinco años y el 90% no llega a los diez años. ¿Por qué?”. Página web de gestiopolis.com. 2008.
- Yamori, N. (2010). “Importance of regional financial institutions in regional economic development: The results of corporate surveys in Japan’s Tokai and Kansai regions”, *Studies in Regional Science*, Vol. 40, No. 4, pp. 867-881.

BIOGRAFÍA

Martín Romero Castillo. Mexicano. Licenciado Físico y con maestría en Investigación de Operaciones en la Universidad Nacional Autónoma de México (UNAM), maestro en Finanzas Corporativas por la Universidad de La Salle Bajío, y es Doctor en Educación por la Universidad Continente Americano de Celaya. Profesor de la licenciatura en Economía Industrial de la Escuela Nacional de Estudios Superiores Unidad León, UNAM.

FINANCIAMIENTO DE LAS MIPYMES PARA EL DESARROLLO Y COMPETITIVIDAD EN LA REGIÓN GUANAJUATO, MÉXICO

Martín Romero Castillo, Escuela Nacional de Estudios Superiores Unidad León, Universidad Nacional Autónoma de México

RESUMEN

La presente investigación se basa en analizar las características de acceso al financiamiento por las micro, pequeña y mediana empresa (MIPYMES) considerando la interdependencia regional donde se desenvuelven las empresas, y que son un elemento esencial en el desarrollo y competitividad de la región Guanajuato. La metodología contempla el análisis empírico, mediante una encuesta a 544 MIPYMES distribuidas aleatoriamente en las regiones del estado de Guanajuato, durante el periodo de 2017. El método de aplicación consiste en realizar el análisis factorial por componentes principales para determinar si existe una relación significativa entre el factor de influencia en la región y el acceso al financiamiento de las pequeñas empresas en las regiones. Al obtener los resultados se presentaron diferencias en las regiones, atribuibles a las características del financiamiento de las MIPYMES en debido a la interdependencia regional, y que son determinantes en el desarrollo y competitividad de las MIPYMES en Guanajuato, México.

PALABRAS CLAVE: Financiamiento, Efecto Regional, Financiamiento, Productividad, MIPYMES

FINANCING OF THE MIPYMES FOR THE DEVELOPMENT AND COMPETITIVENESS IN THE REGION GUANAJUATO, MEXICO

ABSTRAC

This research is based on analyzing the characteristics of access to the financing by micro, small and medium enterprises (MSMEs) Considering the regional interdependence where the companies are developed, and that they are an essential element in the Development and competitiveness of the region of Guanajuato. The method of application is to perform factorial analysis by major components to determine whether there is a significant relationship between the influence factor in the region and access to the financing of small businesses in the regions. To get the results were presented differences in the regions, attributable to the characteristics of the financing of the MSMEs in due to the regional interdependence, and that are determinant in the development and competitiveness of the MSMEs in Guanajuato, Mexico.

KEYWORDS: Financing, Regional Effect, Critical Factors, Productivity, MSMEs

JEL: M10, M20, R11

Las micro, pequeñas y medianas empresas (MIPYMES) tienen una importancia socioeconómica y territorial, en la generación de empleos a nivel regional, nacional y mundial (Flores y García, 2012). No obstante, en un mundo globalizado, estas empresas tienen serias dificultades para sobrevivir en un mercado cada vez más competitivo, suelen encontrarse en desventaja por su bajos recursos económicos y su capacidad de desarrollo en comparación con las grandes empresas (Porter, 2003). En el año 2014 existían en Guanajuato 259,343 empresas, de las cuales el 99.5% son micro, pequeñas y medianas empresas (MIPYMES). Por tamaño de la empresa, el 94.2% de éstas eran microempresas, el 3.9% pequeñas

empresas, el 1.3% empresas medianas y solo el 0.5% se consideraban grandes empresas (INEGI, 2015). Por actividad económica, las MIPYMES más importantes pertenecen al sector comercio con 46.4%, seguido de los servicios con 41.4% y el sector industrial con el 12.2% del total de empresas (INEGI, 2015). La idea central de este trabajo es identificar los factores que impiden acceder al financiamiento por las MIPYMES, debido a la interrelación regional en donde se desenvuelven estas empresas, y que son un elemento esencial para poder financiar sus procesos de desarrollo y competitividad en el estado de Guanajuato. Las preguntas clave a responder son: ¿Cuál es el principal factor de influencia de las MIPYMES debido a la interrelación regional?, y ¿Existe una relación significativa entre el factor de influencia regional con el factor de acceso al financiamiento por las MIPYMES?

El objetivo del presente trabajo es analizar los factores sobre el acceso al financiamiento por las MIPYMES y que son un elemento esencial para su desarrollo y la competitividad en la región del estado de Guanajuato. Este estudio se basa en la hipótesis en que existe una relación como factor de influencia de las MIPYMES en la región y el acceso al financiamiento en las regiones del estado de Guanajuato. Este estudio se basa en la hipótesis en que existe una relación como factor de influencia de las MIPYMES en la región, el acceso al financiamiento y la productividad en las regiones donde se localizan. El documento se organiza como sigue, se presenta una revisión de la literatura relacionada con diversos enfoques en el análisis del contexto regional debido a la distribución territorial de las empresas y del acceso al financiamiento en la región. A continuación se presenta la metodología que consiste en un estudio empírico mediante el análisis de una muestra de 544 encuestas aplicadas en forma aleatoria a las MIPYMES distribuidas en 23 municipios y las cuatro regiones del estado de Guanajuato, durante el periodo de abril a junio de 2017. Al final se presentan las conclusiones obtenidas del análisis realizado.

REVISIÓN LITERARIA

Financiamiento y Desarrollo Regional

De acuerdo con datos INEGI (2015), en México únicamente el 13% de las MIPYMES han solicitado algún tipo de crédito bancario; de este porcentaje, el 76% ha recibido dicho crédito de los cuales el 88% lo otorgó la banca comercial, mientras que el 1.4% de las mismas lo obtuvieron a través de la banca de desarrollo. Siendo las principales causas por las cuales se les niega el crédito, el desinterés del banco hacia el sector, la falta de garantías, y la falta de información (Lecuona, 2009). Maté et al. (2016) comentan que las pequeñas y medianas empresas (PYMES) que se localizan en regiones con mayor desarrollo económico y disponibilidad de instituciones tienen mayor probabilidad de éxito para lograr el acceso financiero que las empresas PYMES que se encuentran en regiones con menor desarrollo económico y cuentan con menos instituciones financieras. Los autores concluyen que es importante que las instituciones financieras públicas y privadas establezcan políticas con programas de apoyo a las PYMES tomando en cuenta las características específicas propias de cada región (Mercieca, Schaeck y Wolfe, 2009, Cinquegrana, Donati y Sarno, 2012). Por otra parte, Appleyard (2013) analizó los cambios de la dinámica de exclusión financiera por regiones en el oeste del Reino Unido, hallando que existen diferencias significativas entre las brechas de financiación y las limitaciones de apoyo financiero a las PYMES. De lo anterior, los autores concluyeron que es importante que los tomadores de decisiones deben considerar estas diferencias regionales en la financiación de las PYME, así como los cambios en el sector financiero regional.

Palacín-Sánchez y Pietro (2015) señalan que los factores determinantes para el desarrollo y crecimiento de PYMES, su estructura de capital, el tamaño, la estructura de activos, los beneficios, el crecimiento y la edad, difieren dependiendo de la región en donde se localizan las pequeñas empresas. Asimismo, Federico, Rabetino y Kantis (2012) examinaron los factores determinantes del crecimiento de la empresa por región, encontrando que la disponibilidad de recursos financieros en la región es un factor importante para el desarrollo y crecimiento de las PYMES, y varía según la región donde se localizan. Por otra parte, Gómez, García y Marín (2009) señalan que el financiamiento es una parte fundamental para el crecimiento y

desarrollo de las MIPYMES, y en consecuencia es evidente la importancia del financiamiento para el desarrollo y el crecimiento de las empresas en la región.

Análisis Factorial Por Componentes Principales de las MIPYMES

En esta sección se presentan algunos estudios que utilizan el análisis factorial por componentes principales para las pequeñas empresas en la región. Cano et al. (2015) en su investigación analizaron el modelo de gestión logística de la PYME para una muestra de 66 empresas en el sector textil de la manufactura en el estado de Tlaxcala, México. El método utilizado fue un análisis factorial con rotación ortogonal Varimax, los resultados del análisis indican un nivel aceptable, por lo que se considera que este modelo podría contribuir a resolver en forma integral y estratégica las necesidades logísticas de las PYME.

Aguilera, Hernández, González (2014) en su estudio analizaron el rendimiento en el control de los recursos materiales de las PYME manufacturera a través de la gestión de los proveedores y la cadena de suministro. Se realizó un trabajo de campo empírico a una muestra de 120 en el cual se aplicó un instrumento de evaluación dirigido a los gerentes de las PYMES. El método de aplicación es un análisis factorial, encontrando que los factores obtenidos son consistentes el modelo teórico. Lo anterior indica que las variables de la gestión de los proveedores y de la gestión de la cadena de suministro están relacionadas con el rendimiento de la empresa. Por otra parte, Aragón y Rubio (2009) estudiaron los factores que explican la competitividad de las PYMES españolas. La metodología consistió en el análisis factorial a una muestra de 9,337 gerentes de PYMES, los cuestionarios fueron aplicados por vía electrónico. Los resultados obtenidos son significativos en relación a los factores con la gestión financiera de la PYME. Estas pequeñas empresas, dada la fragilidad de sus balances económicos, deben de gestionar con cautela su recurso financieros, ya que ésta depende no solo de su competitividad, sino de su propia supervivencia.

METODOLOGÍA

La metodología utilizada es de tipo cuantitativo que se obtuvo del análisis del estudio empírico, mediante la aplicación de una encuesta a una muestra de 544 MIPYMES distribuidas aleatoriamente en las regiones del estado de Guanajuato. La encuesta abarcó un total de 23 (50%) municipios distribuidos en las cuatro regiones del estado de Guanajuato, durante el periodo de abril a junio de 2017. El cuestionario constará de preguntas relacionadas con el tema y se aplicará al azar a las empresas seleccionadas en las regiones del Estado, en particular a los directivos o representantes de cada empresa para evaluar el grado de apreciación de cada una de las variables objeto del presente estudio. Se tuvo una tasa de respuesta de 570 representantes de cada empresa MIPYME, de los cuales se desearon 26 cuestionarios incompletos, para completar el total de los 544 cuestionarios completos de acuerdo a la muestra estimada.

RESULTADOS

Primeramente se presentan los resultados de las variables o ítems del instrumento aplicado a una muestra de 544 MIPYMES distribuidas en las regiones del estado de Guanajuato, en el periodo de 2017. Posteriormente, se muestra el análisis de los ítems del instrumento aplicado utilizando los métodos prueba del estadístico T, el análisis factorial por componentes principales y el análisis discriminante, para identificar si existen diferencias significativas entre las variables o factores y las regiones donde se localizan las pequeñas empresas.

Influencia Que Ejercen Las MIPYMES en la Región

La Tabla 2 presenta los factores de influencia de las MIPYMES que benefician a la región, destaca en primer lugar la generación de empleo con 26.8% del total de las 544 MIPYMES entrevistadas, en segundo lugar está mejoran la economía de la región con 10.5%, el tercer puesto lo ocupan generan autoempleo

familiar con 7.5%, y en cuarto lugar son una fuente de ingreso familiar con 6.8%, le siguen ofrecen productos a la población local (5.7%), generan ventas con precios más accesibles (4.6%), ofrecen servicio al cliente (4.4%) y generan mayor movimiento de ventas (3.7%) del total de las 544 MIPYMES entrevistadas. Lo anterior indica que las MIPYMES son un factor fundamental en el empleo, la economía familiar y el desarrollo de la región.

Tabla 2: Influencia de las MIPYMES en la Regiones del Estado de Guanajuato, 2017

Influencia de las MIPYMES en la Región	Empresa Por Región							
	Región Noreste	I	Región Norte	II	Región Centro	III	Región IV Sur	Total
Generan Empleo		0.6		3.9		16.2	6.3	26.8
Mejoran la Economía de la región		0.2		0.6		8.5	1.3	10.5
Generan autoempleo familiar		1.1		1.3		3.3	1.8	7.5
Fuente de ingreso familiar		0.7		1.7		2.8	1.7	6.8
Ofrecen productos a la población local		0.6		1.1		2.4	1.7	5.7
Generan ventas con precios más accesibles		0.4		0.7		1.5	2.0	4.6
Ofrecen Servicio al cliente		0.7		1.1		2.0	0.6	4.4
Generan mayor movimiento de ventas		0.6		0.4		1.8	0.9	3.7
Elaboran productos propios de la región		0.4		0.6		2.0	0.4	3.3
Atraen más negocios y empresas		0.2		1.1		0.9	0.7	2.9
Ofrecen productos a la población rural		1.7		0.4		0.2	0.7	2.9
Otros factores de influencia en la región		3.1		5.0		5.7	7.0	20.8
Total		10.1		17.6		47.2	25.0	100.0

La primera columna de la Tabla 2 presenta influencia que ejercen las MIPYMES en la región en el estado de Guanajuato. En las siguientes columnas se muestra el porcentaje de las MIPYMES para cada una de las regiones del Estado, de acuerdo a la percepción que contestaron los empresarios de una muestra de 396 MIPYMES aplicadas en el estado de Guanajuato. El periodo de la muestra fue de abril a junio del 2017. Fuente: Elaboración propia.

Acceso al Financiamiento de las MIPYMES en la Región

En esta sección se presenta el análisis sobre el financiamiento a las MIPYMES en las regiones del estado de Guanajuato, de acuerdo a la percepción que manifestaron las empresas entrevistadas de una muestra de 544 MIPYMES, durante el periodo de abril a junio de 2017. En la Tabla 3 se presentan los resultados que respondieron los pequeños empresarios al preguntar sobre las principales fuentes de financiamiento, los resultados son la principal fuente de financiamiento proviene de recursos propios, familiares y de los proveedores con 62.7%, mientras que las instituciones financieras representaron una menor participación con 37.3%. Del total de las instituciones financieras, las Cajas de ahorro o sociedad de ahorro destacan como la principal fuente de financiamiento con 18.4%. En segundo lugar está la banca privada con 11.6%, y el tercer puesto lo ocupan las instituciones Microfinancieras con 5.3%. El resto de las instituciones financieras presenta un valor menor como participación de financiamiento por las MIPYMES en el estado de Guanajuato.

Tabla 3: Fuentes de Financiamiento de las MIPYMES en la Región en Guanajuato, 2017

Fuentes De Financiamiento En La Región	Empresa Por Región				
	Región I Noreste	Región II Norte	Región III Centro	Región IV Sur	Total
Recursos propios	1.8	4.4	21.7	9.2	37.1
Caja de ahorros o sociedad de ahorro y préstamo	1.7	2.8	9.2	4.8	18.4
Familiar	2.2	2.9	6.1	2.8	14.0
Banca privada	1.1	3.1	4.8	2.6	11.6
Proveedores	1.3	2.0	3.5	2.0	8.8
Microfinanciera	1.1	1.3	1.7	1.3	5.3
Casas de préstamo o empeño	0.6	0.6	0.2	1.5	2.8
Gobierno	0.2	0.4	0.2	0.6	1.3
Personas físicas prestamistas	0.2	0.2	0.0	0.4	0.7
Total	10.1	17.6	46.1	25.0	100.0

La primera columna de la Tabla 3 presenta las fuentes de financiamiento que señalaron las MIPYMES como la principal opción para solicitar financiamiento. En las siguientes columnas se muestra el porcentaje de las MIPYMES para cada una de las regiones del Estado, de acuerdo a la percepción que contestaron los empresarios de una muestra de 544 empresas aplicadas en el estado de Guanajuato. El periodo de la muestra fue de abril a junio de 2017. Fuente: Elaboración propia.

Análisis Factorial por Componentes Principales

El método utilizado es el análisis factorial por componentes principales permite obtener e interpretar las estimaciones de las puntuaciones factoriales. La Tabla 4 presenta para el estadístico de KMO un valor de 0.885, y un nivel de significancia menor a 0.01 para la prueba de esfericidad de Barlett, por lo que se puede rechazar la hipótesis nula de esfericidad, lo que permite considerar que el modelo del análisis factorial es adecuado para explicar las variables.

Tabla 4: Medida de Adecuación Muestral KMO y Prueba de Esfericidad de Barlett

Medida de Adecuación Muestral de Kaiser-Meyer-Olkin.	KMO	0.885
Prueba de esfericidad de Bartlett	Chi-cuadrado aproximado	3925
	Grados de libertad	21
	Nivel de significancia	.000

Los resultados de la Tabla 4 muestran los estadísticos KMO y la prueba de esfericidad de Barlett derivado de la aplicación del SPSS (versión 22), se puede observar que el Nivel de significación $p < 0.001$. El total de la muestra fue de 544 encuestas aplicadas a las MIPYMES, durante el periodo de agosto a octubre del 2017. Fuente: Elaboración propia.

Posteriormente, se obtuvo la varianza total explicada para cada factor mediante el análisis de componentes principales. Se utilizó el SPSS (versión 22), el nivel de significancia es menor al 1%. Los resultados indican que los dos primeros componentes son representativos para el modelo, ya que presentan un autovalor mayor a la unidad y la varianza explicada acumulada es del 81.71%.

Análisis Factorial Por Componentes Principales: Puntuaciones Factoriales

La Tabla 5 presenta la matriz de coeficientes para el cálculo de las puntuaciones factoriales por componentes principales y el método de rotación con normalización Varimax, para lo cual se seleccionan las variables: Influencia de MIPYMES en la región, Fuentes de financiamiento, Obstáculos para obtener el crédito en la región, Institución otorgó el crédito, Requisitos para obtener crédito y Principales usos del financiamiento. El alfa de Cronbach es de 0.829.

Tabla 5: Matriz de Coeficientes Para el Cálculo de las Puntuaciones Factoriales

	Componente	
	1	2
Influencia de las MIPYMES en la región	0.094**	0.719**
Fuentes de financiamiento de las MIPYMES	0.039**	0.569**
Obstáculos para obtener el crédito solicitado por las MIPYMES en la región	-0.205**	-0.020**
Institución otorgó el crédito	0.212**	0.011**
Requisitos para obtener crédito	0.211**	-0.011**
Principales usos del financiamiento por las MIPYMES en la región	0.213**	0.029**

Los resultados de la Tabla 5 las estimaciones de las puntuaciones factoriales, el Método de extracción utilizado es el Análisis de Componentes principales y el Método de rotación con Normalización Varimax con Kaiser. El resultado se obtuvo mediante la aplicación del SPSS (versión 22), El total de la muestra fue de 544 encuestas aplicadas a las MIPYMES, durante el periodo de abril a junio de 2017. ** indica nivel de significancia al 1%. Fuente: Elaboración propia.

Combinando cada variable con sus correspondientes coeficientes pueden construirse las dos ecuaciones lineales para cada una de las componentes extraídas, en las que se basa el cálculo de las puntuaciones factoriales. A continuación se presenta cada una de las ecuaciones para la estimación de las puntuaciones factoriales para cada componente.

$$Y1 = 0.094 \text{ Influencia de MIPYMES en la región} + 0.039 \text{ Fuentes de financiamiento de las MIPYMES en la región} - 0.205 \text{ Obstáculos para el crédito} + 0.212 \text{ Institución otorgó el crédito} + 0.211 \text{ Requisitos para obtener crédito} + 0.213 \text{ Principales usos del financiamiento por las MIPYMES en la región}$$

$$Y2 = 0.719 \text{ Influencia de MIPYMES en la región} + 0.569 \text{ Fuentes de financiamiento de las MIPYMES en la región} - 0.020 \text{ Obstáculos para obtener el crédito} + 0.029 \text{ Institución que otorgó el crédito} - 0.011 \text{ Requisitos para obtener el crédito} + 0.008 \text{ Principales usos del financiamiento por las MIPYMES en la región}$$

(3)

Donde Y1 es la componente “factor de influencia de las MIPYMES en la región” y Y2 es la componente “factor de financiamiento por las MIPYMES en la región”, basadas en las variables y las puntuaciones factoriales. Las dos puntuaciones factoriales de las componentes se obtienen sustituyendo cada variable por sus respectivos valores.

CONCLUSIONES

Se realizó un estudio empírico a través del análisis de la información obtenida mediante la aplicación de una encuesta aplicada a 544 MIPYMES distribuidas aleatoriamente en 23 municipios y las cuatro regiones del estado de Guanajuato, durante el periodo de abril a junio del 2017. En este estudio se dio respuesta a la pregunta, ¿Cuál es el principal factor de influencia de las MIPYMES debido a la interrelación regional? se obtuvieron los siguientes resultados como principal factor de influencia de las MIPYMES en la región: generación de empleo con 26.8%, en segundo lugar lo ocupa mejorar la economía de la región (10.5%), le siguen generan autoempleo familiar (7.5%), son una fuente de ingreso familiar (6.8%), ofrecen productos a la población local (5.7%), generan ventas con precios más accesibles es ofrecen productos (4.6%). Lo anterior indica que las MIPYMES son un factor fundamental en el empleo, la economía familiar y el desarrollo de la región. Adicionalmente, se dio respuesta a la pregunta ¿Existe una relación significativa entre el factor de influencia regional con el factor de acceso al financiamiento por las MIPYMES? se obtuvieron los siguientes resultados: la principal fuente de financiamiento proviene de recursos propios, familiares y de los proveedores con 62.7%.

De las instituciones financieras, las cajas de ahorro o sociedad de ahorro presentan la mayor opción de financiamiento para las MIPYMES con 18.4%, mientras que la banca privada ocupó el segundo lugar con 11.6% como opción de financiamiento, y las instituciones Microfinancieras representaron el 5.3%, lo cual

indica que las instituciones microfinancieras van obteniendo cada vez un papel más relevante como opción de financiamiento para las MIPYMES en las regiones de Guanajuato. En una segunda etapa, se realizó un análisis de las preguntas del instrumento aplicado a una muestra de 544 MIPYMES distribuidas en las regiones del estado de Guanajuato. Se utilizó el análisis factorial por componentes principales y rotación con normalización Varimax, con un nivel de significancia del 1%. Los resultados permiten comprobar que el análisis factorial es adecuado para explicar las variables mediante las dos primeras componentes extraídas el factor “Influencia de las MIPYMES en la región”, “Fuentes de financiamiento de las MIPYMES en la región”, “Institución otorgó el crédito”, “Requisitos para obtener el crédito” y el factor “Principales usos del financiamiento por las MIPYMES en la región” como se expresa en la ecuación 3 en la sección de resultados. La contribución del presente trabajo es que no existe un estudio para el estado de Guanajuato en el que se considere la importancia de distinguir los factores regionales de las MIPYMES como un factor de influencia en la región donde se ubican, el factor de acceso al financiamiento por las MIPYMES en la región, considerando los efectos de interrelación regional donde se localizan, y que son un elemento esencial para el desarrollo y la competitividad en las regiones del estado de Guanajuato. Una limitación del presente estudio es que las entrevistas realizadas en campo sobre factores que influyen en el crecimiento y desarrollo de las MIPYMES son de auto percepción. Por lo que la etapa siguiente de este trabajo estará orientada hacia la ampliación de la información en relación a identificar otros aspectos que pueden tener un factor de influencia en la distribución regional de las MIPYMES y que son importantes para su crecimiento, el desarrollo y la competitividad en la región.

REFERENCIAS

- Aguilera, L.; Hernández, O.; González, M. (2014). “El rendimiento de la PYME manufacturera a través de la gestión de los proveedores y de la cadena de suministro”. *Revista Iberoamericana de Ciencias*, Vol.1, No. 1, ISSN 2334-2501.
- Appleyard, L. (2013). “The geographies of access to enterprise finance: the case of the West Midlands, UK”, *Regional Studies*, Vol. 47, Núm. 6, pp. 868-879, UK.
- Aragón, A; Rubio, A. (2009). “¿Cómo compiten las empresas industriales? Un estudio sobre las PYMES Españolas”. *Competitividad y Eficiencia*, Núm. 373, pp. 87-99, Universidad de Murcia, España.
- Cano, P.; Orue, F.; Martínez, J.L.; Mayett, M. y López, G. (2015). “Modelo de gestión logística para pequeñas y medianas empresas en México”. *Contaduría y Administración* 60 (1), enero-marzo 2015: 181-203.
- Cuadras, C. M. (2014) “*Nuevos Métodos de Análisis Multivariante*”. CMC Editions, Barcelona, España.
- Cinquegrana, G., Donati, C., Sarno, D. (2012). “Financial constraints and relationship lending in the growth of italian SMEs”, Munich Personal RePEc Archive MPRA, Paper No. 39825, Munich, Germany. File URL: https://mpra.ub.uni-muenchen.de/39825/1/MPRA_paper_39825.pdf
- Federico, J., Rabetino, R. y Kantis, H. (2012). “Comparing Young SMEs’ growth determinants across regions”, *Journal of Small Business and Enterprises Development*, Vol. 19, Núm. 4, pp. 575-588.
- Flores, L. y García, M. L. (2012). “El financiamiento a las micro-empresas en los espacios mexicanos”. *Revista Académica de Economía*, Núm. 174, pp. 1-28. Recuperado de http://www.eumed.net/cursecon/ecolat/mx/2012/micro_empresas_espacios_mexicanos.html

Gómez, A.; García, D; Marín, S. (2009). “Restricciones a la financiación de la PYME en México: una aproximación empírica”, *Revista Análisis Económico*, Num. 57, vol. XXrV, Tercer cuatrimestre de 2009, México.

INEGI (2015). “Censos Económicos 2014, Principales resultados por AGEB y manzana urbana”, México. Consultado en agosto de 2017. <http://www.inegi.org.mx>.

Lecuona, R. (2009). “El financiamiento a las Pymes en México: La experiencia reciente”, *Economía UNAM*, Vol. 6, Núm. 17, pp. 46-68, México.

Maté, M. L., Ramón, M. C. (2016). “La incidencia de los entornos regionales sobre las restricciones financieras en pequeñas y medianas empresas”, *El Trimestre Económico*, Vol. LXXXII (1), Núm. 329, pp. 37-60.

Mercieca, S., Schaeck, K. y Wolfe, S. (2009). “Bank market structure, competition, and SME financing relationships in european regions”, *J Financ Serv Res*, No. 36, pp. 137–155, UK.

Montanero, J. (2014). “*Análisis Multivariante*”. Espacio Europeo de Educación Superior. Colecciones manualesuex-59, Universidad de Extremadura.

Montanero, J. (2008). “*Análisis Multivariante*”. Editores Cáceres: Universidad de Extremadura, Servicio de Publicaciones, Colección manuales uex – 59, España.

Palacín-Sánchez, M.J., Pietro, F. (2015). “The Role of the Regional Financial Sector in the Capital Structure of small and Medium-Sized enterprises (SMEs)”, *Regional Studies*, Vol. 50, No. 7, pp. 1232-1247, Spain.

Peña, D. (2002). “*Análisis de Datos Multivariantes*”. S.A. McGraw-Hill / Interamericana de España.

Porter, M. (2003) “Cómo Ser Competitivo. Nuevas aportaciones y conclusiones”, Harvard Business School Press. Deusto S.A. Ediciones, Bilbao.

BIOGRAFÍA

Martín Romero Castillo. Mexicano. Licenciado Físico y con maestría en Investigación de Operaciones en la Universidad Nacional Autónoma de México (UNAM), maestro en Finanzas Corporativas por la Universidad de La Salle Bajío, y es Doctor en Educación por la Universidad Continente Americano de Celaya. Profesor de la licenciatura en Economía Industrial de la Escuela Nacional de Estudios Superiores Unidad León, UNAM.

ANÁLISIS DE LOS AMBIENTES DE INNOVACIÓN DE LAS PYMES DE LA REGIÓN SURESTE DE COAHUILA (CASO: INDUSTRIA METALMECÁNICA, AUTOMOTRIZ Y AUTOPARTES)

Baltazar Rodríguez Villanueva, Universidad Autónoma de Coahuila

Orlando W. Gutiérrez Castillo, Universidad Autónoma de Coahuila

Jesús Alberto Montalvo Morales, Universidad Autónoma de Coahuila

Saidt Gabriel Alcalá Silva, Universidad Autónoma de Coahuila

RESUMEN

El objetivo de la investigación es evaluar los ambientes de innovación en las pequeñas y medianas empresas del sector metalmecánico, automotriz y autopartes de la región sureste de Coahuila. El estudio es descriptivo, su diseño es no experimental y transversal. Se aplicó un instrumento con seis dimensiones: Investigación y Desarrollo; Vigilancia e Identificación de Oportunidades del Entorno; Alianzas y Colaboraciones; Estrategia de Innovación; Organización de la Innovación y Adquisición y Transferencia de Capacidades de Innovación. La determinación de la población consideró 384 empresas; la muestra fue de 83 casos que resulta ser representativa, con un nivel de confianza de 95%. En general, las empresas se sitúan en un estadio debilitado, como consecuencia de una endeble estrategia y una falta de organización de la innovación. Al utilizar tablas de contingencia, la micro y pequeña empresa presentan estadios debilitados, la mediana empresa un estadio departamental y la gran empresa un estadio de innovación en desarrollo. Se concluye que existe una relación positiva entre el desarrollo de la dimensión de I+D y el tamaño de las empresas. Por otra parte, las dimensiones más deprimidas en la pequeña y mediana empresa son las de vigilancia e identificación de oportunidades del entorno, la estrategia de la innovación y la organización de la innovación. Esta situación apunta a la existencia de problemas de implementación estratégica, por lo que las pequeñas y medianas empresas deben contar con las condiciones organizativas mínimas para el avance que pueden asegurarse a través de dispositivos internos sobre gestión de la innovación.

PALABRAS CLAVES: Innovación, Ambientes De Innovación, Pequeñas Y Medianas Empresas, Gestión De La Innovación

JEL: O31, O32, O33,

ANALYSIS OF THE INNOVATION ENVIRONMENTS OF SMES IN THE SOUTHEASTERN REGION OF COAHUILA. (STUDY CASE: METALMECHANICAL INDUSTRY, AUTOMOTIVE AND AUTOPARTS)

ABSTRACT

The aim of the investigation was to assess the innovation environments in small and medium-sized companies in the metalmechanical, automotive and autoparts sectors of the southeastern region of Coahuila. The study is descriptive, its design is non-experimental and transversal. An instrument with six dimensions was applied: Research and Development; Surveillance and Identification of Opportunities of the Environment; Alliances and Collaborations; Innovation Strategy; Innovation Management and

Acquisition and Transfer of Innovation Capabilities. The determination of the population considered 384 companies; the sample was of 83 cases that proved to be representative, with a confidence level of 95%. In general, companies are in a weakened state, as a result of a weak strategy and lack of innovation management. By using contingency tables, the micro and small companies show weakened stages, the medium company a departmental stadium and the large company a stage of innovation in development. It is concluded that there is a positive relationship between the development of the R & D and the size of the companies. On the other hand, the most depressed dimensions in small and medium enterprises are the surveillance and identification of opportunities in the environment, the strategy of innovation and the innovation management. This situation points to the existence of problems in the strategic implementation, so the small and medium-sized companies must have the minimum organizational conditions to ensure progress that can be ensured through internal mechanisms on innovation management.

JEL: O31, O32, O33,

KEYWORDS: Innovation, Innovation Environments, Small and Medium-Sized Enterprises, Innovation Management

INTRODUCCIÓN

La historia demuestra que los procesos de gestión de la innovación en los países se convierten en una poderosa estrategia para generar y difundir el conocimiento, ya que de acuerdo con Gutiérrez et al (2015), la innovación fomenta la creación y desarrollo del capital humano, promueve el aprendizaje y la transferencia de capacidades y tecnologías y las alianzas entre el sector público y privado, empresarial y académico lo cual resulta en un importante factor que impulsa cambios estructurales. Paralelamente, las empresas de todos los sectores y tamaños para poder subsistir y competir en el entorno actual, necesitan responder sustancialmente para adaptarse a los nuevos requerimientos de los mercados altamente competitivos que las obliga a actuar de manera diferente para lograr una posición que las distinga.

En esta trayectoria apuntan los procesos de innovación. De ahí la necesidad de desarrollar sus capacidades innovadoras. De acuerdo con Kuczmarski (1997), la innovación constituye una responsabilidad y forma de pensar de los directivos empresariales. Esta situación implica asumir enfoques, métodos y estilos de trabajo que propicien un clima o ambiente adecuado para la generación, implementación y soporte efectivo de los proyectos de innovación que apunte al desarrollo de las capacidades innovadoras en las empresas. Derivado de esta situación, se puede establecer una relación elemental entre el desarrollo de capacidades innovadoras empresariales y la existencia de ambientes de innovación adecuados, lo cual se refleja en una simbiosis, es decir, por una parte, los ambientes de innovación propician el desarrollo de capacidades innovadoras en las empresas y por otra, a medida que se desarrollan estas capacidades, los ambientes se consolidan. Esta dialéctica es fundamental para las empresas innovadoras actuales: el crecimiento y sostenibilidad de sus capacidades innovadoras depende de la habilidad de sus directivos de establecer, desarrollar y consolidar ambientes de innovación que aseguren el soporte funcional, estratégico, organizativo, de aprendizaje y colaborativo para que se ejecuten eficazmente los procesos innovadores. De ahí la importancia de conceptualizar, contextualizar y evaluar los ambientes de innovación de las empresas. Pero además, el desarrollo de ambientes de innovación juega un papel relevante en las empresas de pequeño o mediano tamaño (Pymes), dado que sus dimensiones en ocasiones limitan el desarrollo de proyectos de innovación, debilitando sus posibilidades de generar capacidades innovadoras. De ahí que la evaluación de los ambientes de innovación en estas organizaciones resulta altamente relevante y pertinente. Es por ello que el objetivo del presente trabajo consiste en evaluar el estado de los ambientes de innovación en un grupo seleccionado de Pymes pertenecientes a los sectores metalmecánica, automotriz y autopartes, de la región sureste de Coahuila, a fin de identificar fortalezas y áreas de oportunidad que posibiliten el posterior desarrollo de sus capacidades innovadoras.

Para lograr este propósito, este documento está estructurado de la siguiente manera: al inicio se presenta la revisión de la literatura, que da el sustento conceptual sobre la gestión de la innovación, las capacidades innovadoras y su relación con el clima o ambiente de la innovación, después se presenta la metodología que describe el tipo y el diseño de investigación, la selección de la muestra y los procedimientos para diseñar el instrumento de medición para evaluar ambientes de innovación, posteriormente se incluye la sección de los resultados obtenidos y finalmente las conclusiones, limitaciones y futuras líneas de investigación.

REVISIÓN DE LITERATURA

La gestión de la innovación se convierte en un factor insoslayable para que las empresas incrementen su ventaja competitiva impulsándolas a insertarse en la denominada economía del conocimiento, tal como lo señalan diversos autores como Gibbons et al (1997), David & Foray (2002), Brinkley, (2006), Pomoni (2007), Castillo (2008), Triana (2009), o también la llamada economía creativa Caves (2000), donde la interrelación de los conceptos de competitividad e innovación, adquieren una relevancia especial. Por lo tanto, la innovación se constituye en una responsabilidad y forma de pensar de los directivos empresariales Kuczmarski (1997) que implica asumir enfoques, métodos y estilos de trabajo que propicien un clima o “ambiente” adecuado para la generación, implementación y soporte efectivo de los proyectos de innovación.

Gutiérrez et al (2015) señalan que se puede establecer una relación básica entre el desarrollo de capacidades innovadoras empresariales y la existencia de ambientes de innovación adecuados ya que por un lado los ambientes de innovación propician el desarrollo de capacidades innovadoras en las empresas y por otro, a medida que se desarrollan estas capacidades, los ambientes se consolidan. Esta simbiosis es fundamental para las empresas innovadoras actuales: el crecimiento y sostenibilidad de sus capacidades innovadoras depende de la habilidad de sus directivos para establecer, desarrollar y consolidar ambientes de innovación que aseguren el soporte funcional, estratégico, organizativo, de aprendizaje y colaborativo para ejecutar eficaz y eficientemente los procesos de gestión de la innovación. De aquí la importancia de conceptualizar, contextualizar y evaluar los ambientes de innovación en las empresas, en especial aquellas que se consideran innovadoras, es decir, que sustentan sus modelos de negocio en el desarrollo de nuevos productos, procesos, métodos y procedimientos organizacionales para asegurar un posicionamiento que se distinga en las condiciones del nuevo entorno económico.

Por esta razón, el desarrollo de ambientes de innovación juega un papel primordial en las empresas pequeñas y medianas (Pymes), ya que en muchas ocasiones frenan el desarrollo de proyectos de innovación de alto impacto, limitando su posibilidad de impulsar las capacidades tecnológicas y de innovación. La evaluación de los ambientes de innovación en estas organizaciones resulta por lo tanto muy importante, relevante y pertinente, convirtiéndose en uno de los principales objetivos de la presente investigación, para identificar las fortalezas, pero también las áreas de oportunidad que posibiliten una propuesta estratégica para desarrollar las capacidades de innovación en las Pymes de la región sureste de Coahuila. El término innovación ha sido conceptualizado a partir de la influencia de Schumpeter (1934), quien defendió la idea de que la innovación fomenta el desarrollo a través de un proceso dinámico que definió como “destrucción creadora”. Esta concepción se ha ido enriqueciendo, aunque por lo general se aborda en términos de capacidades empresariales orientadas a la necesidad de incorporar nuevos productos, servicios, procesos o métodos útiles en el mercado. El Manual de Oslo (2005), define la innovación como la introducción de un nuevo o significativamente mejorado producto (bien o servicio), de un proceso, de un nuevo método de comercialización o de un nuevo método organizativo. De esta forma, la innovación se puede concebir como un proceso multifactorial, sistemático e intencional que modifica determinados términos para crear riqueza o nuevos cursos de acción.

Gutiérrez et al (2015), señalan que por capacidad innovadora de una empresa se entiende al conjunto de habilidades, destrezas, conocimientos y valores empresariales que posibilitan la generación de nuevos productos, diseños, procesos, o métodos empresariales o la modificación mejorada de los existentes. Para

Tirole (1995), la relevancia de la capacidad innovadora radica en su impacto en el posicionamiento competitivo de la empresa. En esta dirección, Lam (2005) distingue dos tipos de capacidades innovadoras: las de carácter reactivo, para prevenir pérdidas de cuota de mercado; y las proactivas, para conseguir una posición en el mercado mejor que sus competidores. Otro aspecto relevante de la capacidad innovadora consiste en el potencial de absorción, transformación y difusión de conocimiento de la empresa mediante procesos de interacción (López et al, 2012), y la asocian al desarrollo de valores de colaboración tanto interna como externa de la organización.

Existe un consenso generalizado en que para consolidar la capacidad innovadora de las empresas se necesitan contextos empresariales apropiados. No es necesario contar con altos presupuestos de I+D, sino desarrollar ambientes efectivos de innovación Gloor, (2006), De Souza, (2009). De acuerdo con Gutiérrez et al, (2015), los ambientes de innovación se definen como el contexto o ecosistema en el que se desarrollan las interacciones internas y externas de la empresa para generar innovaciones mediante procesos de aprendizaje y de gestión efectiva de los recursos existentes. Estos ambientes expresan el conjunto de condiciones que propician el desarrollo de las actividades innovadoras, generando espacios donde las personas con iniciativas se relacionan entre sí, desarrollan y ponen en marcha nuevos proyectos. Se trata de un clima de trabajo donde se libera la creatividad y el liderazgo creativo de las personas para que se generen innovaciones, Gutiérrez, (2013). Por lo tanto, detrás de una alta capacidad innovadora empresarial existe un ambiente de innovación desarrollado, propiciado por una gerencia con vocación innovadora que respalda y promueve el espíritu de hacer las cosas en forma diferente y original que, además de aportar ideas e iniciativas, se involucra en las tareas claves de definición y apoya y promueve la creatividad en la diaria operación. Así, los ambientes de innovación desarrollados muestran que tanto las empresas como sus directivos hacen que la innovación sea parte de su cultura organizacional.

Medición de los Ambientes de Innovación.

La revisión de la literatura especializada sobre el tema, Gutiérrez et al (2015), Gutiérrez (2013), Gardner, (2001), Armenteros et al, (2013), Janka y Farrel, (2014) permiten identificar seis dimensiones claves en el desarrollo de los ambientes de innovación: 1) Investigación y Desarrollo (I+D); 2) Vigilancia e Identificación de Oportunidades del Entorno (VIO); 3) Alianzas y Colaboraciones (AyC); 4) Estrategia de Innovación (EDI); 5) Organización de la Innovación (ODI); y 6) Adquisición y Transferencia de Capacidades de Innovación (ATC). La dimensión I+D comprende actividades de investigación fundamental, aplicada y desarrollo tecnológico, que aseguran herramientas de apoyo para los procesos de innovación y la experimentación de soluciones. Los ambientes de innovación se consideran “débiles” cuando no desarrollan actividades de este tipo o si las mismas responden a coyunturas o inquietudes individuales. Cuando se dan en un área específica de la empresa alcanzan un estadio “departamentalizado”, sin gran derrama para toda la empresa. Sin embargo, cuando la I+D se integra a un sistema de I+D+i, donde participan varias áreas, se alcanza un estadio superior, “en desarrollo”, mientras que si se encuentran extendidos en todas las áreas, esta dimensión se encuentra “consolidada” y expresa su estado deseado. La dimensión VIO asegura la identificación de oportunidades de innovación. Proporciona elementos para administrar riesgos en su puesta en marcha y asegura la interacción con clientes y proveedores. Cuando las empresas no cuentan con sistemas VIO, sus ambientes se consideran “débiles”. Si estos sistemas se atienden por un área específica no generan el mismo impacto en los ambientes de innovación que cuando se conforman sistemas integrados de vigilancia o inteligencia competitiva, que aseguran su máximo potencial.

La dimensión AyC asegura la interacción entre miembros de la organización y entre éstos y los actores del entorno. Cuando las iniciativas de colaboración corren a cargo de iniciativas personales, los ambientes de innovación se consideran “débiles”. Si se institucionalizan y consolidan estos vínculos, la dimensión se fortalece, alcanzando niveles de desarrollo superiores, conformando redes de valor con nexos estables de cooperación. La dimensión EDI contribuye a la alineación de las actividades innovadoras con la estrategia empresarial. Contribuye a aminorar la incertidumbre; permite concentrarse en las fuerzas que facilitan la

actividad innovadora; y asegura el compromiso con los propósitos empresariales. Si las iniciativas de innovación provienen de proyectos individuales o se contemplan en presupuestos que agotan pocas áreas de la empresa, el impacto sobre el desarrollo de los ambientes de innovación es débil. En la medida en que la reflexión estratégica contempla las capacidades innovadoras como factor de apalancamiento empresarial, los ambientes conseguirán niveles superiores de desarrollo.

La dimensión ODI soporta las estrategias de innovación. Las estructuras y métodos efectivos posibilitan el desarrollo de capacidades de innovación, fomentando la integración. Cuando son rígidos y verticales constituyen un freno para el desarrollo de los ambientes de innovación, limitando el aprendizaje, generando asimetrías en la asignación de recursos y obstaculizando la creatividad. En cambio, si facilitan la coordinación pueden desarrollarlos. Un elemento a destacar en esta dimensión consiste en la captación y asignación de recursos para el aseguramiento de los procesos de innovación. Por último, la ATC genera capacidades de absorción que conducen a nuevas innovaciones. Cuando no se contemplan, no se apoya el desarrollo de los ambientes de innovación. Si es responsabilidad de un área, se corre el riesgo de burocratización. Solo cuando se promueve la adquisición y difusión de capacidades en todos los niveles se podrá contar con ambientes más desarrollados.

METODOLOGÍA

El estudio es descriptivo y el diseño de la investigación es no experimental, ya que de acuerdo con Hernández Sampieri et al (2014), los estudios de este tipo podrían definirse como la investigación que se realiza sin manipular deliberadamente las variables. Por la temporalidad (horizonte) de la recolección de los datos la investigación es transeccional o transversal ya que en este tipo de diseños de investigación se recolectan datos en un solo momento, en un tiempo único. Por otra parte, la presente investigación presenta una metodología de carácter mixto, donde se interrelaciona la aplicación de métodos cualitativos con métodos cuantitativos para lograr el objetivo propuesto. Para ello se aplicó un instrumento de captura de información diseñado por Gutiérrez, (2013) y Gutiérrez et al, (2015) y el procedimiento correspondiente que permitió diagnosticar el estado de los ambientes de innovación, en base a la percepción de los encuestados. El instrumento de medición, se aplicó durante los meses de junio y julio de 2017 a 83 empresarios de Pymes de las actividades metalmecánica, automotriz y autopartes de la región sureste del estado de Coahuila, constituida por los municipios de Saltillo, Ramos Arizpe y Arteaga.

Para determinar el tamaño de la población, se integró un directorio en base a la información del Directorio Estadístico Nacional de Unidades Económicas (DENUE) del Instituto Nacional de Estadística y Geografía (INEGI). En esta base de datos se incluyeron las empresas con más de 10 trabajadores, (las empresas con menos de 10 trabajadores no se tomaron en cuenta para los fines de esta investigación). El resultado fue un Directorio de 384 empresas. Para esta población se llevó a cabo la determinación del tamaño de la muestra, mediante un muestreo estratificado con asignación de Neyman. Para que el tamaño de la muestra fuera representativo y considerando un nivel de confianza de 95%, con un margen de error del 10%, el tamaño mínimo de la muestra para ser representativa es de 77 casos, sin embargo, se levantaron 83 encuestas en total.

El diseño del instrumento de medición considera 4 estadios para evaluar los Ambientes de Innovación: Estadio I Debilitado; Estadio II Departamental; Estadio III En Desarrollo y Estadio IV Consolidado. Las respuestas de los encuestados se valoran en una escala de Likert, del 1 al 5, donde el valor 1 responde al estadio más debilitado de la dimensión que se valora y el de 5 al estadio más avanzado o consolidado. De esta forma, la valoración promedio que otorgan los encuestados constituye un reflejo del estadio en que se encuentra cada dimensión, lo que permite discernir sobre los rasgos que la caracterizan. Además, se puede evaluar integralmente el estadio general en que se halla el ambiente de innovación de la empresa, a partir de las valoraciones promedio alcanzadas en las diferentes dimensiones. Se evaluaron 6 dimensiones:

Investigación y Desarrollo (I+D); 2) Vigilancia e Identificación de Oportunidades del Entorno (VIO); Alianzas y Colaboraciones (AyC); 4) Estrategia de Innovación (EDI); 5) Organización de la Innovación (ODI); y 6) Adquisición y Transferencia de Capacidades de Innovación (ATC). Para la clasificación de los estadios correspondientes a cada dimensión analizada y, en sentido general, para el ambiente de innovación de manera integral se utilizó un tabulador que posibilitó calificar los estadios en Debilitado si se obtiene una puntuación promedio entre 1 y 2.49; Departamental, si la puntuación oscila entre 2.5 y 3.49; En Desarrollo, si la puntuación se encuentra en el rango de 3.5 a 4.49 y Consolidado si ésta es igual o mayor a 4.5 puntos. En este escalamiento se considera que el nivel más bajo o debilitado es el que caracteriza a los ambientes de innovación basados en esfuerzos o iniciativas individuales de innovación, donde se aprecian débiles signos colectivos y los aportes individuales de algunas personas son los que impulsan los procesos innovadores en la empresa. En la medida que se toma conciencia del estadio en que se encuentran sus ambientes de innovación, las empresas comienzan a tomar decisiones e implementar cursos de acción que reviertan la situación, promoviendo mecanismos que contribuyan a desarrollar las diferentes dimensiones, asumiendo enfoques integrativos, estratégicos, participativos, multidisciplinarios y de aprendizaje colectivo, para alcanzar el estado deseado en cada una de ellas.

RESULTADOS

La Tabla 1 muestra la distribución de las 83 empresas encuestadas por estrato o tamaño de la organización.

Tabla No 1: Distribución Por Tamaño de Empresa

Tamaño	No. de Empresas	Porcentaje
Micro	04	4.8
Pequeña	40	48.2
Mediana	27	32.5
Grande	12	14.5
Total	83	100.00

Fuente: Elaboración propia a partir de los resultados de las encuestas BRV 2017

En la Tabla 2 se exponen los resultados del procesamiento de la información obtenida que presenta el promedio de los resultados generales para los ambientes de innovación considerando todos los estratos o tamaños de las empresas y el porcentaje alcanzado con relación a la máxima calificación.

Tabla 2: Promedio de los Resultados Generales Para los Ambientes de Innovación

Dimensión	Promedio de Calificación Otorgada	% Con Respecto a la Calificación Máxima (5)
Investigación y Desarrollo	2.40	48.00 %
Vigilancia e Identificación de Oportunidades	2.20	44.00 %
Alianzas y Colaboraciones	2.20	44.00 %
Estrategia de la Innovación	2.31	46.20 %
Organización de la Innovación	2.21	44.20 %
Adquisición y Transferencia de Capacidades de Innovación	2.40	48.00 %

Fuente: Elaboración propia a partir de los resultados de las encuestas BRV 2017

Como puede observarse, la calificación mínima obtenida en promedio es de 2.20 para las dimensiones de vigilancia e identificación de oportunidades, alianzas y colaboraciones y organización de la innovación (que resultan ser las áreas más débiles); los promedios de calificación más altas las obtienen en promedio con 2.40 en investigación y desarrollo y en adquisición y transferencia de capacidades de innovación. Obtener una calificación de 1 a 2.49, (la escala más baja), sitúa los ambientes de innovación en general y en promedio, en un estadio debilitado, para cada una de las dimensiones consideradas, como consecuencia

de una endeble estrategia y organización de la innovación. Por otra parte, uno de los aspectos que se comprobó con la investigación, es que el tamaño empresarial tiene una relación significativa respecto al estadio de los ambientes de innovación (A mayor tamaño de empresa, corresponde un ambiente de innovación más desarrollado, mientras que las empresas de menor tamaño se sitúan en ambientes de innovación debilitados). Utilizar las tablas de contingencia, permitió hacer un análisis comparativo por estrato de empresa, cuyos resultados se muestran en la Tabla No. 3 (La escala mínima de calificación es de 1 y la máxima calificación, es de 5).

Tabla 3: Ambientes de Innovación Por Estrato de Empresa

Dimensión	Grande		Mediana		Pequeña		Micro	
	Calificación Promedio	% Respecto a 5	Calificación Promedio	% Respecto a 5	Calificación Promedio	% Respecto a 5	Calificación Promedio	% Respecto a 5
I+D	3.50	70.00 %	2.59	51.80 %	2.08	41.60 %	1.00	20.00 %
VIO	3.33	66.60 %	2.37	47.40 %	1.85	37.00 %	1.50	30.00 %
AyC	3.08	61.60 %	2.15	43.00 %	2.00	40.00 %	1.50	30.00 %
EDI	3.17	63.40 %	2.41	48.20 %	2.08	41.60 %	1.25	25.00 %
ODI	3.08	61.60 %	2.33	46.60 %	1.95	39.00 %	1.50	30.00 %
ATC	3.25	65.00 %	2.53	50.60 %	2.15	43.00 %	1.50	30.00 %

Fuente: Elaboración propia a partir de los resultados de las encuestas BRV 2017

1) (I+D) Investigación y Desarrollo; 2) (VIO) Vigilancia e Identificación de Oportunidades del Entorno; 3) (AyC) Alianzas y Colaboraciones; 4) (EDI) Estrategia de Innovación; 5) (ODI) Organización de la Innovación; y 6) (ATC) Adquisición y Transferencia de Capacidades de Innovación. Para la empresa grande se observa una calificación mínima de 3.08 para las dimensiones de acuerdos y colaboraciones y organización de la innovación, sin embargo, su calificación más alta de 3.5 la consigue para investigación y desarrollo, como era de esperarse. Los promedios de sus calificaciones por dimensión, la ubican en una escala 3 de 4, que se traduce en un estadio en desarrollo. La mediana empresa obtiene puntuaciones mínimas de 2.15 en alianzas y colaboraciones, 2.33 en organización de la innovación y una máxima puntuación de 2.59 en investigación y desarrollo. Su ubicación está en un segundo nivel de 4, es decir en un estadio departamental. Respecto a la pequeña empresa, obtiene evaluaciones mínimas de 1.85 en vigilancia e identificación de oportunidades y 1.95 en organización de la innovación, la calificación máxima de 2.15 la obtienen en adquisición y transferencia de tecnología. Con estos resultados se sitúa en un el primer estadio de 4, es decir, en el nivel más bajo, en un estadio debilitado. Finalmente, las microempresas adquieren las valoraciones más bajas, 1 para investigación y desarrollo y 1.25 para estrategia de la innovación, la calificación más alta de 1.50 se dan en alianzas y colaboraciones, adquisición y transferencia de capacidades de innovación. Se sitúan en la escala más baja: un estadio debilitado.

CONCLUSIONES

La evaluación de los ambientes de innovación en las empresas seleccionadas de la región sureste de Coahuila, dedicadas a las actividades metalmecánica, automotriz y autopartes, arroja que en promedio, se encuentran en un estadio debilitado. Aplicar tablas de contingencia permitió hacer un análisis por tamaño de empresa y realizar comparaciones por estrato lo que puso en evidencia que el tamaño de la empresa y la experiencia acumulada, juegan un papel relevante en el desarrollo de los ambientes de innovación. La micro y pequeña empresa presentan estadios debilitados, la mediana empresa un estadio departamental y la gran empresa un estadio en desarrollo. Se puede concluir que existe una relación positiva entre el desarrollo de la dimensión de I+D y el tamaño de las empresas, así como con la existencia de áreas de I+D en las mismas. Por otra parte, las dimensiones más deprimidas en la pequeña y mediana empresa son las de vigilancia e identificación de oportunidades del entorno, la estrategia de la innovación y la organización de la

innovación lo que denota cierta preferencia de enfoques anticuados en los procesos de innovación. Esta situación apunta a la existencia de problemas de implementación estratégica: indica que la alta dirección puede tener claridad sobre los objetivos de innovación en la empresa, pero no es efectiva en la coordinación, asignación de recursos y despliegue de acciones para concretarlos. Estas dimensiones pueden erigirse entonces en áreas de oportunidad para alcanzar estadios superiores. Las diferencias identificadas en el grado de desarrollo de los ambientes de innovación entre las empresas que poseen áreas de I+D y las que no lo poseen indican que, en su avance hacia mejores estadios, las pequeñas y medianas empresas, deben contar con las condiciones organizativas mínimas para el avance que pueden asegurarse a través de dispositivos internos de I+D principalmente.

REFERENCIAS

Armenteros, M.D.C., Medina M., Molina, V.M., García, G.M., y Guerrero, L. (2013) “La innovación como proceso interactivo. Estudio descriptivo del Sistema Regional de Innovación en Coahuila.” ISSN 1931-0285 CD ISSN 1941-9589 On line 1588

Brinkley, I. (2006) “Defining the knowledge economy” Londres: The Work Foundation

Castillo, J. (2008) “La economía del conocimiento” en <http://www.fundación-precariado.org.mx/bo149conocimiento.pdf> (2 de abril 2008).

Caves, R.E. (2000) “Creative industries.Contracts between art and commerce”. Cambridge: Harvard University Press.

David, P.A. & Foray D. (2002), “Una introducción a la economía y la sociedad del saber”. Revista Interamericana de Ciencias Sociales. Vol. 171 pp 78-94 marzo.

De Souza, B. (2009) “La reinención del conocimiento y la emancipación social”. Buenos Aires, Argentina: CLACSO, 2009.

Gardner, Howard (2001) “Innovación y creatividad. La inteligencia reformulada en el siglo XXI” Barcelona, Editorial Paidós.

Gibbons, M. et al (1997). “La nueva producción del conocimiento. La dinámica de la ciencia y la investigación en las sociedades contemporáneas” Barcelona, España: Ediciones Pomales Corredor.

Gloor, P. (2006) “Swarm creativity: Competitive advantage through collaborative innovation networks”. New York: Oxford University Press, 2006.

Gutiérrez C. O.W., Guerrero R.L.A. López, Ch. S. y Parres F. A. (2015) Propuesta metodológica para la evaluación de ambientes de innovación empresariales. Aplicaciones en el Estado de Hidalgo, México.

Tribuna Plural, La Revista Científica de la Real Academia de Doctores y CIESLAG Octubre 2015 Gómez Palacio, Dgo.
ISSN 2339-997 X.

Gutiérrez C.O.W. (2013). “Reflexiones sobre los ambientes de innovación en las empresas cubanas”. Seminario Anual sobre Economía Cubana y Gerencia Empresarial. Universidad de La Habana, Cuba, 22 de junio de 2013.

Janka, D. & Farrel, J. (2014) “Pensamiento y diseño: Liberar el potencial creativo de la organización” Foro Mundial de Negocios, EGADE Tecnológico de Monterrey, Monterrey Nuevo León, México. Febrero.

<http://www.itesm.mx/wps/wcm/connect/snc/portalinformativo/por+tema/negocios/presentaciónforo-mundialnegocios11feb14>

Kuczmarski, T. (1997) “Innovación, estrategias de liderazgo para mercados de alta competencia”. Santa Fé de Bogotá Mc Graw Hill, 1997

Land, G.T. (1997) “Grow or Die: The Unifying Principle of Transformation” New York: Jhon Wiley & Sons Inc.

Lam, A. (2005) “Organizational Innovation”. New York: Oxford University Press, 2005.

López, N., J.H. Montes y C. Vázquez. (2012) “¿Qué necesita una empresa para innovar?” Revista Europea de Administración de Empresas, Vol. 21, No. 3, pp. 266-281,.

Manual de Oslo (2005) Guía para la recogida e interpretación de datos sobre innovación OECD, Eurostat. European Comission. Ed. Tragsa 3ª Edición. España.

Pomoni, E. (2007). “What is the knowledge economy and how does it differ from the traditional economy” Estados Unidos: Helium Inc. Andover

Tirole, J. “The Theory of Industrial Organization”. Cambridge: MIT Press, 1995.

Triana, J. et al (2009). “Cuba: Crecer desde el conocimiento”. La Habana: Editorial Félix Varela.

Schumpeter, J.A. (1934): The Theory of Economic Development, Cambridge, MA, Harvard University Press.

Limitaciones

La innovación tiene un espectro muy amplio que combina aspectos tanto internos de la organización, así como del entorno llamado sistema regional de innovación. En este sentido, sería conveniente ampliar el estudio hacia aquellas instituciones que conforman este sistema, para profundizar en el análisis de los factores determinantes de los ambientes de innovación. Por otra parte, se seleccionaron 83 empresas con las actividades metalmecánica, automotriz y autopartes de la región sureste de Coahuila, que no están catalogadas como de alta tecnología, quizás esto explica su bajo nivel obtenido, sin embargo, el instrumento utilizado es contundente por lo que sería recomendable ampliar su aplicación, utilizándolo en otras empresas y regiones de Coahuila para hacer estudios comparativos.

Futuras Líneas de Investigación

Los resultados de este trabajo, abren la oportunidad para actuar en nuevas líneas de investigación, como son la relación que existe entre los ambientes de innovación, las capacidades tecnológicas y las relaciones de aquellas empresas que practican la cooperación interempresarial como estrategia y cómo se dan estas relaciones con el desempeño y/o los resultados empresariales.

AGRADECIMIENTOS

Los autores agradecen, sinceramente, los comentarios de los árbitros del Comité Científico y a los editores del IBFR, los cuales contribuyeron sin duda a mejorar la calidad de la presente investigación.

BIOGRAFIAS

Baltazar Rodríguez Villanueva, Lic. en Economía, con Maestría en Planeación, Candidato a Doctor en Administración y Alta Dirección, UAdeC, Profesor de Tiempo Completo, investigador y catedrático de Microeconomía, Macroeconomía y Entorno Económico de los Negocios, de la Universidad Autónoma de Coahuila. Se puede contactar en la Facultad de Ciencias de la Administración Carretera a Piedras Negras Km. 5, Saltillo, Coahuila. México.

Orlando W. Gutiérrez Castillo es Lic. en Economía, Doctor en Ciencias Económicas, Líder del Cuerpo Académico Redes de Valor y Desarrollo Regional. Ha publicado 14 libros en coautoría y más de 50 artículos, actualmente es Catedrático Investigador de la Facultad de Contaduría y Administración, Unidad Torreón, Universidad Autónoma de Coahuila.

Jesús Alberto Montalvo Morales, Lic. en Administración de Empresas con Maestría en Administración, Dr. en Administración y Alta Dirección. Director de la Fac. de Ciencias de la Administración Unidad Saltillo, de la Universidad Autónoma de Coahuila. Se puede contactar en la Facultad de Ciencias de la Administración, Carretera a Piedras Negras Km. 5, Saltillo, Coahuila. México.

Saidt Gabriel Alcalá Silva, Estudiante de Licenciatura de la carrera de Lic. en Administración de Recursos Humanos en la Universidad Autónoma de Coahuila. Ganador del Concurso Regional de Jóvenes Emprendedores. Se puede contactar en la Facultad de Ciencias de la Administración. Carretera a Piedras Negras Km. 5, Saltillo, Coahuila.

COMPETENCIAS DEL PROFESIONAL DE LA CONTADURÍA PÚBLICA DE LA BENEMÉRITA UNIVERSIDAD AUTÓNOMA DE PUEBLA, LA PERCEPCIÓN DEL EMPLEADOR

María de Jesús Ramírez Domínguez, Benemérita Universidad Autónoma de Puebla

Blanca H. Morales Vázquez, Benemérita Universidad Autónoma de Puebla

Rebeca Muñoz Velazquez, Benemérita Universidad Autónoma de Puebla

Martha Elva Reséndiz Ortega, Benemérita Universidad Autónoma de Puebla

RESUMEN

Sin mayor duda, las competencias laborales y profesionales constituyen una capacidad real y demostrada para el éxito en la ejecución de un trabajo, por lo que han sido estudiado por diversas Instituciones; actualmente las empresas requieren de las personas, no solo la aportación de sus conocimientos a los procesos productivos, sino también su participación en el análisis y solución de los problemas que obstaculizan la calidad y la productividad en las empresas. Se identificaron las competencias requeridas por los empleadores de los profesionales de la Contaduría Pública de la Benemérita Universidad Autónoma de Puebla y su desempeño con el fin de obtener información relevante que contribuya a la retroalimentación del Plan de Estudios y de su perfil de egreso. Se aplicó un instrumento, que midió cuatro variables: competencias comunicativas, metodológicas, propositivas y técnicas a través de 24 ítems, los cuales permitieron obtener información relevante de 90 empleadores del sector privado. Se concluye que, los egresados de esta institución se están desempeñando acertadamente en el mercado laboral, y que es muy importante fortalecer las competencias transversales de la institución para seguir fortaleciendo el perfil de este profesional.

JEL: M12, I20, I21, I23, C80

PALABRAS CLAVE: Competencias profesionales, Contaduría Pública, Empleadores y Perfil de Egreso.

PROFESSIONAL COMPETENCIES OF GRADUATED PROFESSIONAL FROM THE ACCOUNTING PROGRAM AT BENEMERITA UNIVERSIDAD AUTONOMA DE PUEBLA

ABSTRACT

Definitely, the labor and professional competences are a real and demonstrated capacity for a success job development, that is the reason why they have been studied for many institutions, actually the companies wants of the people not only put they knowledge to the productive process, also they want their participations in the analysis and solutions of the problems that hinder the quality and company's productivity. They identify the competences required for the employers of the Public Accounting professionals of the Benemérita Universidad Autónoma de Puebla and their development to the porpoise to get relevant information that contributes to the feedback of the Study Plan and their graduate profile. They applied and instrument that measured four variables: communicative competences, methodological, propositional and technical through 24 items, which help to get relevant information of 90 employers of private sector. They concluded that the graduated of this institution are development rightly in the labor

ambiance, and that is very important to enforce the transversal competences of the institution to continue to strengthen the profile of this professional.

KEYWORDS: Professional Competences, Public Accounting, Employers and Discharge Profile

INTRODUCCIÓN

Actualmente, las instituciones de educación superior, se enfrentan ante el reto de lograr que la formación de los estudiantes de las diferentes profesiones, se desarrolle desde un enfoque holístico, que propicie la interrelación entre la preparación técnica que aporta los cimientos de las profesiones y los saberes adicionales que lo llevaran a acrecentar sus capacidades para enfrentar y crear soluciones ante la problemática que se presente en el contexto laboral y profesional donde se desenvuelvan.

El terreno de las competencias ha sido estudiado ampliamente en el ámbito educativo, según lo expresa Organista (2007), se han abordado con diferentes enfoques teóricos, siempre explicando los procesos de conocimiento y su desarrollo, propiciando que las actuales tendencias pedagógicas hayan realizado cambios en las prácticas educativas encaminadas al desarrollo de programas que incentiven la creatividad, la reflexión, el análisis, la crítica y, en general el desarrollo del pensamiento. Primeramente se describen conceptos y caracterización de un modelo basado en competencias, definidas por expertos en el tema, también se describen las diferentes clasificaciones de competencias como son las cognitivas, genericas, transversales, laborales y profesionales.

Su estudio se circunscribe a de la Benemérita Universidad Autónoma de Puebla, describiendo las competencias transversales que se desarrollan en todas las carreras universitarias de la institución; posteriormente y derivadas de un trabajo colegiado de los docentes de la Facultad de Contaduría Pública de la misma institución, se presentan las competencias específicas del profesional de la Contaduría Pública y su contribución al perfil de egreso. La metodología utilizada para la obtención información del trabajo de campo se apoyó de 90 encuestas aplicadas a empleadores de los profesionistas referidos, la cual fue procesada en el programa estadístico Statistical Package for the Social Sciences (SPSS), resultados validados en Alfa de Cronbach y sometidos a la correlación de variables. Los resultados obtenidos reportan el grado de importancia requerido por los empleadores de los profesionales de la Contaduría Pública, respecto de las competencias comunicativas, metodologicas, propositivas y técnicas, así como la valoración del desempeño que le dan a los egresados de la Facultad de Contaduría Pública de la Benemérita Universidad Autónoma de Puebla, México. En las conclusiones se analiza la necesidad de fortalecer el currículo con las competencias genericas, transversales y específicas, para garantizar la empleabilidad y éxito en su actividad profesional; también se recomienda dar continuidad al trabajo de investigación realizado con la intención de contribuir al fortalecimiento del perfil de egreso del profesional referido.

Objetivo

Conocer las competencias requeridas por los empleadores de los profesionales de la Contaduría Pública de la Benemérita Universidad Autónoma de Puebla y el desempeño que presentan actualmente los egresados empleados por el sector privado, con el fin de obtener información relevante que contribuya a la retroalimentación del Plan de Estudios, fortalecer el perfil de egreso de estos profesionales y en consecuencia proporcionar al empleador profesionales competentes y competitivos.

REVISIÓN LITERARIA

Conceptualización de Competencias

Uno de los problemas de la enseñanza tradicional radica en que, dada la relevancia que se ha concedido al contenido, se ha fomentado demasiado un aprendizaje memorístico de conocimientos, el cual no implica necesariamente que el aprendiz sea capaz de aplicarlos a la vida real. Frente a esta situación, el aprendizaje por competencias se centra en dos pilares fundamentales: la significatividad y la funcionalidad de los aprendizajes.

Este nuevo enfoque de la enseñanza no olvida, en ningún caso, la importancia de los conocimientos, pero los aborda de manera interrelacionada, poniendo en juego al mismo tiempo conocimientos, destrezas, habilidades y valores. La declaración de Bolonia (1999), es de las primeras que expresa que las competencias refiriéndose al aprendizaje del alumno se logran a través de horas de trabajo independiente controladas por el profesor, lo cual va cambiando la manera de pensar sobre la enseñanza y el aprendizaje. Barr y Tagg (1995) en Morales (2012) afirman que:

Estamos empezando a reconocer que nuestro paradigma dominante confunde medios con fines...ahora nos estamos dando cuenta de que nuestra misión no es enseñar sino conseguir que cada uno de nuestros alumnos aprendan mediante el procedimiento que mejor funcione. Se entiende por competencias “las habilidades y capacidades adquiridas a través de un esfuerzo deliberado y sistemático para llevar a cabo actividades complejas”. El concepto se refiere entonces al conjunto de capacidades que se consiguen al combinar conocimientos, habilidades, actitudes y motivaciones. Es decir, es la capacidad de aplicar los resultados del aprendizaje en un determinado contexto: educación, trabajo o desarrollo personal. Una competencia no está limitada a elementos cognitivos –uso de la teoría, conceptos o conocimientos implícitos–, sino que abarca tanto habilidades técnicas como atributos interpersonales. (OECD, 2010).

Clasificación de las Competencias

Una de las clasificaciones que realiza ACT KeyTrain, y que a la fecha hay mas de 23000 puestos de trabajo perfilados en la base Job Profile, (2016) son las competencias cognitivas básicas, que las empresas han señalado como fundamentales para tener éxito en el lugar de trabajo; y que por orden de importancia son: 1.-busqueda de informació, 2.- lectura de comprensión, 3.- matemáticas aplicadas, 4.- Observación, 5.- trabajo en equipo, 6.- Escritura, 7.- tecnología aplicada, 8.- escuchar, 9.- escritura para negocios. De acuerdo con estudios realizados por el Centro de Investigación para el Desarrollo A.C. las competencias requeridas en un trabajo profesional se dividen en dos grandes grupos: aquellas relacionadas con conocimientos profesionales, con herramientas de trabajo o con técnicas de producción y aquellas que más bien se relacionan con la forma en que las personas trabajan juntas, interactúan, se comunican o manejan sus emociones. A las primeras se les conoce como competencias técnicas o “duras”, mientras que a las segundas como sociales o “suaves”. (CIDAC) 2014. En la tabla 1, se señalan ejemplos de las competencias técnicas o “duras” y las sociales o suaves.

Tabla 1: Comparación de Competencias Suaves y Duras

Competencias Técnicas o Duras	Competencias Sociales o Suaves
Financieras	Comunicación escrita en español
Contables	Comunicación oral en español
Procesos administrativos	Comunicación oral en inglés
Manejo de maquinaria	Puntualidad
Uso de software	Sentido de responsabilidad
	Iniciativa o pro actividad
	Capacidad de síntesis de información
	Pensamiento lógico y ágil

Fuente: Elaboración propia con base en datos de Centro de Investigación para el Desarrollo A.C. (CIDAC)

Estudios Previos Sobre Importancia de las Competencias Para el Empleador

Para determinar las competencias el CIDAC realizó entrevistas a los responsables de las áreas de recursos humanos y de las demás áreas que contratan a egresados de la IES para ver, entre otros puntos, cuáles son las competencias que consideran más importantes para sus áreas, y cuáles son aquellas que consideran más escasas o que les cuesta más trabajo encontrar, ya sea porque: No hay profesionistas con esa preparación, o los hay en teoría, pero con baja calidad. En la tabla 2, se indican de acuerdo al hallazgo referido las competencias en cuatro áreas principales que son requeridas por los empleadores, en el área de la Contaduría Pública.

Tabla 2: Competencias Requeridas Por los Empleadores Según el Área Específica

Contabilidad	Matemáticas	Administración	Economía
Conocimiento y manejo básico de administración de impuestos.	Conocimiento y manejo básico de ecuaciones diferenciales.	Manejo eficiente del tiempo.	Conocimiento y manejo básico de estadística descriptiva.
Conocimiento y manejo básico de matemáticas financieras.	Conocimiento y manejo básico de álgebra.	Planeación de tareas.	Conocimiento y manejo básico de econometría.
Conocimiento y manejo básico de finanzas corporativas.	Conocimiento y manejo básico de cálculo	Saber tratar a un cliente.	
Conocimiento y manejo básico de finanzas bursátiles.		Detección de oportunidades de mejora en procesos o producto.	
Conocimiento y manejo básico de contabilidad		Detección de nuevas oportunidades de negocio.	
		Implementación de nuevos proyectos.	

Fuente: Elaboración propia con datos del Centro de Investigación para el Desarrollo A.C. (CIDAC)

Otro estudio realizado por la revista FORBES, México (2016), determinó que las seis habilidades determinantes del profesional actual, para que tenga éxito y que en su mayoría no forman parte de los programas de estudio, o que si los incluyen no han logrado su trascendencia, se expresan en la Tabla 3

Competencias transversales en la Benémerita Universidad Autónoma de Puebla

Al interior de la institución donde se desarrolló este estudio, las competencias institucionales son transferibles y fueron construidas para el empleo y la vida como ciudadano responsable. De esta manera imparten a través de la formación general universitaria (FGU) y la forman las asignaturas descritas en la tabla 4. El desarrollo de las competencias genéricas de la BUAP, se llevan a cabo para el logro de los saberes descritos en los ejes transversales del Modelo Universitario Minerva. Promover el uso reflexivo de las estrategias didácticas, para favorecer el autoaprendizaje y el aprendizaje cooperativo. El modelo pretende formar personas integrales con compromiso ético que busquen la autorealización, que aporten soluciones a la sociedad con sentido ético y emprendedor; que favorezca la empleabilidad “aptitud para el empleo y la creación de este” (Vargas 2008 en Criterios y Niveles de Dominio de las Competencias Genéricas de la BUAP. La formación por competencias es el elemento medular para el diseño del perfil

profesional, el cual está integrado por las competencias profesionales (genéricas y específicas de cada profesión).

Tabla 3: Habilidades del Profesional Actual Según la Revista FORBES

Habilidades	Requerimientos
1.- Comunicación:	En todas sus formas, oral y escrita Capacidad para transmitir ideas e información con una estructura, prioridad y sentido de relevancia. Hablar en público con soltura y dominio del tema
2.- Trabajo en equipo	Establecer relaciones humanas que estimulen un ambiente de trabajo productivo, coordinado y eficiente. Ser capaz de mostrar tolerancia y respeto, así como ajustarse a ambientes multiculturales, sin prejuicios ni reduccionismos.
3.- Liderazgo	Actitud de cambio, hambre de progreso, superación de barreras, sana ambición competitiva. Líderes que impulsen cambios de manera cotidiana
4.- Ética	Respetar el medio ambiente, la vida animal, las leyes y los derechos humanos.
5.- Pensamiento crítico y lógico:	Que en un ambiente de trabajo libre las ideas fluyan, crezcan y sean canalizadas a favor de los grandes objetivos de la empresa. Que el personal aporte certeza, intelectualidad, objetividad y base científica de las operaciones.
6.- Competitividad	Todos los días lograr mantenerse, crecer y madurar, no permitir reducir el nivel de trabajo diario o convertirlo en una rutina aburrida. Dar un sentido de emoción y motivación constante a todo lo que hace el profesionista.

Esta tabla muestra las habilidades y requerimientos que los empleadores sugieren que las Instituciones de Educación Superior (IES) desarrollen en sus estudiantes para que al insertarse en el mercado laboral sean competentes y competitivos. Fuente: Revista FORBES, 2016.

Tabla 4 Competencias transversales impartidas en la Benemérita Universidad Autónoma de Puebla

Competencia	Descripción
Formación Humana y Social. (FHS).	Participa de manera comprometida dentro de su medio sociocultural para contribuir al desarrollo social, la preservación del medio ambiente y el cuidado de la salud, considerando los lenguajes científicos, tecnológicos y artísticos de su disciplina profesional al colaborar en la solución de problemas de manera interdisciplinaria.
Desarrollo de habilidades del Pensamiento Complejo. (DHPC).	Reflexiona y toma decisiones de manera crítica y creativa, a partir de analizar y relacionar elementos desde una visión compleja e interdisciplinaria para generar alternativas de solución de acuerdo a las necesidades del contexto.
Lengua Extranjera. (LE).	Utiliza una lengua extranjera de manera integral con la finalidad de realizar procesos de comunicación relacionados con los contenidos y actividades propias de su disciplina, los cuales le permiten establecer relaciones interculturales y colaborativas para explorar y construir saberes dentro de la misma, con ética, responsabilidad social y el apoyo de diversas herramientas tecnológicas.
Desarrollo de Habilidades en el uso de la Tecnología de la Información y Comunicación. (DHTIC).	Gestiona la información, las tecnologías y los procesos de comunicación para fortalecer la formación personal y profesional a través de las TIC al utilizar adecuadamente fuentes académicas y científicas
Educación para la investigación. (EI).	Analiza los componentes del contexto, a partir de identificar la información necesaria y el uso de metodologías adecuadas para construir propuestas de solución y comunicar los resultados obtenidos. 6.- Innovación y Talento Emprendedor. (ITE). Emprende
Innovación y Talento Emprendedor. (ITE).	Emprende proyectos de impacto social de calidad para generar valor en los diferentes ámbitos sociales con base en metodologías de innovación.

En la tabla 4 se describen las competencias transversales aplicables a todas las profesiones que se ofertan en la BUAP. Fuente: Benemérita Universidad Autónoma de Puebla. (2010). Competencias Genéricas de la BUAP. Dirección General de Educación Superior

En la Facultad de Contaduría Pública, las competencias específicas del profesional que egresa, y que adicionados a los contenidos de asignatura, contribuyen al perfil de egreso, se representan en la tabla 5.

Tabla 5: Competencias Específicas de la Licenciatura en Contaduría de la Benemérita Universidad Autónoma de Puebla

Perfil de Egreso	Competencias Específicas
El egresado de Contaduría Pública tendrá una visión mundial y será capaz de diseñar, dirigir, evaluar y dar seguimiento a los procesos que apoyen la toma de decisiones, económicas, financieras y administrativas en las entidades públicas y/o privadas que favorezca el desarrollo sustentable nacional e internacional, utilizando las tecnologías de información y comunicación (TIC); a través del trabajo colaborativo, generando un espíritu emprendedor, actuando siempre con sentido ético, crítico, estético, multicultural y humanista, con un proceso de superación continua a través del autoaprendizaje, brindando un servicio de calidad integral con alto compromiso social.	<p>Identifica, investiga y resuelve problemas económicos, financieros y administrativos, observando la normatividad a la que están sujetas las entidades, para una eficiente toma de decisiones en un ambiente de trabajo colaborativo, con responsabilidad social y ética.</p> <p>Desarrolla habilidades para vincularse con su entorno socio-económico, nacional e internacional, a través del trabajo multidisciplinario, intercambio y movilidad académica.</p> <p>Utiliza y aplica las TIC, para ordenar, procesar y presentar información financiera sustentada en diversas fuentes.</p> <p>Reconoce, comprende y aplica los diversos factores y elementos que intervienen en la productividad y competitividad de una entidad, para la mejora continua.</p> <p>Elabora, gestiona y emprende proyectos de inversión para minimizar el riesgo y crear valores en las entidades.</p> <p>Se comunica eficientemente en forma oral y escrita, para presentar información oportuna que sirva para la gestión en las entidades dentro de su quehacer profesional en un ambiente de respeto.</p>

Como se puede apreciar en la tabla 5, las competencias específicas de la Licenciatura en Contaduría Pública, contribuyen con el perfil de egreso y son congruentes con las competencias genéricas de la institución señaladas en la tabla 4, puesto que las segundas se aplican como ejes transversales en el cumplimiento de las primeras, y es precisamente a través de la intervención del docente con el apoyo de la supervisión del trabajo independiente de los educandos, la realización del servicio social y la práctica profesional crítica como se pretende desarrollarlas. Elaboración propia basada en el Plan de Estudios 2016.

METODOLOGÍA

Considerando la clasificación del método científico propuesta por Eyssautier (2006), al partir de teorías y enfoques para llegar a implicaciones particulares del tema, se recurrió al método deductivo a través de las técnicas de investigación documental e investigación de campo; de acuerdo con la clasificación propuesta por Hernández, Fernández & Baptista (2007), el alcance de este estudio es exploratorio y descriptivo. El trabajo de campo se apoyó primeramente en el diseño de un cuestionario integrado por 24 ítems referidos a las 4 variables tomando como referencia principalmente las genéricas de la institución, las específicas del Plan de Estudios, y se agregaron además para hacer más completo el instrumento, para las competencias comunicativas y propositivas, las señaladas por la revista FORBES (ver tabla 3) y para las metodológicas y técnicas las descritas por el Centro de Investigación para el Desarrollo A.C. (ver tablas 1 y 2) utilizando la escala de Likert de 4 categorías, las cuales fueron codificadas de la siguiente manera: 1= muy importante, 2= importante, 3= poco importante y 4= nada importante, también se incluyó un ítem para medir la valoración del desempeño de los egresados de la Facultad referida, así como una pregunta abierta para recibir recomendaciones para reforzar el Plan de Estudios. La población objeto de estudio fueron 90 empleadores de los profesionistas referidos que se encuentran afiliados a agrupaciones empresariales en la ciudad de Puebla, México cuyo padrón asciende a 400; los encuestados fueron contactados en el año 2017 de manera presencial y virtualmente utilizando la herramienta del “google site”, la información obtenida fue procesada en el programa estadístico Statistical Package for the Social Sciences (SPSS), los resultados fueron validados en Alfa de Cronbach; también se realizó la correlación de variables y la matriz de varianzas entre elementos. La tabla 6 muestra la operacionalización de las variables.

Tabla 6: Operacionalización de las Variables

Variable	Indicador
Competencias comunicativas	Facilidad de comunicación oral y escrita Comunicación oral y escrita en inglés Colaborar con otras personas de manera colaborativa y constructiva Capacidad de desarrollar relaciones públicas Suministrar datos de calidad, oportunos, comprensibles y transparentes
Competencias metodológicas	Gestión de proyectos Dominio de tecnologías de información Diseño de sistemas contables y de control interno Conocimientos adecuados para solucionar problemas concretos Transfiere experiencias adquiridas a otros problemas o situaciones novedosas de trabajo
Competencias propositivas	Capacidad para tomar decisiones relevantes Aplicación de la formación teórica con capacidades, habilidades y recursos para atender las necesidades de su ámbito laboral y/o profesional Afrontar con responsabilidad la solución de sus decisiones Detección de nuevas oportunidades de negocio Implementación de nuevos proyectos
Competencias técnicas	Conocimiento y manejo de la Contabilidad Conocimiento y manejo de Impuestos Conocimiento y manejo de Finanzas Corporativas Conocimiento y manejo de Matemáticas Financieras Conocimiento y manejo de Sistemas de Costos Conocimiento y manejo del Derecho Laboral Conocimiento y manejo de Software contable y fiscal Conocimiento y manejo de software para la elaboración de la nómina Conocimiento y manejo de Proyectos de Inversión
Valoración del egresado de la Facultad de Contaduría Pública de la Benemérita Universidad Autónoma de Puebla	Valoración de su desempeño profesional

La tabla 6 muestra la operacionalización de las variables, con sus respectivos indicadores, tal y como fueron tomados en el instrumento de medición. Elaboración propia.

RESULTADOS

Los resultados obtenidos se interpretan como altamente positivos, tanto en las opiniones de los empleadores respecto a los profesionales de la Contaduría Pública de la institución referida, como en la confiabilidad al calcular los coeficientes de Alpha de Cronbach y la correlación de variables. En este mismo instrumento, los empresarios encuestados valoraron el desempeño de los egresados de la Facultad de Contaduría Pública entre las escalas de "muy bueno" y "bueno". En respuestas abiertas recomendaron incluir en el Plan de Estudios entre las más importantes las siguientes competencias: Habilidad para conocer la nueva legislación en las TIC, habilidad de análisis y síntesis mediante TIC, inteligencia de negocios, comunicación efectiva, manejo de relaciones con clientes interno y externos, manejo de Banca electrónica, valuaciones económico-financieras (IFRS), manejo de software de contabilidad, fiscal, auditoría y administrativo, y desde luego capacidad de comunicación verbal y escrita en Inglés. La tabla 9 muestra la confiabilidad del instrumento aplicado en la investigación

Tabla 8: Estadísticas de fiabilidad

Alfa de Cronbach	Alfa de Cronbach basada en elementos estandarizados	N de elementos
0.842	0.837	24

La tabla 9 muestra los estadísticos de fiabilidad de todas las variables en su conjunto, indicándola con un alto grado. Elaboración propia.

CONCLUSIÓN

Las competencias desarrolladas por el egresado de la licenciatura en Contaduría Pública son herramientas fundamentales para su formación integral, y en el contexto de la empresa están siendo evaluadas por los responsables de la selección de personal. Las asignaturas del Plan de Estudios, incluyen de manera parcial las competencias técnicas, sin embargo las competencias comunicativas, metodológicas y propositivas son desarrolladas por el estudiante durante su estancia en un trabajo parcial en el área de su profesión; y a través de su servicio social y la práctica profesional crítica, donde juega un papel importante el tutor para vigilar que se desarrollen en beneficio de los estudiantes referidos.

REFERENCIAS

ACT KeyTrain, [http:// profiles.keytrain.com](http://profiles.keytrain.com) (2017). Recuperado el 30 de agosto del 2017.

Benemérita Universidad Autónoma de Puebla (BUAP) Criterios y Niveles de Dominio de las Competencias Genéricas de la Benemérita Universidad Autónoma de Puebla.

Benemérita Universidad Autónoma de Puebla, Facultad de Contaduría, Programas de Estudio 2016.
FORBES México (2016) Habilidades del profesional del futuro

Centro de Investigación para el Desarrollo A.C. (CIDAC) www.cidac.org.mx (2014)
Competencias profesionales de egresados en Contaduría Pública

<http://www.lasalle.mx/blog/competencias-profesionales-de-egresados-en-contaduria-publica/>
<https://planeacionibero.wordpress.com/2016/10/03/6-habilidades-para-lograr-eso-que-buscas/>

Correa, J. (2007) Orígenes y desarrollo conceptual de competencia en el contexto educativo.- Facultad de Rehabilitación y Desarrollo Humano. Bogotá: Editorial Universidad del Rosario.

International Federation of Accountants <http://www.ifac.org/>

Education at a Glance 2010: OECD Indicators

Eyssautier de la M., M. (2006) Metodología de la Investigación. Desarrollo de la inteligencia. (5a Edición). México. Thomson.

Hernández, R., Fernández, R., Baptista, P. (2014) Metodología de la Investigación. México. Mc. Graw Hill

Morales, P. (2012) El profesor en la era de las competencias. El espacio Europeo de Educación Superior. Madrid: Universidad Pontificia Comillas.

Observatorio Laboral
http://www.observatoriolaboral.gob.mx/swb/es/ola/tendencias_del_empleo_profesional.

Organista (2007) El concepto de competencias: Una mirada histórica desde la psicología de la cognición, Cuadernos Hispanoamericanos de Psicología, Vol 7 No. 1 69-76
http://www.uelbosque.edu.co/publicaciones/cuadernos_hispanoamericanos_psicologia/volumen7_numero1
www.oecd.org/education/skills-beyond-school/45925316.pdf, Recuperado el 20 de mayo del 2017

Torrado, M. (2000). Educar para el desarrollo de las competencias: una propuesta para reflexionar. En competencias y proyecto pedagógico. Bogotá: Universidad Nacional de Colombia.

BIOGRAFIA

María de Jesús Ramírez Domínguez, Benemérita Universidad Autónoma de Puebla

Blanca H. Morales Vázquez, Benemérita Universidad Autónoma de Puebla

Rebeca Muñoz Velazquez, Benemérita Universidad Autónoma de Puebla

Martha Elva Reséndiz Ortega, Benemérita Universidad Autónoma de Puebla

FACTORES ASOCIADOS A LA ACEPTACIÓN DE UN CUPO EN LAS UNIVERSIDADES DE LOS BACHILLERES DE MANABÍ

Karla Viviana Benavides Espinosa, Universidad de las Fuerzas Armadas - ESPE
Betzabé del Rosario Maldonado Mera, Universidad de las Fuerzas Armadas - ESPE
José Javier Buenaño Cabrera, Universidad de las Fuerzas Armadas - ESPE

RESUMEN

El artículo busca identificar el grado de predicción de las variables individuales, experienciales y las contextuales, para la aceptación de un cupo en las carreras de las universidades públicas del Ecuador en términos de probabilidad de ocurrencia, a través del modelo de regresión logística determinado con la herramienta SPSS. El modelo estableció que las variables determinadas a partir de la teoría cognitiva social y la racional de decisiones, que son buenas predictores son: prioridad asignada a la carrera por el estudiante, la carrera aspirada, la provincia de donde se ubica la Institución de Educación Superior (IES), el número de veces que se aplicó la prueba, el estado civil, el género, la modalidad y la edad. El estudio fue de corte transversal al segundo periodo de selección de postulantes al sistema de educación superior, en septiembre de 2013, y contempló a 4648 postulantes.

PALABRAS CLAVE: Acceso a la Educación Superior, Aceptación de Cupos Universitarios, Factores Asociados y Modelo de Regresión Logística

FACTORS ASSOCIATED WITH THE ACCEPTANCE OF A COUPO IN THE UNIVERSITIES OF THE BACCELLERS OF MANABÍ

ABSTRACT

The article seeks to identify that both predict the individual, experiential and contextual variables to the acceptance of a quota in the careers of the public universities of Ecuador in terms of probability of occurrence, through the logistic regression model obtained with the SPSS tool. The model identified that the variables assigned priority to the race by the student, the career aspired, the province where the IES is located, the number of times the test was applied, the marital status, the gender, the modality and the age, are good predictors.

JEL: I23

KEYWORDS: Access to Higher Education, Acceptance of University Quotas, Associated Factors and Logistic Regression Model

INTRODUCCIÓN

Carrasco, Zúñiga & Espinoza (2014) afirman que los resultados positivos en la formación superior son dependientes de las evaluaciones de admisión y del tipo de centro de educación media, aspectos que están relacionados con el nivel socioeconómico. La educación superior es el camino a la movilidad social y la igualdad de acceso es un principio global que no necesariamente garantiza equidad de oportunidades, pero sí es un conductor hacia una competencia justa. Es conocida la relación entre la formación y el progreso de la sociedad, de ahí la importancia del acceso equitativo a la educación. El estado ecuatoriano a partir de la

vigencia de la Constitución, ha normado la calidad de todos los niveles de educación, y otorga acceso gratuito hasta el tercer nivel. Para acceder en el sistema público, deben aprobar las etapas de admisión, a través del Examen Nacional de Educación Superior (ENES). Los aspirantes conforme a su puntaje y en concordancia a sus deseos tanto de carrera como de institución educativa y modalidad, deciden aceptar o no el cupo alcanzado. Frente a estos hechos, se propone identificar los factores relacionados a la decisión de aceptación de cupo obtenido por un aspirante a ingresar a la educación superior. El objetivo es establecer a través del modelo de Regresión Logística, si los factores que se circunscriben a la teoría cognitiva social de desarrollo, dentro del ámbito de la racionalidad de las decisiones, están asociadas a la aceptación de cupo para el ingreso a la educación pública del país, por parte de los aspirantes de la provincia de Manabí-Ecuador. De este modo proponer un modelo predictivo de esta situación que contribuya a mejorar la eficiencia de asignación de cupos del sistema nacional de admisión. El documento inicia con el marco referencial que sustenta los factores asociados al ingreso a la universidad, desde una perspectiva teórica y del estado del arte. Continúa con la aplicación empírica del modelo de regresión logística binomial y finalmente se exponen los resultados y conclusiones del estudio.

REVISIÓN LITERARIA

Amparada en el marco legal ecuatoriano se crea el Sistema Nacional de Nivelación y Admisión (SNNA), órgano dependiente de la Secretaría de Educación Superior, Ciencia, Tecnología e Innovación (SENECYT), que tiene por objeto transparentar a través de un proceso de méritos, la igualdad de ingreso a las IES, que incluye en los elementos de admisión, la inscripción, evaluación y asignación de cupos SNNA (2017). Establece que “El estudiante elige, libre y responsablemente, la carrera de su preferencia”, además que la selección es a través de una evaluación de aptitudes.

El Instituto Nacional de Evaluación Educativa (INEVAL) plantea que los determinantes del desempeño educativo son: “el contexto socioeconómico de la familia del estudiante, los hábitos del estudiante y las características propias de las instituciones educativas” (INEVAL, 2015, p.2). Alcívar, Calderón, Mendoza (2015) manifiestan que la vocación no es necesariamente el principal factor para escoger el cupo en la educación pública, sino las circunstancias del entorno. Como lo explica Canales (2016) el acceso a la educación superior no es sinónimo de equidad de ingreso, por diferencias especialmente de orden sociales y económicas, mismos que se demuestran estadísticamente al contrastar los resultados. Según Antivilo, Contreras & Hernández (2014) los resultados de las pruebas de selección dan cuentas del orden del rendimiento para seleccionar a los que poseen mejores posibilidades de eficacia académica. Muchos de los estudios examinan que el impacto del estatus económico social (SES) en las oportunidades de educación superior persiste en muchos países. Los estudiantes de grupos sociales desfavorecidos son más propensos a estudiar en instituciones de menor nivel, menos prestigiosas o en cursos vocacionales.

En la teoría cognitiva social de Lent, los individuos se acercan o rechazan situaciones a partir de herramientas cognitivas que evalúan sus capacidades de autoeficacia para enfrentarlas, se concientiza si es capaz de lograr resultados positivos en una determinada realidad. Esta visión que la explica Blanco (2008) ha sido muy aplicada para explicar la elección del futuro académico-profesional desde el primer estudio realizado por Krumboltz, evolucionó a lo que hoy se conoce como la teoría cognitiva social de desarrollo (TCSD) de Betz y Hackett. La TCSD explicada por Martínez (1998) comprende tres enfoques: el individual que considera factores personales como aptitud, destrezas, vocación, actitud, formación que se puede enfocar con la teoría del rasgo; los ambientalistas, que integra factores estructurales, socioeconómicos que se superponen al anterior enfoque como por ejemplo, el nivel socioeconómico de la familia y la estructura en este aspecto en el entorno, la presión del contexto, el estatus de la profesión, se afianza en las teorías conductuales; y, el enfoque interactivo, que involucra aspectos como las relaciones persona-escuela, relaciones con los ambientes, y se fundamenta en los modelos de evolutivos y los cognitivos-conductuales.

Estudios como el de González (2014) indican un estudiante de un Nivel socio-económico (NSE) bajo de Chile “tiene tres veces menos probabilidades de aspirar a una universidad selectiva y nueve veces menos posibilidades de ser aceptado en una institución de este tipo, que un alumno proveniente de un colegio de NSE alto” (p. 263). Villada, López, Patiño, Ramírez, Jurado & Ossa, (2002) estudiaron las variables relacionadas a la elección de la profesión y la IES, en Antioquia, y concluyen que hay influencia de la familia más cercana y de factores externos y los aspectos cognitivos de cada aspirante. En este contexto, esta investigación busca evaluar la probabilidad de tomar la decisión (TD) de aceptar o no un cupo ya asignado. Los factores que influencia la TD son: emocionales, intelectuales, culturales o psicológicos (Arrendondo & Velázquez, 2013).

METODOLOGÍA

A los artículos recuperados con la utilización de motores de búsqueda académica se unieron libros relacionados con análisis multivariante. El artículo es un estudio de corte transversal que se ejecutó con la base de datos de la Dirección Técnica del SSNA correspondiente al segundo período del 2013. Entre los registros encontrados en la base están factores personales, experienciales y contextuales. El análisis estadístico partió de la investigación del marco teórico y el estado del arte, a partir de lo cual se identificó las variables que se asocian a la predicción de la variable dependiente, *aceptar el cupo* de ingreso al SNES.

La población objeto de análisis está conformada por 4648 postulantes con cupo de Manabí que provienen 19122 inscritos (Maldonado, 2014). De acuerdo a la naturaleza de las variables se analizaron de forma univariada y bivariada. En la fase multivariante se aplicó la Regresión Logística. Se utilizó el programa SPSS versión 23, que facilitó la optimización de la búsqueda de las variables a través de la identificación de varios modelos logit, hasta llegar al que mejores condiciones de predictibilidad de la probabilidad. Se estimó los coeficientes de las variables independientes a través del proceso para identificar la máxima verosimilitud y posteriormente se realizó el análisis de la bondad de ajuste. En resumen los análisis practicados se componen de: Foward para seleccionar el subconjunto, Rao y Wald para elegir o descartar variables, bondad de ajuste, la validación de resultados. Las variables consideradas como factores personales fueron: GENERO (masculino y femenino), EDAD, ESTADOCIV (casado, soltero, unión libre, divorciado, viudo, DISCAPACIDAD (tiene o no tiene).

Como factores contextuales: AREARESID (urbana o rural), TIPOUNID (fiscal, particular, fiscomisional o municipal), CARRERAASP (área de: agricultura, ciencias, ciencias sociales, educación, humanidades y artes, salud y servicios sociales, ingeniería-industria y construcción o de servicios), MODALIDAD (presencial, distancia o semipresencial), CATEGORIA (A, B, C, D o E), PROVINCIAIES (Azuay, Bolívar, Cañar, Chimborazo, Cotopaxi, El Oro, Esmeraldas, Guayas, Imbabura, Los Ríos, Manabí, Pastaza, Pichincha, Santa Elena, Santo Domingo de los Tsáchilas y Tungurahua. Como factores experienciales: NOTAENES (De 400 a 1000 puntos), ENESVERBAL (De 400 a 1000 puntos), ENESLOGICA (De 400 a 1000 puntos), ENESABSTRAC (De 400 a 1000 puntos), OPORTUNIDA (primera y segunda aplicación), PRIORIDAD (primera, segunda, tercera, cuarta y quinta prioridad) y ACEPTACIONCARRE (Acepta o no acepta el cupo) que es la variable dependiente objeto de este estudio. El estudio pretende estimar si la probabilidad de aceptar el cupo depende de las variables independientes ya identificadas.

RESULTADOS

Según el análisis univariado se observó que en un 50,8% eran mujeres. La media de la edad 17 años. El 89,8% residen en la zona urbana. El 95% registran estado civil soltero, el 5% restante se distribuyen en otros estados. El 0,2% registran algún tipo de discapacidad. Un 63,9% provienen de colegios fiscales, 32,1% de particulares, 2,7% de fiscomisionales y 1,3% de municipales. El 87% de aspirantes rindieron una vez el ENES. El 69,5% obtuvieron puntajes entre 633 y 800 en aptitud verbal. 58,5% entre 633 y 783 en razonamiento abstracto y 65,4% puntajes entre 650 y 817 en razonamiento numérico. El 99,1% seleccionan

la modalidad presencial. El 62,5% obtiene cupo en universidades categoría C, 25,8% en la D, 6,4% en la B. El 86,3% obtienen cupo en universidades domiciliadas en la provincia de Manabí. El 50,4% obtuvo cupo en carreras seleccionadas en primera prioridad, el 20,7% en segunda prioridad y el 13,5% tercera prioridad. Finalmente el 79% aceptó cupo y el restante no aceptó el cupo asignado por el SNNA.

El análisis de correlación de Pearson dio como resultado una baja correlación con las notas de razonamiento lógico y abstracto, y con la nota general ENES. La variable dependiente no tiene correlación con la nota de razonamiento verbal. Se consideró una significancia menor a 0,05. En el análisis de la independencia de las variables categóricas, se consideró si el valor de J_i^2 entre dos variables es menor a 0,05, entonces las variables están relacionadas. El análisis de contingencia de las variables que tienen relación con la variable dependiente, se identifican algunas relaciones: 3512 solteros si aceptaron la carrera. De los aspirantes que aceptaron el cupo, 3640 optaron por presencial, unos 3157 en su primer intento y 2015 habían escogido la carrera y la universidad como su primera opción. La aplicación por pasos del modelo de regresión logístico da como resultado en el bloque inicial, una probabilidad del 79,1% de que se acepte el cupo. La probabilidad de la variable dependiente está dada en relación a su frecuencia de acierto. Finalmente, en el octavo paso se obtuvo un 80,5% de probabilidad de acertar la predicción de la variable dependiente, a través de las variables: PRIORIDAD, CARRERAASP, PROVINCIALES, OPORTUNIDAD, ESTADOCIV, GENERO, MODALIDAD y EDAD. Con las cuales se estableció el modelo que se presenta a continuación.

Modelo de Regresión Logístico

El modelo logístico es el siguiente:

$$P_i = P(p_i = S_i / x_k) = \frac{1}{1 + e^{-z}}$$

$$Z = (\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5) \quad (2)$$

De donde:

$$\hat{P}_i = 1 / 1 + e^{(-2,917 - ,208 \text{ GENERO} + (-0,028) \text{ EDAD} + 3,039 \text{ ESTADO CIV}(1) + 3,185 \text{ ESTADO CIV}(2) + 2,863 \text{ ESTADO CIV}(3) - 0,667 \text{ OPORTUNIDA}(1) + (-,182) \text{ CARRERAASP}(1) + ,211 * \text{CARRERAASP}(2) + ,073 * \text{CARRERAASP}(3) - 1,296 * \text{CARRERAASP}(4) - 1,138 * \text{CARRERAASP}(5) + 0,403 * \text{CARRERAASP}(6) + 0,770 * \text{CARRERAASP}(7) + 0,938 \text{ MODALIDAD}(1) + 3,4318 \text{ MODALIDAD}(2) + 0,134 * \text{PROVINCIAIES}(1) - 21,882 * \text{PROVINCIAIES}(2) + 21,199 * \text{PROVINCIAIES}(3) - 21,419 * \text{PROVINCIAIES}(4) - 1,168 * \text{PROVINCIAIES}(5) - ,265 * \text{PROVINCIAIES}(6) - ,085 * \text{PROVINCIAIES}(7) - 1,700 * \text{PROVINCIAIES}(8) + ,141 * \text{PROVINCIAIES}(9) - 1,600 * \text{PROVINCIAIES}(10) - ,557 * \text{PROVINCIAIES}(11) + ,422 * \text{PROVINCIAIES}(12) - ,206 * \text{PROVINCIAIES}(13) + ,026 * \text{PROVINCIAIES}(14) - 1,078 * \text{PROVINCIAIES}(15) + ,498 * \text{PROVINCIAIES}(16) + 1,495 * \text{PRIORIDAD}(1) + 0,876 * \text{PRIORIDAD}(2) + 0,540 * \text{PRIORIDAD}(3) - 0,022 * \text{PRIORIDAD}(4))}$$

Cada valor del parámetro β representa el incremento en el ln del ODDS por la ocurrencia de la variable independiente, es decir estima el efecto incremental respecto al valor 0. Para cada aspirante bajo condiciones determinadas de: área de carrera, modalidad, categoría de la IES en la que obtuvo cupo, provincia donde funciona la IES y la prioridad de selección de la carrera, se incrementa la probabilidad de que un aspirante SI acepte el cupo de la carrera obtenida, es ODDS veces mayor que la probabilidad de que NO acepte el cupo.

$$\ln(\pi/q_i) = z = (-2,917 - ,208 \text{ GENERO} + (-0,028) \text{ EDAD} + 3,039 \text{ ESTADO CIV}(1) + 3,185 \text{ ESTADO CIV}(2) + 2,863 \text{ ESTADO CIV}(3) - 0,667 \text{ OPORTUNIDA}(1) + (-,182) \text{ CARRERAASP}(1) + ,211 * \text{CARRERAASP}(2) + ,073 * \text{CARRERAASP}(3) - 1,296 * \text{CARRERAASP}(4) - 1,138 * \text{CARRERAASP}(5) + 0,403 * \text{CARRERAASP}(6) + 0,770 * \text{CARRERAASP}(7) + 0,938 \text{ MODALIDAD}(1) + 3,4318 \text{ MODALIDAD}(2) + 0,134 * \text{PROVINCIAIES}(1) - 21,882 * \text{PROVINCIAIES}(2)$$

+ 21,199 *PROVINCIAIES(3) - 21,419 *PROVINCIAIES(4) - 1,168 *PROVINCIAIES(5) - ,265 *PROVINCIAIES(6) - ,085 *PROVINCIAIES(7) - 1,700 *PROVINCIAIES(8) + ,141 *PROVINCIAIES(9) -1,600 *PROVINCIAIES(10) -,557 *PROVINCIAIES(11) + ,422 *PROVINCIAIES(12) - ,206 *PROVINCIAIES(13) + ,026 *PROVINCIAIES(14) -1,078 *PROVINCIAIES(15) + ,498 *PROVINCIAIES(16) + 1,495 * PRIORIDAD(1) + 0,876 * PRIORIDAD(2) + 0,540 *PRIORIDAD(3) - 0,022 *PRIORIDAD(4)

CONCLUSIONES

El modelo propuesto permitió identificar que los factores que inciden en la decisión del aspirante de aceptar o no el cupo asignado, son: prioridad de carrera seleccionada, provincia donde se ubica la IES, número de veces que aplicó la prueba, estado civil, género, modalidad de la carrera y edad. Las variables observadas como resultado del modelo logístico aplicado, se encuadran en los factores relevantes propuestos por la Teoría Cognitivo Social de Desarrollo de la Carrera, personales, experienciales y contextuales. Se pone en evidencia que los múltiples factores de orden individual, experimental y contextual, que se identifican en teoría cognitiva social de desarrollo, subyacen de la inequidad socioeconómica, que a través de varios estudios, se ha demostrado que las posibilidades de que los aspirantes a la educación superior que provienen de familias con bajos recursos, son más limitas. El estudio aporta a la reflexión y revisión de las políticas públicas en materia de acceso a la educación superior del Ecuador, que deberían priorizar aspectos como la orientación vocacional, el hecho que las IES privadas no son la segunda opción que *queda* en descarte de la pública y la eliminación de brechas de *calidad* entre las instituciones públicas, pues los diversos niveles de posicionamiento marcan la predilección que se sobrepone a la verdadera vocación. Se tuvo acceso a la base de datos del SNNA lo cual facilitó el estudio, sin embargo esto a la vez puede ser un limitante debido a que se ajustó las variables de estudio a los datos existentes en la base. El estudio abre la opción a un sin número de investigaciones tendientes a mejorar la eficiencia del SNNA en su conjunto y la definición de políticas públicas en base a resultados que brinden a las autoridades una perspectiva diferente y complementaria.

REFERENCIAS

Alcívar T., Calderón J., Mendoza, E. (2015). “*Los nuevos procesos de admisión en la universidad ecuatoriana y su ámbito en el desarrollo de aptitudes para una educación con encargo social,*” Atlante.

Cuadernos de Educación y Desarrollo. Recuperado el 5 de agosto de 2017. Disponible en: <http://atlante.eumed.net/procesos-admision/>

Antivilo, A., Contreras, P. & Hernández, J. (2014). *Estudio de la confiabilidad de las pruebas de selección universitaria admisión 2013*. Santiago. Recuperado el 15 de agosto de 2017 de: <http://www.portaldemre.demre.cl/adjuntos/estudio-confiabilidad-psu-admision-2013.pdf>

Arrendondo, F., & Velazques, J. (2013). *Un modelo de análisis racional para la toma de decisiones gerenciales, desde la perspectiva elsteriana*. Cuadernos de Administración, 26(46), 135-158. Recuperado de: http://revistas.javeriana.edu.co/index.php/cuadernos_admon/article/view/5645

Blanco, B. (2009) “El modelo cognitivo social del desarrollo de la carrera: revisión de más de una década de investigación empírica Social,” *Revista de Educación*, 350, 423-445. Recuperado de: http://www.revistaeducacion.mec.es/re350/re350_18.pdf

Canales, A. (2016) “Diferencias socioeconómicas en la postulación a las universidades chilenas: el rol de factores académicos y no académicos,” *Calidad en la educación*, (44), 129-157.

Carrasco, E., Zúñiga, C. & Espinoza, J. (2014) “Elección de carrera en estudiantes de nivel socioeconómico bajo de universidades chilenas altamente selectivas,” *Calidad en la educación*, (40), p. 95-128.

González, Á. (2014). “Aspirar a una universidad selectiva y concretar las aspiraciones: factores determinantes,” *Calidad en la educación*, (40), p. 235-267. Recuperado de: http://www.scielo.cl/scielo.php?pid=S0718-45652014000100008&script=sci_arttext&tlng=en

INEVAL (2015). *Terce: factores asociados al desempeño educativo*. Recuperado el 10 de agosto de 2017 de: http://www.evaluacion.gob.ec/wp-content/uploads/downloads/2016/06/CIE-TERCE2015_triptico20150820-out.pdf.pdf

López-Roldán & Fachelli (2015). Análisis log-lineal. *Metodología de la Investigación Social Cuantitativa*. Bellaterra (Cerdanyola del Vallès): Dipòsit Digital de Documents, Universitat Autònoma de Barcelona. Capítulo III.1. 1ª edición. Edición digital: <http://ddd.uab.cat/record/131470>

Maldonado, B. (2014) *Informe numérico del Examen Nacional para la Educación Superior (ENES): ENES septiembre 2013*. Sangolquí: Ecuador.

Martínez, M. (1998) “Orientación vocacional y profesional,” *Papeles del psicólogo*, 71, 23-32. Recuperado de: <http://www.papelesdelpsicologo.es/resumen?pii=794>

SNNA. (2017) “Página web SNNA,” Recuperado el 2 de agosto de 2017. Disponible en: http://www.snna.gob.ec/wp-content/themes/institucion/normativa_menu.php

Villada, C., López, L., Patiño, C., Ramírez, W., Jurado, C., & Ossa, J. (2002). *Factores Asociados a la Elección de Carrera y Universidad*. Unipluri/versidad, 2, p. 23-30.

BIOGRAFÍA

Karla Viviana Benavides Espinosa es MBA especialidad Marketing, Candidata a PhD en el programa doctoral de Ciencias de la Administración de la Universidad Nacional de La Plata – Argentina. Docente Investigadora de la Universidad de las Fuerzas Armadas ESPE. Departamento de Ciencias Económicas, Administrativas y de Comercio. Av. General Rumiñahui, Sangolquí, Ecuador.

Betzabé de Rosario Maldonado Mera es Magíster en Gestión de Organizaciones, Candidata a PhD en el programa doctoral de Ciencias de la Administración de la Universidad Nacional de La Plata – Argentina. Docente Investigadora de la Universidad de las Fuerzas Armadas ESPE. Departamento de Ciencias Económicas, Administrativas y de Comercio. Av. General Rumiñahui, Sangolquí, Ecuador.

José Javier Buenaño Cabrera es MBA especialidad Marketing, Candidato a PhD en el programa doctoral de Ciencias de la Administración de la Universidad Nacional de La Plata – Argentina. Docente Investigadora de la Universidad de las Fuerzas Armadas ESPE. Departamento de Ciencias Económicas, Administrativas y de Comercio. Av. General Rumiñahui, Sangolquí, Ecuador.

GENERACIÓN DE UN PLAN DE MEJORA PARA LAS PYMES GASERAS (GAS L.P.) EN LA ZONA CENTRO DE MÉXICO: CASO DE ESTUDIO

Uriel Polo García, Instituto Tecnológico de Apizaco
Alejandra Torres López, Instituto Tecnológico de Apizaco
Crisanto Tenopala Hernández, Instituto Tecnológico de Apizaco
Karla Gonzáles Hidalgo, Instituto Tecnológico de Apizaco

RESUMEN

En este artículo se describe el desarrollo de la metodología ocupada para el estudio del proceso de llenado de gas L.P. cilíndrico en la zona centro de México. Dicha metodología partió de información general sobre las empresas gaseras a nivel estatal, local y continuó con información relevante al caso de estudio. Parte de esta información recopilada aborda datos como el número de empresas con este giro, así como la demanda que el producto tiene en la zona centro del país y la aportación monetaria que las organizaciones de este tipo hacen a nivel nacional. Para efectos de esta investigación se comenzó con el desarrollo de un diagnóstico en la empresa “caso de estudio” que incluye la toma de tiempos, el procesamiento de datos y, finalmente, la construcción de gráficos de control por cada proceso cronometrado dentro del área de andén. Esto con el fin de evidenciar las oportunidades de mejora que existen en cada uno de ellos y agilizar el proceso. Con ayuda de esta información procesada se generaron propuestas para disminuir la variabilidad mostrada en ciertos procesos, así como para el resto de los procesos que a pesar de no mostrar mucha variabilidad aún tienen la oportunidad de mejorar.

PALABRAS CLAVE: Metodología, Diagnostico, Toma de Tiempos, Oportunidades de Mejora y Propuestas

GENERATION OF AN IMPROVEMENT PLAN FOR SMALL AND MEDIUM GAS ENTERPRISES (L.P. GAS) ON THE MEXICO'S CENTRE ZONE: CASE STUDY

ABSTRACT

In this article it's described the development of the methodology used in the L.P. gas tank fulling process study on the Mexico's centre zone. It started with general state and local gas enterprises information and then with relevant information about the case study. Part of this information is about data like the number of enterprises in this field, the product demand on the country's centre zone as well, and the monetary input that this kind of organizations do at national level. This investigation was started with a diagnostic development in the “case study” enterprise. This diagnostic includes making times, data process and, finally, the use of control graphics for each measured time process in the platform area. It was made to show the improvement opportunities, which exist in each of them, and to accelerate the full process. Proposals were generated with this processed information to decrease the shown variability in some processes. They are applied to the rest of the processes too. Despite they don't present a lot of variability, they have the chance to improve.

JEL: C61, M10

KEYWORDS: Methodology, Diagnostic, Making Times, Improvement Opportunities and Proposals.

INTRODUCCIÓN

Comercio al Por Menor de Gas L.P. en el Estado de Tlaxcala

Según los últimos datos del INEGI del 2014 la región centro del país sigue siendo la mayor consumidora de gas L.P., la demanda alcanzó un volumen de 116.1 mdd, lo que representó una participación de 41.2 % del total nacional. En esta región el Estado de México es el mayor consumidor con un volumen de 49.7 mdd, es decir una participación de 42.8% de la demanda regional, por su parte Tlaxcala fue el que presentó la menor demanda con un volumen de 4.6 mdd. El desarrollo de la presente investigación se enfoca en una empresa ubicada en el estado de Tlaxcala donde según el DENUE (Directorio Estadístico Nacional de Unidades Económicas) existen 27 organizaciones dedicadas al comercio al por menor de gas L.P. cilíndrico y para tanques estacionarios (468412) y 11 establecimientos de comercio al por menor de gas L.P. en estaciones de carburación (468413). (INEGI, 2017). Algunas de las empresas que se encuentran en el mercado Tlaxcalteca son: Gas Global, Flama Gas, Gas Imperial, Extra Gas, Gas Y Griega y Garza Gas entre otros. empresa “caso de estudio” lleva a cabo el comercio al por menor de gas L.P. cilíndrico, estacionario y en estación de carburación de igual manera. Este artículo concentra información y propuestas de mejora concernientes al proceso del llenado de cilindros en el área del andén, donde se lleva a cabo el pintado, llenado y sellado de los cilindros para agilizar el mismo y disminuir el tiempo de espera de las unidades repartidoras.

METODOLOGÍA

La metodología utilizada para el desarrollo de la investigación abordó los siguientes puntos:

Diagnóstico:

Recopilación de información general del funcionamiento del andén (número de rutas, inventario de cilindros, venta por ruta, número y funcionamiento de los servidores, etc.).

Toma de tiempos de los procesos involucrados en el llenado de cilindros.

Resultados del diagnóstico:

Procesamiento de datos recolectados

Conclusiones de los datos recopilados

Generación de propuestas para la mejora del proceso en el andén:

Detección de las oportunidades de mejora y estrategias propuestas.

Diagnóstico

Información general

La empresa cuenta con 14 rutas diferentes, el número de cilindros que manejan tienen una capacidad de 45, 30, y 20 kg además de ánforas con capacidad de 10, 6, 4 y 2 kg de gas L.P. y cuenta con un inventario promedio de cilindros de:

1 de 45 kg

57 de 30 kg

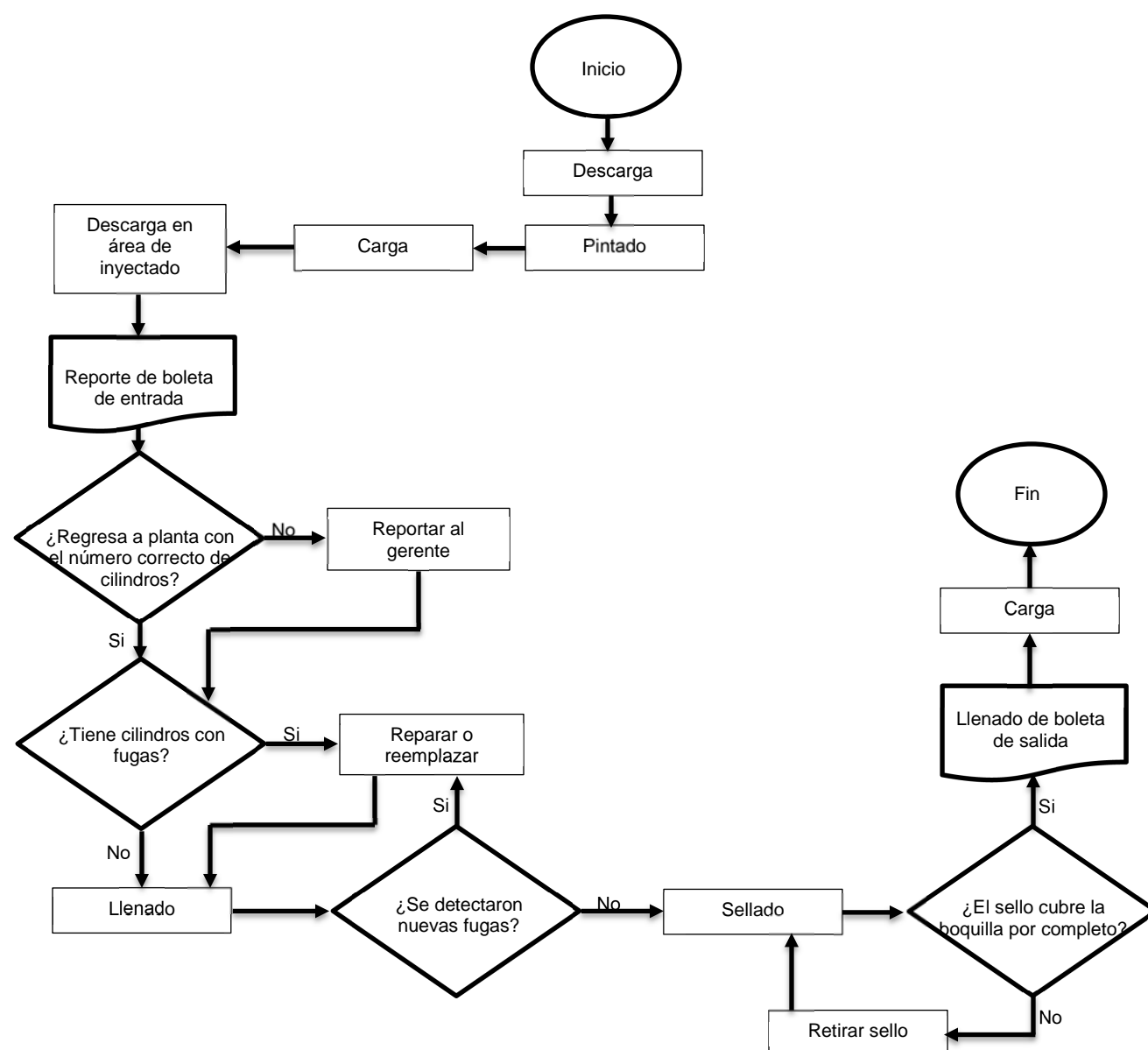
374 de 20 kg

218 kg en ánforas de 10, 6, 4 y 2 kg

El número de cilindros por unidad depende de la ruta que recorren, es decir, ninguna tiene el mismo número de cilindros. Para efectos del desarrollo de la investigación se estudió el proceso de los cilindros de 20 y 30 kg ya que son los más demandados y por consecuencia los de mayor rotación. Las instalaciones del andén cuentan con 5 inyectores para el llenado de cilindros de 20 kg, 4 de ellos pueden llenar cilindros de 30 kg

y dos de los mismos son para el llenado de ánforas (2,4,6 y 10 kg), es importante decir que con frecuencia un servidor se encuentra averiado, lo que significa que solo quedan 4 inyectores para cilindros de 20 kg, 3 para cilindros de 30 kg y solo uno para las ánforas. Solo un operador es destinado al inyectado de cilindros y otro para el pintado el cual es llevado a mano, cabe mencionar que las funciones de los trabajadores no están definidas, por lo que cualquiera de ellos puede participar en cualquier actividad dentro del andén, incluyendo a los conductores. El área de pintado se encuentra apartada de la de inyectado, esto es un factor importante que tiene efecto en el tiempo de espera total de las unidades, ya que la descarga y carga se lleva a cabo en dos ocasiones. El registro de venta y llenado de cilindros diarios quedan a cargo del supervisor o el gerente del andén. El proceso llevado a cabo en el andén se muestra en la Figura 1.

Figura 1: Diagrama de Flujo del Proceso de Llenado de Cilindros



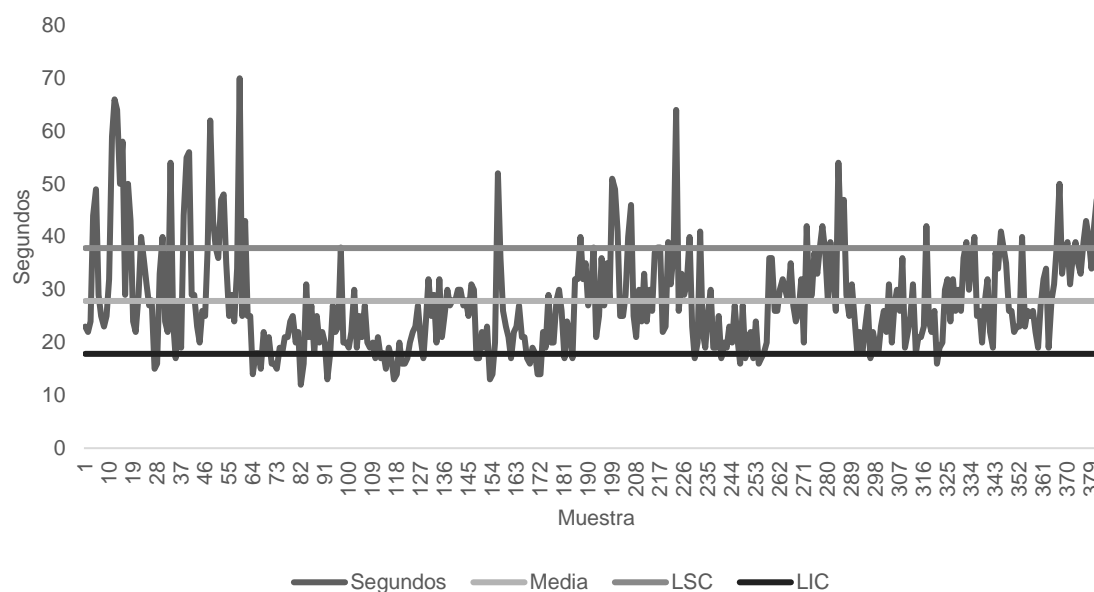
Toma de tiempos de los procesos involucrados en el llenado de cilindros. El estudio de tiempos consistió en cronometrar cada una de las actividades de procesos desde el tiempo de descarga, pintado de un cilindro de 20 y 30 kg, llenado de cilindros de 20 y 30 kg, sellado y finalmente la carga, así como datos de venta diaria e inventario de cilindros. Después de recopilar datos durante 30 días se averiguó que la empresa cuenta con un inventario promedio de 374 cilindros de 20 kg. y 57 cilindros de 30 kg, de los cuales, la venta promedio diaria por las 14 diferentes rutas es de 266 cilindros de 20 Kg y 25 de 30 kg. Se tomaron 72 muestras del tiempo de descarga, 43 de pintado de cilindros de 30 kg, 385 de pintado de 20 kg, 95 muestras de llenado de cilindros de 30 kg, 385 de llenado de 20 kg, 30 muestras de sellado, y 57 de carga de cilindros, así como el tiempo total en el sistema por ruta considerando el número de cilindros llenos y vacíos con los que entran a planta.

Resultados del Diagnóstico

Procesamiento de Datos

Para el procesamiento de datos se generaron gráficos de control para observar la variabilidad existente en cada uno de los procesos cronometrados y detectar las oportunidades de mejor, en este artículo se muestran las gráficas de los procesos que mostraron mayor variabilidad. Los resultados en cuanto a la toma de tiempos fueron los siguientes: Un conductor descarga 1 cilindro cada 8.4 segundos y en promedio descarga 20 cilindros, dándonos como resultado $\bar{X}= 2.85$ minutos en descargar, para el proceso de pintado de cilindros de 30 kg se tiene $\bar{X}= 43.16$ segundos. En la Figura 2 se puede apreciar el comportamiento de los datos cronometrados para el pintado de cilindros de 20 kg el cual es uno de los que muestra más variabilidad.

Figura 2: Gráfica de Control Proceso de Pintado 20 Kg

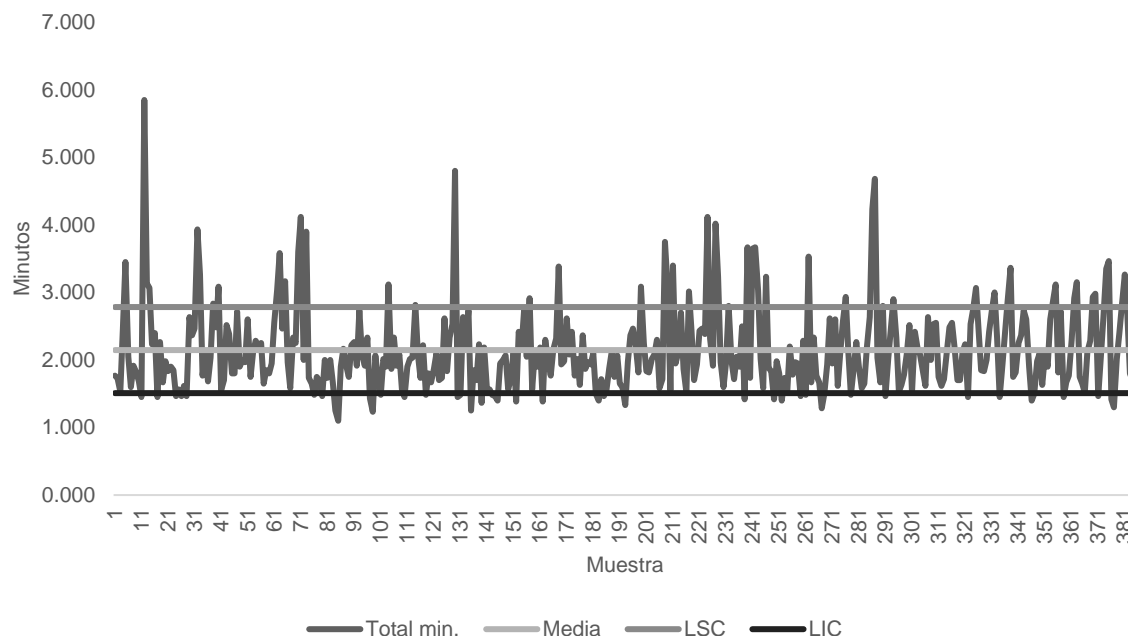


En esta gráfica de control se puede observar la variabilidad que tiene el proceso de pintado de cilindros de 20 kg, teniendo el número de muestras tomadas en el eje X y el tiempo requerido para pintar un cilindro (segundos) en el eje Y, con una media = 27.85 segundos, un límite superior de control = 37.86 segundos y un límite inferior de control = 17.84 segundos. Debido al número de datos que salen de ambos límites de control se concluye que este proceso está fuera de control y es necesario acciones para disminuir la variabilidad.

Por otro lado, el inyectado para cilindros de 30 kg cuenta con $\bar{X}=3.09$ minutos, como ya se mencionó anteriormente solo hay 4 servidores disponibles para el inyectado de cilindros de esta capacidad y que frecuentemente uno de ellos es inhabilitado debido a las fallas en el tablero del inyector, siendo este un

factor que afecta al tiempo de llenado de los cilindros, para el llenado de tanque de 20 kg se cuentan con 5 inyectoros aunque de igual manera un servidor llega a estar inhabilitado, este proceso es uno más que muestra mucha variabilidad, el comportamiento de los datos se muestran en la Figura 3.

Figura 3: Gráfica de Control Llenado de Cilindros de 20 Kg



Este gráfico de control muestra el comportamiento de los datos del proceso de llenado de cilindros de 20 kg, el cual tiene una media = 2.14 minutos, un límite superior de control de 2.78 minutos y un límite de control inferior de 1.5 minutos. Existe de igual manera mucha variabilidad en este proceso por lo que se deben tomar acciones para disminuirla.

Continuando con el proceso, un operador sella 1 cilindro cada 13.86 segundos y 20 cilindros son sellados, dando como resultado \bar{X} = de 4.6 minutos en este proceso. Por la misma sencillez de este proceso es uno de los menos atendidos ya que los cilindros llenos pasan mucho tiempo sin ser sellados. Finalmente, la carga de los cilindros a las unidades repartidoras tiene un promedio de 1 cilindro cada 10.38 segundos y carga 20 cilindros, resultando \bar{X} = 3.37 minutos.

Para tener mayor profundidad en el estudio se tomó el tiempo por unidad repartidora, es decir, desde que entra al sistema y empieza el proceso hasta que lo finaliza, se consideró el número de cilindros por ruta (llenos y vacíos). Este procesamiento de datos nos permitió averiguar el tiempo total de cada unidad, el tiempo que requieren dependiendo los cilindros vacíos y con estos datos se calcularon los tiempos ociosos. Lo antes mencionado describe el comportamiento actual de procesos del andén. La Tabla 1 muestra los resultados obtenidos del cálculo dependiendo el número de cilindros que cada ruta.

Tabla 1: Tiempo en el Sistema Por Ruta

Cilindros Vacíos						
Ruta	20 kg	30 kg	Total de cilindros	Tiempo requerido (minutos)	Tiempo medio (Minutos)	Tiempo ocioso (Minutos)
1	14.7	2.5	17.2	32.3	47.73	15.43
2	14.7	1.2	15.9	31.4	60.00	28.60
4	17.3	1.7	19.0	35.6	68.82	33.22
5	13.7	0.9	14.6	28.3	47.27	18.97
6	21.2	2.8	24.0	44.4	78.73	34.33
7	15.1	0.8	15.9	30.1	61.64	31.54
9	18.9	2.5	21.4	40.8	87.00	46.20
10	26.1	2.0	28.1	52.0	110.45	58.45
11	10.5	0.6	11.2	21.3	62.00	40.70
12	15.5	0.7	16.2	30.3	61.27	30.97
13	9.4	0.4	9.9	18.5	47.13	28.63
14	16.4	0.9	17.2	32.6	59.18	26.58
15	20.9	2.3	23.1	43.6	56.57	12.97
16	27.1	1.8	28.9	53.0	50.90	-2.10

En esta tabla se muestra el número promedio de cilindros vacíos de 20 y 30 kg, así como, el tiempo que cada unidad requiere para llenar el total de cilindros, tiempo que están en el sistema, finalmente los tiempos ociosos por ruta.

CONCLUSIONES DE LOS DATOS RECOPIADOS

Debido a que el pintado se lleva a cabo en un área apartada de inyectado los conductores deben realizar la descarga y carga en dos ocasiones haciendo más largo el tiempo del proceso, el pintado es llevado a cabo manualmente por un operador, quien pinta aproximadamente 291 cilindros diarios, debido a esto se mostró mucha variabilidad, cabe mencionar que el pintado a mano es un trabajo que genera en el operador gran fatiga, cansancio así como dolor en los hombros, espalda y problemas respiratorios debido a la inhalación del olor de gasolina y la pintura en sí, por otro lado existe desperdicio excesivo de pintura y a causa de la cantidad de pintura en el suelo los operadores corren el riesgo de resbalar, además de que dicho desperdicio genera pérdidas económicas. Como ya se mencionó anteriormente, el inyectado de cilindros se hace con 5 servidores, los cuales normalmente cuentan con un operador y frecuentemente un servidor está inhabilitado debido a averías en el tablero, explicando la variabilidad en el proceso, posteriormente los cilindros llenos son acumulados y están en espera hasta que un operador llegue a sellarlos y finalmente se espera al que el conductor los cargue a su unidad. A pesar de no mostrar mucha variabilidad en los procesos antes mencionados, existen tiempos ociosos prolongados, lo que indica que se pueden mejorar en cada fase del proceso disminuyendo el tiempo de espera.

Generación de Propuestas Para la Mejora del Proceso en el Andén

Detección de las oportunidades de mejora y estrategias propuestas.

La Tabla 2 muestra los procesos en los que se detectaron las oportunidades de mejora y las estrategias generadas.

Tabla 2: Estrategias Propuestas

Proceso	Estrategia Propuesta
Descarga	Entrar a planta con cilindros clasificados: llenos y vacíos, por pintar, no pintar y fugas.
Pintado	Reubicar el área de pintado cerca del área de inyectado. Incluir un segundo operador en este proceso.
Llenado	Cambiar el pintado a mano con brocha a pintado con maquina compresora. Incluir un segundo operador en el inyectado para atender a los 5 servidores. Detectar y corregir la falla en los tableros de los servidores para contar al 100% con ellos.
Sellado	Proporcionar la cantidad exacta de sellos a los conductores para poder sellarlos tan luego salgan del inyectado y eliminar la espera en este proceso

Nota: El modo de trabajo que se propone está enfocado a mantener en movimiento los cilindros durante todo el proceso, es decir, que al cabo de una de las fases del proceso el cilindro no permanezca en espera del siguiente, sino que pase a la siguiente fase inmediatamente.

CONCLUSIONES

La información proporcionada por el estudio de tiempos evidencio los procesos del andén que necesitan acciones de mejora con mayor urgencia, independientemente de que algunos procesos tengan menor variabilidad que otros no significa que no puedan mejorar, ya que los datos sobre los tiempos ociosos nos hablan de que la oportunidad de mejora existe en cada uno de ellos, a excepción de una ruta las demás muestran tiempos ociosos excesivos debido a las problemáticas que ocurren en cada fase del proceso. El modo de trabajo mencionada en la Tabla 2 puede ser posible si se concientiza a los operarios sobre el trabajo en equipo y se establecen las funciones de cada uno de ellos. La mayoría de las estrategias propuestas no requieren de inversión alguna ya que se habla de un nuevo modo de trabajo y cooperación de todos los operarios que conforman el área de andén, por otro lado, las estrategias propuestas para el área de pintado a pesar de que si se requiere inversión no dejan de ser igualmente importantes ya que atender esta problemática traería beneficios al operario y a la empresa ya que la carga de trabajo de repartiría y la maquina compresora de pintura disminuiría la fátiga, lesiones en los hombros y espalda, mejoraría la apariencia de los cilindros y agilizaría el pintado, además de los beneficios económicos al ahorrar pintura.

BIBLIOGRAFÍA

(s.f.).

INEGI. (Marzo de 2017). Directorio Estadístico Nacional de Unidades Económicas. Obtenido de <http://www.beta.inegi.org.mx/app/mapa/denue/default.aspx>

ANÁLISIS DEL PROCESO DE CONTROL DE INVENTARIOS PARA FARMACIAS EN HOSPITALES PÚBLICOS DE LA CIUDAD DE GUAYAQUIL

Fabián Espinoza Bazán, Universidad de Guayaquil

Rafael Ortiz Zambrano, Universidad de Guayaquil

Marisol Miranda Torres, Universidad de Guayaquil

RESUMEN

El Hospitales Públicos en la ciudad de Guayaquil sus farmacias a más de dispensar medicamentos también tenía que facturarlos, no se realizaban constataciones físicas periódicas de lo que había en existencia o se lo hacía de manera superficial. En mayo del 2013 los hospitales se adhirieron a la Red Integral de Salud del Ministerio de Salud Pública, aumentando la cantidad de pacientes y por lo consiguiente la farmacia creció, en la actualidad cuenta con 4 ubicaciones que son: Farmacia Principal, la misma que recibe fármacos e insumos procedentes de bodega, los almacena y los dispensa tanto a pacientes de emergencia como hacia las otras ubicaciones de los hospitales como por ejemplo enfermería, odontología e imágenes. Farmacia de Quirófano, que provee de medicinas al área de quirófano para las cirugías que se realizan allí. Farmacia de Consulta Externa a pacientes ambulatorios y Farmacia de Dosis Unitaria a hospitalización. Al ser una institución pública está obligada a llevar inventarios periódicos cada seis meses en todas las ubicaciones. Además está encargada de custodiar los medicamentos y de llevar un control acerca de las existencias, control de caducidades. Por este motivo es necesario que se conozcan los procesos para llevar un apropiado control de inventarios en la Farmacia.

Palabras claves: Farmacia, Control, Inventario, Dispensación, Medicamentos, Insumos

ANALYSIS OF THE PROCESS OF CONTROL OF INVENTORIES FOR PHARMACIES IN PUBLIC HOSPITALS OF THE CITY OF GUAYAQUIL

ABSTRACT

The Public Hospitals of the city of Guayaquil, in addition to dispensing medications, also had to bill them, there were no periodic physical findings of what was in existence or was done superficially. In May 2013 hospitals adhered to the Comprehensive Health Network of the Ministry of Public Health, increasing the number of patients and so consequently the pharmacy grew, currently has 4 locations are: Main Pharmacy, the same receiving drugs and supplies from warehouse, stores and dispenses both as emergency patients to other hospitals locations such as nursing, dentistry and images. Pharmacy Operating Room, which provides medicines to the area of the operating room for surgeries performed there. Outpatient pharmacy and outpatient pharmacy Unit Dose hospitalization patients. As a public institution is required to take periodic inventories every six months in all locations. It is also in charge of guarding the medicines and supplies and keep track about stocks on their perches, control expirations. For this reason it is necessary that the established processes are known to carry an appropriate inventory control in Pharmacy.

JEL: M4, M41, M42

KEYWORDS: Pharmacy, Control, Inventory, Dispensing Medicines, Supplies

INTRODUCCIÓN

En la antigüedad los pueblos empezaron a almacenar los alimentos con el fin de irlos consumiendo en épocas de escases y sequías de forma proporcional en base a su necesidad, como los egipcios. Este comportamiento poco a poco fue evolucionando y convirtiéndose en una práctica herramienta de almacenamiento y control que hoy conocemos como inventarios. Al transcurrir el tiempo esta idea de llevar un registro, distribución y cuidado de los recursos se ha ido fortaleciendo y formando parte importante dentro de los negocios y las empresas sin importar que tan grandes estas sean, y los productos o mercaderías que almacenen y comercialicen. Los distintos procesos que debe reunir una farmacia están condicionados al uso eficiente de las medicinas y dispositivos médicos en procura de tener una buena disponibilidad para su posterior consumo, por la responsabilidad de intervenir de manera directa en la atención en los centros de la red integral de salud pública.

Debido a ello se tiene que resaltar la importancia que implica disponer de la información precisa de lo que posee en existencia una farmacia, un personal entrenado y capacitado para comprender la responsabilidad y el alcance en la entrega adecuada de la medicina a los pacientes. Así también podemos precisar que los avances tecnológicos han aportado en el fortalecimiento para la realización de los inventarios, muchos de los procesos manuales han ido desapareciendo y poco a poco han sido reemplazados por sistemas informáticos que permiten registrar las transacciones en las bases de datos y poder visualizar reportes en tiempo real. Esta tecnificación representa una exigencia mayor en la revisión y evaluación de los procesos que implican tener un inventario bien consolidado, con información que refleje de manera consistente las existencias ya que forman parte del activo de una empresa.

Todo lo manifestado anteriormente tiene que ir de la mano con la concienciación de los empleados, de la capacitación continua que deben tener, de conocer el valor que proporciona esta actividad dentro de la organización, sabiendo que toda transacción afectará el resultado final, y que de un buen control de inventario depende el éxito de nuestro emprendimiento. Los hospitales públicos de la ciudad de Guayaquil desde sus inicios siempre tuvieron una farmacia en la cual almacenaban y dispensaban medicamentos. Al ser una institución semipública no realizaban inventarios de manera periódica o en fechas ya establecidas, existía poca información acerca de los inventarios realizados. A partir de junio del 2013 los hospitales fueron absorbidos por el MSP convirtiéndose en público, fue entonces que tuvieron que empaparse de las normativas que se aplican en estas instituciones. Una de estas es que se tienen que realizar inventarios periódicos cada 6 meses en todas las ubicaciones de las farmacias y bodega, esto derivó en que no se esté lo suficientemente preparado para realizar esta actividad.

En hospitales locales como por ejemplo el Matilde Hidalgo de Procel, realizar inventarios representa una actividad que le toma varios días, aunque es una entidad antigua dentro del MSP y que conoce de las normativas que se deben aplicar, a diferencia de ciertos hospitales que llevan más de 2 años de funcionamiento. Esto nos indica que llevar un inventario representa una actividad muy importante dentro de las instituciones públicas que garantiza el cumplimiento adecuado de las normativas. El objetivo de esta investigación es tratar de definir si existen excedentes o faltantes en la gestión de control de inventario y determinar el modelo correcto para el proceso de generación de inventarios. En esta investigación nace bajo la necesidad de tener un modelo de inventario adecuado para farmacias de hospitales en la ciudad de Guayaquil, ya que se manejan recursos que tienen que ser empleados de manera oportuna y disponible para los pacientes y médicos de esta institución. En el corto plazo la farmacia podrá ir confirmando que el modelo de inventario proporcionará una confianza para conocer las existencias de fármacos e insumos, la ubicación, el stock, logrando así conformar una herramienta de control que le va a ayudar en las actividades diarias realizadas por el personal en el correcto manejo y uso de los productos.

Así también esta investigación proporcionará una optimización en la organización, ya que servirá para realizar un mejor control cada vez que la institución requiera hacer inventarios físicos. Adicionalmente, se

irá poco a poco reduciendo los tiempos de entrega de resultados, proporcionará información correcta en sus reportes para la toma de decisiones en los diferentes niveles jerárquicos. Los inventarios son una parte importante dentro de la empresa, porque representan los activos corrientes, es decir, dinero que la institución ha invertido para proveer de un servicio de salud a los pacientes. Por tal motivo el beneficio de tener un modelo de inventario adecuado va a reflejarse de manera directa en la farmacia porque va a conocer lo que tiene y será una fortaleza dentro de la gestión interna.

REVISIÓN LITERARIA

Farmacia

La palabra farmacia proviene del griego *fármakon* que significa medicamento, veneno, tóxico, es el lugar donde se preparan, almacenan, dispensan y venden los productos medicinales. A continuación se mencionan algunos conceptos para comprender el significado de farmacia: “La farmacia es el arte y la ciencia de preparar medicamentos y de suministrar al público la información relacionada con los fármacos” (Esteva, 2005, pág. 3). Como se menciona en la cita anterior, una farmacia es un área donde no tan solo se almacenan medicamentos terminados, sino también, se preparan medicamentos con los diferentes componentes químicos. “La Farmacia es una profesión sanitaria asistencial que forma parte del conjunto de todas aquellas que atienden las necesidades de salud de la población” (Esteva & Martín, 2007, pág. 3). Aquí nos indican también que la farmacia es una profesión sanitaria asistencial. Vista desde otra perspectiva la farmacia tiene una incidencia directa en la salud de los pacientes, por ende se debe manejar con personal preparado y que tenga conocimientos de fármacos. “Los drogueros desempeñaron un importante papel en la farmacia hasta su desaparición a mediados del siglo XX” (Esteva, 2005, pág. 87). Los drogueros eran los únicos que podían distribuir medicinas, eran las personas que poseían el conocimiento para la elaboración de las medicinas. La producción de los medicamentos al inicio estaba centrada en los drogueros, al pasar el tiempo estos fueron desapareciendo producto de la industrialización de la farmacia en el siglo XX.

Farmacia Hospitalaria

“La Farmacia Hospitalaria promueve la utilización racional de los medicamentos e insumos farmacéuticos, cumpliendo de esta manera con una importante función sanitaria. Desde los servicios de farmacia se fomenta diariamente la eficacia, la seguridad y los costos económicos razonables en los tratamientos con fármacos.” (Peretta, 2005, pág. 355) Como se lo menciona en el enunciado anterior, la Farmacia Hospitalaria promueve la utilización adecuada y medida de los medicamentos e insumos en los pacientes que se encuentran hospitalizados. Incita a que los medicamentos sean proporcionados en la cantidad justa a los pacientes, transformando esto en una actividad eficiente dentro de una entidad hospitalaria. “La práctica de la misma requiere, por tanto, que un profesional con experiencia en el empleo de los medicamentos farmacéuticos sea el responsable de los resultados de la farmacoterapéutica de los pacientes y de que se consigan los objetivos terapéuticos deseados, con los menores riesgos de efectos secundarios y adversos.” (Herrera Carranza, 2006, pág. 8). Aquí nos explican la importancia que representa la farmacia hospitalaria dentro del proceso de tratamiento terapéutico de enfermedades en los pacientes y su recuperación. Indica también la participación activa de la persona que se encarga de atender o dispensar la medicina, que debe poseer un conocimiento de los medicamentos y sus dosis variantes en base a sus estudios, es decir, que la actividad de atender una prescripción médica no termina solo con la atención del especialista en medicina sino en el conocimiento del farmacéutico.

Inventario

“Todas las organizaciones mantienen inventarios. Los inventarios de una compañía están constituidos por sus materias primas, sus productos en proceso, los suministros que utiliza en sus operaciones y los productos terminados.” (Muller, 2005, pág. 1). En esta cita el autor nos indica que los inventarios están implícitos en

las organizaciones, que dependiendo a que se dedique la empresa va a estar constituido el mismo. Como por ejemplo una empresa que se dedique a la fábrica de muebles, su inventario estará conformado por la materia prima, productos en elaboración, productos terminados, materiales para construcción. En una farmacia estaría compuesto por fármacos e insumos. “Un inventario puede ser algo tan elemental como una botella de limpiador de vidrios empleada como parte de mantenimiento de un edificio, o algo más complejo como una combinación de materias primas y subensamblajes que forman parte de un proceso de manufactura.” (Muller, 2005, pág. 2).

Por medio de esta cita el autor nos hace notar la importancia que tienen los productos o artículos ya sean estos de uso frecuente o no, de un costo mayor o menor. Lo que podemos comprender es que dentro de un inventario se deben tener en cuenta todos los productos que ha adquirido la empresa. “Aunque técnicamente los inventarios constituyen un activo en el balance general de la compañía, casi todos los ejecutivos contables o financieros consideran que mantenerlos implica un gasto significativo, y que su misión es minimizarlo lo más posible.” (Chapman, 2006, pág. 99). En el plano financiero los inventarios forman parte de los activos de las empresas, es decir, son bienes que se tienen almacenados para convertirlos en efectivo. También significan un gasto ya que tenerlos almacenados genera un valor que debe ser cubierto por la empresa, este valor va aumentando dependiendo si existe exceso de productos. Está en la habilidad de la administración el que se minimicen estos valores. “El objetivo de mantener una baja inversión en inventarios suele contradecir la forma de pensar de buena parte del personal de ventas y marketing, a quienes casi siempre les importa que la empresa cuente con un inventario considerable para poder atender rápidamente las solicitudes de los clientes.” (Chapman, 2006, pág. 99). Otro punto de vista nos indica que en el caso de los vendedores, les interesa que los inventarios estén abastecidos con los productos que ellos reportan para la venta, ya que el interés por parte de ellos es de poder proporcionar a los clientes lo que requieran, esta disponibilidad es importante para satisfacer la demanda pero tiene que soportarse con la capacidad de almacenamiento y poder adquisitivo de la empresa, ya que tener un producto en inventario y que no tenga mucha rotación ocasionará un costo de inventario mayor.

Sistema ABC Para Inventarios

Para seguir con la aportación en la investigación de los inventarios es importante conocer las diferentes prioridades que se establecen en la adquisición de productos ya que estos forman parte de nuestro inventario. “El sistema ABC para inventarios se fundamenta en determinar por orden de necesidad o urgencia en el proceso, los bienes en el inventario, de tal forma que se denominará con A los de mayor urgencia, alto costo o que siguiendo las políticas de la organización u otros, son de primera necesidad en el proceso, luego con B aquellos que se requieren de forma general y por último con C aquellos de consumo o de control mínimo.” (Chaves, 2010, pág. 66). Como lo indica la cita anterior, los productos son la parte principal de los inventarios y se debe de establecer su importancia para saber la prioridad en que se tiene que abastecer para no quedarse sin existencias de dichos productos. Para ello establece prioridades, las mismas que denominan como A, a las de mayor importancia o fundamentales, B a las que sean de consumo mayor pero que no sean tan vitales, y C a las que sean de menor importancia.

Evaluación

La evaluación está presente en la mayoría de los proyectos que uno emprende, ya sea de estudios, familiares o empresariales. Por eso vamos a introducirnos en este campo con el fin de conocer un poco más de esto. Según Saavedra “Fernández Huerta (1986, pp.145-146) menciona los orígenes bíblicos de las decisiones evaluadora; la “evaluación vital” atribuida a las esfinges por los griegos; el sistema implantado por los chinos para la promoción del funcionariado imperial; las modalidades evaluativas en Grecia y Roma, en las universidades, y el advenimiento de la tecnología educacional con la aparición de la psicometría en el siglo XX.” (Saavedra, 2008, pág. 1). Aquí podemos constatar que la evaluación dista de mucho tiempo atrás y que se daba en muchos ámbitos de la vida, ya sea religiosa, educativa o para mantener el poder. “La

evaluación en la época primitiva y en la historia temprana era parte de las destrezas propias del liderazgo y la conducción; existe y se reconoce, pero no se le clasifica por separado.” (Díaz & Rosales, 2003, pág. 22). “La evaluación contribuye a esos procesos del pensamiento, dotando de racionalidad la conducta, confirmando finalidades y propiciando la escogencia de los medios alternativos para lograrlas.” (Díaz & Rosales, 2003, pág. 10).

Compras Públicas

Históricamente se conoce que las compras se iniciaron por medio del trueque como lo indica Heredia en su libro Gestión de compras, “Dado esto, se anota que las compras tienen su origen en la misma naturaleza del hombre, cuando en sus primitivas manifestaciones comerciales desarrolla el primer modelo de intercambio y abastecimiento llamado trueque, que va madurando y perfeccionando a través de los tiempos hasta llegar a los sofisticados modelos comerciales actuales.” (Heredia, 2013, pág. 2). Entonces el trueque fue la primera manifestación de intercambio y que se podría decir el origen de las compras, en la que los pueblos realizaban intercambios de sus productos. En la actualidad este tipo de intercambios se sigue dando, producto de las necesidades y con el apoyo de la tecnología, ya que existen redes sociales creadas exclusivamente con ese fin, donde se pueden intercambiar productos entre sus usuarios. Como lo menciona Heredia en el su libro de Gestión de Compras, “La importancia de la función de compras es absoluta, ya que cualquier ahorro que se consiga al efectuar las compras de suministros para una organización empresarial, tiene un efecto amplificado en la tasa de rentabilidad sobre inversión (ROI), además de la rapidez en la respuesta, que supera cualquiera otra reducción de costos obtenida por cambios adecuados en los recursos de la empresa.” (Heredia, 2013, pág. 1).

Así pues, da a conocer la importancia que representan las compras en dentro de la empresa ya que nos hace referencia, que comprar es una actividad que proporcionará a la organización productos, pero también un ahorro sustancial y directo cuando se lo realiza de la manera apropiada. Por ejemplo lo que sucede en una institución de salud que necesita comprar un medicamento básico, ellos empiezan por hacer un pedido donde especifican las cantidades, lo envían al portal de compras y por medio de un software determina la oferta más conveniente, analizando costos, tiempo de entrega, calidad y otras características.

Identificación y Conceptualización de los Términos Básicos y Variables de la Investigación.

SERCOP: Sistema Nacional de Compras Públicas. Software de compras públicas del Ecuador.

Software: Programas informáticos que hacen posible el funcionamiento de dispositivos o componentes de un computador. Cumplen con instrucciones específicas.

Bodega: Lugar equipado y destinado para el almacenamiento de productos y mercaderías disponibles para las demás áreas.

Tiempo de entrega: Es el lapso de tiempo que el proveedor se compromete en entregar un determinado producto, bien o servicio.

Dispositivos Médicos: Son insumos médicos como por ejemplo jeringuillas, catéter; que forman parte de la atención en salud de los pacientes.

Medicamentos: Fármacos que se utilizan en los pacientes dentro de los tratamientos médicos.

Dosis: Cantidad o fracción de medicamentos que se utilizan en los pacientes de acuerdo a lo recetado por el médico.

Químico Farmacéutico: Persona capacitada en el uso de medicamentos. También puede cumplir funciones en laboratorio clínico.

Punto de Reorden: Es el momento exacto o adecuado para que se autogenera una orden o pedido de compras.

CNMB: Cuadro Nacional de Medicamentos Básicos, es el listado de medicamentos básicos que deben utilizar los médicos para ser recetados a los pacientes.

Requisición: Formulario para realizar un pedido de productos o mercaderías desde las áreas hacia la bodega.

Insumos: Son dispositivos que se utilizan en la atención a los pacientes, como por ejemplo, guantes, jeringuillas, gasas.

PAP: Planificación Anual Presupuestaria. Es la planificación que realizan las áreas de acuerdo a lo que van a consumir en el próximo periodo.

Ubicaciones: Se considera ubicaciones a los diferentes lugares o áreas donde se trasladan las medicinas o insumos.

METODOLOGÍA

Para la realización de este proyecto de investigación se tiene que identificar el método que se apegue a la solución que se pretende conseguir que es establecer un modelo adecuado para llevar a cabo los inventarios de la Farmacia. El método que se aplicará a esta investigación es el de análisis ya que nos permitirá ir descomponiendo el problema en varios segmentos. Una vez analizados empezaremos a ensamblarlos de acuerdo a la optimización de los recursos y en la obtención de los resultados que esperamos conseguir.

Tipo de Investigación

Se utilizará el método cualitativo ya que permite la interacción social empleando métodos de recolección de datos que son no cuantitativos, como lo expresa (Merino M. , 2010, pág. 46): “Las técnicas cualitativas sirven para obtener información muy profunda de las personas investigadas: motivaciones de compra de un producto, actitudes hacia una marca, creencias y opiniones sobre el consumo de un servicio, etc.” El propósito de explorar las relaciones sociales y describir la realidad tal como la experimentan los individuos que participan en este proceso. El mismo autor también nos indica que existen tipos de investigaciones cualitativas: Para Merino M. (2010, pág. 46) Las técnicas directas miden la expresión verbal, esto es, lo que los individuos van diciendo durante la investigación. Por ejemplo, las reuniones de grupos o las entrevistas en profundidad. Las técnicas indirectas, como su nombre indica, analizan indirectamente aquellas percepciones o comentarios del individuo que puedan interesar en cada caso. Por ejemplo, las técnicas proyectivas o la observación. Entonces se puede interpretar que la investigación cualitativa requiere un profundo entendimiento del comportamiento humano y las razones que lo gobiernan buscando explicar los diferentes aspectos de tal comportamiento. En otras palabras, investiga el por qué y el cómo se tomó una decisión. También que la investigación cualitativa se puede aplicar en la toma de muestras pequeñas, esto es la observación de grupos de población reducidos como en nuestro proyecto de investigación. Otro tipo de investigación a utilizar será la descriptiva como lo menciona Tamayo (2004, pág. 84): “La investigación descriptiva va más allá de la toma y tabulación de datos. Supone un elemento interpretativo del significado o importancia de lo que describe, combinando así el contraste, la interpretación y evaluación.” Como podemos notar también en este proyecto es recomendable utilizar el tipo de investigación descriptiva ya que de esta manera es posible exponer los puntos que soporta la hipótesis planteada y que describirán al detalle en que se basa la misma.

Herramientas Metodológicas

Dentro de las herramientas metodológicas a utilizar vamos a tomar en cuenta las que más se apeguen o las más adecuadas para obtener la información precisa que se necesita para este proyecto de tesis. Una de las herramientas a utilizar serán las entrevistas con las personas que intervengan en el proceso de nuestra investigación, ya que mediante ello vamos a interactuar y a conocer las diferentes actividades que realizar los actores en cada uno de los procesos. De esta forma nos adentraremos en su labor diaria lo cual nos permitirá identificar las necesidades, causas y deficiencias que pudieran existir. También se procederá a realizar encuestas con el personal de farmacia y cierta porción de médicos. Estas encuestas estarán dirigidas a la obtención de información referente al proceso de abastecimiento y dispensación en el caso de farmacia; y para el caso de los médicos estará enfocada en el cumplimiento de los requerimientos de medicamentos por parte de ellos hacia la farmacia.

Método Estadístico

Todos los datos recolectados por medio de las encuestas realizadas a los trabajadores y médicos de los hospitales públicos en la ciudad de Guayaquil, será tabulada, graficada y con su respectiva interpretación de los datos obtenidos.

Población: Es el conjunto total limitado e ilimitado de individuos compuesto por personas o cosas, que poseen algunas características comunes. La población para el presente trabajo se consideró un total de 17 hospitales públicos de la ciudad de Guayaquil.

Según Tomás (2009) “Es el conjunto de todos los individuos que cumplen ciertas propiedades y de quienes deseamos estudiar ciertos datos. Podemos entender que una población abraza todo el conjunto de elementos de los cuales podemos obtener información, entendiendo que todos ellos han de poder ser identificados” (p. 21). Para el cálculo del tamaño de la población se escogió la directora de la Fundación, a continuación, se reflejará los siguientes:

Tabla 1: Población

Hospitales Públicos	Cantidad
Norte	2
Sur	3
Centro	1
Este	2
Oeste	2
TOTAL	10

En esta tabla se describe la población de los hospitales públicos de la ciudad de Guayaquil. Fuente: Elaboración propia

Muestra

Según Fuentelsaz, Icart & Pulpón (2006) “La muestra es el grupo de individuos que realmente se estudiarán, es un subconjunto de la población. Para que se pueda generalizar los resultados obtenidos, dicha muestra ha de ser representativa de la población”. (Pág. 55). Como la población es menos de 100 no se aplica fórmula.

RESULTADOS

Como se apreciar durante los resultados y las interpretaciones de las encuestas y entrevistas, se pudieron identificar que algunos de los procesos no están definidos lo que está ocasionando que no se pueda obtener el resultado esperado. Estos procesos que son fundamentales para el correcto funcionamiento de la

farmacia, son los que precisamente se tienen que rediseñar y hacer conocer a todos los que intervienen en los mismos. Después de haber analizado los resultados obtenidos durante la investigación e identificado las necesidades y los desfases en los procesos, se determinan 2 propuestas, la primera que se podría implementar de manera inmediata y la segunda que reforzará la optimización de los recursos.

CONCLUSIONES

El presente proyecto investigativo ha permitido conocer el funcionamiento de las farmacias de los hospitales públicos en la ciudad de Guayaquil. Llevar a cabo el proyecto dará como resultado que el personal mejore el desempeño de sus funciones y los procesos. Se concluye que: En la mayoría de los inventarios tomados en físico habían faltantes y sobrantes, los mismos que tenían que ser recontados e indagar si estaban dispersados por el hospital o en otras ubicaciones de la farmacia. Esto ha originado a realizar ajustes en el inventario, a tener medicamentos en stock físico sin rotación y a tener pacientes en espera de medicamentos. El personal no tiene conocimiento de la cantidad de medicamentos que poseen las ubicaciones con lotes, fecha de caducidad y registro sanitario, por lo que no ha podido distribuir de manera óptima los mismos, ocasionando que algunos de estos cumplan su fecha de caducidad y no puedan ser canjeados a tiempo lo que conlleva una pérdida para el hospital. Se identificó que el modelo actual de la generación de inventarios incluía los medicamentos solo con cantidades, sin lotes, fecha de caducidad y registro sanitario. Esto ocasiona que no se sepa de qué lotes tengo disponibles. Con el proceso actual de generación de inventario muchos medicamentos expiraban, es decir, que se cumplía la fecha de caducidad y no se canjeaban por desconocimiento de los mismos. El proceso de toma física de inventarios demora 1 día por ubicación y la consolidación de la misma tarda 30 días, producto de que las personas que intervienen en el mismo tardan mucho tiempo en estar colocando lotes, fechas de caducidad y registro sanitario, ya que el modelo actual no proporciona esa información en línea.

REFERENCIA

- Esteva, J. (2005). Historia de la Farmacia. Barcelona: Masson.
- Esteva, J., & Martín, B. (2007). Función social de las oficinas de farmacia. Madrid: Elsevier.
- Gennaro R., A. (2003). Remington Farmacia. Buenos Aires: Panamericana.
- Heredia, N. L. (2013). Gerencia de compras la nueva estrategia competitiva. Bogotá: Ecoe Ediciones.
- Herrera Carranza, J. (2006). Manual de Farmacia Clínica y Atención Farmacéutica. Madrid: Elsevier.
- Horgren, C., Datar, S., & Foster, G. (2007). Contabilidad de Costos. Mexico: Pearson Educación.
- Merino, E. (2014). El Cambio de la Matriz Productiva. Buen Viaje, 10.
- Muller, M. (2005). Fundamentos de Administración de Inventarios. Bogotá: Norma.
- Peretta, M. D. (2005). Reingeniería Farmacéutica. Buenos Aires: Panamericana.
- Rodríguez, I. (2007). Estrategias y técnicas de comunicación: Una visión integrada en el marketing. Barcelona: Editorial UOC.
- Rodríguez, I., Ammettler, G., & López, Ó. (2006). Principios y estrategias de Marketing. Barcelona: Editorial UOC.
- Saavedra, M. (2008). Evaluación del Aprendizaje. Mexico: Pax Mexico.

Scheff, J. (2008). Marketing tras bambalinas: Cómo crear y conservar el público para las artes escénicas . México, D.F. : Gestión Cultural .

Tábora, M. (2007). Condiciones generales de competencia en Honduras . Santiago de Chile : Naciones Unidas .

Tamayo, M. (2004). Diccionario de investigación científica. Cali: Limusa.

Tiboni, E., & Cavallo, A. (2011). Comunicación Estratégica . Santiago de Chile : Penguin Random House Grupo Editorial Chile .

BIOGRAFÍA

Fabián Espinoza Bazán es Ingeniero en Multimedia, docente actual de la escuela de Ingeniería Comercial de la Facultad de Ciencias Administrativas, de la Universidad de Guayaquil.

Rafael Ortiz Zambrano es Ingeniero en Estadística Informática, Magíster en Sistemas Integrados de Gestión de la Calidad, Ambiente y Seguridad, docente actual de la escuela de Ingeniería en Comercio Exterior de la Facultad de Ciencias Administrativas, de la Universidad de Guayaquil.

Marisol Miranda Torres es Ingeniera en Estadística Informática, Magíster en Sistemas Integrados de Gestión de la Calidad, Ambiente y Seguridad, docente actual de la escuela de Ingeniería Comercial de la Facultad de Ciencias Administrativas, de la Universidad de Guayaquil.

NEGOCIACIÓN DE CONFLICTOS A TRAVÉS DE ESTRATEGIAS DE MEDIACIÓN EN PYMES EN LA CIUDAD DE GUAYAQUIL

Álvaro Rivera Guerrero, Universidad de Guayaquil
Erick Paúl Murillo Delgado, Universidad de Guayaquil

RESUMEN

Los conflictos son algo habitual en el ser humano. La solución de estos conflictos a lo largo de la historia ha ido cambiando de acuerdo a la evolución de las sociedades. Así en el pasado los conflictos generalmente se solucionaban gracias a la intervención de un personaje respetado (ancianos, jefes de las tribus, sacerdotes, etc) de la comunidad que ayudaba a solucionar las controversias entre los miembros de su comunidad. La PYMEs en la ciudad de Guayaquil, ha evolucionado introduciendo aspectos legales y en orden, observándose una gran innovación en la resolución de conflictos y otras alternativas de solución, con los que se han remediado muchos problemas en menos tiempo y con menos costos que en los procesos judiciales. Se analizan los antecedentes investigados, que son documentos que sirvieron como sustento para realizar el trabajo, además, se explican las diferentes teorías relacionadas con el tema, su fundamentación bibliográfica y la interpretación que hace el autor. Se detalla, además, la metodología de la investigación que a su vez, muestra los diferentes aspectos, desarrollo de la investigación de mercado, y el cálculo de la población y muestra, que permite obtener datos específicos sobre el problema y la solución.

Palabras claves: Conflicto, Solución, Empresa, Problemas, Talento Humano

NEGOTIATION OF CONFLICT THROUGH MEDIATION STRATEGIES IN SMES IN THE CITY OF GUAYAQUIL

ABSTRACT

Conflicts are common in humans. The solution of these conflicts throughout history has been changing according to the evolution of societies. Thus in the past conflicts were generally resolved through the intervention of a respected person (elders, tribal chiefs, priests, etc.) of the community who helped resolve disputes among members of their community. The PYMEs in the city of Guayaquil have evolved by introducing legal and orderly aspects, observing a great innovation in the resolution of conflicts and other alternatives of solution, with which many problems have been remedied in less time and with less costs than in the proceedings. We analyze the antecedents investigated, which are documents that served as sustenance to carry out the work, in addition, explain the different theories related to the subject, its bibliographic basis and the interpretation that the author makes. It also details the research methodology which, in turn, shows the different aspects, the development of market research, and the calculation of population and sample, which allows to obtain specific data on the problem and the solution.

JEL: M1, M12, M14, M41, M42

KEYWORDS: Conflict, Solution, Company, Problems, Human Talent

INTRODUCCIÓN

En la actualidad las empresas juegan un papel fundamental en la economía, pues gracias a ellas se satisfacen las diferentes necesidades del ser humano, sin embargo cualquier compañía sin importar su tamaño o razón social, afrontan en el desarrollo de sus actividades diferentes problemáticas internas y externas, es el caso de los conflictos laborales, estos aparecen en cualquier circunstancia dentro de las compañías y en cualquier lugar del mundo, pues es de saberse que los conflictos hacen parte del ser humano, pues cada individuo siempre afrontará conflictos internos que al exteriorizarlos provocan dificultades en su entorno, esto conlleva a desestabilizar el clima organizacional y las relaciones laborales, lo cual entorpece el desempeño de los trabajadores. Este método de solución fue variando con los años, de acuerdo a la complejidad de los conflictos, hasta llegar a solucionar las disputas de toda índole por la vía judicial, entregándole a un tercero la capacidad de resolver los conflictos, congestionando los tribunales y favoreciendo al carácter litigante de los abogados, que necesariamente aconsejaban el uso de la autoridad para solucionar hasta las controversias más pequeñas que muchas de las veces podrían ser resueltas mediante el diálogo y la comunicación entre las partes en disputa. En el Ecuador, al igual que en muchos países del mundo, el sistema judicial se ha visto desbordado por el número de causas que se presentan, tornando a la justicia lenta e incrementando los costos a las personas y empresas que desean resolver sus conflictos, además de la pérdida de tiempo en largos litigios sobre todo para las empresas que lo que más necesitan es celeridad en sus procedimientos y operaciones

Desarrollo

El Ecuador registra un importante número de Pymes, siendo estas las primeras que recurrieron a los procesos de Mediación con sus contrapartes. Según información proporcionada por la (Función Judicial del Ecuador, 2016) en la actualidad se han aprobado 68 centros de Mediación en el Ecuador, 10 de los cuales funcionan en la ciudad de Guayaquil, realizando una labor que ayuda a los procesos de administración de justicia para que sean más rápidos y eficientes. A pesar de ello, su funcionalidad no está bien promocionada en las empresas medianas y pequeñas del puerto principal del Ecuador, dejando a merced de la ética de los abogados, la asesoría en la resolución de conflictos. Hay que reconocer que los costos de Mediación, tienen una tabla porcentual y por tanto no son bajos, mucho menos gratuitos, pero su practicidad y eficiencia está comprobada, por lo que se destaca que siempre será la mejor opción, según lo observado en otros estudios como el realizado por (Recalde, 2016) en los que demuestra la celeridad de los mismos. Cuando se habla de conflictos es primordial saber los orígenes, en general estos surgen de creencias, valores y la educación que las personas hayan tenido a lo largo de su vida, pero también depende de los intereses u objetivos que la persona tenga dentro de la compañía, dado que a veces esto provoca que tenga comportamientos ajenos a los que realmente tendría, solo en pro de alcanzar lo que desea. El conflicto es un proceso que es originado por un individuo que se siente agobiado o frustrado por otro, donde éste siente que son afectados sus intereses personales, y ocasiona una situación de incompatibilidad donde cada individuo busca defender su posición y sus objetivos. Es por ello que los conflictos laborales se toman como una problemática perjudicial para la empresa y es por eso que en la actualidad estás procuran mantener un clima organizacional equilibrado.

Implementar estrategias de resolución de conflictos como métodos alternativos de solución entre empleados en PYMES en la ciudad de Guayaquil. Los conflictos laborales hacen parte del desarrollo del clima organizacional en una compañía, sin embargo, es de saber que este influye directamente en las personas que trabajan en dicho lugar y hace parte de su personalidad y de la manera cómo se afrontan diferentes situaciones y circunstancias en la vida. Es así como antes de hacer referencia a los conflictos laborales y todo lo que ello implica, se describirá su origen y su efecto en cada persona.

REVISIÓN LITERARIA

Conflicto

García (2011) acota lo siguiente: “El conflicto es un fenómeno natural en toda sociedad, es decir, se trata de un hecho social consustancial a la vida en sociedad. Así mismo, las disputas son una constante histórica, puesto que han comparecido en todas las épocas y sociedades a lo largo de los tiempos. Incluso, el cambio social que determina toda la dinámica de la vida de los seres humanos es una consecuencia que debe ser imputada de modo mayoritario, aun cuando no de manera absoluta, al conflicto.” (p. 29). El conflicto es un fenómeno natural en toda sociedad, es decir, se trata de un hecho social consustancial a la vida en sociedad. Así mismo, las disputas son una constante histórica, puesto que han comparecido en todas las épocas y sociedades a lo largo de los tiempos. Incluso, el cambio social que determina toda la dinámica de la vida de los seres humanos es una consecuencia que debe ser imputada de modo mayoritario, aun cuando no de manera absoluta, al conflicto. El conflicto puede ser afectado o tratado a través de la desaparición, la negociación, la absorción, la eliminación o la subordinación. En la desaparición, por sustracción de materia no hay conflicto, ya que uno o ambos intereses enfrentados, cuando no los mismos grupos sociales, se han extinguido o perdido vigencia.

Tipos de Conflictos

Debido a la gran variedad de situaciones que pueden generar diferentes tipos de conflictos, es muy difícil establecer una clasificación de los mismos que satisfaga las percepciones de todos. Sin embargo, se han tomado en cuenta los aportes de dos autores para establecer una clasificación que cumpla con los objetivos de este trabajo, de esta manera los clasificaremos de acuerdo a su alcance o sus efectos, y de acuerdo a su contenido.

Los Conflictos de Acuerdo con su Alcance o Sus Efectos.

Morton Deutsch (1969) (citado en Torregrosa y Crespo, 1984) propone una clasificación en la que diferencia los conflictos de acuerdo con los efectos que estos producen. Estos efectos se consideran tomando en cuenta la totalidad del proceso conflictivo y no solo una parte de los mismos:

Conflictos constructivos: Son los conflictos cuyos resultados son beneficiosos para todas las partes. El bien mayor para el mayor número posible.

Conflictos destructivos: Son los conflictos en los cuales los resultados solo se perciben favorables para alguna de las partes y necesariamente causan una pérdida para el resto de partes. Son conflictos en la que todas las partes pierden y que el objetivo final es evitar pérdidas propias y causar pérdidas en la otra parte.

Los conflictos de acuerdo a su contenido: Moore (1994) realiza una interesante clasificación de acuerdo a la fuente que genera el conflicto:

Conflictos de relación: Son los que surgen entre las personas debido a: emociones fuertes, falsas percepciones, escasa o falta de comunicación o conductas negativas repetidas. Estos conflictos también son llamados irreales ya que se producen incluso sin que haya una causa objetiva que los desencadene.

Conflictos de información: Se producen por información falsa, falta de información, interpretación diferente de la información, etc.

Conflictos de intereses: Son los que se producen por necesidades incompatibles o percibidas como tales. Pueden ser sustanciales (dinero, recursos físicos, tiempo, etc.), de procedimiento (la manera cómo el

conflicto debe ser resuelto) o psicológicos (percepciones de confianza, respeto, etc.). Es necesario un acuerdo en los tres niveles para la satisfacción completa.

Conflictos estructurales: Son causados por estructuras opresivas de relaciones humanas, muchas de las veces ajenas a la gente en conflicto. Desigual poder o autoridad, control desigual de recursos, condiciones geográficas (distancia o proximidad), tiempo, estructuras organizativas, etc.

Conflictos de valores: Causados por una incompatibilidad de creencias o diferencia entre las mismas. Los conflictos surgen cuando unos tratan de imponer por la fuerza su conjunto de valores por sobre los de otros.

Estrategia de Resolución de Problemas

Es una estrategia que persigue la colaboración y la conciliación. Esta estrategia genera los mayores resultados conjuntos, permite el compromiso con el acuerdo y mejora las relaciones interpersonales. Existen varios momentos claves que posibilitan la aparición de la estrategia de solución de problemas: **a)** al inicio de la interacción mediante la identificación del problema, **b)** a la hora de proponer alternativas y soluciones al conflicto, y **c)** en la fase final del proceso negociador. (Sastre, G. Y Moreno, M., 2002) Cuando la gente se enfrenta a un conflicto, tiene un número limitado de medios para intentar resolver sus disputas. Los desacuerdos, problemas y conflictos pueden surgir, prácticamente, en cualquier relación. Normalmente afrontamos dichas situaciones de manera informal. En primer lugar, la gente puede tratar de evitar a la otra parte por distintas causas: el malestar producido por el conflicto, porque no considera que el problema es suficientemente importante, porque no tiene poder para cambiar la situación, porque no cree que la situación pueda mejorar o porque no está, todavía, dispuesto a negociar. Cuando no es posible seguir evitando el conflicto, o las tensiones son tan fuertes que nos permiten continuar igual, se tiende a utilizar la discusión informal para solucionar problemas. En la vida cotidiana, la mayor parte de nuestros desacuerdos se solucionan mediante este procedimiento, o bien logrando acuerdos que satisfacen más o menos, a las distintas partes implicadas, o bien abandonando el asunto porque carece de interés, o no tiene solución.

Criterios Para A Resolución de Conflictos

La gente emplea ciertos comportamientos, normas, procedimientos e instituciones en un intento de resolver el conflicto ya sea con métodos basados en los intereses, en el derecho o en el poder. El marco de referencia en el que se integra el amplio conjunto de estilos, estrategias y procedimientos mencionados se apoya en los trabajos de Ury, Brett y Goldberg (1988), que inauguraron el campo del diseño de sistemas de disputas (dispute system design) con sus investigaciones sobre los procedimientos de reclamaciones empleados en la industria minera. Sus investigaciones revelaron tres orientaciones para la resolución de los conflictos: los intereses, el derecho y el poder. Los modelos basados en los intereses (interest-based) intentan reconciliar los intereses subyacentes de los disputantes, los modelos basados en el derecho (rights-based) determinan quién tiene razón según unos criterios de comportamiento aceptados y los modelos basados en el poder (power-based) se centran en determinar qué parte tiene más poder y son coercitivos por naturaleza.

Etapas del Conflicto Laboral en las Empresas

Contraposición o potencial incompatibilidad: En la actualidad surgen este tipo de conflictos, cuando en las compañías se presenta una comunicación inadecuada, o cuando en la organización la estructura no está bien definida, en cuanto a funciones, niveles de autoridad, pero también se presenta cuando hay comportamientos personales como voz irritante, grosería al responder, carácter fuerte, lo que puede ocasionar un conflicto posterior que sea manifestado.

Conocimiento o personalización: En esta etapa se siente el desarrollo del conflicto, es decir da sus primeros frutos representados en acciones contundentes que comienzan por deteriorar relaciones y funciones de los trabajadores de las empresas.

Intensión: En esta etapa el conflicto ya ha tomado vuelo y se ve la incidencia en la eficiencia de los trabajadores, y las consecuencias que esto contrae como el mal desarrollo de sus actividades, discusiones en tonos altos e interrupción de las jornadas laborales.

Comportamiento: En esta etapa del conflicto se evidencia la oposición de los individuos y hay agresiones fuertes, como el declive del buen funcionamiento de la compañía, lo que contrae problemáticas que pueden afectar a la empresa.

Resultados: Las consecuencias de un conflicto laboral dependen sustancialmente, como las personas y el líder lo han manejado, pues pudo tomarse como una oportunidad de mejoramiento y/o del desempeño del grupo o pueden perjudicar al mismo.

METODOLOGÍA

Diseño de la Investigación

La metodología por utilizar en la presente investigación será la cualitativa. La investigación cualitativa “es la forma perceptiva de analizar la información recopilada de forma profesional y prolija” Álvarez (2003). Este tipo de investigación permite establecer las características que se persigue en la investigación, como lo son las cifras económicas del país, la influencia de las salvaguardias en las cifras del sector textil y los efectos sociales. Unas de las ventajas de la investigación cualitativa es que puede ser empleada en muchas disciplinas, siendo la más adecuada para el presente estudio, donde los resultados podrán ser comparados con estudios similares obteniendo conclusiones valiosas en esta investigación. En el presente trabajo investigativo se utilizaron tres tipos de métodos de investigación:

Métodos

En el presente trabajo investigativo se utilizaron tres tipos de métodos de investigación:

Método Analítico

El método analítico toma por punto de partida el conocimiento buscado, y retrocede, suponiendo ordenes de dependencia en los que ese conocimiento está incluido, hasta lograr la conexión con cadenas deductivas que son ya conocidas y evidentes. (Caimi, 2003, pág. 39). Es el método que será utilizado en el momento del procesamiento de la información que ha sido recopilada durante la investigación del trabajo, la misma que nos permitirá extraer los elementos fundamentales para fundamentación del trabajo.

Método Deductivo

“Es un método de razonamiento que consiste en tomar conclusiones generales para explicaciones particulares”. (Bernal, 2006, pág. 56). Este método será utilizado en la elaboración de las conclusiones que nos permitirá determinar los resultados del proceso de investigación y en las recomendaciones para poder proyectarnos al futuro.

Método Estadístico: “El método estadístico, dentro del método científico, consiste en una serie de pasos para llegar al verdadero conocimiento estadístico”. (García, Ramos, & Ruiz, 2006, pág. 6). Este método lo

utilizamos al momento de recopilar la información para la elaboración de los resultados con la que podemos realizar la tabulación y elaboración de los cuadros estadísticos.

Tipo de investigación: En el trabajo de investigación se seleccionaron diferentes tipos de investigación: Investigación documental Mediante la investigación documental se recopila la información de las correspondientes variables, con el objetivo de efectuar el debido análisis para diseñarlo en el marco teórico, que son las claves fundamentales para procesar la información.

Investigación de campo: Esta investigación de campo ayuda a averiguar los posibles problemas que existen al implementar el sistema y a evaluar la situación para buscar las mejores alternativas en dar solución a tiempo a los inconvenientes que se puedan presentar.

:

Investigación explicativa: Por medio de esta investigación se logra interpretar y entender la naturaleza de los resultados que surgirán de las encuestas, para dar un análisis que fundamentará el marco investigativo.

Técnicas de investigación: Las técnicas permiten la recolección de la información por medio de los instrumentos de investigación, tales como: encuestas, entrevistas, observación entre otros (Ramírez González A., 2010). Este trabajo de titulación utiliza la entrevista como instrumento de investigación con el objetivo de recolectar la información oportuna para hacer factible este trabajo de titulación. La información recolectada es cuantitativa debido a que se usaron instrumentos de mediación estadísticos para llegar a una conclusión.

Encuestas

La encuesta es una de las técnicas de recolección más usadas y se realiza a un determinado grupo de personas con la fundamentación del cuestionario. La encuesta es relevante porque refleja datos trascendentales y además permite observar la reacción que se provoca en el individuo evaluado.

Población y Muestra

Población o Universo

La población por considerar son las PYMEs de la ciudad de Guayaquil, que según la Cámara de Comercio (2016), en Guayaquil existe 286.754 pymes.

Muestra

Para el cálculo del tamaño muestral, se empleará la fórmula para la población infinita.

$$n = \frac{Z^2 * P * Q}{e^2}$$

Z = Nivel de confianza (1.96)

p = Probabilidad de éxito (0.5)

q = Probabilidad de fracaso (0.5)

e = Margen de error (0.05)

$$n = \frac{1.96^2 * 0.5 * 0.5}{(0.05)^2}$$

$$n = \frac{3,8416 * 0.5 * 0.5}{0.0025}$$

$$n = 384$$

Como es de conocer, el cálculo del tamaño de la muestra reflejó un total de 384 objetos de estudio, dándose aquel valor, ya que se consideró como nivel de confianza un 95%, siendo 1.96 el valor asignado para Z, debido al porcentaje de confianza estimado, a más de ello, se tomó un 5% para el margen de error, un 50% para la probabilidad de éxito, y otro 50% para la probabilidad de fracaso.

RESULTADOS

Conforme a los datos obtenidos por medio de las encuestas, se llega a las siguientes interpretaciones: Los microempresarios no saben cómo aplicar estrategias de conflictos entre su personal de trabajo, la gran parte de ellos no conocen la forma correcta para tratar los problemas que se pueden presentar, lo que denota la viabilidad para la existencia de una asesora microempresarial. A todas las microempresas encuestadas se le han presentado problemas tanto administrativos como económicos, lo que denota que la sustentabilidad de ellas es incierta, puesto que no mantiene bases para emprender. El estudio de mercado y el desfinanciamiento son los mayores problemas a los que se presentan sus dueños, por ende, la propuesta debe tener capacitación sobre estos puntos. Es importante desarrollar un plan de resolución de conflictos a través de estrategias para dar solución.

CONCLUSIONES

Los conflictos siempre serán una de las características fundamental de cualquier organización, y por ello es indispensable que los gerentes lo manejen de manera adecuada teniendo como base la objetividad, el bienestar de los trabajadores y de la compañía, es importante trabajar en un clima organizacional que permita que el ambiente laboral sea liviano y lleve a cada individuo al mejoramiento continuo. Conforme a la investigación desarrollada se llega a las siguientes conclusiones: Se determinó que las PYMEs actuales no mantienen una ayuda referente a asesoramiento para la solución de conflictos. Se evaluaron los obstáculos que se presentan, siendo estos la falta de dirección para ser eficaz en los procesos, así como la inexistencia de una facilidad para el financiamiento y el desarrollo de sus actividades. Los conflictos son algo habitual en el ser humano. Su misma naturaleza, la convivencia y su deseo de poder y dominación sobre sus iguales favorecen el apareamiento de conflictos de diversa índole. En la actividad publicitaria, al igual que en las demás actividades humanas, se presentan conflictos generados especialmente por las relaciones comerciales e interpersonales entre los principales actores de esta actividad, como son: anunciantes, agencias de publicidad, proveedores de servicios (productoras de audio y video, fotógrafos, imprentas, modelos, etc), medios de comunicación, consumidores y empleados de las agencias.

REFERENCIA

Álvarez-Gayou, J. (2003). *Cómo hacer investigación cualitativa: Fundamentos y metodología*. México:: Paidós Educador.

Bernal, C. (2006). *METODOLOGÍA DE LA INVESTIGACIÓN: para administración, economía, humanidades y ciencias sociales*. Naucalpan, Edo. de México: Publicaciones Pearson Educación.

Caimi, M. (2003). *DISCURSO DEL MÉTODO: Volúmen 39 of (Clásicos del pensamiento)* Colihue Clásica. Argentina: Ediciones Colihue SRL.

García, J., Ramos, C., & Ruiz, G. (2006). ESTADÍSTICA EMPRESARIAL. Manuales a 6 euros. Cádiz: Servicio Publicaciones UCA.

García, L. (2011). La mediación a través de sus principios. Reflexiones a la luz del Anteproyecto de Ley de mediación en asuntos civiles mercantiles. [on line]. Disponible en: . Obtenido de <http://justicia.salta.gov.ar/Documents/La%20mediación%20a%20través%20de%20sus%2>

Ramírez González A. (2010). Metodología de la Investigación Científica.

Sastre, G. Y Moreno, M. (2002). Resolución de conflictos y aprendizaje emocional. . Gedisa.

BIOGRAFÍA

Álvaro Rivera Guerrero es Ingeniero Comercial en Recursos Humanos y Especialista en Administración Pública, docente actual de la escuela de Ingeniería Comercial de la Facultad de Ciencias Administrativas.

Paúl Murillo Delgado es Ingeniero en Acuicultura y magister en Administración de Empresas actualmente docente de la escuela de Ingeniería Comercial de la Facultad de Ciencias Administrativas.

CADENA DE VALOR PARA DETONAR LA LOMBRICOMPOSTA EN LA ZONA SUR ORIENTE DEL ESTADO DE MÉXICO

Omar Ernesto Terán Varela, Centro Universitario UAEM Amecameca

Enrique Espinosa Ayala, Centro Universitario UAEM Amecameca

Pedro Abel Hernández García, Centro Universitario UAEM Amecameca

Jazmín Soriano Martínez, Centro Universitario UAEM Amecameca

RESUMEN

En los procesos globalizados donde los problemas del cambio climático a nivel mundial están perjudicando a todos los procesos productivos del sector primario, se hace necesario empezar a tener alternativas que puedan dar solución a los procesos de producción primarios, en este caso a los agricultores, es por ello, que se plantea estructurar una cadena de valor que permita cumplir con las nuevas necesidades del mercado y satisfacer a los consumidores. La cadena de valor se enfoca hacia el cumplimiento de las necesidades del consumidor y es capaz de responder rápidamente cuando éstas cambian, ofrecer seguridad en las relaciones entre miembros de la cadena de valor con base en objetivos, metas y estrategias comunes. Por lo tanto, una alternativa para los procesos de producción primarios es la lombricultura que es un proceso que al parecer es sencillo emprender, además de que su costo de producción puede ser bajo por el hecho de realizarse a base de material o residuos orgánicos. Es importante analizar las actividades que deben realizarse en el proceso para obtener menores costos y gozar de una ventaja competitiva. Esta ventaja competitiva podemos obtenerla con la aplicación de diferentes herramientas como lo es la cadena de valor. La cadena de valor ayuda a determinar las actividades que permiten generar una Ventaja Competitiva sustentable. Tener una ventaja competitiva es tener una rentabilidad relativa superior a los rivales en el sector o rubro en el cual se compete. Rentabilidad significa un margen entre los ingresos y los costos. Cada actividad que realiza la empresa debe generar el mayor ingreso posible. De no ser así, debe costar lo menos posible, con el fin de obtener un margen superior al de los rivales. Por lo tanto, esta investigación tiene como propósito generar estrategias que apoyen a la cadena de valor para detonar la lombricomposta en la Zona Sur Oriente del Estado de México, debido a que surge como una necesidad para la agricultura, siendo esta una de las actividades económicas de la zona donde se cultiva principalmente maíz, alfalfa, trigo, avena, frijol, verduras, legumbres, frutas, entre otros productos agrícolas. Actualmente los fertilizantes químicos tienen gran demanda por los agricultores del municipio debido a que no existe comercialización de abonos orgánicos, entre ellos la lombricomposta.

PALABRAS CLAVE: Cadena de Valor, Lombricomposta, Sector Productivo Primario

ABSTRACT

In globalized processes where global climate change problems are harming all production processes in the primary sector, it is necessary to have alternatives that can solve the primary production processes, in this case farmers; for that reason, it is proposed to structure a chain of value that can meet the new needs of the market and satisfy consumers. The value chain focuses on meeting consumer needs and is able to respond quickly as they change, providing security in relationships between members of the value chain based on common goals and strategies. Therefore, an alternative for the primary production processes is the vermiculture, process that apparently is simple to undertake, in addition its production cost can be lower for the fact of being made from material or organic residues. It is important to analyze the activities that must be carried out in the process to obtain lower costs and enjoy a competitive advantage. This

competitive advantage can be obtained with the application of different tools such as the value chain. The value chain helps to determine the activities that generate a sustainable Competitive Advantage. To have a competitive advantage is having a superior return higher than competition gains in the sector or where they compete. Profitability means a margin between revenue and costs. Each activity carried out by the company must generate the greatest possible income. If not, it should cost as little as possible, in order to obtain a margin higher than the rivals. Therefore, this research aims to generate strategies that support the value chain to detonate vermicompost in the South East Zone of the State of Mexico, because it emerges as a necessity for agriculture, this being one of the economic activities of The area where maize, alfalfa, wheat, oats, beans, vegetables, legumes, fruits and other agricultural products are grown. Currently chemical fertilizers are in great demand by farmers in the municipality because there is no commercialization of organic fertilizers, including vermicompost.

JEL: M11, M19, O13, O14, O30, Q21, Q26, Q56

KEYWORDS: Value Chain, Vermicompost, Primary Productive Sector

INTRODUCCIÓN

En los procesos globalizados donde los problemas del cambio climático a nivel mundial están perjudicando todos los procesos productivos, se hace necesario empezar a tener alternativas que puedan dar solución a los procesos de producción primarios, en este caso al sector agrícola. Debido a que actualmente la agricultura en la Zona Sur Oriente del Estado de México es considerada una de las principales actividades económicas, es forzoso buscar alternativas que contribuyan a conservar el medio ambiente, por tanto se considera importante la presente investigación a fin de ofrecer un nuevo tipo de fertilizante con mayores beneficios para los agricultores de la Zona, buscando generar estrategias que apoyen a la cadena de valor para detonar la lombricomposta, para apuntalar una necesidad para la agricultura donde los principales cultivos son maíz, alfalfa, trigo, avena, frijol, verduras, legumbres y frutas entre otros productos agrícolas; el uso de fertilizantes químicos tiene gran demanda por los agricultores porque no existe la comercialización de abonos orgánicos, entre ellos la lombricomposta.

En las próximas décadas uno de los desafíos más importantes para los sistemas agroalimentarios del mundo, especialmente para los países en desarrollo, será el asegurar el abasto suficiente de alimentos para su población. Lo anterior se debe a que, la demanda de alimentos se intensificará por el crecimiento de la población; la mayor esperanza de vida, los cambios en los patrones de consumo hacia alimentos más saludables, inocuos, de mejor calidad, producidos de forma amigable con el medio ambiente, cuyo origen pueda ser rastreado por cuestiones de salud y que contengan información especializada en su etiquetado, así como por la demanda de una población adulta creciente y con un ingreso disponible mayor. (SAGARPA, 2010). Esta investigación tiene como objetivo generar estrategias que permitan crear una cadena de valor para detonar el uso la de lombricomposta como fertilizante en los cultivos de los agricultores de la zona, al mismo tiempo se estará generando una ventaja competitiva y obteniendo beneficios económicos en la producción. El estudio facilita el conocimiento de las etapas de la cadena de valor para la producción de la lombricomposta, pretendiendo contribuir a la comercialización de la misma. La estructura del artículo está organizado por una introducción donde se hace mención del papel que tienen las cadenas de valor para detonar el uso la de lombricomposta como fertilizante en los cultivos de los agricultores de la zona, así mismo, cual es el papel que esboza la lombricomposta como fertilizante y sustituto de fertilizantes químicos, para mejorar y generar una cultura en el consumo de productos orgánicos, así mismo, se señala como interrogante el objetivo que se persigue en la investigación. Se plantea otra sección donde se realiza una revisión literaria de fuentes bibliográficas, estadísticas, entre otras. En el apartado de la metodología se menciona la población objeto de estudio, el tipo de metodología utilizada. Se mencionan algunas conclusiones a las que se llegaron en la investigación y por último las referencias bibliográficas que se emplearon para el desarrollo del mismo.

REVISIÓN LITERARIA

Lombricomposta

Gómez (2013), menciona que el origen de la agricultura se remonta a 10.000 años antes de Cristo en la región de Egipto y Mesopotamia y precisamente los egipcios tenían gran admiración por las lombrices y a estos animales se debe en parte la fertilidad del Valle de Nilo. Pero fue Aristóteles quien bautizó a las lombrices como los intestinos de la tierra por su movilidad dentro del suelo y por los beneficios evidentes que esta representa para los suelos. La reina Cleopatra del antiguo Egipto le confirió el título de animal sagrado, y a los agricultores y/o campesinos que trataban de sacarlas de su reino a otros territorios eran castigados con la pena máxima. Pero sólo hasta 1880, se obtuvieron datos científicos sobre este anélido; Charles Darwin a pesar de sus estudios de tecnología se interesó por las lombrices desde temprana edad y fue así que escribió el libro “The formation of vegetable mould through the action of worms, with observation on their habits” en 1881, que traducido al español se puede resumir así: La formación de la tierra vegetal por acción de las lombrices, en dicho libro Darwin indica: “el arado es una de las más antiguas y útiles invenciones del hombre, pero mucho antes de que él existiera, la tierra era arada regular y continuamente por las lombrices. Probablemente el hombre; reconocerá un día la gigantesca obra que realiza estos anélidos”.

EXIMEX (2012), menciona que los primeros estudios sobre lombrices y las primeras nociones sobre su hábitat y su sistema de reproducción datan de 1837, estos estudios de investigación fueron dirigidos por el biólogo Darwin, que dedicó a la lombriz muchas horas de estudio. En tiempos más actuales, en los E.U., un familiar de un ex presidente, Hugg Carter, en 1947 inició su producción de lombrices. Este personaje excéntrico, estableció su, criadero en un ataúd. Se dice que en 1973, Carter estaba en condiciones de suministrar a las tiendas de caza y pesca más de 15 millones de lombrices anuales. Por aquellas fechas, la Universidad agrícola de California empezó a programar con seriedad la utilización de estos anélidos en agricultura, ante las numerosas solicitudes, que tenía en este sentido, de agricultores, hortelanos, dueños de viveros y floricultores. En el año de 1979 había en E.U. unas 1500 explotaciones industriales de lombrices y una de ellas se encuentra en California. Esta explotación tiene como objetivo fundamental la producción de humus y el reciclaje de los terrenos para así poder aumentar su productividad y generar un beneficio no solo económico sino en lo social y ecológico.

Cadena de Valor

Según se menciona en la página Gestipolis (2001), el concepto de cadena de valor se comienza a popularizar hacia 1985 a partir de la publicación del libro *The Competitive Advantage: Creating and Sustaining Superior Performance*, del profesor Michael Porter, quien se basó en la idea de los sistemas empresariales, desarrollada por la firma McKinsey & Co. a comienzos de la misma década. La propuesta de McKinsey consideraba a la empresa como una serie de funciones, marketing, recursos humanos, producción, etc., que se debían analizar en relación a las mismas funciones de las firmas competidoras, si lo que se quería era entender su estrategia y conocer su posición en el mercado. Porter fue más allá de ese concepto de amplios niveles funcionales descomponiéndolos en sus actividades individuales, agregando además que las fuentes de ventaja competitiva, liderazgo en bajo costo y diferenciación, propuestas en *Competitive Strategy: Techniques for Analyzing Industries and Competitors* (1980), dependían de dichas actividades individuales. Así, mediante esta desagregación, la cadena de valor proveía a la firma con las capacidades de entender sus costos y de identificar sus fuentes de diferenciaciones existentes o potenciales

Generadores de Valor y de Costos

Quintero & Sánchez (2006), citan a Porter (1986) y su definición es un conjunto de factores en la cadena de valor que tienen incidencia especial sobre los costos o sobre el valor generado, en las actividades de la cadena de valor. Éstos pueden ser: 1) Generadores de costos: son las causas estructurales de costo de una actividad en la cadena de valor de una organización y pueden estar más o menos bajo el control de la empresa. Algunos generadores de costo de la cadena de valor podrían ser: las economías de escala, el aprendizaje, el patrón de uso de capacidad de capacidad, la vinculación entre las distintas actividades, vínculos entre unidades organizacionales, grado de integración, el timing o la actuación a tiempo, las políticas de la empresa, la localización, y políticas gubernamentales, entre otras. 2) Generadores de valor: son las razones fundamentales dentro de la cadena de una organización de porque una actividad es única (exclusiva). En esta se encuentran los siguientes generadores de valor: las políticas empresariales, los vínculos entre las actividades de la cadena, la ubicación, el aprendizaje, las políticas públicas, entre otros.

Ventaja Competitiva

Quintero & Sánchez (2006), afirman que por ventaja competitiva se consideran todas las características o atributos de un producto o servicio que le dan una cierta superioridad sobre sus competidores inmediatos. Estas características o atributos pueden ser de naturaleza variada y referirse al mismo producto o servicio, a los servicios necesarios o añadidos que acompañan al servicio base, o a las modalidades de producción, de distribución o venta del producto o de la empresa. Esta superioridad es relativa y establecida en referencia al competidor mejor situado y puede resultar de una multiplicidad de factores. De manera general, se pueden reagrupar en dos grandes categorías según el origen de la ventaja competitiva que proporcionen. La ventaja competitiva puede ser externa o interna. Una ventaja competitiva se denomina “externa” cuando se apoya en una de las cualidades distintivas del producto que constituyen un valor para el comprador, que puede lograrse por la reducción de sus costos de uso o por el aumento de su rendimiento de uso. Una ventaja competitiva interna es el resultado de mejor productividad y por esto da a la empresa una rentabilidad mejor y una mayor capacidad de resistencia a una reducción del precio de venta impuesta por las condiciones del mercado. Trae consigo una estrategia de dominación a través de los costos, que pone de manifiesto el saber hacer organizacional y tecnológico de la empresa.

Sistema De Valor

Quintero & Sánchez (2006) citan a Mayo (2004) quien define el valor como la suma de los beneficios percibidos por el cliente recibe los costos vistos por él; al adquirir y usar un producto o servicio. La cadena de valor es esencialmente una forma de análisis de la actividad empresarial mediante la cual se descompone una empresa en sus partes constitutivas, buscando identificar fuentes de ventaja competitiva en aquellas actividades generadoras de valor.

Formulación De Estrategias A Partir De La Cadena De Valor

Quintero & Sánchez (2006), mencionan que la cadena de valor se extiende desde los proveedores de los proveedores hasta los clientes de los clientes. Las tareas de cada uno de los eslabones que conforman esta cadena está bien definida, por ejemplo, el fabricante tiene la función de la calidad y la innovación en el producto, el mayorista tiene en su haber la consolidación y distribución eficiente de los productos, el detallista de la comercialización del producto y así sucesivamente. La manera en que cada uno de estos integrantes se desenvuelva repercutirá en el adecuado o inadecuado funcionamiento de la cadena. Una vez analizada la cadena de valor de la empresa y detectadas las principales fuentes de ventaja competitiva, se debe optar por una estrategia que permita el cumplimiento de la misión de la misma teniendo en cuenta, además, la evolución del entorno. Las estrategias básicas susceptibles de ser adoptadas serán diferentes sobre la base de la ventaja competitiva, que bien puede ser basada en una ganancia de productividad, y por

consiguiente en términos de costo, o basada en un elemento de diferenciación y por tanto en términos de precio.

METODOLOGÍA

La metodología que se aplicó es de tipo cualitativo, nivel descriptivo, diseño no experimental transversal y de investigación acción. De acuerdo a la metodología de investigación la acción participativa presenta un enfoque analítico de la problemática que se presenta en la Zona Sur Oriente del Estado de México, con el uso indiscriminado de los fertilizantes químicos, y se busca que la generación de estrategias apoyadas por la cadena de valor auxilien a detonar la lombricomposta en la región, debido a que surge como una necesidad para la agricultura, siendo esta una de las actividades económicas de la región, donde se cultiva principalmente maíz, alfalfa, trigo, avena, frijol, verduras, legumbres, frutas, entre otros productos agrícolas, y actualmente los fertilizantes químicos tienen gran demanda por los agricultores, debido a que no existe la comercialización de abonos orgánicos, entre ellos la lombricomposta. Continuando con la descripción del tipo investigación, es de tipo cualitativa, debido a que se tomó como referencia artículos científicos, páginas de internet y se llevó a cabo un proceso de la aplicación de un instrumento de trece (13) reactivos, que ayudaron al levantamiento y a la recolección de los datos. Así mismo, es de nivel descriptivo ya que se describen una serie de estrategias, basadas en los resultados del instrumento. Por último, es de diseño no experimental transversal mediante la recolección de datos en un solo momento en la región, debido a que los datos y la información recolectada para la generación de estrategias permitan determinar su uso, ya que permitirá desglosar y explicar las principales actividades, procesos y procedimientos que forman la cadena de valor de la lombricomposta en la zona, lo que permitirá su producción, comercialización y utilización como abono orgánico para los agricultores. La cadena de valor para la producción de lombricomposta debe permitir mostrar los beneficios sociales, ambientales y económicos logrando una ventaja competitiva para dichos productos.

RESULTADOS

Los resultados de la investigación están plasmados en la aplicación de un instrumento a un grupo de 100 productores de la zona, que se dedican al sector agrícola, donde se les pregunta sobre su opinión de como ellos perciben los resultados de las cosechas de los productos que cultivan con fertilizantes y si conocen los tipos de abono basado en lombricomposta. Donde arroja que el 100% de los encuestados realizan actividades agrícolas en diversas modalidades. Respecto al conocimiento de uso de la lombricomposta el 96% no lo conocen. El 70% conocen o han escuchado hablar del abono de lombricomposta. El 100% de los encuestados desconocen el beneficio que le aporta el tipo de tipo de abono a sus cultivos. Como resultado del diagnóstico se llegó a las siguientes aseveraciones: 1) La mayoría de los agricultores de la zona usan fertilizantes químicos u otros que no son la lombricomposta. 2) Los agricultores y/o campesinos que han utilizado este tipo de abono la han usado por poco tiempo no mayor a dos años. 3) Existe poco conocimiento sobre la lombricomposta y sobre su modo de uso entre los agricultores. 4) La mayoría de los agricultores y/o campesinos no sabe cuáles son los beneficios que la lombricomposta puede aportar a sus cultivos. 5) De la muestra que se tomó en consideración en la aplicación del instrumento que han utilizado la lombricomposta como abono, el uso que se le ha dado es en invernadero y en otros cultivos al aire libre, obteniendo buenos resultados según versión de los productores. 6) Gran parte de los agricultores y/o campesinos no sabe cuál es el costo de utilizar la lombricomposta, lo cual podría ser un impedimento para no ser utilizada. 7) Después de saber qué beneficios podría aportarles la lombricomposta la mitad de los agricultores encuestados estarían dispuestos a utilizarlo en sus cultivos.

CONCLUSIONES

Los productores Agrícolas de la Zona Sur Oriente, Estado de México, no tienen mucho conocimiento sobre alternativas de fertilizantes orgánicos, la principal causa de esto es que en el municipio no ofertan este tipo

de productos. De acuerdo a las encuestas realizadas el 50 % de los agricultores están interesados en utilizar este abono en sus cultivos, se plantea la utilización de la cadena de valor en la lombricomposta para crear estrategias que permitan detonar su conocimiento y utilización entre los agricultores. Así mismo, no tienen conocimiento de las ventajas que ofrece la lombricomposta en sus cultivos, de la misma forma, desconocen que la lombricomposta les puede ofrecer beneficios económicos, ya que sus ingresos pueden aumentar al ofrecer productos orgánicos. Por lo tanto, se pretende con este trabajo que los agricultores adquieran los conocimientos sobre el uso y utilidad de este fertilizante. Se puede concluir que la propuesta de la cadena de valor que se presenta trae consigo estrategias que permitan a los productos crear valor, logrando la satisfacción de los clientes y de esta forma permitir que compitan en otros mercados.

REFERENCIAS BIBLIOGRÁFICAS

EXIMEX (2012). Antecedentes de la Lombricultura. Recuperado de:
<http://eximex.blogspot.mx/2012/02/antecedentes-de-la-lombricultura.html>

Gestiopolis (2001). Que es la Cadena de Valor. Recuperado de:
<https://www.gestiopolis.com/que-es-la-cadena-de-valor/>

Gómez, E., (2013) Lombricultura, Breve reseña histórica. Recuperado de:
<http://www.lombricompostamexico.com/lombricultura/>

SAGARPA (2010) Retos y oportunidades del sistema agroalimentario de México en los próximos 20 años. Recuperado de:
<http://www.sagarpa.gob.mx/agronegocios/Documents/pablo/retosyopportunidades.pdf>

Quintero, J. & Sánchez, J. (2006). La cadena de valor: Una herramienta del pensamiento estratégico
<http://www.redalyc.org/pdf/993/99318788001.pdf>

BIOGRAFÍA DE LOS AUTORES

Dr. en Admón. Omar Ernesto Terán Varela, Profesor del Centro Universitario UAEM Amecameca, Universidad Autónoma del Estado de México, Km. 2.5 Carretera Amecameca Ayapango, Estado de México, Línea de investigación Desarrollo y Política Pública. Profesor de la División de Estudios de Posgrado de la Facultad de Contaduría y Administración de la Universidad Nacional Autónoma de México (UNAM), oteranv@hotmail.com

Dr. en C.A.R.N. Enrique Espinosa Ayala, Profesor del Centro Universitario UAEM Amecameca, Universidad Autónoma del Estado de México.

Dr. Pedro Abel, Hernández García, Profesor del Centro Universitario UAEM Amecameca, Universidad Autónoma del Estado de México.

Pas. Jazmín Soriano Martínez, Egresada de la Licenciatura en Administración del Centro Universitario UAEM Amecameca, Universidad Autónoma del Estado de México.

MARKETING POLÍTICO COMO HERRAMIENTA DE POSICIONAMIENTO EN LA MENTE DEL CONSUMIDOR EN EL MUNICIPIO DE CHALCO, ESTADO DE MÉXICO

Jesús Mata Izquierdo, Centro Universitario UAEM Amecameca
Omar Ernesto Terán Varela, Centro Universitario UAEM Amecameca
Enrique Espinosa Ayala, Centro Universitario UAEM Amecameca
Martha Elva Ruiz Riva Palacio, Centro Universitario UAEM Amecameca

INTRODUCCIÓN

La utilización de la mercadotecnia política en México inicia a finales de la década de los 80's, cuando se siente la necesidad de evolucionar los mecanismos políticos orientados a un proceso más democrático, Barragán & Guerra & Villalpando (2015). Con el paso del tiempo el marketing político pasó de ser una herramienta a un medio para construir y afianzar la legitimidad de políticos, gobiernos, instituciones públicas y organizaciones sociales. Posteriormente se convirtió en una necesidad para todos aquellos partidos, candidatos, líderes sociales y líderes de consensos sociales y mayorías electorales estables. Con los avances tecnológicos, el cual el marketing político alcanzó otra dimensión convirtiéndose en una herramienta indispensable de comunicación política, económica, eficiente y de mayor alcance. En las últimas dos décadas se ha modernizado y generalizado sus aplicaciones, de tal forma que actualmente no hay campaña política en donde no se emplee dicha herramienta para la investigación de mercados, desarrollo de imagen pública, e instrumento de comunicación. Por lo que, en el Municipio de Chalco, no es la excepción y busca ser protagonista, debido al alcance que se tiene con la herramienta lograr posicionar el producto en la mente de los consumidores. El propósito de que se utilice al marketing político como herramienta de posicionamiento, es el de generar diferentes estrategias basadas en el marketing político y de esta manera lograr obtener beneficios, el cual es tener de manera permanente al producto que en este caso es el candidato ya que se pretende obtener votos a favor de nuestros competidores. En la presente investigación se buscó analizar los elementos que integran al marketing político para que los consumidores del municipio de Chalco tengan ideas del producto (candidato) que se les vendió; de esa misma manera los consumidores (votantes) siguen teniendo el mismo interés debido a que los mensajes perduraron y fueron transmitidos mediante los medios de comunicación de la manera idónea teniendo un efecto positivo.

PALABRAS CLAVES: Marketing Político, Mente del Consumidor, Líderes Políticos, Organizaciones Políticas

POLITICAL MARKETING AS A POSITIONING TOOL IN THE CONSUMER MIND IN THE MUNICIPALITY OF CHALCO, STATE OF MEXICO

ABSTRACT

The use of political marketing in Mexico began at the end of the 1980s, when the need was felt to evolve the political mechanisms oriented towards a more democratic process, Barragán & Guerra & Villalpando (2015). With the passage of time, political marketing went from being a tool to a means to build and strengthen the legitimacy of politicians, governments, public institutions and social organizations. Later it

became a necessity for all those parties, candidates, social leaders and leaders of social consensus and stable electoral majorities. With technological advances, which political marketing reached another dimension becoming an indispensable tool of political, economic, efficient and far-reaching communication. In the last two decades its applications have been modernized and generalized, so that currently there is no political campaign where this tool is not used for market research, development of public image, and communication tool. Therefore, in the Municipality of Chalco, it is not the exception and seeks to be a protagonist, due to the scope of the tool to position the product in the minds of consumers. The purpose of using political marketing as a positioning tool is to generate different strategies based on political marketing and thus achieve benefits, which is to have permanently the product that in this case is the candidate and which is intended to obtain votes in favor of our competitors. In this research, we sought to analyze the elements that make up political marketing so that consumers in the municipality of Chalco have ideas of the product (candidate) that was sold to them; in the same way consumers (voters) continue to have the same interest because the messages persisted and were transmitted through the media in the right way having a positive effect.

JEL: H59, M00, M30, M31, M32, M37, M38, M39, Y80, Z00

KEYWORDS: Political Marketing, Consumer Mind, Political Leaders, Political Organizations

INTRODUCCIÓN

Cuando se escucha el término de mercadotecnia automáticamente se relaciona con ventas, segmentación de mercado, estrategias de mercado, publicidad, relaciones públicas, mezcla mercadológica, entre otras ideas, por lo que el hablar del termino no implica que únicamente queramos vender un producto o servicio, actualmente la mercadotecnia se está aplicando a otro ámbito que es la política, debido a que se convierte en una herramienta para hacer llegar y lograr comunicar a candidatos a lugares lejanos. Actualmente estamos viviendo nuevas situaciones con constantes cambios tecnológicos políticos, económicos y sociales que exigen cambiar las formas pasadas de realizar campañas publicitarias, las cuales consistían en ir de comunidad en comunidad para dar a conocer su plan de trabajo, es por eso que se ha recurrido a la mercadotecnia para potencializar esos procesos y que la persona física sea reconocida por la gran mayoría del público.

El marketing es funcional en el ámbito de la política debido a que es considerando, una organización política como una empresa y el líder, persona física o en este caso llámese producto político es el dueño empresario al cual se pretende hacer ganar mediante ciertas estrategias publicitarias, las cuales nos harán llegar hasta los objetivos deseados, en todo plan estratégico es necesario aplicar la mercadotecnia para saber a través de qué medios daremos a conocer a nuestro candidato, que les ofrecerá nuestro candidato a la ciudadanía para que estos consideren como mejor opción para votar, toda estrategia lleva un plan y antes de todo plan debe realizarse un estudio, en este caso el estudio sería la población y aspectos como su economía, conocer cuáles son sus necesidades del público de esta manera en el plan de trabajo y la mercadotecnia se dan a conocer y ofrecer ciertas ideas las cuales satisfacen esa carencia.

La sociedad está cambiando, actualmente les interesa la política, conocer los problemas sociales y la economía del país; de igual manera las generaciones jóvenes, que son la mayoría de los votantes actuales y potenciales, son cada vez más exigentes y tienen un continuo y rápido cambio de intereses, tienen más educación y acceso a más información a través de internet, el correo electrónico y las redes sociales como facebook y twitter, ven más la televisión, escuchan más la radio y las noticias, viajan más que las generaciones anteriores, tienen más relaciones sociales, esta generación es bien conocida como “los millenials”; por lo que son más exigentes y analizan más profundamente las propuestas políticas y los programas de gobierno.

Debido a todos esos avances nació el marketing político en Estados Unidos y Europa, posteriormente llegó a América Latina. El marketing político puede ser visto desde muchas perspectivas, algunos la denominan técnica, herramienta y otros hasta método. No importa como los autores le llamen su finalidad es la misma, ejecutar estrategias y tácticas a lo largo de una campaña publicitaria de un producto político para que se tenga una aceptación por parte del votante.

Ya se hizo mención de que el marketing político da a conocer un producto político o de un producto/candidato, sin embargo hay que enfatizar que lo que se pretende es que los consumidores tengan su aprobación, entonces no podemos preguntar quiénes son esos consumidores; bien, ellos serán todo el público general o mejor conocidos como los votantes. Ellos juegan un papel importante ya que ellos son los que eligen y seleccionan al producto, llegar a su mente es difícil ya que cada uno de ellos tiene una forma de pensar y diversos factores influyen en su comportamiento.

REVISIÓN LITERARIA

La primera vez que aparece registrado el uso del término marketing político fue a mediados del siglo XX en Estados Unidos cuando Stanley Kelley, un renombrado analista político de la época, reconoció la importancia cada vez mayor que los profesionales del marketing estaban teniendo a la hora de transmitir las ideas más adecuadas para tener más impacto en el votante medio. En 1952 el general Dwight Eisenhower se convirtió en el primer candidato presidencial en apelar a los servicios de una agencia de publicidad, la "BBDO", para que se hicieran cargo de su campaña televisiva. Posteriormente unos años más tarde, en la televisión, las campañas electorales norteamericanas llegaron de la mano de los "debates televisivos" de candidatos, como los de John Kennedy y Richard Nixon. (Alonso & Adell, 2011).

Durante los últimos años, los candidatos han mostrado mayor interés y han tomado conciencia de la importancia de desarrollar nuevas formas de comunicación política alternativa que posibilitan el posicionamiento de candidatos, partidos y temas de campaña en sectores específicos de la sociedad, actualmente los candidatos se ven forzadas a generar nuevas ideas para incursionar en el entorno y obtener ventaja competitiva. Por lo que, el objetivo de la investigación es utilizar al marketing político como una herramienta que permita posicionar y acercar al mayor número de consumidores, productos políticos logrando obtener beneficios a favor de la competencia, estableciéndose como herramienta de vinculación mercadológica de los candidatos. Logrando tener un impacto en el consumidor, el cual es generar percepción, una emoción y una sensación que al entrar en un proceso de integración van a originar un posicionamiento en la mente del consumidor la cual da como resultado tres posibles reacciones posibles que son aceptación, rechazo o indiferencia al producto político. Al ser presentada como un instrumento de posicionamiento en primera instancia se busca el marketing político tenga como funcionalidad el deseo de posicionar elementos a través de estrategias publicitarias, políticas y comunicacionales un producto (candidato) en la mente de los consumidores (votantes) de tal manera que en cuanto escuchen el nombre de él lo tengan posicionado. El marketing político avanza a pasos agigantados y parece cobrar cada día una dimensión de mayor peso tanto para el mundo de la política como para el mundo del Marketing. En el ámbito político cada vez se invierte más en contratar a prestigiosos "gurús" del sector de la mercadotecnia que ayuden a un determinado candidato a posicionarse como la mejor opción de cara a los electores. Por su parte el sector del Marketing cada vez pone a merced de la política herramientas más sofisticadas y hasta enrevesadas que les permitan lo mismo; lograr que el candidato para el que trabajan sea la opción.

Valdez & Huerta & Vergara (2012), indican que El marketing político llegó a Latinoamérica como parte del proceso de transición a la democracia y se instauró en México a partir de los años ochenta, cuando los procesos electorales comienzan a ser más competidos y cuando las elecciones se convierten en los conductos privilegiados para el acceso y la conservación del poder público. Poco a poco, el uso del marketing político se fue generalizando, ya no sólo como herramienta para buscar un mayor nivel de competitividad en la política electoral, sino también como medio para construir y afianzar la legitimidad de políticos, gobiernos, instituciones públicas y organizaciones sociales. De esta forma, el marketing político

pasó de ser una alternativa a una necesidad para todos aquellos partidos, candidatos y líderes que sustentan su liderazgo en la construcción de consensos sociales y mayorías electorales estables. Fue así como en dos décadas, el marketing político se modernizó y se generalizó su uso, de tal forma que hoy día no hay proceso electoral, sobre bases democráticas, que no sea utilizado el marketing ya sea en forma de investigación de mercados, como proceso de planeación estratégica, como medio para construir y desarrollar una imagen pública, o como instrumento de comunicación política.

En México, podríamos decir que la aparición de la mercadotecnia política es simultánea a la aparición de la figura de partidos políticos que se enfrentan para alcanzar una posición favorable en los puestos de elección popular. Antes, en tiempos de los gobiernos civiles o posrevolucionarios, se podrían distinguir algunos elementos, pero el gran paso se da años más tarde cuando llega a la presidencia de la república la oposición, en el año 2000, y como tal, aplicando una serie de estrategias de la mercadotecnia política y otros factores coyunturales del país que toma importancia este concepto. Barragan & Guerra & Villalpando (2015). Fuentes (2012), nos recuerda que fue en el año 2000 con Vicente Fox Quesada militante del Partido Acción Nacional que se llega al cambio y final de un periodo de 71 años en el que todos los presidentes de México fueron militantes del Partido Revolucionario Institucional mediante. Su campaña política fue una lucha ardua por poder cambiar el gobierno mexicano del poder del partido revolucionario institucional. Duró más de 2 años, y se caracterizó por implementar estrategias de mercadotecnia política inspiradas en su experiencia profesional. Para poder hacer esto, cualquier político debe de hacerse de apoyo de instituciones, Fox no fue la excepción. Por ejemplo, la llamada Amigos de Fox. La organización aglutinó a más de 4 millones de personas y fue la primera en utilizar internet como un medio de activismo social en campañas presidenciales.

Permaneciendo con Fuentes (2012), menciona que así el grupo de mercadotecnia de Fox crearía dos frases para que el pueblo mexicano se siente identificado con él: el cambio que a ti te conviene y cada vez más somos los que queremos el cambio. Esto le dio un poder a Fox para poder destituir a su contendiente, que pasaría a ser un candidato que decía más de lo mismo. La imagen de Fox fue muy cuidada, su vestimenta sin corbata, siempre con botas, hacían que cada mexicano lo viera como un símbolo del mexicano, y no como un candidato formal, que ya tiene la imagen de ser corrupto o ladrón. Su lenguaje, franco, directo y coloquial también lo hicieron acercarse más a la ciudadanía. Hasta el punto de creerle y atribuirle el poder del cambio que necesita México. Ramírez (2007), comenta que en la actualidad el marketing político se refiere a otro concepto diferente, se intenta vender en cualquier mercado, no solo local sino también internacional y el contacto esta masificado además el nivel de información, sobre todo por causas y tecnológicas, ha aumentado. La distribución muy globalizada. Se debe hacer colocar el producto a la vista de este, sino que hay que conocerlo convencerlo para que lo adquieran. Por lo que para Barranco (2012), el marketing político es una especialidad del marketing cuyo objetivo final es “vender” una ideología, un programa o un candidato. Es una estrategia y un conjunto integrado de herramientas que conducen el desarrollo de la campaña electoral hacia el éxito.

METODOLOGÍA

Esta investigación es de tipo documental, ya que se auxilia de la consulta de libros, revistas, periódicos, así como la consulta de artículos y páginas de internet. Es de tipo cualitativo donde se utilizó métodos que siguen una disciplina científica basados en principios teóricos para la toma de decisiones. Se tomó como referencia pequeñas muestras en la observación de un conjunto o grupo de ciudadanos de la región. Se realizó el estudio de cómo los productos políticos del municipio de Chalco se pueden ver beneficiadas por el uso del Marketing Político. Es de tipo descriptiva debido a que se particulariza cómo se ven beneficiadas los productos políticos del municipio de Chalco por el uso del Marketing Político. Fue de tipo no experimental transversal debido a que las variables son independientes. Los transversales recolectan datos en un solo momento en un tiempo único, su propósito fundamental es describir variables y analizar su incidencia y relación en un momento dado.

RESULTADOS

Se cuenta con los resultados al realizar una investigación de campo mediante un instrumento que determina la factibilidad y viabilidad de cómo generar una propuesta del Marketing Político como herramienta de posicionamiento en la mente del consumidor en el municipio de Chalco, Estado de México. Así mismo, se consideró una serie de elementos claves para el éxito de productos políticos que le permitan posicionarse a este tipo en la mente de los consumidores. Para lograr este objetivo, se cumplieron dos condiciones: proporcionar a los consumidores lo que necesitan y la otra es sobrevivir a la competencia. Para cumplir con las expectativas del consumidor, en función a sus inquietudes. Una vez que se realiza una segmentación de mercado y se conocen a los consumidores, se deberán estudiar sus necesidades y comportamientos, es decir las causas por las que deciden escoger un producto político ofertado en lugar de otro. A partir de ese momento, el producto político podrá trazar su estrategia para su posicionamiento.

REFERENCIAS BIBLIOGRÁFICAS

Alonso M. & Adell A. (2011), “*Marketing político 2.0: todo lo que un candidato necesita saber para ganar las elecciones*”, Mexico: Grupo Planeta (GBS)., págs. 67-68.

Barragán & Guerra & Villalpando (2015), “*Mercadotecnia Política en México: Antecedentes y Estrategias Representativas*”, págs. 192-193

Barranco Sáiz F. (2012), “*Marketing político*”. Madrid. Editorial: ESIC, p. 20

Fuentes Cervantes Héctor (2012), “*Análisis de campaña política de Vicente Fox (nomás para que se den una idea de lo que hay detrás de todos ellos)*”, Recuperado de:
<https://ivanfuentescervantes.wordpress.com/2012/06/>

Ramírez Wilson (2007), “*Manual de Marketing Político*” Lulu, p. 8.

Valdez & Huerta & Vergara (2012), “*Del marketing político tradicional al marketing 2.0.*” Revista Mexicana de comunicación. Recuperado de:
<http://mexicanadecomunicacion.com.mx/rmc/2012/05/16/del-marketing-politico-tradicional-al-marketing-2-0/>

DRONES PARA EL MONITOREO GEODEMOGRÁFICO EN EL SECTOR AGRÍCOLA EN EL MUNICIPIO DE AYAPANGO ESTADO DE MÉXICO

Omar Ernesto Terán Varela, Centro Universitario UAEM Amecameca
Pedro Abel Hernández García, Centro Universitario UAEM Amecameca
Enrique Espinosa Ayala, Centro Universitario UAEM Amecameca
Alma Lucero Álvarez González, Centro Universitario UAEM Amecameca
Abraham Sánchez Gil, Centro Universitario UAEM Amecameca

RESUMEN

En los procesos globalizadores de los sectores productivos de los países han evolucionado y están encaminados a ser dominados por la tecnología y a cambios bruscos que con llevan a generar nuevas estrategias que permitan mejorar los procesos productivos, el sector primario no es la excepción, el cual está sufriendo cambios basados en el empleo de DRONES como herramienta para mejorar las cosechas de los cultivos, lo cual trae nuevos horizontes en el marco de la agricultura de precisión, y genera procesos eficientes que radica en la capacidad tecnológica para proporcionar al agricultor una visión territorial, geográfica y demográfica de su parcela, por la cual le permite evaluar algunos factores tales como la densidad de siembra, el uso de fertilizantes y la frecuencia del riego, entre otras posibilidades. Lo que le permitirá obtener la optimización de los procesos de producción, al mismo tiempo que minimiza el impacto sobre el medio ambiente. La herramienta conocida como DRONES, que puede sobrevolar extensas franjas de territorios de una forma rápida y poder captar diversa información gracias a su estructura basada en sensores, permitiendo la formalización para los cultivos una herramienta que les permita controlar e incrementar su productividad. El uso de DRONES, puede monitorizar cientos de hectáreas de forma precisa, generando evidencias que permitan evaluar las condiciones del terreno, y recoger información sobre la hidratación, la temperatura o el ritmo de crecimiento de los cultivos. Su función primordial que se le atribuye a estos dispositivos es la localización prematura de plagas en los cultivos y en los terrenos. Con la información proporcionada, genera ahorros de costos significativos para los agricultores, evitando plagas y contribuyendo a reducir la cantidad de productos químicos que se emplean en los cultivos, con el fin de reducir los efectos del cambio climático. Por lo que el objetivo de la investigación es generar estrategias para determinar el uso de los DRONES para el monitoreo Geodemográfico en el sector agrícola en el Municipio de Ayapango, Estado de México.

PALABRAS CLAVES: Drones, Geodemográfico, Sector Agrícola

DRONES FOR GEODEMOGRAPHIC MONITORING IN THE AGRICULTURAL SECTOR IN THE MUNICIPALITY OF AYAPANGO MEXICO STATE

ABSTRACT

In the globalizing processes of the productive sectors of the countries have evolved and are destined to be dominated by technology and abrupt changes that lead to generate new strategies to improve production processes, the primary sector is not the exception, which is undergoing changes based on the use of DRONES as a tool to improve crop crops, which brings new horizons in the context of precision agriculture, and generates efficient processes that lies in the technological capacity to provide the farmer with a

territorial, geographical and demographic of its plot, by which it allows to evaluate some factors such as the density of sowing, the use of fertilizers and the frequency of irrigation, among other possibilities. This will allow you to obtain the optimization of the production processes, while minimizing the impact on the environment. The tool known as DRONES, which can fly over large strips of territory in a quick way and can capture diverse information thanks to its structure based on sensors, allowing the formalization for crops a tool that allows them to control and increase their productivity. Using DRONES, you can monitor hundreds of hectares accurately, generating evidence to assess the conditions of the land, and collect information on hydration, temperature or the rate of growth of crops. Its primary function attributed to these devices is the premature location of pests on crops and on land. With the information provided, it generates significant cost savings for farmers, avoiding pests and helping to reduce the amount of chemicals used in crops, in order to reduce the effects of climate change. Therefore, the objective of the research is to generate strategies to determine the use of DRONES for Geodemographic monitoring in the agricultural sector in the Municipality of Ayapango, State of Mexico.

JEL: D29, J19, O13, O14, Q16, Q19, Q24, Q55, R11

KEYWORDS: Drones, Geodemographic, Agricultural Sector

INTRODUCCIÓN

En la actualidad los países desarrollados han implementado recursos tecnológicos satelitales buscando mejorar la producción del sector primario, los cuales le han permitido lograr la optimización de los procesos de cultivos agrícolas; así mismo, utilizan herramientas de Sistemas de Información Geográficos vía satelitales, para conocer las condiciones climáticas y de suelo, entre dichos recursos se encuentran los DRONES. Ballesteros (2016), menciona que al indagar la utilización de vehículos voladores no tripulados llamados DRONES, se logran alcances para mejorar y hacer eficiente el campo o el sector agrícola; esto se debe a que se pueden establecer mediante detección previa aquellos factores que disminuyen la productividad de un cultivo. Por lo anterior, es fundamental la integración y la posibilidad de que los productores participen en todos los procesos, donde ellos tengan la capacidad de tomar decisiones importantes como oportunidad de apoyo, donde la herramienta le proporcione datos de cómo reparar los daños antes que el cultivo sea afectado.

Para Ballesteros (2016), los avances tecnológicos enfocados al desarrollo del sector primario, primordialmente al sector agrícola les proporcionarán elementos para evaluar diversos factores relacionados con la extensión territorial de sus terrenos con mayor precisión, que le puedan determinar cuál es la situación en que se encuentran sus lotes. Para ello, menciona que uno de los avances actuales es el uso de Vehículos Aéreos No Tripulados (VANTs), o más comúnmente llamados DRONES, que ofrecen numerosas ventajas frente a otros tipos de vehículos aéreos especializados en la toma de imágenes, por su pequeño tamaño, bajo peso y velocidad de vuelo, amplio rango y altura del mismo, bajo costo y facilidad de disponibilidad de realización de vuelos frente a vuelos convencionales. Así mismo, Ballesteros (2016) retoma lo que menciona Herwitz et al. (2004), donde establece que el uso de los drones ofrece nuevas alternativas para la agricultura en el marco de las aplicaciones de las imágenes de alta resolución en tiempo real. También que brindan ventajas e inconvenientes derivados de la utilización de un tipo u otro de aeronave, y que éstos, dependerán principalmente del objetivo de su aplicación, debiendo existir un equilibrio entre facilidad de vuelo, su estabilidad frente al viento, distancias cubiertas y requerimientos de aterrizaje y despegue, logrando alcanzar la solución más económica posible que permita determinar las exigencias del trabajo en cuestión. En sus trabajos menciona que en 1983 el Ministerio de Agricultura de Japón se preocupaba por el envejecimiento de la población rural y para aminorar este problema, propuso modernizar al campo como una vía para atraer gente joven. Se le pidió a la Empresa Yamaha que empezara a desarrollar un vehículo no tripulado, se desarrolló con el nombre de “Yamaha RMAX”, el cual trabajó ayudando en las tareas del campo; en los años 90 se introdujeron las primeras unidades, para esta época ya se aplicaban

aproximadamente un 40% en los arrozales japoneses. En el país del Sol Naciente el modelo de DRON “Yamaha RMAX”, lleva trabajando en los campos agrícolas desde los años ochenta, ocupándose para lanzar pesticidas y fertilizantes, en los campos de producción.

Continuando con Ballesteros (2016) explica que en el trabajo realizado por Brox (2014), donde establece que hay estudios que confirman la viabilidad económica de prácticas en el uso de DRONES en la agricultura, considerando un costo de 10 €/ha volada. Donde estos equipos poseen tecnología basada en videos térmicos que permiten detectar la localización del estado de déficit hídrico, la toma de imágenes convencionales observando el estrés hídrico de los cultivos, mientras que las imágenes térmicas permiten la situación de forma temprana al detectar alteraciones en los fenómenos sobre el estado de los cultivos. Con la toma de imágenes aéreas las cámaras térmicas muestran los estados en se encuentran los cultivos por deficiencias de agua o de nutrientes, los cuales permite determinar de una forma temprana su estado, evitando así daños más graves. La presente investigación tiene como propósito presentar cual es la problemática que existe con el uso de los DRONES para el monitoreo Geodemográfico en el sector agrícola en el Municipio de Ayapango, Estado de México; en la actualidad es deficiente y se podría afirmar que es nulo el uso de los mismos, debido a la carencia de monitoreo, se desconocen las características geográficas y demográficas que apoyen a determinar qué tipo de cultivos se pueden sembrar y cosechar en la zona.

REVISIÓN LITERARIA

Cortes (s/f), menciona que el uso de los DRONES han sido empleados durante la primera y segunda guerra mundial, con el propósito de capacitar a los operarios de los cañones antiaéreos y proporcionar información de los diversos mapeos geográficos y demográficos, que apoyan al entendimiento de los diferentes comportamientos de las posiciones en las trincheras enemigas, pero es hasta finales del siglo XX cuando se operan mediante el radio control con todas las características de autonomía. Para ello, los DRONES han demostrado su potencial en la obtención y manejo de información con fines bélicos, en la cual ha proporcionado muchos testimonios que han permitido generar estrategias de combate. Así mismo, el uso que se le ha dado en la aviación no tripulada la cual ha tenido algunos tropiezos y deficiencias en el diseño de los modelos construidos y volados por inventores como Cayley, Stringfellow, Du Temple y otros exploradores de la aviación, donde ellos, han sido los pioneros de sus propios intentos de desarrollar aeronaves tripuladas a lo largo de la primera mitad del siglo XIX. Los cuales sus aparatos han servido como bancos de pruebas tecnológicos para el posterior desarrollo de modelos de mayor tamaño con piloto a bordo y, en este sentido, fueron los precursores de la aviación tripulada. Se dice que la familia de las aeronaves no tripuladas oculta sus raíces en el desarrollo de los llamados «torpedos aéreos», antecesores de los actuales misiles crucero, que posteriormente se desarrollaron a través de las ramas de las bombas guiadas (no propulsadas), los blancos aéreos (llamados «drones» en la terminología anglosajona), los señuelos, los modelos recreacionales y/o deportivos de radio-control, las aeronaves de investigación, las aeronaves de reconocimiento, las de combate, e incluso algunos modelos más extraños de vuelo extra-atmosférico.

Bonelli en el blogspot Mundo Drone del 26 de junio de 2014, dice que los datos más antiguos que se tiene sobre el uso de plataformas aéreas de Unmanned Aerial Vehicle (UAV) datan de 1849, cuando se utilizaron globos con cargas explosivas desde barcos Austriacos ara atacar blancos específicos, lo que no se contempló en esos momentos es que las trayectorias de los globos iban a depender de las corrientes de aires atmosféricas, las cuales les modificaría algunos de ellos su trayectoria. Aunque los globos no concuerdan con la definición actual que le damos a los Drones/UAV, el concepto si se ajusta al de "plataforma no tripulada que porta una carga útil", en este caso explosivos.

Para Martínez de Carbajal (2015), el Dron es un vehículo aéreo no tripulado (VANT), UAV o dron es una aeronave que vuela sin tripulación. Aunque existe el VANT de uso civil, también son usados en aplicaciones militares, donde son denominados vehículo aéreo de combate no tripulado UCAV por su nombre en inglés (Unmanned combat air vehicle). Para diferenciar a los VANT de los misiles, un VANT se define “como un

vehículo sin tripulación reutilizable, capaz de mantener de manera autónoma un nivel de vuelo controlado y sostenido, y propulsado por un motor de explosión o de reacción". Por tanto, los misiles de crucero no son considerados VANT porque, como la mayoría de los misiles, el propio vehículo es un arma que no se puede reutilizar, a pesar de que también es no tripulado y en algunos casos guiado remotamente.

Navarro (2015), establece que una de las clasificaciones de los VANT se establece de acuerdo a su función: hay del tipo Blanco el cual es usado para simular aviones o ataques enemigos en los sistemas de defensa de tierra o aire. El de Reconocimiento el cual envía información militar y son del tipo avión o helicóptero. Los de Combate que ayudan a combatir y llevar a cabo misiones que suelen ser muy peligrosas. Los de Logística que son diseñados para llevar carga. Los de Investigación y desarrollo que sirven de prueba e investigación de los sistemas en desarrollo. Los UAV comerciales y civiles los cuales fueron diseñados para propósitos civiles, filmar películas y entretenimiento. También existe una amplia clasificación de acuerdo a sus funciones, la primera clasificación podría ser en función del tipo de alas; que son los Drones de Alas Fijas: que tienen las alas fijas y son similares a un avión. Los Drones MultiRotor que son de estructura cuadricópteros o de 4 rotores con hélices, y otros que tienen 6 rotores (hexacópteros) o incluso hasta 8 hélices. De las cuales dos de sus hélices giran en el sentido de las agujas del reloj y otras dos en sentido contrario, creando así la fuerza de empuje necesario para llevar al dron a elevarse y poderlo mantener en el mismo sitio sin variar la posición, gracias a sus giroscopios y estabilizadores, lo que es perfecto para sacar fotos y grabar vídeos.

Por otro lado Navarro (2015), realiza una clasificación según el método de control que es el Autónomo, que es el dron que no necesita de un piloto humano que lo controle desde tierra. Y el cual se conduce por sus propios sistemas y sensores integrados. También está el Monitorizado: que es manejado por la figura de un técnico humano, él cual cumple con la función de manipulación indicándole el tipo de información y como controlarlo mediante la retroalimentación. Y el dron dirige su propio plan de vuelo y el técnico, a pesar de no poder controlar los mandos directamente, sí puede decidir qué acción llevará a cabo. El de tipo Supervisado, que depende de un operador que lo pilota, aunque este puede realizar algunas tareas autónomamente. El de tipo Preprogramado, donde se le realiza y se le diseña un plan de vuelo previamente y no tiene medios de cambiarlo para adaptarse a posibles cambios. Y el DRON controlado remotamente(R/C), donde es pilotado directamente por un técnico mediante una consola. También, establece que por la función del uso pueden ser: 1) Drones Militares: son llamados UCAV que procede del inglés Unmanned Combat Air Vehicle, traducido al español sería vehículos no tripulados de combate aéreo. Suelen ir armados y con capacidad de bombardeos. Y finalmente 2) Drones Civiles: son aquellos drones que no tienen uso militar.

METODOLOGÍA

La metodología que se aplicó es de tipo cualitativo, nivel descriptivo, diseño no experimental transversal y de investigación acción. De acuerdo a la metodología de investigación la acción participativa presenta un enfoque analítico de la problemática que se presenta en el municipio de Ayapango Estado de México, al no utilizar los DRONES para el monitoreo Geodemográfico. Continuando con la descripción del tipo investigación, es de tipo cualitativa, debido a que se tomaron como referencia artículos científicos, páginas de internet y se llevó a cabo un proceso de observación mediante una encuesta no estructurada para conocer el punto de vista de los comerciantes y consumidores de la zona, y por otro lado, la aplicación de un instrumento de diez (10) reactivos, que ayudaron al levantamiento y a la recolección de los datos. Así mismo, es de nivel descriptivo ya que se describen una serie de estrategias, basadas en los resultados del instrumento. Y por último, es de diseño no experimental transversal mediante la recolección de datos en un solo momento en la región, debido a que los datos y la información recolectada para la generación de estrategias permitan determinar el uso de los DRONES para el monitoreo Geodemográfico en el sector agrícola en el Municipio de Ayapango, Estado de México.

RESULTADOS

Los resultados de la investigación están plasmados en dos partes, la primera en función de una serie de entrevistas no estructuradas dirigida a los comerciantes y consumidores de la zona, se les pregunta su opinión sobre como ellos perciben los resultados de las cosechas de los productos de la Zona y si identifican cuáles serían las causas de tener una baja producción que cubre de manera deficiente el mercado, y la segunda basada en un instrumento dirigido a los productores con el propósito de poder determinar las causas de sus bajos resultados y la poca creencia en el uso de la tecnología para conocer las características de los suelos. Con base a los resultados que arrojaron las entrevistas no estructuradas realizadas a los comerciantes y consumidores de la zona, se concluye que los productores del Municipio llevan un proceso de producción de temporada y que sus cosechas no satisfacen en su totalidad las necesidades del mercado ya que existen muchas pérdidas por el desconocimiento del tipo de semilla a sembrar así como por la ignorancia de las características de los suelos, o porque se basan en procesos de producción ancestral de acuerdo al temporal, o debido a que en temporada de secas no se cultiva ningún tipo de producto. Un factor importante es que desconocen el uso de la tecnología para mejorar sus procesos de producción.

CONCLUSIONES

Se puede llegar a conclusiones muy específicas que permitan apoyar a los productores agrícolas del Municipio de Ayapango de Gabriel Ramos Millán, Estado de México, que son los más representativos que indican el uso de los Drones para el monitoreo Geodemográfico, así mismo, se pueden formular algunas reflexiones, sobre los resultados de la investigación. Se empezará por establecer algunas conclusiones: la primera está enfocada a determinar que aunque los productores conocen en su mayoría lo que son los Drones, en realidad no saben cuál es su uso, y menos qué utilidad y apoyo les puede proporcionar para mejorar sus procesos de producción. Así mismo, tiene un desconocimiento de las características que presentan los suelos de la Zona y que el tipo de producción se lleva a cabo de manera ancestral y de temporada, en muchos de los casos no saben qué tipo de producto se puede cultivar y qué condiciones climatológicas se requieren. La segunda en importancia es que aunque no se están negando al uso de la tecnología se ven limitados por la poca información que llega al Municipio sobre la misma.

De acuerdo a los resultados de la investigación se considera más importante, que no cuenten con el apoyo de los organismos responsables para mejorar sus procesos de producción, tales organismos gubernamentales son a nivel Federal SAGARPA, a nivel estatal SEDAGRO y a nivel municipal la Regiduría de Desarrollo Agrario y los responsables de la Ley de Desarrollo Sustentable, porque deben ser los que le den seguimiento a los programas de apoyo para el desarrollo del campo, con el propósito de mejorar las condiciones del campo, optimizando los procesos productivos y la variedad de los cultivos de acuerdo a las condiciones del suelo. La reflexión más importante sería que las autoridades gubernamentales responsables de generar proyectos de apoyo a los productores, consideraran como alternativa el uso de los Drones una herramienta tecnológica para el apoyo a fin de mejorar los procesos productivos y generar nuevos tipos de cultivos con el fin de aprovechar el uso del suelo todo el año, porque como resultado se busca que la comunidad de la Zona tenga un trabajo formal, permanente y bien remunerado.

Otra, sería que se les proporcionen asesorías con empresas del ramo tecnológico que manejan los diferentes tipos de Drones orientados a la agricultura, permitiéndoles a los productores mejorar sus conocimientos y usos determinando a su vez el interés en el uso de la tecnología para mejorar las condiciones productivas del campo. Por último, la mayoría de los productores deben enfrentar los diversos problemas de procesos de producción, si pueden mejorar sus condiciones y se les apoya con el financiamiento, el propósito de que no abandonen el campo será visto como fuente de ingreso primario. El estudio presenta una serie de limitaciones tales como la deficiente información que existe en la vinculación de los responsables de

generar proyectos dirigidos a mejorar las condiciones del campo, los productores y los expertos en la tecnología, con el fin de optimizar los procesos productivos. Lo anterior ayudaría a generar una serie de estrategias que permitan darle solución a la problemática formulada, la cual se verá reflejada en ventajas competitivas y de beneficio para los agricultores.

REFERENCIAS BIBLIOGRÁFICAS

Ballesteros (2016), “El uso de drones llega a la agricultura”, Recuperado de:
http://cadenaser.com/emisora/2016/05/05/radio_albacete/1462433404_238284.html

Bonelli, Marco (2014) “Historia de los drones”. Recuperado de: <http://mundrone.blogspot.mx/p/historia-de-los-drones.html>

Bonelli Marco, (2014) en el blogspot mundo drone (26 de junio de 2014) Mundo Drone Página Web sobre Drones, UAV, UAS, RPAS

Cortes, Juan Pablo (s/f) “Definición de DRON”. Recuperado de:
http://www.academia.edu/7946946/QU%C3%89_ES_UN_DRONE

Definición de dron. Recuperado de: <http://definicion.mx/dron/>

Diccionario Definición ABC (s/f), Recuperado de: <http://www.definicionabc.com/tecnologia/dron.php>

Martínez de Carvajal Hedrich, Ernesto, (2015) *Piloto de RPAS* Cuadricoptero - Guía de referencia.

Navarro Javier (2015) “Dron. Sitio: Definición ABC”. Recuperado: 18/12/2015, del URL:
<https://www.definicionabc.com/tecnologia/dron.php>

Torres & Morales, (2011), “Los grandes retos y perspectivas para el agro y el sector rural en México en el siglo XXI”, Revista Estudios Agrarios, núm. 49. México: Procuraduría Agraria. Recuperado de:
<http://www.eumed.net/cursecon/ecolat/mx/2014/crisis-campo.html>

BIOGRAFÍA DE LOS AUTORES

Dr. en Admón. Omar Ernesto Terán Varela, Profesor del Centro Universitario UAEM Amecameca, Universidad Autónoma del Estado de México, Km. 2.5 Carretera Amecameca Ayapango, Estado de México, Línea de investigación Desarrollo y Política Pública. Profesor de la División de Estudios de Posgrado de la Facultad de Contaduría y Administración de la Universidad Nacional Autónoma de México (UNAM),

Dr. Pedro Abel, Hernández García, Profesor del Centro Universitario UAEM Amecameca, Universidad Autónoma del Estado de México.

Dr. en C.A.R.N. Enrique Espinosa Ayala, Profesor del Centro Universitario UAEM Amecameca, Universidad Autónoma del Estado de México.

Pas.Alma Lucero Álvarez González, Egresada de la Licenciatura en Administración del Centro Universitario UAEM Amecameca, Universidad Autónoma del Estado de México.

Pas. Abraham Sánchez Gil, Egresado de la Licenciatura en Contaduría del Centro Universitario UAEM Amecameca, Universidad Autónoma del Estado de México.

SEGURIDAD E IMAGEN EN GARITA INTERNACIONAL DE CRUCE PEATONAL: RETOS PARA USUARIOS Y TURISMO TRANSFRONTERIZO

Adriana Guillermina Ríos Vázquez, Universidad Autónoma de Baja California
Jesús Amparo López Vizcarra, Universidad Autónoma de Baja California

RESUMEN

El presente documento analiza e identifica los aspectos y situaciones reiteradas que afectan la seguridad e imagen en las garitas internacionales de cruce peatonal Este, Oeste y Puerta México Este en la frontera Tijuana, Baja California México/San Ysidro, California Estados Unidos a fin de precisar los hallazgos y propuestas tendientes a mejorar la percepción sobre la seguridad del turista en esta frontera. La información se deriva del informe del proyecto de investigación denominado “Promoción de imagen y certidumbre turística en la garita internacional de cruce peatonal Tij/SY/Tij”, que surge como una propuesta académica dentro de la Facultad de Turismo y Mercadotecnia de la Universidad Autónoma de Baja California (UABC) ante la necesidad de crear un observatorio permanente en tiempo real del fenómeno cotidiano del cruce peatonal transfronterizo. A lo largo del tiempo, la experiencia vivencial de visitantes, turistas nacionales y extranjeros, así como la comunidad en ambos lados de la frontera detectan diferentes percepciones de la imagen y seguridad en el proceso de cruce hacia los Estados Unidos o bien de ingreso a México. De acuerdo al reporte del 2013 de la General Services Administration GSA a través de las 24 puertas de ingreso a los Estados Unidos por la garita de San Ysidro, California, todos los días cruzan alrededor de 50,000 vehículos y por el área peatonal 25,000 personas, según datos del Instituto Nacional de Estadística e Informática INEGI 2010 y de la Oficina de Censos de Estados Unidos del Condado de San Diego, destacan que anualmente se dan más de 400 millones de cruces de pasajeros, destacándose el puerto transfronterizo Tijuana-San Ysidro como el más dinámico en todo el mundo, razón que motiva el presente estudio.

PALABRAS CLAVE: Imagen, seguridad, garita internacional de cruce peatonal, turismo transfronterizo

SECURITY AND IMAGE IN INTERNATIONAL PEDESTRIAN CROSSING BORDER: CHALLENGES FOR USERS AND CROSS- BORDER TOURISM

ABSTRACT

This document analyzes and identifies the aspects and repeated situations that affect the security and image in the international border crossing points East, West and East Mexico Gate on the border Tijuana, Baja California México/San Ysidro, California United States in order to specify the findings and proposals aimed at improving the perception of tourist safety on this border. The information is derived from the report of the research project called "Promotion of image and tourist certainty in the international pedestrian crossing Tij/SY/Tij", which emerges as an academic proposal within the Facultad de Turismo y Mercadotecnia de la Universidad Autónoma de Baja California (UABC) before the need to create a permanent observatory in real time of the daily phenomenon of the cross-border pedestrian crossing. Over time, the experience of visitors, national and foreign tourists, as well as the community on both sides of the border, detect different perceptions of image and security in the process of crossing to the United States or

entering Mexico. According to the 2013, report of the General Services Administration GSA through the 24 gates of entry to the United States by the sentry box of San Ysidro, California, every day they cross around 50,000 vehicles and through the pedestrian area 25,000 people. On the other hand, and according to data from the National Institute of Statistics and Informatics INEGI 2010 and the United States Census Bureau of the County of San Diego, emphasize that annually there happen more than 400 million passengers crossings, standing out the cross-border port Tijuana-San Ysidro as the most dynamic in the whole world, reason that motivates the present study.

JEL: F52, K33, N40, Z32

KEYWORDS: Image, Security, International Pedestrian Crossing, Cross-Border Tourism.

INTRODUCCIÓN

La frontera de México con Estados Unidos de América se extiende por más de 3000 kilómetros, está integrada por 6 entidades federativas y 38 municipios del lado mexicano así como por 4 estados y 23 condados estadounidenses, cuya población en esta zona según datos estadísticos del Instituto Nacional de Estadística Geografía e Historia (INEGI, 2015) en concordancia con la Oficina de Censos de los Estados Unidos (*U.S. Census Bureau, 2011-2015*) se estima en 14.6 millones de habitantes; del total, 7.1 millones viven en México y 7.5 millones en los Estados Unidos., asimismo continuando con el mismo tenor, se indica que la población fronteriza del lado mexicano converge principalmente en el Estado de Baja California (38.5%) y en Estados Unidos, dentro de California (45.0%).

Actualmente existen 56 puertos de entrada a lo largo de la frontera México-Estados Unidos, de los cuales, 53 se encuentran en operación y 3 están cerrados. Del total de puertos existentes 21 se clasifican como cruces dentro de la frontera terrestre y 35 son puentes que libran el Río Bravo. Actualmente Baja California cuenta con 9 cruces fronterizos para tránsito vehicular, de personas y de carga en ambos sentidos por toda su frontera con California, el cruce de peatones con mayor aumento se registra en dos Estados: California (43%) y Texas (41%), por ello es de gran relevancia la concentración poblacional fronteriza en la región California-Baja California que agrupa el 45% de la población binacional y en particular el principal cruce fronterizo Tijuana-San Ysidro no solo por el tránsito vehicular transfronterizo sino porque es el principal cruce utilizado por peatones (19%) (BDAN, 2017).

El Instituto Mexicano del Transporte (2014), define el cruce o puerto fronterizo terrestre como infraestructura especializada con personal, instalaciones, equipo y procedimientos específicos para controlar el flujo de peatones, vehículos y mercancías entre dos países, asimismo retoma de acuerdo al modelo conceptual de un puerto fronterizo a *Regal Decision Systems, Inc., 2005*, quien determina que un puerto fronterizo terrestre es una infraestructura especializada para el control de los flujos de entrada y salida de un país, resaltando su importancia estratégica como las instituciones de asegurar el cumplimiento y detectar desobediencias a las leyes federales relativas al movimiento comercial, de personas, plantas y animales en la frontera, un punto de contacto con los viajeros que ingresan o salen de un país, con el fin de recaudar ingresos; evitar el ingreso de extranjeros ilegales; evitar el ingreso de plantas perjudiciales, plagas animales, enfermedades humanas y animales; y examinar documentos de comercio exterior, entre otros (p. 26). Así mismo, Estados Unidos implementó programas que de alguna manera favorecieron a los viajeros y usuarios frecuentes de los cruces y puertos fronterizos como han sido *Free and Secure Trade (FAST)* y *Secure Electronic Network for Travelers Rapid Inspection (SENTRI)*, que permiten el cruce expedito de viajeros pre-aprobados y de bajo riesgo a través de carriles exclusivos.

Debe destacarse, que en 2015 se creó una Conexión Peatonal Aeroportuaria (*Cross Border Xpress*) que comunica, mediante un puente peatonal, a los aeropuertos de Tijuana y San Diego y el nuevo cruce peatonal del puerto El Chaparral-San Ysidro, o puerto Oeste también conocido como *PedWest*, el segundo

inaugurado en 2016, atiende el flujo peatonal en ambos sentidos en la frontera. En ese sentido, el progreso que se tuvo al remodelar e innovar los cruces fronterizos entre Tijuana y San Ysidro, ha impactado positivamente en los tiempos de cruce peatonal.

Del lado mexicano no todo está concluido, aún quedan aspectos por corregir en los próximos meses, sobre todos en las áreas aledañas de ingreso de cruce peatonal en las garitas de los puertos fronterizos Tijuana-San Ysidro, para que los peatones utilicen mejor las nuevas, funcionales y modernas instalaciones de la Garita Oeste también conocida como *Pedwest* priorizando el tiempo, porque todo el proceso de construcción del puerto fronterizo en ambos países se tiene programado concluir para el año 2019.

Tal coyuntura da pauta a la Facultad de Turismo y Mercadotecnia de la Universidad Autónoma de Baja California, con la iniciativa de llevar a cabo la fase inicial del proyecto de investigación denominado “Promoción de imagen y certidumbre turística en la garita internacional de cruce peatonal Tij/SY/Tij”, que inició sus trabajos preliminarmente en agosto del 2016 y que hasta el momento en 2017 continúa trabajando en la zona indefinidamente, en proceso de crear el observatorio permanente en tiempo real del fenómeno cotidiano del cruce peatonal fronterizo en las garitas internacionales Este, Oeste y Puerta México Este en la frontera Tijuana/San Ysidro, donde el principal objetivo es analizar e identificar los aspectos y situaciones reiteradas que afectan la seguridad e imagen así como la percepción que detentan los usuarios, no solo los visitantes o turistas, sino aquellos usuarios transfronterizos o locales que son los que cotidianamente, por diversos motivos cruzan y utilizan las garitas internacionales de cruce peatonal en la frontera Tijuana, Baja California México/San Ysidro, California, Estados Unidos de América.

Las opiniones y percepción de los usuarios en cuanto a imagen y seguridad, han sido recolectadas directamente donde se da el fenómeno, a partir de la aplicación de instrumentos que abordan las variables en estudio, y que han permitido reconocer los principales desafíos y retos que enfrenta la zona, con el objetivo de analizar los factores que repercuten en la imagen e identificar las necesidades que coadyuven al desarrollo desde una certeza turística en la zona, por ello se deben concertarse las deficiencias entre los actores involucrados como áreas de oportunidad para implementar acciones y estrategias que contribuyan de manera positiva en la mejora de la imagen, confianza y seguridad para garantizar principalmente la seguridad del visitante y turista de la región.

REVISIÓN LITERARIA

El turismo es un proceso de interacción de carácter asimétrico (Bringas, N., 1991, p. 285), esa definición atípica de lo tradicional pero perfectamente acertada para el turismo en la frontera donde en una región como la de Tijuana, San Diego se enfrenta asimétricamente con relaciones complejas diversas como la intensidad de las relaciones, idioma, impresiones, sentimientos compartidos, percepciones e interacciones poder, ámbito socio cultural, moneda, infraestructura, derrama económica, seguridad, oportunidades, precios, migración, violencia, inseguridad, narcotráfico, prostitución, marginación, aduanas, corrupción, cruces fronterizos, tráfico, línea, desigualdad económica, interacción con diferentes actores de la sociedad en temas transfronterizos, nuevos nichos de mercado que finalmente pueden resultar atractivos para la industria turística de la región.

Blanco Herranz (2004), supone que la seguridad es un concepto abstracto y polifacético; definiéndola en dos sentidos desde la percepción de la ausencia de riesgos que sería en un plano subjetivo y por su efectiva ausencia en el aspecto objetivo, en ese sentido precisa a la seguridad turística como un “conjunto de medidas, condiciones objetivas y percepciones existentes en el ámbito social, económico y político de un destino turístico, que permiten que la experiencia turística se desarrolle en un entorno de libertad, confianza y tranquilidad y con la mayor protección física, legal o económica para los turistas y sus bienes y para quienes contraten servicios turísticos en dicho destino” (pp. 13-14). Pero enfocándose en un destino de

frontera Bringas y Verduzco (2007), resaltan que, el tema de la seguridad tiene por lo menos tres dimensiones: la seguridad de la población, la seguridad pública y la seguridad nacional.

Tanto la seguridad e imagen son aspectos importantes, al considerar un destino turístico, la utilización de un cruce fronterizo o simplemente llevar a cabo visitas que posteriormente conlleven a entrar en una dinámica de turismo transfronterizo frecuente, Kotler et al. (1994) definen la imagen como “un conjunto de creencias, ideas e impresiones que la gente tiene de un objeto o destino” (p. 137).

Es trascendental el interés del gobierno ante el rezago de políticas públicas inadecuadas que no se han concretado desde la visión y problemática local como sucede en la frontera de Tijuana, al igual que las acciones en materia de turismo por parte del gobierno del Estado, pero aún más significativas las gestiones de acción u omisión que al gobierno municipal corresponde a través de la imagen municipal, infraestructura, vialidades, corrupción de los mandos policiacos, recolección de basura, concientización del comercio y prestadores de servicios directamente involucrados con la industria turística local.

Según nos señala Valenzuela Arce (2003), el turismo fronterizo no solo se encuentra definido por la vecindad fronteriza, los hoteles o restaurantes, sino que es una continua interacción entre los distintos actores, convergiendo e integrándose diversas prácticas y experiencias tanto para los turistas como para los anfitriones.

En la región Tijuana, Baja California México y San Diego, California Estados Unidos, es importante identificar los retos y desafíos para encontrar alternativas de solución a la inseguridad como variable crítica en un contexto transfronterizo interdependiente en que se circunscribe el compromiso bilateral en materia de seguridad en el turismo, delimitando en qué proporción las acciones de los involucrados pueden garantizar y promover la seguridad del turismo como detonante del desarrollo en la región transfronteriza

METODOLOGÍA

Existen numerosos tipos de investigaciones cuantitativas dentro de las ciencias sociales, según el objetivo principal, puede clasificarse en descriptivas y en explicativas. Acorde al tiempo durante el cual se realiza el estudio se distinguen las investigaciones sincrónicas o transversales, que se refieren al objeto de investigación en un mismo período, y las investigaciones diacrónicas o longitudinales, en las cuales los individuos se analizan durante un cierto tiempo, de manera continua (Briones, 2002, p. 37). Por otro lado, para Kerlinger (1979), la investigación no experimental es aquella que se realiza sin manipular variables, se concreta en observar fenómenos tal y como se dan en su contexto natural, para después analizarlos.

Dicho lo anterior, y considerando que el objeto de estudio de la presente investigación se circunscribe durante un proceso como es el cruce fronterizo, fenómeno estrechamente relacionado con los sujetos de estudio que para efectos del este análisis, ambos sujeto-objeto se abordaron de manera constante *in situ*, sin manipular variables durante el lapso que duró la fase empírica, entonces se plantea un diseño descriptivo, de corte transversal diacrónica no experimental, pues se intentan identificar indicadores dentro del espacio fronterizo a las garitas internacional de cruce peatonal Tijuana/San Ysidro.

El universo de estudio está constituido por usuarios que realizan el cruce internacional en las garitas peatonales Tij/SY/Tij, y que según datos del Plan Municipal de Desarrollo del Municipio de Tijuana 2014-2016, en concordancia con las cifras del censo de INEGI 2010 y datos de la Oficina de Censos de Estados Unidos del Condado de San Diego, en el 2015 se dieron 48 millones de cruces peatonales. En consecuencia y según Ibarra (2009), siendo la población mayor a mil (1,000>) en gestión turística, la muestra debe ser determinada a partir de la siguiente ecuación:

$$n = \frac{Z^2 pq}{E^2} \quad (1)$$

Donde:

n = Tamaño de la muestra

Z = es el nivel de confianza = 96% = 2.05² Z^2 = 4.202

E = es la precisión o margen de error = 4% = .04

p = es la variabilidad positiva = .5

q = es la variabilidad negativa = .5

Sustituyendo los valores en la formula, se tiene:

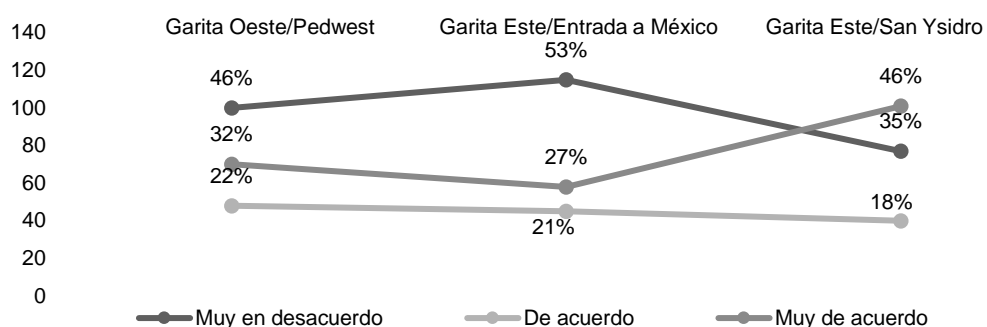
$$n = \frac{2.05^2(0.5)(0.5)}{0.04^2} = 656.25$$

Instrumento de medición: se diseñó una encuesta, que abordo preguntas que van desde opción múltiple, dicotómicas, nominales y en escala tipo Likert, con la intención de medir exclusivamente las variables de *imagen y seguridad*. Dicho instrumento se aplicó en las 3 garitas que integran el cruce peatonal fronterizo en la franja Tijuana/San Ysidro / Tijuana, para lo cual fue necesario dividir la muestra poblacional entre los 3 cruces, de forma que los datos arrojados fueran equitativos; significa que por cada puerta se aplicaron 218 encuestas.

RESULTADOS

El instrumento abordo una afirmación: *Considero que la seguridad que resguarda la zona, garantiza mi integridad*. Se brindó respuesta de opción tipo Likert. El propósito de la afirmación fue evaluar la percepción del usuario en cuanto a seguridad al momento de realizar el cruce peatonal. Se puede observar que la puerta *Garita Este/ Entrada México* resalta con un 53 % y que representa la mitad de la muestra seleccionaron la opción *De acuerdo*, que se interpreta como una percepción positiva a la protección en la integridad del peatón al momento de realizar el cruce fronterizo, esto debido a la seguridad que resguarda la zona. Cabe señalar, que en dicha puerta hay presencia del personal del Ejército mexicano.

Figura 1: Percepción de Seguridad en la Zona



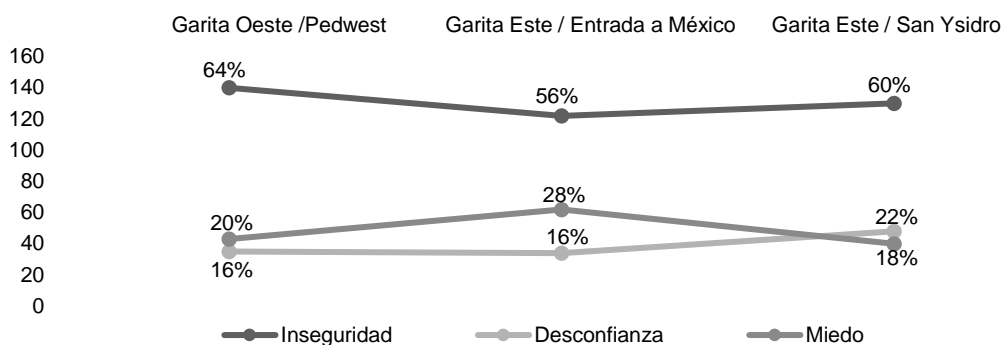
Esta figura muestra las 3 garitas peatonales en la franja fronteriza Tij/SY/Tij., así como los porcentajes en relación a los sujetos que representan la muestra poblacional. Se exhiben también las opciones de respuesta que abordo la encuesta.

Arellano (2002, p. 81) señala que todo individuo sensibiliza los sentidos a partir del proceso de percepción. El dato expuesto, exhibe el sentir de los sujetos que experimentan al paso por dicha zona. En contraste, la

misma figura expone un 46% del total de población en estudio, evaluados en la puerta Garita Oeste/*Pedwest* que optaron por la respuesta *Muy en desacuerdo*, lo que se demuestra una percepción negativa del individuo en cuanto a la seguridad en su persona al momento de encontrarse en la zona durante el proceso de cruce. Es necesario enfatizar que, en dicha puerta, así como a lo largo y ancho en toda área aledaña hasta el punto del cruce Oeste/*Pedwest* y en algunas ocasiones también conocido por los locales como *el chaparral*, por el lado mexicano continúan, los trabajos de remodelación y modernización, los hechos evidencian espacios sucios y descuidados con montículos de materiales en desecho, y detalles incompletos.

Por otro lado, la Garita Este /San Ysidro apuntala con un 46% que representa casi la mitad de la población que utiliza dicha Puerta de cruce internacional. La muestra de sujetos de investigación optó por la opción *Muy de acuerdo*, interpretado como percepción positiva hacia la protección de su integridad por la seguridad en la zona. Es necesario señalar que dicho cruce peatonal, hasta antes de la modernización era la única garita peatonal de entrada al país vecino por la zona San Ysidro, la misma que siempre estuvo bajo el resguardo de oficiales de migración por parte del Gobierno de Estados Unidos y siempre se cuidó el aspecto urbano que incluye entre otras cosas, alumbrado público y limpieza en la zona. Hoy en día, aun con todo lo que implica remodelar y modernizar las garitas, en la parte estadounidense se puede observar que la percepción de la seguridad en el sentir del individuo es positiva.

Figura 2: Razones Por las Que No Cruzaría



Para efectos de esta figura, se abordó un cuestionamiento dicotómico de opción de respuesta Si/ No respecto del horario de cruce nocturno. Al surgir la respuesta No, se invitó al usuario a expresar la razón por la cual no utiliza la garita durante el horario nocturno. La información en la figura muestra los 3 indicadores de más alta frecuencia que expresan la razón por la cual usuario realizar el cruce por las garitas peatonales fronterizas Tijuana/San Ysidro/Tijuana.

Se puede constatar sin excepción que en las tres garitas la razón principal que influye en los sujetos a no llevar a cabo el cruce durante el turno nocturno, se relaciona con la variable seguridad. Las 3 garitas muestran que más del 50% de la población que hace uso de los cruces peatonales se siente inseguro. Con un 28% se muestra a los sujetos encuestados en la garita Este/Entrada a México, quienes señalaron que *miedo* es el principal factor que los empuja a no utilizar el cruce fronterizo. Aún y cuando en la Figura número 1, se indicó que en dicha puerta hay presencia del Ejército mexicano, es oportuno señalar que dicho personal resguarda exclusivamente la parte interna del edificio donde se encuentran las oficinas del Instituto Nacional de Migración (INAMI), espacio donde es obligatorio mostrar documentación antes de ingresar a México.

Al salir de las instalaciones, el sujeto en su recorrido por andadores peatonales y uso de zonas aledañas a la garita, se enfrenta a pedigüños, vendedores ambulantes y deportados aunado a la ausencia de vigilancia en la zona de salida de la Puerta México, lo que predispone al sujeto a una actitud negativa, y que para Arellano (2002) actitud es la idea que un individuo se forma sobre algo o alguien, lo que conlleva a un acto de rechazo.

En la misma figura se observa un 22% perteneciente a la muestra de estudio, que fueron abordados en la en la garita Este/San Ysidro, los que previamente expresaron (en figura 1) sentir seguridad en la integridad de su persona al momento del cruce, pues la zona en mención se encuentra bajo el resguardo de oficiales de migración por parte del Gobierno de Estados Unidos lugar, en esta ocasión indicaron que la *desconfianza* es el indicador que no les permite usar las instalaciones durante el turno nocturno. Aquí de igual forma realizan trabajos de remodelación y el resguardo por oficiales de migración a lo largo de la franja en dicha zona, es dentro del territorio de los E.U.A.

Así pues, el usuario que requiere hacer utilizar de dicha puerta fronteriza, necesita de recorrer largos tramos y áreas aledañas a la garita, esto por el territorio mexicano, y durante el trayecto se enfrenta a condiciones que actualmente no son las más favorables debido a las tareas de remodelación como se expresó anticipadamente.

Figura 3: Opinión Respecto a la Imagen

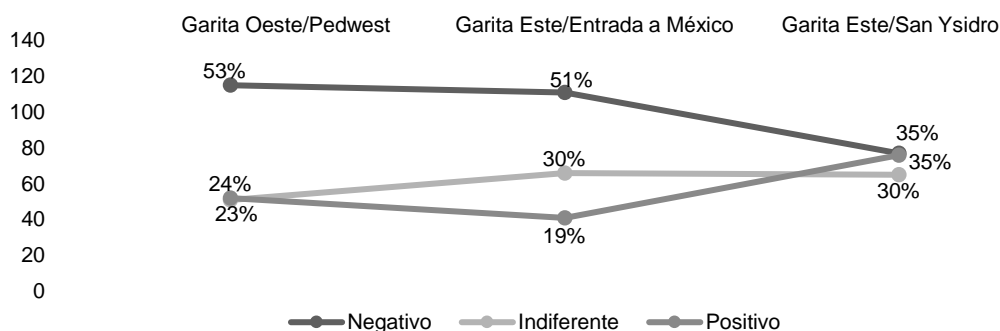


figura expone el tipo de impacto que ocasiona la imagen en la percepción del sujeto. En el instrumento se propone la múltiple con valores: Negativo/ Indiferente/ Positivo

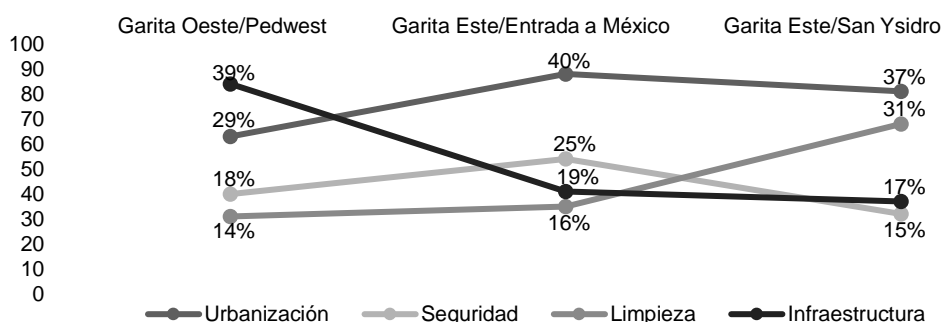
Esta opción

En relación a la petición en la encuesta: “Señale el tipo de impacto que genera en su persona la Imagen que se presentan los espacios públicos aledaños a la garita como el interior de edificios y uso de la zona del cruce peatonal”, se aprecia que la gente que utiliza la garita Oeste/Pedwest y garita Este/ Entrada a México (53 y 51% respectivamente), afirman percibir un impacto negativo, lo que concuerda con las Figuras 1 y 2 anteriormente explicadas, en las que se abordó la variable de seguridad, como las razones del sentir, a lo que aquí se confirma nuevamente a lo largo y ancho de dicha puerta, así como en toda área aledaña hasta el punto del cruce, conocido como *el chaparral o Pedwest*, por el lado mexicano, las condiciones que se observan como resultado de los trabajos de remodelación y modernización: espacios sucios y descuidados con montículos de materiales en desecho, y detalles incompletos, evidencian la forma en que influye sobre los sujetos, tal y como lo expresa Watson, pues el efecto negativo representa la magnitud de emocionalidad displacentera y malestar (1985).

Es interesante observar que el 30% de sujetos encuestados (que representa la mitad de la población) y que hacen uso del puerto de entrada garita Este/Entrada a México, apunto al valor *indiferente*, como respuesta a que todo cuanto observa y percibe en su andar por las zonas aledañas a dicha puerta de cruce internacional, no le afecta, no tiene reacción alguna, lo que contrasta con lo señalado en la Figura 2, donde expresaron sentir desconfianza ante lo que se expone al recorrer en dicha área (se enfrenta a un escenario con presencia de pedigüños, vendedores ambulantes y deportados, aunado a la ausencia de vigilancia).

El valor positivo, representado por el 35% de población que se encontró en la puerta de cruce internacional garita Este / San Ysidro, coincide con la respuesta a la variable *seguridad* que se abordó en la gráfica 1, y donde se expusieron las razones del sentirse seguro como aquí positivo.

Figura 4: Retos que enfrenta



Aquí se exponen los datos sobre el último punto del instrumento: Se solicitó al sujeto de estudio hiciera una sugerencia en pro de mejoras en la zona fronteriza y garitas peatonales. La figura exhibe los indicadores que arrojaron más frecuencia, los mismos que se relacionan directamente con las variables de estudio imagen y seguridad

Tal y como se expuso al inicio del presente trabajo: el principal objetivo de estudio es identificar los factores que inciden en la imagen y seguridad en las garitas internacionales de cruce peatonal Este, Oeste y Puerta México Este en la frontera Tijuana, Baja California, entonces fue necesario considerar la opinión de la muestra poblacional, a quien se le pidió comentara un aspecto que hoy en día esta desatendido y requiere cuidado. El 40% de la muestra, correspondiente a usuarios que utilizan la Entrada a México, así como el 39% de usuarios detectados en la garita Este San Ysidro, coinciden y enfatizan sobre mejoras en infraestructura y urbanización. Indicaron la necesidad de luminarias, sanitarios públicos, orden en el uso de espacios por locatarios y comerciantes, botes de basura y servicios de recolección de residuos sólidos, así como mantenimiento en áreas verdes. Al respecto de la urbanización, Borja & Castells (2000), indican que desde la planeación, dicho aspecto debe estar orientado fundamentalmente a la organización de elementos en la ciudad, de forma tal que aporten y ofrezcan un bienestar a la población. Entre dichos elementos se encuentran aspectos tales como fuentes, bancas de descanso, áreas verdes, módulos de información, entre otros, pues es un todo conocido como imagen urbana. En ese sentido, se observa que un alto porcentaje de la población encuestada y en referencia a las figuras expuestas previamente, perciben como desagradable la imagen urbana.

Por otro lado, el 39% de personas que se encontraban en la garita Oeste/Pedwest, opinó sobre consideraciones en cuanto a infraestructura, que va de la mano con la urbanización, pero agregaron que es necesario atender aspectos específicos que requieren personas con capacidades limitadas, con sobrepeso y de la 3ra edad, entre dichos aspectos, indicaron la necesidad de otras puertas adecuadas en acceso a los edificios como abatibles o con sensores, semáforos sonoros y marcas táctiles en los andadores. Aquí es oportuno resaltar a Palafox (2003, "La falta de una política de planificación integral hace que la modernización acentúe los problema políticos y socioeconómicos y culturales" (pp. 104 -107)

CONCLUSIONES

Los hallazgos del estudio señalan que se deben implementar acciones, planes y programas en los que deben formar parte los 3 órdenes de gobierno (Federal, Estatal, Municipal), comerciantes, empresarios y organizaciones relacionadas a la dinámica turística, que auxilien directamente a subsanar aspectos relacionados con seguridad e imagen que han venido mermando el interés de los usuarios, por realizar el

cruce en determinados horarios, situación que repercute en familias que viven de la actividad turística, y muchos de ellos se ha visto obligados a dejar de brindar servicios y productos, ante la ausencia de movimiento transfronterizo cerca de sus negocios, esto a partir del inicio de obras de remodelación e innovación de las garitas peatonales que afectaron atractivos como plazas comerciales y lugares de entretenimiento del área.

Si bien es cierto que el dinamismo del turismo impacta de manera global, por ser una de las actividades más lucrativas que inciden directamente en las economías de los países, indiscutible es que el turismo en México, específicamente en la zona fronteriza ha experimentado una débil vinculación interinstitucional de los tres niveles de gobierno, empresarios, comerciantes y la sociedad civil, y que agregado a los detonadores tales como problemática de índole social y la mala imagen percibida por la difusión de la narcoviolencia, ha venido reducir drásticamente el flujo fronterizo de turistas estadounidenses, Tijuana, Playas de Rosarito y Ensenada, experimentaron una ausencia casi total de turistas debido a los índices de inseguridad (Martínez, Ruiz, y Verján, 2010).

México hasta cierto punto ha tenido una postura ambivalente, en cuestiones de seguridad, pero ha tenido que implementar acciones en la zona transfronteriza para garantizar la seguridad en su territorio, no solo por la vecindad, sino por el esquema de intereses e influencia de la política estadounidense después de los actos terroristas perpetrados en su territorio, que ha precisado definir el resguardo y protección de sus fronteras principalmente en las más vulnerables como es la región Tijuana-San Diego.

Cuestionar el impacto de la seguridad en el turismo resulta complejo ya que implica un sinfín de posibilidades en la certidumbre del turista, puede contradecirse la realidad ofertada como destino turístico e influenciada en ocasiones por los medios de comunicación masivos que ejercen temor y desconfianza, en relación con la seguridad personal, jurídica, económica, sanitaria, social e incluso de derechos humanos y psicológica, que repercuten severamente en la industria turística. Bajo dichas circunstancias, es ineludible reflexionar sobre la coexistencia de diversos aspectos presentes en contexto de frontera como la interdependencia, política, economía, seguridad, comercio, imagen, medio ambiente, paisajes, atractivos socioculturales, idiomas, que de alguna manera enriquecen los distintos escenarios con particulares cualidades, por ello la situación de frontera no debería percibirse como amenazas o debilidades, más bien como oportunidades y fortalezas.

Así pues, a partir del presente estudio, la Facultad de Turismo y Mercadotecnia de la Universidad Autónoma de Baja California (UABC), en el intento por lograr una integración entre los actores relacionados a la actividad turística y conociendo, los retos y desafíos que enfrentan cotidianamente los usuarios y turismo fronterizo, realizó una reunión informativa con los principales representantes, e hizo entrega de los resultados obtenidos, con el propósito de que la información compartida promueva y garantice una transformación loable como detonante del desarrollo turístico en la región.

REFERENCIAS

Arellano, R. (2002). *Comportamiento del Consumidor*. Mc.GrawHill: México.

BDAN (2017). *Análisis de los Proyectos de Puertos Fronterizos en la Frontera México-Estados Unidos*. Banco de Desarrollo de América del Norte BDAN. Recuperado el 10 de noviembre de 2017, en: http://www.nadb.org/Reports1/Press_Releases/spanish/2017/POES.pdf

Blanco Herranz, F. J. (2004). *Reflexiones sobre seguridad, poderes públicos y actividad turística*. Estudios Turísticos, 160, 5-29.

Borja J. & Castells M. (2000). *Local y global, La gestión de las ciudades en la era de la información*. Taurus: México.

Bringas, N. (1991). *Grupos de visitantes y actividades turísticas en Tijuana*, El Colegio de la Frontera Norte. México.

Bringas, N. (1991). *Diagnóstico del sector turístico en Tijuana* en Nora Bringas y Jorge Carrillo (Coord.). Grupos de visitantes y actividades turísticas. Tijuana, México, Departamento de Estudios Sociales. El Colegio de la Frontera Norte. México. Serie Cuadernos.

Bringas, N. y Verduzco, B. (2007). *La construcción de la frontera norte como destino turístico, en un contexto de alertas de seguridad*. El colegio de México. México. Recuperado el 24 de agosto de 2017 en: <http://lanic.utexas.edu/project/etext/colson/42/1.pdf>

Briones, G. (2002). *Metodología de la Investigación Cuantitativa en las Ciencias Sociales*. Bogotá, Colombia: ARFO Editores.

Expansion (2013). Baja California ante el reto de tener la frontera más transitada del mundo. Expansión en alianza con CNN. Recuperado el 24 de agosto de 2017 en: http://expansion.mx/nacional/2013/06/17/baja-california-ante-el-reto-de-tener-la-frontera-mas-transitada-del-mundo?internal_source=PLAYLIST

Ibarra, O. (2009). *Estadística Para La Administración Turística*. México: Trillas.

INEGI y U.S. Census Bureau (2015). *INEGI Tabulados y Micro datos de la Encuesta Intercensal 2015*. U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates.

Instituto Mexicano del Transporte (2014). *Modelo conceptual de un puerto fronterizo y plataformas para simular su operación*. Secretaría de Comunicaciones y Transporte. Publicación Técnica No. 408 Sanfandila, Qro. Recuperado el 18 de noviembre de 2017 <http://www.imt.mx/archivos/Publicaciones/PublicacionTecnica/pt408.pdf>

Kerlinger, F. (1979). *Enfoque conceptual de la investigación del comportamiento*. México, D.F., Editorial Interamericana.

Kotler, P. et al. (1994). *Mercadotecnia de localidades*. México: Diana.

Martínez, O. C., Ruiz, J. G. y Verján, R. (2010). *Vive México: estrategia de promoción para reactivar el sector turístico en México*. Perspectiva de un mercado emisor. Universidad Autónoma de Baja California.

Palafox, A. (2003). *Desarrollo Sustentable del Turismo*. CA Turismo: México

Valenzuela Arce, J. M. (2003). *Por las fronteras del norte. Una aproximación cultural a la frontera México-Estados Unidos*. México: Fondo de Cultura Económico.

Watson, D. (2000). *Mood and temperament*. New York: Guilford Press.

BIOGRAFÍA

Adriana Guillermina Ríos Vázquez, es Doctora en Estudios de Desarrollo Global por la Universidad Autónoma de Baja California UABC, actualmente es profesora de tiempo completo en la Facultad de Turismo y Mercadotecnia de la UABC, líneas de investigación y estudio en: Cooperación y Seguridad

Transfronteriza, Política Exterior, Políticas Publicas, Migración, Turismo y Mercadotecnia; Derechos: Internacional Público, Humanos, Diplomático y Consular.

Jesús Amparo López Vizcarra, es Maestra en docencia con énfasis en lingüística, profesor de asignatura en la Facultad de Turismo y Mercadotecnia de la UABC, líneas de investigación y estudio en: Turismo, Mercadotecnia y Traducción.

IMPORTANCIA DE LA RESPONSABILIDAD SOCIAL EMPRESARIAL EN EL DESARROLLO LOCAL Y SU INFLUENCIA EN EL DESEMPEÑO FINANCIERO DEL SECTOR QUÍMICO-FARMACÉUTICO

Carmen Padilla-Lozano, Universidad Católica de Santiago de Guayaquil
Danny Arévalo-Avecillas, Universidad Católica de Santiago de Guayaquil

RESUMEN

El presente estudio aborda nuevas evidencias de la relación entre las prácticas de responsabilidad social empresarial y el desempeño financiero de empresas ecuatorianas del sector químico – farmacéutico bajo una perspectiva de desarrollo local. La investigación tiene un componente mixto, donde se recogieron experiencias y opiniones de expertos en el sector a través de grupos focales y se realizaron encuestas a gerentes de 88 empresas de las ciudades de Quito y Guayaquil, Ecuador. Se utilizaron métodos de ponderación para determinar un índice de RSE que explique el nivel de implementación de prácticas socialmente responsables y técnicas de correlación. Entre los resultados, se destaca la relación positiva entre las dimensiones económicas y ambientales de la RSE con el rendimiento sobre el capital (ROE) y la dimensión social de la RSE con el rendimiento sobre las ventas (ROS).

Palabras clave: Responsabilidad Económica; Responsabilidad Social; Responsabilidad Ambiental; Sector Químico - Farmacéutico; Desempeño Financiero

IMPORTANCE OF CORPORATE SOCIAL RESPONSIBILITY IN LOCAL DEVELOPMENT AND ITS INFLUENCE ON THE FINANCIAL PERFORMANCE OF THE CHEMICAL-PHARMACEUTICAL SECTOR

ABSTRACT

The present work addresses new evidence of the relationship between corporate social responsibility practices and the financial performance of Ecuadorian companies in the chemical - pharmaceutical sector from a local development perspective. The research has a mixed component, where experiences and opinions of industry experts through focus groups were considered and a survey was conducted to 88 companies in the cities of Quito and Guayaquil, Ecuador. The methodology included the use of weighting methods to determine a CSR index that explains the level of implementation of socially responsible practices and correlation techniques. According to the results, a positive relationship exists between the economic and environmental dimensions of CSR with regard to return on equity (ROE) and the social dimension of CSR with the return on sales (ROS).

KEYWORDS: Economic Responsibility; Social Responsibility; Environmental Responsibility; Chemical - Pharmaceutical Sector; Financial Performance

INTRODUCCIÓN

En la actualidad, vivimos en un mundo donde cada vez existe más conocimiento y tecnología que nunca antes, emparejada con el aumento de la desigualdad social y la incertidumbre; donde hay una epidemia de obesidad en países desarrollados y hambre en países en desarrollo; donde existe cada vez más participación gubernamental en la regulación de mercados financieros y emisiones de gas invernadero, pero acompañado

del aumento a gran escala de milicias, protestas y desobediencia civil. Dado este creciente marco de paradojas en el mundo y en la búsqueda de una economía ambientalmente más sostenible y socialmente más responsable, el papel de las empresas es decisivo. Por lo tanto, existe una relación mutua entre las entidades empresariales y la sociedad y la interdependencia de la empresa y la sociedad puede ser beneficiosa tanto para las entidades empresariales como para la sociedad en su conjunto. De aquí surge la definición de la Responsabilidad Social Empresarial (RSE) como el conjunto de acciones corporativas voluntarias que las empresas deciden emprender para responder a intereses de las partes interesadas (stakeholders) y promover el desarrollo local (Mackey, Mackey, & Barney, 2007; Sandhu & Kapoor, 2010; Silberhorn & Warren, 2007). Por ello, para motivar a las empresas a practicar un comportamiento empresarial responsable, se ha argumentado que la práctica de este comportamiento, sumado a una inversión en el desempeño social corporativo genera un ahorro de costos, diferenciación de productos y una legitimidad más firme (Tuppura, Arminen, Pätäri, & Jantunen, 2016).

El criterio de medición multidimensional de la RSE ha recibido una considerable atención tanto del mundo académico como del mundo empresarial (Paulík et al., 2015). Battaglia et al. (2014) analiza la RSE a través de tres pilares económico, social y ambiental, además del impacto de las actividades de la empresa sobre la sociedad. Nelling y Webb (2009) incluye a clientes, empleados, así como factores ambientales, sociales y de comportamiento empresarial que comprende un conjunto más amplio de partes interesadas en relación con las actividades de las empresas. Mridula y Preeti (2015) estudiaron la ética aplicada en los gobiernos, las empresas y los sistemas de valor. La afectación de la reputación de las empresas a causa de la generación de residuos dañinos para el medio ambiente con consecuencias sociales duraderas se ha venido estudiando desde los años 90 (Colten, 1991). No obstante, en los últimos años, se habla de una mayor preocupación de las empresas por el medio ambiente, de la mano con una creciente conciencia ecológica en las personas (Carroll & Shabana, 2010; Dahlsrud, 2008). Uno de los objetivos primordiales que persiguen las empresas en la práctica de actividades socialmente responsables es la obtención de una reputación favorable a la RSE, puesto que las firmas desean que el público las vea como éticas y socialmente responsables (Lii & Lee, 2012). La investigación de corte académica de igual modo ha demostrado que una reputación positiva de la RSE puede afectar el comportamiento del consumidor, las donaciones a las organizaciones sin fines de lucro apoyadas por corporaciones y el comportamiento de la ciudadanía (Lichtenstein, Drumwright, & Braig, 2004; Lii & Lee, 2012). Birindelli, Ferretti, Intoni y Iannuzzi (2015) sostienen que los criterios asumidos por las empresas en materia de RSE general un incremento en su reputación a través de reducción de riesgos y la previsión de efectos desastrosos para la sociedad. Finalmente, Du, Bhattacharya y Sen (2010) aclara la importancia de estudios de la corrupción en las empresas y la necesidad progresiva de promover una cultura organizacional verde.

RSE en la Industria Químico – Farmacéutica

La industria farmacéutica está entre los sectores los más admirados y criticados de todas. Esto, derivado del hecho que la industria, por un lado, realiza procesos de investigación y desarrollo para la proporción de medicamentos y químicos para la cura de enfermedades potencialmente mortales; y, por otro lado, es incapaz de proporcionar cura a precios asequibles e inclusive dejando huellas desfavorables para el medio ambiente (Nussbaum, 2008). A pesar de esta postura crítica sobre sus prácticas, no se debe omitir el hecho de que su enfoque se centra en la investigación y desarrollo con el único fin de aumentar el margen de las ganancias a favor de sus accionistas (Vargas & Marrugo, 2016). A medida que las empresas del sector farmacéutico se enfrentan a los retos de un entorno global y en constante cambio, deben aumentar su convencimiento de que las estrategias socialmente responsables pueden tener un impacto muy favorable en la consecución de diversos objetivos a favor de la sociedad.

Stankiewicz (2015) indica que es necesario recordar que el beneficio va más allá del punto de vista económico para este sector; y que valores como la mejora de la reputación de la empresa, mejora de la calidad de los productos y servicios, mejora de las relaciones con los clientes y el aumento de la confianza,

son cada vez más apreciados por los directivos y stakeholders. Una revisión de varios informes de empresas farmacéuticas sobre la RSE revela avances en áreas claves que involucran cuestiones materiales, la reducción de la huella ambiental, como gases de efecto invernadero, energía, agua, entre otros, seguridad de los empleados, manejo seguro de medicamentos no utilizados, la participación activa de los empleados y la comunidad y el acceso a la medicina (Min, Desmoulins-Lebeault, & Esposito, 2017) A raíz de estos hallazgos, el objetivo principal de la presente investigación es ofrecer un aporte a la literatura al determinar la existencia de correlación entre un índice de RSE, obtenido a partir de factores económicos, sociales y ambientales y el desempeño financiero en el contexto de compañías ecuatorianas del sector químico – farmacéutico.

REFERENCIAS

- Ambec, S., & Lanoine, P. (2008). Does it pay to be green? A systematic overview. *Academy of Management Perspectives*, 22(4), 45-62.
- Ansoff, H. (1983). Societal strategy for the business firm. *Advances in Strategic Management*, 1, 3-29.
- Baird, P., Geylani, P., & Roberts, J. (2012). Corporate social and financial performance re-examined: industry effects in a linear mixed model analysis. *Journal of Business Ethics*, 109(3), 367-388.
- Bansal, P., & Clelland, I. (2004). Talking trash: legitimacy, impression management, and unsystematic risk in the context of the natural environment. *Academy of Management Journal*, 47(1), 93-103.
- Battaglia, M., Testa, L., Bianchi, L., Iraldo, F., & Frey, M. (2014). Corporate Social Responsibility and Competitiveness within SMEs of the Fashion Industry: Evidence from Italy and France. *Sustainability*, 872-893.
- Birindelli, G., Ferretti, P., Intoni, M., & Iannuzzi, A. (2015). On the drivers of corporate social responsibility in banks: evidence from an ethical rating model. *Journal of Management & Governance*, 109(3), 303-340.
- Carroll, A., & Shabana, K. (2010). The Business Case for Corporate Social Responsibility: A Review of Concepts, Research and Practice. *International Journal of Management Reviews*, 12(1), 85-105.
- Chang, L. (2006). Who's in the Business of Saving Lives? *Journal of Medicine and Philosophy*, 31(5), 461-482.
- Chatterji, A., & Toffel, M. (2010). How firms respond to being rated? *Strategic Management Journal*, 31(9), 917-945.
- Colten, C. (1991). Historical Perspective on Industrial Wastes and Groundwater Contamination. *Geographical Review*, 81(2), 215-228.
- Dahlsrud, A. (2008). How corporate social responsibility is defined: an analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15(1), 1-13.
- Dixon-Fowler, H., Slater, D., Johnson, J., Ellstrand, A., & Romi, A. (2013). Beyond 'Does it pay to be green?' A meta-analysis on moderators of the CEP-CFP relationship. *Journal of Business Ethics*, 112, 353-366.

- Du, S., Bhattacharya, C., & Sen, S. (2010). Maximizing Business Returns to Corporate Social Responsibility (CSR): The role of CSR Communication. *International Journal of Management Reviews*, 12(1), 8-19.
- Ellis, A. (2009). The impact of corporate social responsibility on employee attitudes and behaviours. *Academy of Management Proceedings*(1), 1-6.
- Flammer, C. (2013). Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach. *Management Science*, 61(11), 2549-2568.
- Frynas, J., & Yamahaki, C. (2016). Corporate social responsibility: review and roadmap of theoretical perspectives. *Business Ethics: An European Review*, 258-285.
- Galbreath, J. (2010). How does corporate social responsibility benefit firms? Evidence from Australia. *European Business Review*, 22(4), 411-431.
- Hernández, R., Fernández, C., & Baptista, P. (2010). *Metodología de la Investigación Científica*. México: McGraw Hil.
- Jangu, T., Joseph, C., & Madi, N. (2007). The Current State of Corporate Social Responsibility Among Industrial Companies in Mlasya. *Social Responsibility Journal*, 3(3), 9-18.
- Lange, D., & Washburn, N. (2012). Understanding attributions of corporate social irresponsibility. *Academy of Management Review*, 37(2), 300-326.
- Lev, B., Petrovits, C., & Radhakrishnan, S. (2010). Is doing good good for you? How corporate charitable contributions enhance revenue growth. *Strategic Management Journal*, 31(1), 82-200.
- Lichtenstein, D., Drumwright, M., & Braig, B. (2004). The effect of corporate social responsibility on customer donations to corporate-supported nonprofits. *Journal of Marketing*, 68(4), 16-32.
- Lii, Y., & Lee, M. (2012). Doing right leads to doing well: when the type of CSR and reputation interact to affect consumer evaluations of the firm. *Journal of Business Ethics*, 105(1), 69-81.
- Likert, R. (1932). Technique for the Measurement of Attitudes. *Archives of Psychology*, 1-55.
- Lind, D., Marchal, W., & Wathen, S. (2012). *Estadística aplicada a los negocios y la economía*. México: McGraw-Hill / Interamericana Editores.
- Mackey, A., Mackey, T., & Barney, J. (2007). Corporate social responsibility and firm performance: investor preferences and corporate strategies. *Academy of Management Review*, 32, 817-835.
- Malhorta, N. (2008). *Investigación de Mercados (5ta Edición ed.)*. México: Pearson.
- Margolis, J., & Walsh, J. (2003). Misery loves companies: rethinking social initiatives by business. *Administrative Science Quarterly*, 48, 268-305.
- Margolis, J., Elfenbein, H., & Walsh, J. (2007). Does it pay to be good? A meta-analysis and redirection of research on the relationship between corporate social and financial performance. *Academy of Management Meetings*.

- Martínez, J., & Frías, J. (2015). Relationship between sustainable development and financial performance: international empirical research. *Business Strategy and the Environment*, 24(1), 20-39.
- McWilliams, A., & Siegel, D. (2000). Corporate social responsibility and financial performance: correlation or misspecification? *Strategic Management Journal*, 21, 603-609.
- Miles, M., & Covin, J. (2000). Environmental marketing: a source of reputational, competitive, and financial advantage. *Journal of Business Ethics*, 23(3), 299-311.
- Min, M., Desmoulins-Lebeault, F., & Esposito, M. (2017). Should pharmaceutical companies engage in corporate social responsibility? *Journal of Management Development*, 36(1), 58-70.
- Mridula, G., & Preeti, R. (2014). Business Ethics and Corporate Social Responsibility – Is there a dividing line? *Procedia Economics and Finance*, 11, 49-59.
- Nelling, E., & Webb, E. (2009). Corporate social responsibility and financial performance: the 'virtuous circle' revisited. *Review of Quantitative Finance and Accounting*, 32(2), 197-209.
- Nussbaum, K. (2008). Ethical corporate social responsibility (CSR) and the pharmaceutical industry: a happy couple? *Journal of Medical Marketing*, 9(1), 67-76.
- Orlitzky, M., Schmidt, F., & Rynes, S. (2003). Corporate social and financial performance: a meta-analysis. *Organization Studies*, 24(3), 403-441.
- Paulík, J., Sobeková, M., Tykva, T., & Cervinka, M. (2015). Application of the CSR measuring model in commercial bank in relation to their financial performance. *Economics and Sociology*, 8(4), 65-81. doi:10.14254/2071-789X.2015/8-4/5
- Perrini, F., Russo, A., Tencati, A., & Vurro, C. (2011). Deconstructing the relationship between corporate social and financial performance. *Journal of Business Ethics*, 102, 59-76.
- Roper, S., & Parker, C. (2013). Doing well by doing good: a quantitative investigation of the litter effect. *Journal of Business Ethics*, 66(11), 2262-2268.
- Sadeghi, G., Arabsalehi, M., & Hamavandi, M. (2016). Impact of corporate social performance on financial performance of manufacturing companies (IMC) listed on the Tehran Stock Exchange. *International Journal of Law and Management*, 58(6), 634-659.
- Sandhu, M., & Kapoor, S. (2010). Stakeholders' perceptions of corporate social responsibility: empirical evidences from Iran. *International Journal of Business Research*, 17(2), 47-80.
- Schreck, P. (2011). Reviewing the business case for corporate social responsibility: new evidence and analysis. *Journal of Business Ethics*, 103, 167-188.
- Sharma, S., & Henriques, I. (2005). Stakeholder influences on sustainability practices in the Canadian forest products industry. *Strategic Management Journal*, 26(2), 159-180.
- Silberhorn, D., & Warren, R. (2007). Defining corporate social responsibility. *European Business Review*, 19(5), 352-372.

- Stankiewicz, A. (2015). Ethical code and whistleblowing as CSR tools in pharmaceutical companies. *Social Responsibility of Organizations*, 158-169.
- Tuppura, A., Arminen, H., Pätäri, S., & Jantunen, A. (2016). Corporate social and financial performance in different industry contexts: the chicken or the egg? *Social Responsibility Journal*, 12(4), 672-686. doi:10.1108/SRJ-12-2015-0181
- Vargas, I., & Marrugo, L. (2016). Responsabilidad Social Empresarial, Inclusión y Discapacidad: Análisis desde las buenas prácticas en la Industria Farmacéutica. *Revista de Derecho, Comunicación y Nuevas Tecnologías*, 15, 2-23.
- Walker, K., Zhang, Z., & Yu, B. (2016). The angel-halo effect: How increases in corporate social responsibility and irresponsibility relate to firm performance. *European Business Review*, 28(6), 709-722. doi:10.1108/EBR-11-2015-0139
- Wang, H., & Choi, J. (2013). A new look at the corporate social-financial performance relationship: the moderating roles of temporal and interdomain consistency in corporate social performance. *Journal of Management*, 39(2), 416-441.
- Yoon, Y., Gurhan-Canli, Z., & Schwarz, N. (2006). The effect of corporate social responsibility (CSR) activities on companies with bad reputations. *Journal of Consumer Psychology*, 16(2), 377-390.

CONTRADICCIONES DEL SISTEMA SALARIAL PARA LOS DOCENTES DE LAS UNIVERSIDADES PÚBLICAS EN COLOMBIA

Gloria Yolanda Ospina Pacheco, Universidad del Tolima, Ibagué – Tolima (Colombia)

Inés Yohanna Pinzón Marín, Universidad del Tolima, Ibagué – Tolima (Colombia)

RESUMEN

El punto de partida del presente estudio hace referencia al Decreto 1279 de junio 19 de 2002, mandato por medio del cual se dictan disposiciones y criterios que permiten reconocer puntos a los profesores universitarios de acuerdo con su formación académica, la categoría en el escalafón docente, su experiencia calificada, y la productividad académica. Puntos éstos que, al multiplicarlos por el valor del punto definido por el Departamento Administrativo de la Función Pública, permiten conocer así, la asignación salarial de cada uno de los profesores de las universidades públicas, de acuerdo con las variables antes mencionadas. Sin embargo, se puede evidenciar, que el principio rector de la igualdad, en realidad, no se cumple, no es real ni efectivo, al encontrar a un mismo docente, cuya asignación salarial es diferente, a pesar de que “todas” las Universidades Públicas aplican el mismo decreto. Estas marcadas consideraciones, están dando giros reveladores al significado de igual o de “IGUALDAD” y a los principios fundamentales declarados en la misma Carta Política -igualdad de oportunidades, al declararse con la competencia de modificar rangos diferentes a los determinados por el Decreto en estudio. Entonces, las posibles causas que han generado dichas diferencias pueden ser imputadas al desarrollo y aplicabilidad subjetiva de la AUTONOMÍA UNIVERSITARIA, pues, si bien es cierto, como su palabra lo indica, las universidades gozan de dicha autonomía, también lo es, que ésta tiene límites, cuyo propósito es definitivamente evitar el exceso o abuso de aquellas entidades en sobrepasar las demarcaciones establecidas por la ley y la misma Carta Magna.

Palabras Clave: Autonomía, Igualdad, Salario, Docentes, Dicotomía, Diferencia

CONTRADICTIONS OF THE WAGE SYSTEM FOR THE TEACHERS OF THE PUBLIC UNIVERSITIES IN COLOMBIA

ABSTRACT

The starting point of the present study refers to Decree 1279 of June 19, 2002, mandate by means of which provisions and criteria are established that allow to recognize points to university professors according to their academic training, the category in the teaching ladder, your qualified experience, and academic productivity. Points that, when multiplied by the value of the point defined by the Administrative Department of Public Function, allow us to know the salary allocation of each of the professors of public universities, according to the aforementioned variables. However, it can be shown that the guiding principle of equality, in reality, is not fulfilled, is not real or effective, when finding the same teacher, whose salary allocation is different, despite the fact that "all" the Universities Public apply the same decree. These marked considerations, are giving revealing twists to the meaning of equal or of "EQUALITY" and to the fundamental principles declared in the same Political Letter - equality of opportunities, when declaring with the competence to modify ranges different from those determined by the Decree under study. Then, the possible causes that have generated these differences can be imputed to the development and subjective applicability of UNIVERSITY AUTONOMY, because, although it is true, as its word indicates, universities

enjoy such autonomy, it is also, that it has limits, whose purpose is definitely to avoid the excess or abuse of those entities in surpassing the demarcations established by law and the Magna Carta itself.

JEL: I2, I21, I23, I24 I28, K31

KEYWORDS: Autonomy, Equality, Salary, Professors, Dichotomy, Difference.

INTRODUCCIÓN

El punto de partida del presente estudio hace referencia al decreto 1279 de junio 19 de 2002 (Presidencia de la República de Colombia, 2002), mandato por medio del cual se dictan disposiciones y criterios que permiten reconocer puntos a los profesores universitarios de acuerdo con su formación académica (profesional de pregrado y posgrado), la categoría en el escalafón docente (asignada por cada institución universitaria), su experiencia calificada (docente universitaria, profesional, investigativa, etc.), y la productividad académica. Puntos éstos que al multiplicarlos por el valor definido por el Departamento. Si bien es cierto, cada Universidad puede establecer según la Constitución Política de Colombia (Presidencia de la República de Colombia, 1991) por “autonomía universitaria”, los criterios internos para los ascensos o ingresos en el escalafón, también lo es, que como se expresa en la Carta Política y en la Ley 30 del 28 de diciembre de 1992 (Congreso de Colombia, 1992), el Estado garantizará el cumplimiento de ésta, generando mecanismos de inspección, para que las directrices en esta materia tengan como prioridad, el cumplimiento de las normas diseñadas para tal fin, siendo su razón de ser la aplicación de los criterios sin generar diferencias o preferencias entre unos y otros. Es por ello, que se excluyen de estas reglas los profesores con vinculaciones diferentes, tales como, los Ocasionales y Catedráticos.

REVISIÓN DE LITERATURA

La política definida en la normatividad vigente expedida por el ejecutivo, es clara al reiterar que existirá igualdad de condiciones según ley 4ª de 1992 (Congreso de Colombia, 1992) en la asignación salarial de los profesores que se encuentran en carrera docente, o aquellos que desean ingresar a esta según el decreto 1279 de 2002. Sin embargo se puede evidenciar, que dicho principio rector en realidad no se cumple, toda vez que, podemos encontrar un docente quien tiene una remuneración o asignación salarial diferente en cada una de las universidades públicas del país, lo cual contraviene no solo el artículo 20 de la ley 4ª del 28 de mayo de 1992, emanada del Congreso de Colombia, que a la letra dice: “*Los profesores de las universidades públicas nacionales tendrán igual tratamiento salarial y prestacional según la categoría académica exigida, dedicación y producción intelectual*”, sino además, con lo estatuido en la Carta Superior como derecho de igualdad, específicamente cuando dispone, que el estado promoverá las condiciones para que la igualdad sea real y efectiva.

Efectivamente, el Estado colombiano viene dando cumplimiento en gran medida con lo preceptuado en la Carta Magna (Presidencia de la República, Decreto 1279, 2002), apoyado en sus entes de control expidiendo normas para regular el asunto (Decreto 1279, 2002), sin embargo, en su desarrollo y aplicación se empieza a evidenciar que su estructura no es precisa y clara, lo que ha contribuido a la creación de normas interpretativas, aclaratorias y complementarias, aprobadas por el Grupo de Seguimiento al Decreto 1279 de 2002. (Ministerio de Educación Nacional, 2004) Sin embargo, éstos tampoco cumplen las expectativas de las universidades estatales u oficiales, por eso, muchas de ellas han considerado pertinente y legítimo definir y aprobar rangos que no superan los topes establecidos por el Decreto en mención, ya sea para las asignaciones de puntos salariales por producción académica o de puntos para bonificaciones por productividad académica, según el Decreto 1279 de 2002, esto, con el propósito de dar notabilidad e importancia sobre algunos temas específicos o de cumplimiento con su visión o su misión institucional, para donde algunos será más importante su línea de preferencia y de mayor desarrollo de acuerdo a la práctica de cada universidad pública, llámese docencia, investigación o proyección social y/o extensión.

Este tipo de decisiones ha sido el resultado de la aplicabilidad interpretativa de una “autonomía universitaria” diferencial en las universidades estatales y oficiales, de su aplicación exclusiva según la Constitución Política de Colombia.

METODOLOGÍA

De los casos específicos y concretos se identificarán las causas que generan las posibles diferencias entre la asignación de puntos salariales por títulos de posgrado, por categoría, producción intelectual y demás situaciones propuestas para asignación de puntos salariales. Las posibles causas que han generado dichas diferencias pueden ser imputadas al desarrollo y aplicabilidad subjetiva de la autonomía universitaria (Presidencia de la República de Colombia, Constitución Política de Colombia, 1991), pues, si bien es cierto, como su palabra lo indica, las Universidades gozan de dicha autonomía, también lo es, que ésta tiene límites, cuyo propósito según Carlos Gaviria (Gaviria Díaz, 1997), es definitivamente evitar el exceso o abuso de aquellas entidades en sobrepasar las demarcaciones establecidas por la ley y la misma Carta Magna. Ahora bien, el resultado debiera generar como variante de la fórmula clásica, responder las siguientes tres preguntas:

¿Igualdad entre quiénes?, entre los profesores de planta de las diferentes universidades públicas del país.

¿Igualdad en qué?, en la definición de los criterios y los rangos cuantitativos que se asignan como puntos, resultado ítems referenciados en el Decreto 1279 de 2002, que fijan el factor salarial de éstos.

¿Igualdad con base en qué criterio?, la necesidad de medir en forma objetiva el avance intelectual, alcanzando como deducción de estos actos.

El Problema

Antecedentes del Problema: El origen de las diferencias inicia justamente con la vinculación de los profesores de planta en las diferentes universidades públicas del país, al momento de reingresar a la carrera docente (Presidencia de la República, Decreto 1279, 2002). En la valoración de la hoja de vida bajo el régimen salarial y prestacional definido por el gobierno nacional vigente mediante Decreto 1279 de 2002, es allí donde se inicia a descubrirse las diferencias de asignación de puntos por los diversos conceptos (Decreto 1279, 2002).

Descripción del Problema: El Decreto 1279 de junio 19 de 2002 es la norma general que establece la asignación salarial de los profesores de las universidades públicas. Es necesario verificar si con su aplicación se da cumplimiento a lo establecido en el artículo 13 de la Constitución Política de Colombia sobre el derecho a la igualdad, es probable que existan vacíos jurídicos cuando se evidencia que una hoja de vida con la trayectoria profesional, académica y producción intelectual de un profesor, puede tener asignaciones salariales diferentes entre una universidad y otra.

Formulación del Problema: ¿Cuáles son los factores que generan las diferencias en la aplicación de los puntos que determinan la asignación salarial de los profesores en las universidades públicas en Colombia? ¿Son estos factores coherentes con el ánimo del Decreto 1279 de 2002?

RESULTADOS

Origen de las Diferencias Entre las Universidades Públicas Que Aplican el Decreto 1279 de 2002

Dentro del grupo significativo de universidades públicas se pudo definir la existencia de marcadas diferencias en la aplicación de los criterios para la asignación de puntos salariales de que trata este Decreto

(Presidencia de la República, Decreto 1279, 2002), permitiendo con ello construir de forma separada tres grandes grupos de universidades públicas que aplican de manera disímil la norma citada, así: *a)* aquellas que aplican de manera textual los criterios definidos en el Decreto; *b)* las que haciendo uso de la hermenéutica jurídica han creado criterios propios por adopción de la autonomía de acuerdo con su interpretación; y *c)* aquellas que lo realizan como híbrido, es decir, de una parte, en forma textual, ceñidos a la norma, y de otra aplicando autonomía según su interpretación. Una modificación notoria se evidenció para los profesores ocasionales, (Congreso de Colombia, Ley 30) considerando de manera puntual que no son empleados públicos docentes de régimen especial ni pertenecen a la carrera profesoral y, por consiguiente, sus condiciones salariales y prestacionales no están regidas por el presente Decreto.

(Presidencia de la República, Decreto 1279, 2002). No obstante, su vinculación se hace conforme a las reglas que define cada Universidad, con sujeción a lo dispuesto por la ley 30 de 1992 y demás disposiciones constitucionales y legales vigentes. Para el caso de los profesores ocasionales, puede observarse, como soporte jurídico para su vinculación, artículo 74, Ley 30 de 1992, y sentencia C-006 de 1996, de la Corte Constitucional, dado que el Decreto vigente los excluye de manera clara de éste sistema (Moran Díaz, 1996). En el caso de los profesores de hora cátedra, no existe diferencia alguna, dado que éstos al igual que los anteriores fueron excluidos del sistema, tal como se desprende del artículo 4º del Decreto vigente (Presidencia de la República, Decreto 1279, 2002). No obstante es importante aclarar, que si bien la norma vigente deroga los Decretos anteriores, especialmente lo que le sea contrario, en el sub-exánime, no sería inverso lo definido por el artículo 12 del Decreto 1444 de 1992, (Presidencia de la República, 1992) el cual definió no sólo categorías, sino puntos por categoría, de modo que, atendiendo al valor del punto asignado por el año lectivo, existiera un valor homogéneo para todos los catedráticos del país que prestan sus servicios en las Universidades Públicas, homologando de cierta forma el sistema definido para los profesores de planta. Ahora bien, desde ya se denotan las causas que pueden estar originando diferencias de interpretación jurídica y de alcance de la norma, toda vez que podemos evidenciar cambios y modificaciones realizadas desde el año 1992 a la fecha, en especial sobre su reglamentación y desarrollo en la actividad administrativa y académica. Por ello, no puede desmejorar o menoscabar la libertad, la dignidad humana ni los derechos de los trabajadores, como perentoriamente lo establece el artículo 53 de la Constitución" (Hernández, Galindo, 1994)

Pues bien, no habría dificultad para aquellos a quienes su salario se ubicaba por encima de lo actualmente asignado, generando ello una oportunidad en beneficio del docente para mejorar su salario y calidad de vida, atendiendo el principio "*in dubio pro operario*" en materia laboral (Molina Monsalve, 2011), definiéndolo concretamente, cuando frente a una misma norma laboral surgen varias interpretaciones sensatas, la cual implica la escogencia del ejercicio hermenéutico que más le favorezca al trabajador. De conformidad con este mandato, cuando una sola norma admite varias interpretaciones, la exégesis escogida deberá ser aplicada a favor del trabajador (Gaviria Díaz, 1995). Es así como desde su origen y nacimiento a la vida jurídica, el Decreto (Presidencia de la República, Decreto 1279, 2002) ha generado diferentes interpretaciones, aplicabilidades únicas según la dinámica de cada Universidad, o sencillamente como un impulso desproporcionado para la construcción de lineamientos y criterios por cada una de las Universidades. Esta dispersión sin límites es el actor principal de las variedades y diferencias al momento de la asignación salarial de los docentes. El origen de la interpretación en los títulos, podría pensarse que inicia con los títulos de especialización (Decreto 1279, 2002) para dar un ejemplo establece el decreto una interpretación por años o en su defecto con topes máximos.

Vulneración del Derecho de Igualdad Frente a la Aplicabilidad del Decreto 1279 de 2002

Este ha sido considerado como un cambio relevante para el ciudadano común, y útil para enfrentar los problemas de nuestro país, y no simplemente como un conjunto de principios y buenas intenciones sin aplicación práctica, con un acercamiento mayor entre el individuo y la Constitución (Cepeda, Manuel, 1997). La teoría jurídica analítica, aplicada al tratamiento del derecho a la igualdad, ha establecido algunas

distinciones de mucha utilidad para la solución de casos relacionados con ese derecho. La primera de ellas tiene que ver con la *estructura* de las normas que establecen el derecho a la igualdad, tales como la formulación aristotélica clásica o el artículo 13 de nuestra Constitución Política. En efecto, los conflictos en que se entra en juego al considerar el derecho a la igualdad muestran que las normas que lo consagran pueden ser tratadas como *principios*; esto es, son normas cuya aplicación en un caso concreto depende de la ponderación que se haga frente a los principios que con él colisionan (Robert Alexy, 1993).

Es así como dicho principio representa los inicios de toda sociedad bien estructurada, y de un Estado Social de Derecho que cumple a cabalidad con sus preceptos Constitucionales. “Este principio impone al estado el deber de tratar a los individuos, de tal modo que las cargas y las ventajas sociales se distribuyan equitativamente entre ellos” (Rawls, Jhon, 1995). En todo caso, tal situación contraviene con lo señalado en el artículo 20, de la ley 4ª de mayo 18 de 1992 (Congreso de Colombia, Ley 4ª, 1992), dado que, a pesar de que el legislador dejar ver de la manera más clara que su intencionalidad siempre fue que la asignación salarial de los docentes se diera con base en los reconocimientos obtenidos por los docentes y se valorara por su producción académica e intelectual, así como, que tal asignación fuera la misma sin distinción alguna, para todos y cada uno de los docentes de acuerdo a sus méritos, lo cual definitivamente no muestra la realidad.

Intervención de la Autonomía Universitaria

“Autonomía se llama el hecho de estar una realidad regida por una ley propia, y distinta de otras leyes que no le sean incompatibles. Pero tal capacidad o facultad de autodirección debe poseer sólidos fundamentos” (Borrero Cabal, 2008).

En todo caso la autonomía no es absoluta, primero por la visión responsable que ha tenido la corte constitucional negando tal premisa y segundo porque incluso en el modelo de inclusión a la ley, existe un marco jurídico superior que determina el ámbito de competencia de autogobierno, como lo es la Constitución. (Botero, 2005) Es competencia del legislador establecer los límites a la libertad de acción que en ejercicio de la autonomía universitaria se le reconoce a las universidades públicas y privadas; tales límites los debe imponer el legislador de manera expresa a través de la ley, constituyendo éstos excepciones a la regla general, sin que pueda entenderse que la regulación del quehacer de las universidades, per-se, sea una obstrucción a la autonomía (Moron díaz, 2000).

Extralimitación o Legitimidad del Principio de Autonomía Universitaria Frente a la Aplicabilidad del Decreto 1279 de 2002

Establecer que el origen del principio de la Autonomía Universitaria reaparece con la constitución de 1991, embestida de legalidad en su artículo 69 (Presidencia de la República, Constitución Política de Colombia, 1991), desarrollada en la ley 30 de 1992 garantizando este principio (Congreso de la República de Colombia, Ley 30, 1992). La autonomía universitaria se concreta entonces en la libertada académica, administrativa y económica de las instituciones de educación superior. En ejercicio de éstas, las universidades tienen derecho a darse y modificarse sus estatutos, designar sus autoridades académicas y administrativas, crear, organizar y desarrollar sus programas académicos, definir y organizar sus labores formativas, académicas docentes, científicas y culturales, otorgar los títulos, correspondientes (...) (Congreso de la República de Colombia, Ley 30, 1992).

Presunta Vulneración al Derecho Fundamental de Igualdad de Acuerdo Con los Retos de Ponderación

El concepto y la estructura de la ponderación, de acuerdo con Alexy, los principios son mandatos de optimización. El ámbito de lo jurídicamente posible está determinado por principios y reglas que juegan en sentido contrario. Por su parte, los enunciados fácticos acerca del caso determinan el ámbito de lo

fácticamente posible” (Robert Alexy, 1993). A fin de establecer “la mayor medida posible” en la que un principio debe ser cumplido, es necesario contrastarlo con los principios que juegan en sentido contrario o con los principios que dan fundamento a las reglas que juegan en sentido contrario. (Carbonell Miguel, 2007). De esta manera podríamos pensar en la existencia de una violación al derecho de igualdad de acuerdo a los conceptos académicos y jurídicos que por medio de la ponderación permiten dar tal calificación. El concepto del principio de proporcionalidad tiene como función principal establecer un criterio para determinar el contenido de los derechos fundamentales que resultan vinculantes a los poderes públicos y particulares. (Bernal Pulido, Carlos, 2011).

“El juez constitucional debe ponderar los límites a los que se puede exponer la autonomía universitaria y el derecho a la educación, cuando quiera que estos se ven en conflicto por errores administrativos de las instituciones educativas. En todos los casos debe tenerse en cuenta que las instituciones de educación superior no pueden excusarse en la autonomía que les otorga la Constitución para abstenerse de observar el debido proceso y la buena fe en sus actuaciones, llevando a cabo actuaciones arbitrarias o negligentes. (Subrayado y negrilla fuera de texto). Pero, asimismo, ha considerado la Corte que el estudiante no puede pretender que la solución de esos errores le genere de manera automática la convalidación de materias o requisitos que no ha cumplido de manera efectiva”. (Vargas Silva, 2011).

CONCLUSIONES

Los resultados generados de los tres grandes grupos identificados de universidades públicas que aplican de manera disímil el Decreto 1279 de 2002, resultan de la revisión normativa de las 32 Universidades públicas de Colombia.

Se pudo establecer que existe diferencia en la asignación salarial de los docentes de las Universidades públicas que aplican el Decreto 1279 de 2002, generando diferencias en la asignación salarial.

Si bien es cierto, existen tres prototipos diferentes de interpretación del Decreto en estudio (Presidencia de la República, Decreto 1279 2002), también es cierto que su validez está debidamente justificada en la Constitución, la ley y la jurisprudencia. Ello permite entender la razón del porqué se han desarrollado todas estas teorías, que desde cada punto de vista es tan legítimo como aplicable.

REFERENCIAS BIBLIOGRÁFICAS

BARRERA CARBONELL, Antonio. Sentencia N° U-342/1995. (1995). Bogotá. Corte Constitucional 1995.

BERNAL PULIDO, Carlos. El Principio de Proporcionalidad como Criterio para la Aplicación del Derecho Fundamental de Igualdad. El Concepto del Principio de Proporcionalidad. Bogotá – Colombia. Universidad Externado de Colombia. 201

BORRERO CABAL, Alfonso S.J. La Universidad: estudio sobre sus orígenes, dinámicas y tendencias. Tomo I. Historia Universitaria: La Universidad en Europa desde sus orígenes hasta la revolución Francesa. Ed: Pontificia Universidad Javeriana. Bogotá. 2008.

CARBONELL Miguel. El Principio de Proporcionalidad en el Estado Constitucional: La Racionalidad de la Ponderación. Universidad Externado de Colombia. Colombia – Bogotá. 2007.

CEPEDA, Manuel. Los Derechos Fundamentales de la Constitución de 1991, Consejería Presidencial para el Desarrollo de la constitución, 2ª Ed. Bogotá: TEMIS, 1997, 398

CIFUENTES MUÑOZ Eduardo. Sentencia de la Sala Séptima de Revisión No. T- 422/1992. (19, Junio, 1992). Igualdad ante la igualdad de oportunidades. REF. : Expediente T-298. Bogotá. Corte Constitucional. 1992.

Congreso de Colombia. Ley 30. (1992). Por la cual se organiza el Servicio Público de la Educación Superior. Bogotá.

Congreso de Colombia. Ley 4ª. (1992).

GAVIRIA DÍAZ, Carlos. Sentencia C-589/1997 (1997). Demanda de inconstitucionalidad contra los artículos 64 de la ley 30 de 1992 y 11 del decreto 1210 de 1993. Expediente D-1683. Bogotá. Corte Constitucional. 1997.

GAVIRIA DÍAZ. Carlos. Sentencia N° C-168/1995. (20, abril, 1995). Normas acusadas: artículos 11 parcial, 36 parcial y 288 de la ley 100 de 1993. REF.: Expediente No. D-686. Bogotá: Corte Constitucional, 1995.

HERNÁNDEZ, Carlos. Universidad y Excelencia. Ed: Instituto Colombiano para el Desarrollo de la Ciencia y la Tecnología “Francisco José de Caldas”- Colciencias- Asociación colombiana de universidades –ASCUN-. Bogotá. 2002.

FERNÁNDEZ DE SANTAELLA, Rodrigo. Tratado de la inmortalidad del alma (1503). Ed: JPM editores. Valencia-España. 2006. 316 p.

GAVIRIA DÍAZ. Carlos. Sentencia N° C-168/1995. (20, abril, 1995). Normas acusadas: artículos 11 parcial, 36 parcial y 288 de la ley 100 de 1993. REF.: Expediente No. D-686. Bogotá: Corte Constitucional.

DE COVARRUBIAS OROZCO, Sebastián (1539-1613), "Tesoro de la lengua castellana o española", Madrid, 1611Ed. Castalia, 1995. p.v.

Diccionario Académico. Segunda edición. 2010. Sociedad científica, literaria o artística establecida con autoridad pública.

HERNÁNDEZ GALINDO, José. Sentencia N° C-529/1994. (1994). Demanda de inconstitucionalidad contra el artículo 289 (parcial) de la Ley 100 de 1993. Sala Plena. Referencia: Expediente D- 629. Bogotá: Corte constitucional, 1994.

MORÁN DÍA, Fabio. Sentencia N° C-006/1996 (1996). Acción pública de inconstitucionalidad contra el artículo 74 (parcial) de la Ley 30 de 1992, "Por la cual se organiza el servicio público de la educación superior.". Ref.: Expediente No. D-983. Bogotá: Corte Constitucional, 1996.

MOLINA MONSALVE, Carlos. Sentencia Radicado N° 40662/2011. (15, febrero, 2011). Bogotá: Sala de Casación Laboral-Corte Suprema de Justicia, 2011

MORÓN DÍAZ, Fabio. sentencia N° T-1577/2000 (14, noviembre, 2000).

Ministerio de Educación Nacional. Colombia. Acuerdo (2004). N° 001 Grupo de Seguimiento al 1279. Grupo de Seguimiento del régimen salarial y prestacional de los profesores universitarios en uso de las facultades conferidas por el Decreto 1279 de 2002. Bogotá.

NARANJO MESA, Vladimiro. Sentencia 2004. N° C-556/2004. (6, diciembre, 2004). REF.: Expediente No. D-626, Bogotá. Corte Constitucional.

Presidencia de la República de Colombia (2002). Decreto 1279. Por el cual se establece el régimen salarial y prestacional de los docentes de las universidades estatales. Bogotá

Presidencia de la República de Colombia (1991). Constitución Política de Colombia. Vigésima séptima edición.

Presidencia de la República de Colombia. Decreto 1279. (19, junio, 2002).

Presidencia de la República de Colombia. Constitución Política de Colombia.(1991)

Presidencia de la República de Colombia. Decreto 1444. (1992).

RAWLS, Jhon, Teoría de la Justicia (Traducción de M.D. González), Fondo de Cultura Económica, Madrid, 1995; Id., El Liberalismo Político (Traducción de A. Doménech) Grijalbo-Mondadori, Barcelona, 1996, pp. 35 y ss.

ROBERT Alexy. Teoría de los derechos fundamentales. Madrid. Centro de Estudios Constitucionales. 1993. p. 610.

VARGAS SILVA, Luis Ernesto. Sentencia N° T-929 de 2003, el 7 de diciembre de 2011. Acción de tutela instaurada por Diana Lucía Fontanilla Ramírez contra la Universidad del Tolima. Bogotá. Corte Constitucional. 2011.

RECONOCIMIENTO

Al grupo de Investigación en Derecho Público de la Universidad del Tolima, dado que siempre apoya la participación de transmisión del conocimiento por parte de sus investigadores. Así como a las diferentes Universidades Públicas de Colombia por entregar la información necesaria que permitió realizar el estudio de campo y tener conclusiones frente a la revisión normativa institucional y nacional.

BIOGRAFÍA

Gloria Yolanda Ospina Pacheco, Magister en Derecho Público de la Universidad Santo Tomás. Administradora de Empresas de la Universidad INCCA de Colombia. Investigadora Grupo Estudios en Derecho Público General de la Universidad del Tolima. Docente catedrática de pregrado y posgrado de la Escuela Superior de Administración Pública – ESAP y de la Universidad del Tolima. Actualmente Jefe de la División de Relaciones Laborales y Prestacionales de la Universidad del Tolima, Barrio Santa Helena Parte Alta.

Inés Yohanna Pinzón Marín, Magister en Bioética de la Pontificia Universidad Javeriana - sede Bogotá. Master en Derecho Sanitario y Bioética de la Universidad de Castilla Mancha – España. Especialista en Derecho Penal de la Universidad del Ibagué. Especialista en Derecho Penal Económico de la Universidad de Castilla Mancha – España. Abogada de la Universidad de Ibagué. Investigadora Grupo Estudios en Derecho Público General de la Universidad del Tolima. Docente de Planta de Tiempo Completo de la Universidad del Tolima. Barrio Santa Helena Parte Alta.

CAMBIO TECNOLÓGICO COMO FACTOR DE INNOVACIÓN EN UNA MICROFINANCIERA OAXAQUEÑA

María de Lourdes Vázquez Arango, Universidad Autónoma “Benito Juárez” de Oaxaca

Eric Amín Ramírez Castillo, Universidad Autónoma “Benito Juárez” de Oaxaca

Paul Jair García Contreras, Universidad Mesoamericana

RESUMEN

El desarrollo inusitado que ha presenciado el mundo en relación a los diversos avances tecnológicos es evidente; consecuentemente las organizaciones se han visto en la necesidad de involucrarse en los procesos de innovación, experimentando cambios que han transformado sus esquemas de operación. La empresa de microfinanzas analizada no cuenta con estudios enfocados al aspecto tecnológico, consecuentemente no se ha brindado la oportunidad de estudiar las incidencias que la tecnología tiene. La metodología empleada en el trabajo es de tipo descriptiva, analítica y exploratoria. La información básica del estudio se relaciona con el análisis de cambio tecnológico e innovación en una empresa de microfinanzas en Oaxaca. Es así que se plantea como pregunta de investigación: ¿Qué incidencia tiene el cambio tecnológico en la operación de la organización, a través de una implementación innovadora?, y como objetivo principal: Analizar si el cambio tecnológico es un elemento innovador que incide en operatividad de la empresa de microfinanzas.

PALABRAS CLAVE: Cambio Tecnológico, Innovación, Microfinanzas

TECHNOLOGICAL CHANGE AS AN INNOVATION FACTOR IN AN OAXAQUEÑA MICROFINANCE

ABSTRACT

The unusual development that the world has witnessed in relation to the various technological advances is evident; consequently, organizations have seen the need to be involved in innovation processes, experiencing changes that have transformed their operation schemes. The analyzed microfinance company does not have studies focused on the technological aspect, consequently the opportunity to study the incidents that the technology has has not been provided. The methodology used in the work is descriptive, analytical and exploratory. The basic information of the study is related to the analysis of technological change and innovation in a microfinance company in Oaxaca. This is how the research question is posed: What impact does technological change have on the operation of the organization, through an innovative implementation ?, and as a main objective: Analyze whether technological change is an innovative element that affects operability of the microfinance company.

JEL: M1, M10, M15, 03, 033

KEYWORDS: Technological change, innovation, microfinance

INTRODUCCIÓN

Es indispensable que las organizaciones cuenten con los elementos que las hagan sobresalir sobre el resto de las empresas, donde el empleo de los avances tecnológicos en información y comunicación en los

procesos de producción y comercialización, exigen una adecuada gestión de los recursos internos y correctas relaciones con el entorno social, político, económico y cultural. Consecuentemente el crecimiento y evolución de las organizaciones está inmerso en una dinámica innovadora, plasmada en ciclos que marcan la pauta de trayectorias cimentadas en la tecnología que pretenden mantener un equilibrio armónico y benéfico para las partes. Es así que, la tecnología ha transformado la forma de hacer negocios, jugando un papel esencial en las empresas, principalmente como una herramienta de apoyo para lograr una ventaja competitiva, soportando el desarrollo y crecimiento económico de cualquier tipo de organización.

Por lo tanto, las organizaciones deben estar a la vanguardia en tecnología, de manera particular las empresas de microfinanzas debido al giro y la necesidad de tener una posición competitiva en el mercado, así como lograr mejores controles con visión a tener en un mediano plazo la posibilidad de expansión y crecimiento. La medición del servicio y la incidencia de la tecnología deben ir en función a la satisfacción de los clientes, la rapidez con la que se les atiende y la precisión de la información requerida por los mismos. Es indudable que en la actualidad, la tecnología se hace presente en todos los ámbitos, influyendo en gran medida en la competitividad de las organizaciones y en consecuencia, estas deben mantenerse a la vanguardia para poder ofrecer servicios y productos de calidad a sus clientes, quienes cada vez exigen mayores beneficios en reciprocidad a un intercambio justo entre mercado y consumidor. La empresa microfinanciera estudiada, brinda servicios financieros a sus clientes, compitiendo con el sector bancario y con instituciones dedicadas a proporcionar servicios de ahorros, préstamos e inversiones, ante este panorama, se tiene que, para poder hacer frente y ser competitivo en este sector, el papel de la Tecnología es fundamental para lograr satisfacer las necesidades de sus clientes. En este aspecto, el cambio tecnológico es el encargado de determinar la posición y ritmo de crecimiento de la organización, así como la innovación en los productos a ofrecer y la calidad con la que estos se brinden a sus clientes. (Vázquez, Acevedo, Ruíz, & García, 2013) La plataforma de red y comunicación utilizada por la empresa microfinanciera no es suficiente para atender a sus cerca de 35,000 clientes, lo que en muchas ocasiones genera tiempos muertos, desgaste económico debido al desperdicio innecesario de papelería y materiales que elevan los costos de operación; una espera infructuosa para sus clientes quienes esperan mayor agilidad e información acerca del recurso monetario invertido.

Aunado a lo anterior, se debe considerar el hecho de la competitividad de la organización y los factores externos a los que tiene que enfrentarse para lograr posicionarse como pionera en su ramo (sector de ahorro y préstamo), considerando las ventajas de una adecuada plataforma tecnológica que cubra expectativas propias y de sus clientes, buscando la implementación de innovaciones que conlleven a mejorar sus condiciones organizacionales. De manera concreta, la problemática de la organización se centra en la competencia existente en el sector en el que opera, así como en el volumen de datos que tiene que enfrentar diariamente, pudiendo generar problemas de productividad al dejar de lado lo importante para cubrir actividades triviales y urgentes, así como retrasos para generar información precisa y rápida que brinde un mejor servicio. De igual manera la distancia geográfica entre las sucursales para la realización de los movimientos pueden generar una limitación para ser una organización competitiva, demandando una comunicación más eficiente entre las oficinas; por lo que la operación en red permitiría una accesibilidad en tiempo y forma para la adecuada toma de decisiones.

REVISIÓN DE LITERATURA

La Teoría Evolucionista Como Punto de Partida Para el Análisis del Cambio Tecnológico

La concepción evolucionista se centra en los cambios económicos, subrayando el papel contemporáneo de la innovación tecnológica hacia una explicación endógena en las organizaciones. Autores como Fernández & León (2006), plantean que las implicaciones de las tecnologías que actualmente se usan permiten abrir ventanas de oportunidades en el desarrollo económico, señalan que “las innovaciones radicales provocan rupturas con procesos y productos pasados dando lugar a nuevas organizaciones e instituciones”.

Es así que la denominada revolución científica–tecnológica o tercera revolución industrial, basa su premisa en el uso de *nuevas tecnologías* como la informática, las telecomunicaciones, biotecnologías y nuevos materiales, permitiendo su difusión para responder a los problemas presentes de rentabilidad, productividad y competitividad de las empresas. Sin embargo, es importante señalar que de acuerdo a Fernández & León (2006) el cambio tecnológico no debe ser considerado como un factor exclusivo e independiente, sino que coevoluciona e interactúa con otros elementos como la ciencia, economía, política, cultura y la sustentabilidad, enfocando así el estudio a través de un análisis sistémico y evolutivo que permite la interacción de todas las partes para su comprensión.

Si nos referimos a la evolución en términos de los cambios, Schumpeter citado en (Montoya, 2004) señala que el proceso evolutivo tiene lugar en el seno de las organizaciones; colocando al cambio tecnológico en el centro de la evolución y al empresario como el ente innovador de las empresas. Argumentando que las estructuras económicas evolucionan de manera constante, fenómeno que denomino *destrucción creativa*, consistente en destruir las viejas maneras de producción para dar paso a nuevos caminos, resaltando el papel dinámico de la tecnología. De acuerdo al enfoque schumpeteriano, los empresarios y/o representantes administrativos, son los encargados de modificar el estado de las cosas; teniendo como fin el incremento de ganancias, modificando rutinas (lo que crea nuevas trayectorias de evolución), para las cuales se crean nuevos hábitos y nuevas instituciones. Es a partir del enfoque evolucionista que la tecnología ha procurado garantizar y mejorar el conocimiento, en este sentido, existe una estrecha interacción y acondicionamiento mutuo de la sociedad con la ciencia, por lo que la labor ha sido determinar hasta qué punto la ciencia y la tecnología han configurado las sociedades modernas y transformado las tradicionales.

Postura de la Organización Ante la Tecnología Para la Competitividad

Los procesos transitorios a los cuales tienen que adaptarse las organizaciones, son fundamentales para su permanencia y desarrollo. Si se hace una remembranza al modelo tradicional de producción, el fin se centra en obtener un producto de calidad a través de la estandarización, optimización de tiempos y movimientos en la fabricación, así como la división y especialización del trabajo, por lo tanto en esta fase el cambio tecnológico se vuelve costoso y su introducción debe ser planificada cuidadosamente. De esta forma, la innovación tecnológica plantea como objetivos principales mejorar la competitividad de las empresas a través del incremento tecnológico aplicado a productos y procesos que permitan la disminución de desperdicios, alcance de los objetivos planteados por la organización e interacción de actores sociales que permita una sinergia endógena y exógena efectiva. (Reyes, Carreón, & Álvarez, 2006) Por lo tanto, las organizaciones se ven en la necesidad de adoptar nuevos paradigmas para ser competitivas, que permitan estructurar y diseñar favorablemente los procesos de cambio, convirtiéndose en organizaciones flexibles y adaptables capaces de operar en mercados altamente segmentados y cambiantes. (Pérez, 2000) La autora hace una señalización en función al cambio de paradigma a través de un *sentido común* tecnológico y gerencial, donde aborda la transición de la producción en masa a una flexible y adaptable, que permite a las organizaciones realizar los cambios en pro de una mejora competitiva, se realiza el cambio de rutinas óptimas como meta a un cambio tecnológico como principal rutina, permitiendo de esta forma una organización en red flexible y donde el personal se convierte en el centro del proceso al transformarse en capital imprescindible para la organización. Ante los permanentes cambios tecnológicos, las empresas deben volcarse en un rol innovador, emprendiendo la mejora continua de sus productos, organización, personal y procesos, es conveniente para la organización determinar los cambios tanto en el manejo cotidiano, en las estrategias y en la transferencia de tecnología. Para determinar su sobrevivencia, prosperidad y futuro, las empresas deben consolidar sus capacidades para incorporarlas a su competitividad, requiriendo contar con estructuras de captación, innovación y sustentabilidad, de forma interna y externa que brinde la oportunidad de crecimiento y anticipación al cambio, asociadas a las ventajas tecnológicas.

El Sector de Microfinanzas

Las microfinanzas en esta última década han crecido considerablemente, su desarrollo se debe a la inclusión de usuarios que no pueden acceder al servicio financiero por no poseer las características requeridas por el sector (Vázquez, 2016). A decir de Oliverio & Almorín (2006), el microfinanciamiento es una medida alternativa a los esquemas comerciales, enfocado a mecanismos de ahorro y crédito para estratos pobres y excluidos del financiamiento bancario. Es importante considerar también la conceptualización de *finanzas solidarias*, en este sentido, Walter (2002) menciona que buscan adecuar los productos financieros a las necesidades básicas de la población y fortalecer el trabajo solidario, creando integración y una relación perdurable economía-sociedad que propicia las condiciones para un desarrollo humano integrado y sustentable. De esta manera, las finanzas solidarias hacen uso de la herramienta financiera para lograr un desarrollo equitativo y sostenible, constituyendo la forma brindar servicios que se enfoquen al desarrollo humano y social, intentando combatir la pobreza, exclusión o dificultad de acceso a los servicios financieros. (Oliverio & Almorín, 2006) Se señala por parte de Vázquez (2016), que el esquema de operación con el que se llevan a cabo las transacciones en el sector financiero popular, vuelve fundamental para las empresas dedicadas a las microfinanzas estar a la vanguardia tecnológica con el fin de tener una adecuada administración, control y poder brindar un servicio eficiente a los usuarios.

Por su parte, Velázquez, Santiago, & Solana (2014), muestran que los servicios de microfinanzas brindan un medio alternativo a poblaciones marginadas, que les permita tener acceso a crédito y al desarrollo a actividades productivas. En este punto se hace necesario considerar el hecho que al ampliar su rango de actuación el uso de tecnologías permitirá tener un mejor control que disminuya los riesgos de endeudamiento y fraude.

La Microfinanciera Objeto de Estudio

A petición de los directivos se guarda discreción respecto a la información de identificación de la empresa. Se señalan como datos primordiales que al segundo semestre del año 2017, la microfinanciera cuenta con aproximadamente 35,000 clientes dados de alta; los servicios que brinda a los usuarios son clasificados en dos rubros:

Básico: ahorro, crédito, inversión.

Secundarios: cambio de cheques, asesoría empresarial (apoyo y formulación de proyectos productivos y seguimiento mercadológico para el emprendedor), pago de servicios básicos, envío de remesas, cambio de dólares, educación financiera, servicio médico, servicio oftalmológico (canalización por convenio institucional).

La institución cuenta con nueve sucursales distribuidas en la ciudad de Oaxaca, Mixteca, Istmo de Tehuantepec, Costa y Sierra Mixe, así como una oficina concentradora - coordinadora de la administración, operación, comunicación, capacitación y manejo de activos y pasivos de toda la empresa. El esquema de operación se basa en los principios cooperativos, que señalan que debe estar constituida por un Consejo de Administración, Consejo de Vigilancia y Comités Auxiliares que vigilan y regulan el actuar institucional. Los Consejeros y miembros de los Comités Auxiliares son elegidos y/o ratificados a través de una Asamblea General de "Socios" representantes que son elegidos por todos los miembros de la cooperativa a través de un proceso democrático (Se le denomina socio a los clientes que realizan una aportación voluntaria para pertenecer a la institución de ahorro y crédito y poder acceder a los servicios que son ofertados). Al ser una empresa con gran número de operaciones, es necesaria la contratación del personal a tiempo completo y especializado para poder realizar cada una de las transacciones que son necesarias y de esta forma poder brindar el servicio a los usuarios.

Es así que, el máximo órgano es la Asamblea General de Socios, que decide los asuntos más importantes y trascendentales, mientras que el órgano administrativo que brinda dirección es el Consejo de Administración. Por su parte el Consejo de Vigilancia da seguimiento y observancia a las actividades realizadas, las comisiones realizan tareas específicas de acuerdo a la filosofía y principios cooperativos, siendo estos miembros ex officio del Consejo de Administración, y la Gerencia General es la encargada de la operatividad y ejecución de las disposiciones y reglamentaciones emitidas por las instancias superiores, y que coordina todo el trabajo en la oficina matriz y sucursales, donde cada una cuenta con un gerente de sucursal. Para su funcionamiento financiero, es imprescindible que quienes deseen formar parte de la empresa realicen una aportación obligatoria que es recuperada al momento de decidir retirarse, otra fuente de captación son los ahorros que se colocan en créditos para los “Socios”, y los excedentes generados por la operación de la institución son colocados en inversiones a través de productos financieros que generan al igual que los intereses de los créditos más ingresos para la empresa.

Respecto a la gobernabilidad de la institución, se determina por un marco de control interno que comprende políticas, reglamentos y procedimientos que delimitan cada una de las operaciones que se ejecutan en los diferentes niveles organizacionales. El nivel operativo de la organización actúa con base a los reglamentos y procedimientos, y el nivel directivo lo hace considerando las políticas que al efecto estén determinadas con base a la filosofía institucional y el marco jurídico. En cuanto a los procesos de información y comunicación los impactos son reflejados principalmente en cuestiones de productividad, que es vista como la relación entre la captación y colocación de dinero, ingreso de nuevos clientes, tiempo de atención y uso adecuado de los recursos para la actividad. Aunado a lo anterior, debemos considerar el hecho de la competitividad de la organización y los factores externos a los que tiene que enfrentarse para lograr posicionarse como pionera en su ramo, considerando las ventajas de una adecuada plataforma tecnológica que cubra expectativas propias y de sus clientes. Respecto a los componentes tecnológicos con los que se cuenta se tiene: Servidores que controlan el sistema interno de las sucursales, equipo de cómputo portátil y de escritorio con paquetería básica por departamento, intranet, sistema de consulta de datos, base de datos global, internet, telefonía fija y móvil, sistema de radiocomunicación. Es de observar que la plataforma de red y comunicación utilizada no es suficiente, generando tiempos muertos que merman la productividad y una espera infructuosa para los clientes, quienes esperan mayor agilidad e información acerca del recurso invertido, del estado actual de sus créditos, ahorros e inversiones y que consecuentemente afecta el servicio brindado.

METODOLOGÍA

El propósito del estudio consistió en analizar la forma en que el cambio tecnológico y incide como elemento innovador en la operación de la organización de microfinanzas. Se utiliza una metodología descriptiva, analítica y exploratoria, obteniendo información a través de trabajo de campo con observación participante, encuestas a colaboradores y entrevistas semi estructuradas a los directivos. Se tienen como fuentes primarias de información; a los directivos como conocedores del entorno interno y externo, a los trabajadores como usuarios del sistema, así como el apoyo de la documentación generada por los cambios que se pretenden establecer, tomando en cuenta los resultados mostrados, los informes mensuales generados por las áreas y sucursales, así como el cumplimiento de las metas plasmadas en los controles. La técnica de recolección de datos, consistió en establecer en primer lugar el diseño de una estrategia de recolección de información con el fin de obtener los datos que identificaron al fenómeno desde una perspectiva científica. Se realizó observación participante que permitió determinar el comportamiento de los usuarios de la tecnología y las reacciones ante los procesos de cambio, en esta fase se estructuraron los hechos basados en *dimensiones conceptuales* que son el interés de la investigación, conectándolas con las *áreas observables contexto* de la observación. De tal manera que teoría y prácticas se articulan en el trabajo de observación y como resultado los datos sirvieron para nutrir las notas y el trabajo de campo.

Para someter el cuestionario al escrutinio de los sujetos de investigación, se realizó una prueba piloto con 15 de ellos y 3 gerentes en la sucursal Oaxaca, para identificar la precisión y consistencia de las preguntas formuladas en las herramientas. Siendo importante estimar la redacción clara de las preguntas, con el objeto de que pudieran ser leídas y comprendidas por el mayor número de personas que serían encuestadas; así como corroborar el interés de los destinatarios en el asunto a investigar y su disposición a cooperar en la recolección de datos. En lo que respecta a la entrevista semi estructurada, se buscó obtener información sobre acontecimientos y aspectos relacionados con la tecnología y la innovación en la organización. Aportando de esta forma a la metodología la profundidad, el detalle y las perspectivas de los entrevistados. La estrategia consistió en sugerir y proponer los temas abordados en la investigación con la pretensión de estimular la reflexión y el análisis de sentimientos y pensamientos de una forma libre, conversacional y poco formal. Las preguntas fueron de carácter abierto y el entrevistado tenía que construir la respuesta, haciéndola flexible y adaptable a las necesidades de la investigación.

La población objeto de estudio de la investigación se integró de tres miembros del Consejo de Administración, dos del Consejo de Vigilancia, un gerente general y nueve gerentes de sucursal, haciendo un total de 15 entrevistas, mientras que la aplicación de los cuestionarios se realizó a conveniencia a 50 trabajadores. Partiendo de la observación se realiza una tipología de las categorías e indicadores mostrados en la tabla 1, en las áreas en las cuales ocurren las observaciones, identificando y distinguiendo los diversos contextos por su similitud/diferencia y en razón a un análisis conceptual.

Tabla 1: Categorías e Indicadores Para la Observación Participante

Dimensión	Categoría	Indicador
Tecnología (D1)	Acceso a la tecnología.	Grado en que la actual plataforma tecnológica cubre la demanda existente de socios y los requerimientos de información y comunicación en la empresa.
	Grado de conocimiento tecnológico.	Herramientas que usan los colaboradores para la realización de sus actividades. Grado de conocimiento del empleo de las Herramientas Tecnológicas.
	Servicio.	Mejora en el servicio a los clientes para satisfacer sus requerimientos.
Innovación (D2)	Productividad.	Interacciones entre coordinadora y sucursales. Efectividad en la información.
	Competitividad.	Capacidad de mantener sistemáticamente ventajas comparativas que le permitan alcanzar, sostener y mejorar una determinada posición en el entorno socioeconómico en el que se desenvuelve.

En la Tabla 1, se hace una explicación de las dimensiones, categorías e indicadores que permitieron identificar los elementos dados por la observación participante. Se realiza la identificación de la dimensión Tecnología (D1) y de la Innovación (D2), donde se les asigna a cada una la categoría correspondiente siendo para la primera el acceso a la tecnología, medida con un indicador que determina el grado en el que la plataforma tecnológica cubre la demanda de socios y los requerimientos de información de la empresa; así también en la dimensión tecnología se involucra el grado de conocimiento tecnológico, que se mide con un indicador de uso de las herramientas de los colaboradores para realizar sus actividades y el grado de conocimiento del empleo en las herramientas tecnológicas. Por su parte dimensión de Innovación se comprende la categoría servicio medida con el indicador mejora en el servicio a los clientes para satisfacer a sus clientes y la categoría de productividad que se determina con la interacción entre la coordinadora y sucursales y la efectividad en la información. Fuente: Elaboración propia con base a teoría y observación participante.

Respecto al diseño de la encuesta se ligó al interés de recoger información que permitió estandarizar y medir de manera sistemática, el porcentaje de productividad, número de clientes atendidos, conocimiento y uso de nuevas tecnologías por parte de los colaboradores y manejo sustentable de los recursos. Por su parte, el diseño de la entrevista comporta la misma metodología que la encuesta, aunque en este caso las preguntas son dirigidas a los directivos de la cooperativa, para conocer su punto de vista con relación a la tecnología, la sustentabilidad y los esquemas de innovación. El cuestionario tiene un carácter abierto donde se formularon las preguntas y se les dio un orden, pero se dejó suficiente libertad para responder los cuestionamientos y enriquecer la investigación.

RESULTADOS

Los resultados son producto de la aplicación de la metodología descrita anteriormente, por lo que a continuación se señalan los puntos relevantes obtenidos en la investigación. Se hace una señalización de los resultados obtenidos en la investigación donde que las tecnologías en cuanto a su contexto físico y conocimiento tiene una incidencia de cuatro veces, llegando casi al número más alto que es cinco con la mayor incidencia (contrario a uno que es más baja); pudiendo evaluar la relación de la empresa con la tecnología encontrada y la utilizada, respecto a sus componentes físicos y la utilidad que se le está dando en cuanto a infraestructura. Basado en ello es posible hacer resaltar que las tecnologías empleadas a la fecha son utilizadas de acuerdo a las capacidades de cada colaborador, sin que lleguen a ser potencializadas a su máximo nivel. Fuente: Elaboración propia con base a trabajo de campo.

Producto de la observación, se señala que la tecnología juega un papel muy importante en cuanto a la calidad de servicio que se brinda a los clientes, así como los esquemas y apego a las disposiciones y políticas dentro de la institución. Estos elementos indican que actualmente la microfinanciera necesita renovarse en el aspecto tecnológico a fin de poder crear una mayor infraestructura tecnológica de información y comunicación para ser competitiva en el mercado externo, así como crear una competitividad interna que le permita personal más capacitado y especializado en su manejo. Es de observar que lo relativo al acceso tecnológico la institución ha disminuido interés, sin ocuparse en proporcionar la tecnología acorde a los requerimientos existentes, así tampoco se ha puesto el interés adecuado en la capacitación acorde a la tecnología existente, teniendo como consecuencia una disminución en la productividad y por ende un reflejo poco competitivo con organizaciones similares, lo que la hace mantenerse rezagada, referente al aspecto de servicio. Es evidente el mal uso de los recursos con los que cuenta, existiendo mucha duplicidad de papelería y otros recursos materiales que son cargados a gastos administrativos y son absorbidos por los clientes. Es importante resaltar que una innovación en el equipamiento tecnológico y la infraestructura, incidirá en la productividad con la que se desempeñan los trabajos, y por ende en el manejo de la información y el servicio que se brinde a los socios. Por lo que es de observar exceso de personas, tiempos muertos y de igual manera rezagos administrativos que pueden ser superados por medio de una adecuada plataforma tecnológica para hacer eficiente los procesos productivos y por consecuencia el servicio.

Resultado de las encuestas se tiene que, de la población encuestada el 34% de la población tiene una opinión media en relación a que las herramientas tecnológicas proporcionadas les permiten realizar su trabajo adecuadamente. Por consiguiente la empresa no cubre plenamente los requerimientos que se consideran idóneos, cubriendo de forma regular las necesidades de los colaboradores en el aspecto tecnología para que ellos puedan realizar su trabajo con base a las demandas de información, siendo limitante para operar de forma eficiente y productiva. Así también, es importante señalar que el 4% de los colaboradores, coinciden que el manejo de la tecnología es incomprensible, en este rubro se tiene la certeza que este personal es el que tiene una baja preparación y en consecuencia la actual plataforma es elevada para ellos. Sin embargo, nos damos cuenta que los índices más altos son de la mayoría de los colaboradores, quienes tienen un mayor contacto con las tecnologías en un 30%. Por consiguiente es posible determinar que la actual plataforma tecnológica con la que se cuenta es comprensible y manejable para el personal que la opera, por tal motivo, es necesario tomar en cuenta las futuras posibilidades de implementación de nuevas tecnologías y los grados de comprensión y aprendizaje a los que se someterá el personal para su asimilación y operación adecuada que permita efficientar los procesos y que esta, no sea obstáculo para la productividad y el servicio.

Si se llega a brindar la oportunidad de intervenir en los procesos de innovación dentro de la institución, el 36% manifestó no estar ni de acuerdo, ni en desacuerdo con involucrarse en las mejoras tecnológicas y de sustentabilidad en la empresa, lo que nos brinda un panorama que su intervención ha sido media, el 25% ha tenido un mayor involucramiento al estar de acuerdo con este aspecto, así como un 39% de la población señala en no tener interés en participar. Se tiene muy poca iniciativa por parte del personal, creándose hasta cierto punto una limitación para el crecimiento y la innovación tecnológica y sustentable, al no requerir

ellos mayores herramientas que les faciliten su labor, por temor a ser rebasados o a sentirse incapaces de su manejo, o bien a que no se les brinde una adecuada capacitación y sus errores conlleven sanciones administrativas o rescisiones de contrato.

Por otro lado, un 43% de los encuestados coincide en que los productos ofrecidos por la cooperativa mantienen un nivel medio en innovación, llegando incluso a ser conservadores en relación con los de la competencia, mientras que el 20% de los encuestados coincide en que los productos ofrecidos por la cooperativa si son innovadores en relación con otras instituciones del mismo giro. Estos resultados nos permiten determinar las estrategias para ofrecer servicios adicionales que le permitan una diferenciación a la institución para crear un mayor grado de competitividad. Tomando en cuenta los bloques temáticos en los cuales se basó la entrevista a directivos, se tiene que para hacer frente a innovaciones tecnológicas, la percepción que se tiene del equipo de colaboradores con los que cuenta la empresa, poseen la capacidad para asumir los retos que se presenten en la organización, ya que como parte del perfil del colaborador se encuentra la perseverancia y la tenacidad para hacer frente a los obstáculos que se presenten dentro de la organización, además de que tienen especialistas enfocados a sistemas computacionales y la capacidad para contratar asesores expertos en la materia.

CONCLUSIONES

A fin de que la empresa pueda enfrentar adecuadamente los procesos de cambio, es necesario plantear un enfoque sistémico que le permita incluir en los procesos tecnologías para el ahorro en mano de obra para tareas operativas y rutinarias, que consecuentemente disminuirían el uso excesivo de papelería. Por lo tanto, es posible determinar que el cambio tecnológico brinda innovación, dada la disponibilidad de los colaboradores para asumir retos en beneficios de la empresa. Al día de hoy la institución da mayor importancia al aspecto de servicio en cuanto a la calidez humana con la que se brinda el trato a sus clientes, sin embargo, ha dejado de lado la rapidez y el flujo adecuado de información para brindar un servicio integral, posterior a ello, ha fijado su atención al acceso de las TICs en su contexto físico, siendo esta la forma en que la tecnología utilizada actualmente en la organización no va de la mano con la demanda existente de clientes y los requerimientos de información y comunicación, sin considerar tampoco el uso por parte de los colaboradores y la productividad que para ello representa de acuerdo a sus capacidades, lo que da muestra de un equipamiento tecnológico obsoleto, por lo que de continuar con esta tendencia la organización carecerá de capacidad competitiva que le permita alcanzar y sostener un posicionamiento en el entorno económico en el cual se desenvuelve.

El uso adecuado de las tecnologías le brinda la oportunidad de un eficiente trabajo de red, de forma tal que le permita estandarizar procesos y brinde una comunicación más rápida y eficaz. Esto se traduce en una mejora de la empresa al tener costos más bajos gracias al uso compartido de datos y de periféricos, estandarización de programas para poder tener acceso a los datos en tiempo real, una comunicación y organización más eficaz, reducción del uso de papel, los empleados puede obtener la misma información. Además es posible convertir toda clase de documentos a formato electrónico de la web y actualizarlos constantemente por casi nada y disminuir el uso de fuentes de energía al utilizar herramientas amigables con el ambiente que se refleje en los costos de operación. Como reflexión, la tecnología, más que cualquier otro factor, posibilita la nueva organización integrada. Pudiendo alcanzar significativas mejoras en la sinergia de la organización, ya que la información fluye interna y externamente; es decir, el intercambio electrónico de información ocurre en toda la organización. Al estar inmersos en un sector tan dinámico y competitivo como el financiero, la tecnología permite la mejora de sus procesos, el incremento de la eficiencia y adquisición de ventajas competitivas. Es importante que las empresas creen valor para los clientes y se distingan del resto por elementos que las hagan únicas.

BIBLIOGRAFÍA

Lundvall, B. (1988). *Innovation as an interactive process: From user-producer interaction to the national system of innovation*. Londres y N.Y: Pinter Publisher.

Walter, R. (2002). *Microfinanzas solidarias y vínculos sociales: Experiencias de FAFIDESS*. Encuentro de Microfinanzas Solidarias y Vínculos Sociales. París, Francia.

Váldez, P., & Hidalgo, N. (2004). Las microfinanzas y la provisión de servicios financieros en México. *Comercio exterior*, 54 (7), 598-604.

Vázquez, M. L. (Julio de 2016). Las TIC como herramienta para la mejora del servicio a usuarios de microfinanzas. *Revista Observatorio de la Economía Latinoamericana*, 20.

Vázquez, M. L., Acevedo, J. A., Ruíz, A., & García, P. J. (2013). El uso de las Tecnologías de Información y Comunicación (TIC's) en el sector financiero popular para la inclusión de sectores rurales: El caso de cuatro municipios de la Mixteca Oaxaqueña. VII Conferencia ACORN-REDECOM, (págs. 105-118). México.

Velázquez, R. M., Santiago, A. A., & Solana, O. R. (2014). Las microfinanzas en los indicadores de desarrollo local de comunidades indígenas del Estado de Oaxaca. XIX Congreso Internacional de Contaduría, Administración e Informática. XIX, pág. 9. México: UNAM.

Zeller, M., & Meyer, R. (2003). The triangle of microfinance: Financial sustainability, outreach, and impact. International Food Policy Research Institute.

De la Rosa, M. E., & Vargas, J. G. (2007). Capital Social Organizacional base de la sustentabilidad organizacional para el desarrollo ambiental y económico. El caso de las micro y pequeñas empresas en la explotación del tule de la laguna de Zapotlán. COLPARMEX.

Fernández, A. M., & León, M. D. (2006). Teoría evolucionista y sistemas de innovación: Implicaciones institucionales y organizacionales de la innovación tecnológica y el desarrollo económico regional. (I. C. Española, Ed.) *Boletín Económico de ICE* (2876), 25-43.

Galleguillos, L., & Santelices, I. (2002). Cambio Tecnológico y Desarrollo sostenible. Dialnet.

Meyer, R. (2002). Track record of financial institutions in assisting the poor in Asia. ADB Institute (49).

Mejía, R. (2004). Instituciones y programas para los desbancarizados en el Distrito Federal. *Comercio Exterior*, 54 (7), 584-597.

Minzer, R. (2009). La Industria microfinanciera en el Istmo Centroamericano y México: la evolución del mercado microcrediticio, el alcance y el desempeño de sus instituciones microfinancieras. CEPAL (116).

Montoya, O. (2004). Shumpeter, innovación y determinismo tecnológico. *Redalyc*, 15.

Pérez, C. (2000). *Cambio de Paradigma y rol de la tecnología en el desarrollo*. Caracas, Venezuela: Editorial de Innovación Tecnológica.

Picabea, J. F. (2013). Economía sustentable y cambio tecnológico: Los sistemas tecnológicos sociales como herramienta para orientar procesos inclusivos de innovación y desarrollo en América Latina. Conferencia Internacional LALICS 2013. Río de Janeiro, Brazil.

Oliverio, R., & Almorín, R. (2006). Las microfinanzas en México, Tendencias y perspectivas. México: Fundación Un Sol Món Caixa Catalunya.

Reyes, A., Carreón, H., & Álvarez, C. (2006). Impulso del desarrollo sustentable mediante el avance tecnológico y la participación de la sociedad civil. Congreso Iberoamericano de Ciencia, Tecnología, Sociedad e Innovación.

RECONOCIMIENTO

Los autores agradecen el apoyo brindado por el programa PRODEP de la Universidad Autónoma “Benito Juárez”, para posibilitar el trabajo de investigación, así como los comentarios de los árbitros y editores del IBFR, quienes contribuyeron a la mejora de la investigación.

BIOGRAFIA

María de Lourdes Vázquez Arango es Doctora en Ciencias en Desarrollo Regional y Tecnológico por el Instituto Tecnológico de Oaxaca (ITO). Profesor Investigador de Tiempo Completo en la Facultad de Contaduría y Administración de la UABJO. Se puede contactar en Av. Universidad S/N Cinco Señores C.P. 68120 Oaxaca, Oaxaca.

Eric Amín Ramírez Castillo es Doctor en Ciencias de la Administración por la Universidad Autónoma “Benito Juárez” de Oaxaca (UABJO). Profesor Investigador de Tiempo Completo en la Facultad de Contaduría y Administración de la UABJO. Se puede contactar en Av. Universidad S/N Cinco Señores C.P. 68120 Oaxaca, Oaxaca.

Paul Jair García Contreras es Licenciado en Ciencias de la Comunicación por la Universidad Mesoamericana. Profesor y Productor de contenidos tecnológicos, para Universidad Mesoamericana y Corporación Oaxaqueña de Radio y Televisión.

DESIGUALDAD DE EMPRENDIMIENTO ENTRE REGIONES DE MÉXICO

Michelle Taxis Flores, Benemérita Universidad Autónoma de Puebla
Luis Enrique Bueno Cevada, Benemérita Universidad Autónoma de Puebla
Rafael Eduardo Saavedra Leyva, Universidad Autónoma de Baja California

RESUMEN

Con la finalidad de identificar los factores que explican las diferencias en actividad emprendedora en México, se formuló un modelo de emprendimiento considerando las características de las entidades federativas para el periodo 2003-2014. El argumento central es que la heterogeneidad entre las economías estatales, así como las condiciones del mercado laboral, nivel de capital humano y dinámica económica generan desigualdades en la puesta en marcha de nuevas empresas. Con la aplicación de algunos ejercicios econométricos que permite la metodología de panel de datos como la estimación de la función con efectos fijos y aleatorios se analizaron las diferencias interestatales en la generación de nuevas empresas. Los resultados confirman la diferenciación entre las entidades en cuanto a su capacidad para crear nuevas empresas e ilustran la significación del desempleo y la educación como determinantes de tal situación. Se concluye que los estados con notable actividad emprendedora están asociados a economías dinámicas. En consecuencia, persevera una creciente desigualdad entre las entidades de mayor y menor emprendimiento.

PALABRAS CLAVE: Emprendimiento, Nuevas Empresas, Desempleo, Análisis de Economías Regionales, Panel de Datos.

INEQUALITY OF ENTREPRENEURSHIP BETWEEN MEXICO REGIONS

ABSTRACT

In order to identify the factors that explain the differences in entrepreneurial activity in Mexico, an entrepreneurial model was formulated considering the characteristics of the states for the period 2003-2014. The central argument is that heterogeneity in state economies, as well as labor market conditions, the level of human capital and economic dynamics causes inequality in the start-up of new firms. With the application of some econometric exercises that allows the data panel methodology such as the estimation of the function with fixed and random effects, interesting differences in the generation of new companies are analyzed. The results confirm the differentiation between the states in terms of the capacity to create new companies and illustrate the significance of unemployment and education as determinants of this situation. It is concluded that states with notable entrepreneurial activity are associated with dynamic economies. As a result, there is a growing inequality between the states of higher and lower entrepreneurship.

JEL: L26, M13, J64, R10, C23

KEYWORDS: Entrepreneurship, New Firms, Unemployment, Regional Economies Analysis, Panel Data Models.

INTRODUCCIÓN

En las últimas décadas, el tema del emprendimiento ha cobrado interés como línea de investigación, así como directriz de políticas públicas y económicas. Una de las ideas centrales en la comprensión de la creación de empresas es que la inversión destinada a acciones que promueven la actividad emprendedora es una forma de transformación en la sociedad que rinde beneficios a través del mejor desempeño y nivel de bienestar de las regiones. En este sentido, los esfuerzos en torno al fortalecimiento del emprendimiento se han orientado a mejorar la capacidad de las sociedades para emprender. El emprendimiento se ha explicado a partir de las oportunidades que brinda el mercado, bajo esta perspectiva, se espera que el crecimiento económico estimule el origen de nuevos negocios. Efectos como los de aglomeración propician que las nueva empresa prefieran ubicarse en regiones con mayor crecimiento económico, donde existen niveles altos de capital humano y conocimiento (Baptista y Torres, 2011). Así, ante un entorno económico próspero, la creación de empresas se percibe como una consecuencia natural de la disponibilidad de recursos, incremento de la demanda, acceso a créditos y demás condiciones favorables en la economía; sin embargo, signos de una economía en depresión, como el desempleo, pueden incentivar la apertura de empresas.

En la relación entre emprendimiento y desempleo se han desarrollado dos hipótesis del emprendimiento: efecto pull y push. En primer lugar, se concibe la idea de que a menores tasas de desempleo la actividad emprendedora aumente, estableciendo una relación inversa entre las variables conocida como efecto pull (Storey, 1991; Meager, 1992; Marlow y Storey, 1992; Tervo y Niittykangas, 1994; Hinz y Jungbauer-Gans, 1999). En contraste, aumentos en los niveles de desempleo incrementan la apertura de nuevas empresas, efecto push: (Evans y Leighton, 1989; Ritsila y Tervo, 2002; Audretsch et al., 2002; Carree 2002). También han surgido otras teorías para explicar el fenómeno del emprendimiento que incluyen variables como crecimiento económico, capital humano, conocimiento y densidad de la población. Para el caso de México, la falta de un indicador sobre la actividad emprendedora por entidad federativa en serie de tiempo, relacionado a su vez con la escasez de estudios empíricos, representa un espacio de oportunidad para contribuir al entendimiento de la capacidad de las regiones para crear nuevas empresas. Así, el objetivo de este trabajo es aportar evidencia que contribuya a mejorar la comprensión sobre la diferencia regional de la actividad emprendedora en México. La consideración central es que la heterogeneidad entre las economías estatales, así como las condiciones del mercado laboral, nivel de capital humano y dinámica económica generan desigualdades en la puesta en marcha de nuevas empresas.

Se propone la estimación de un indicador de emprendimiento por entidad federativa del año 2003 al 2014. Para el modelo econométrico se consideran como determinantes del emprendimiento el desempleo, la actividad económica y la educación de cada una de las entidades federativas del país. Lo anterior permite la configuración de un panel de datos para el tratamiento del emprendimiento que favorece la identificación de efectos fijos para cada entidad invariantes en el tiempo y efectos temporales invariantes entre las entidades, así como la correspondiente función estimada con efectos aleatorios. El trabajo está estructurado de la forma siguiente: en la primera sección se realiza una revisión de la literatura que analiza el tema del emprendimiento; en la segunda sección se presentan los aspectos metodológicos y empíricos propuesto para alcanzar el objetivo de este trabajo, así mismo se describe el origen de la base de dato utilizada. Los resultados e interpretaciones de los mismos se presentan en la cuarta sección. Para finalizar, se exponen las conclusiones.

REVISIÓN DE LITERATURA

El argumento de que el aumento en la actividad emprendedora está vinculado a bajas tasa de desempleo corresponde al efecto pull. Storey (1991) encuentra que una demanda de bienes y servicios alta corresponde a baja tasas de desempleo y a niveles altos de emprendimiento. En consecuencia, el efecto push es la

expresión de mercados deprimidos donde las personas que aprecian pocas posibilidades de emplearse son más proclives a iniciar un negocio propio. Hinz y Jungbauer-Gans (1999) confirman la hipótesis del efecto pull al encontrar una relación inversa entre emprendimiento y desempleo cuando este último se encuentra en niveles bajos o bien disminuye, ya que tal situación es propicia para el emprendimiento y desarrollo de nuevos negocios. Adicionalmente, evalúan el desempeño de las nuevas empresas que son resultado del desempleo contra las que nacieron fuera de esta relación, los resultados señalan que a diferencia de los emprendedores con empleo, los emprendedores sin empleo enfrentan mayores obstáculos para desarrollar sus empresas. Mediante un razonamiento parecido, Ritsila y Tervo (2001) asocian el surgimiento de nuevas empresas con bajos niveles de desempleo en la economía, dado que ante tal situación los mercados son más dinámicos, existen facilidades de acceso a créditos empresariales e incentivos a la inversión, de tal manera que un incremento en los niveles del desempleo reduce la actividad emprendedora. En el mismo sentido, Meager (1992) analiza las variaciones de la actividad emprendedora a partir de las condiciones de la economía, concluye que la formación de nuevas empresas depende de contextos económicamente favorable.

En esta misma perspectiva, Tervo y Niittykangas (1994) observan que cambios absolutos y proporcionales de la tasa de desempleo se relacionan positivamente con el emprendimiento. Por otro lado, cuando la demanda es alta y las condiciones de mercado son prósperas se presentan incrementos en los emprendimientos. Por otra parte, Spilling (1996) estudia el impacto del desempleo, la población, la economía personal, la estructura política y las economías de aglomeración, en la formación de nuevos negocios de Noruega. Sus resultados muestran una relación inversa con la tasa de desempleo y directa con los factores favorables para la economía. Otros autores han explicado la propagación de empresas como resultado de condiciones desfavorables en la economía y en los mercados laborales (Georgellis et al., 2005). Al respecto, Carree (2002) puntualiza que incluso después de considerar lo atractivo que es comenzar un negocio propio, el emprendimiento puede ser el resultado de la desesperanza que sienten algunos individuos que se encuentran en situaciones de desempleo, sobre todo en el caso de que éste sea prolongado. En un estudio de Audretsch y Keilbach (2004) se introduce el concepto de capital emprendedor, como la capacidad de la sociedad para crear empresas. Se concluye que los determinantes más destacados en el origen del capital emprendedor son el crecimiento económico, la inversión y el desempleo. Bajo este planteamiento el desempleo refleja escasas oportunidades empresariales y menor capacidad de los agentes económicos para emprender. Otra línea de investigación vincula el origen de nuevas empresas con la comercialización de oportunidades y con el desarrollo de sus capacidades y habilidades de los emprendedores. Al respecto, Audretsch y Keilbach (2007) elaboraron un modelo de emprendimiento que incluye variables explicativas como crecimiento económico, conocimiento, desempleo y densidad de población. Encuentran que las regiones de mayor crecimiento económico y de inversiones en conocimiento, así como las de menor desempleo estimulan la actividad emprendedora.

METODOLOGÍA

Se considera un modelo de datos de panel por entidad federativa. El principal objetivo de aplicar esta metodología, es capturar la heterogeneidad no observable, entre entidades federativas, así como también en el tiempo, dado que esta heterogeneidad sería imperceptible tanto en la dimensión estructural como temporal. El modelo en particular se especifica de la forma siguiente:

$$Em_{it} = \beta_{0it} + \beta_1 D_{it} + \beta_2 PIB_{it} + \beta_3 Edu_{it} + \mu_{it} \quad (1)$$

donde,

Em: se refiere al índice de emprendimiento anual para las entidades federativas de México.

D: desempleo, corresponde a la tasa de desocupación total anual según entidad federativa.

PIB: Producto Interno Bruto por entidad federativa, base 2013 (Millones de pesos a precios de 2013)

Edu: educación. Matrícula en Educación superior por entidad federativa.

El término i se refiere a los 32 estados de México, mientras que t al periodo 2003-2014. Se estimaron varias especificaciones, primero sin incluir ningún tipo de efecto y luego asumiendo efectos fijos y aleatorios en sección cruzada y en periodo. En la selección del modelo correcto se aplicó la prueba de Hausman.

Descripción de Datos Utilizados

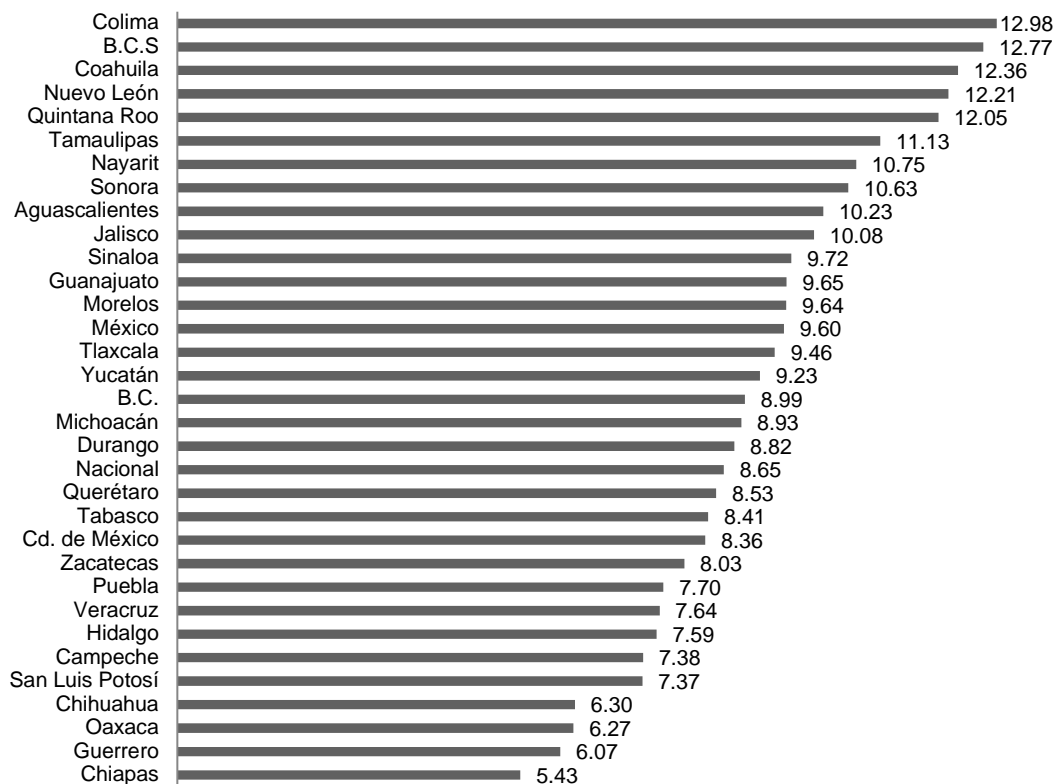
El índice de emprendimiento que se construyó tiene como marco de referencia la Encuesta Nacional de Ocupación y Empleo (ENOE) del año 2003 al 2014. Cabe destacar que por emprendimiento nos referimos al surgimiento de nuevos negocios. Se utilizaron los datos correspondientes al inicio de operación de los trabajadores independientes, quienes se emplean así mismos o a más personas, éstos se ponderan con el total de trabajadores independientes de cada una de las entidades federativas. Con respecto a las variables explicativas, los datos del desempleo en México corresponden a las tasas de desocupación de la ENOE para cada entidad federativa, porcentaje respecto a la Población Económicamente Activa (PEA). La serie del Producto Interno Bruto (PIB) por entidad federativa fue obtenida del Instituto Nacional de Estadística y Geografía (INEGI), expresada en millones de pesos a precios de 2013. Para capturar el efecto de la educación se utilizó la variable proxy correspondiente a la matrícula en educación superior, pública y privada disponible en Estadísticas Educativas del Sistema Nacional de Información Estadística Educativa.

RESULTADOS

De acuerdo con el índice de emprendimiento calculado por entidad federativa para México del año 2003 al 2014, el promedio de la actividad emprendedora en el país es de 8.65, lo que indica que de cada 100 empresas establecidas, en promedio, nueve son de nueva creación. Tomando como referencia el promedio del periodo para cada entidad federativa, de mayor a menor actividad emprendedora, Figura 1, destacan Colima, Baja California Sur, Coahuila, Nuevo León, Quintana Roo, Tamaulipas, Nayarit, Sonora, Aguascalientes, Jalisco, Sinaloa, Guanajuato, Morelos, México, Tlaxcala, Yucatán, Baja California, Michoacán, Durango y Querétaro que se ubican por arriba de la media nacional. Los 16 primeros estados con mayor actividad emprendedora, es decir, de Colima a Yucatán, tienen en promedio un índice mayor a 9. De este grupo, Colima, Baja California Sur, Coahuila, Nuevo León y Quintana Roo presentan el índice de emprendimiento más alto correspondiente a una relación de 12 empresas nuevas por cada 100 establecidas. Otra singularidad de este grupo corresponde a la presencia de las entidades de la frontera norte y los estados de la zona del bajo. Del resto de los estados, Chiapas, Guerrero, Oaxaca, Chihuahua, San Luis Potosí, Campeche, Hidalgo, Veracruz, Puebla, Zacatecas, Ciudad de México, Tabasco se ubican como los menos emprendedores del país.

En el 2003, el estado de Nuevo León presentó la actividad emprendedora más importante del país con un índice de 9.63, seguido de México (9.2), Baja California (8.56), Coahuila (8.32), Durango (8.3) y Quintana Roo (8.02). Por otro lado, San Luis Potosí registraba para ese mismo año la menor generación de nuevas empresas, con un índice de 2.06. Para el 2014, Nuevo León, que en el año 2003 fuera la entidad más emprendedora, descendió sólo una posición, mientras que Colima resultó ser la entidad que generó un mayor número de nuevas empresas. En el extremo, se ubican Chiapas, Veracruz y Guerrero experimentando el menor dinamismo en la creación de nuevas empresas, generando cinco empresas por cada 100 existentes. Si se examina cada estado, se puede resaltar el desempeño sobresaliente de Nuevo León, para el 2003 presentó el índices de emprendimiento más altos, aunque su actividad disminuyó, en años subsecuentes se mantuvo dentro de los estados más emprendedores de México. Otro estado que ha destacado ha sido Baja California Sur, donde el emprendimiento fue el más significativo del país en los años 2007, 2011, 2012 y 2013. El desempeño de Colima, ha venido de menos a más, presentando el índice de emprendimiento más alto en el año 2004, posteriormente se ubica como el estado más emprendedor en 2008, 2010 y 2014. Por el contrario, los estados de Chiapas, Oaxaca y Guerrero, revelan la necesidad más apremiante en la tarea de replantear sus políticas y estrategias para revertir la dinámica que las ha rezagado.

Figura 1: Actividad Emprendedora Por Entidad Federativa, 2003-2014



En esta figura se muestra el comportamiento de la actividad emprendedora de México por entidad federativa. El dato asociado a cada estado corresponde al promedio del índice de emprendimiento registrado en el periodo 2003-2014. De acuerdo con el índice de emprendimiento calculado para México del año 2003 al 2014, el promedio de la actividad emprendedora en el país es de 8.48, lo que indica que de cada 100 empresas establecidas, en promedio, ocho son de nueva creación. Fuente: Elaboración propia.

Análisis Económico

La estimación de la ecuación (1) dio como resultado las relaciones que se ilustran en la Tabla 1. El signo de los coeficientes asociados a las variables desempleo y educación confirman su relación directa e inversa, respectivamente. En el caso de la dependencia emprendimiento y desempleo, las estimaciones econométricas fortalecen el planteamiento de que el emprendimiento aumenta conforme lo hace el desempleo, efecto push. No obstante, es importante considerar que economías con incrementos constantes de desempleo generan una respuesta adversa a la entrada de empresas al mercado. Por su parte, la relación emprendimiento y educación presenta un signo negativo, contrario a lo que se esperaría, incrementos en la variable educación disminuyen la apertura de nuevas empresas. Aunque el resultado puede parecer fuera de contexto, si se considera que la relación entre emprendimiento y desempleo es directa, podemos inferir que los tipo de emprendimientos que se originan son emprendimientos por necesidad, dado que si aumenta el desempleo aumenta el emprendimiento, por lo que las personas con estudios de nivel superior probablemente no consideran la opción de emprender como una fuente de ingreso si tiene posibilidades de un empleo dependiente. Con respecto a la variable PIB, el signo del coeficiente coincide con la idea de que economías más dinámicas provocan la apertura de nuevo negocios. No obstante, hay evidencia de que tal impacto sobre el emprendimiento sea nulo debido a la baja significancia estadística que presenta el coeficiente. Sin embargo, es posible que una doble causalidad incida en esta relación que explique la falta de impacto del coeficiente o bien sea necesario ponderar.

El intercepto de la función es positivo y estadísticamente significativo. En términos relativos, el tamaño del coeficientes es grande, lo que implica que la incorporación de variables dicotómicas al modelo, es decir, la estimación por efectos fijos, tendrá un impacto positivo en la creación de nuevas empresas a partir de efectos con signos positivos por lo que, para contrarrestar la dinámica de emprendimiento que se observa por región, los efectos fijos por sección cruzada, es decir, por entidad federativa, tendrían que tener signo negativo y un tamaño del efecto mayor al valor del coeficiente.

Tabla 1: Comportamiento del Emprendimiento en México

Variable	Coefficiente	Error Estándar	Estadístico T	Probabilidad
Desempleo	0.814527	0.079444	10.25289	0.0000*
PIB	0.000000647	0.000000638	1.013376	0.3115
Educación	-0.0000109	0.00000388	-2.809952	0.0052*
Constante	6.343799	0.334559	18.96167	0.0000*
R-squared	0.219783	F-statistic		35.68125
Adjusted R-squared	0.213623	Prob(F-statistic)		0.000000
Durbin-Watson stat	1.005848			

* significativo al 5%. Los coeficientes asociados a las variables desempleo, educación y el término constante son estadísticamente significativos con un nivel de confianza del 95%. Se trata de un panel (balanceado) con 384 observaciones; Periodos incluidos: 12; Secciones transversales incluidas: 32.

Los resultados del modelo con efectos fijos en sección cruzada y periodo se muestran en la Tabla 2. Bajo este enfoque, se asume que existen efectos vinculados a cada entidad federativa o temporales, que no son recogidos por los determinantes del modelo. Por lo que, existe un término constante diferente para cada entidad federativa, independientes entre sí. Con este modelo se considera que las variables explicativas afectan por igual a las unidades de corte transversal y que éstas se diferencian por características propias de cada una de ellas, medidas por medio del intercepto.

Tabla 2: Comportamiento del Emprendimiento en México (Efectos Fijos en Sección Cruzada y Periodo)

Variable	Coefficiente	Error Estándar	Estadístico T	Probabilidad
Desempleo	0.387393	0.109916	3.524450	0.0005*
PIB	0.000000339	0.00000185	0.182754	0.8551
Educación	-0.0000209	0.00000860	-2.436984	0.0153*
Constante	9.020127	0.818477	11.02062	0.0000*
Especificación de efectos				
Efectos Fijos en Secciones Cruzada (Variables Dummy)				
Efectos Fijos en Periodo (Variables Dummy)				
R-squared	0.766072	F-statistic		24.59757
Adjusted R-squared	0.734928	Prob(F-statistic)		0.00000
Durbin-Watson stat	2.123759			

* significativo al 5%. Los coeficientes asociados a las variables desempleo, educación y el término constante son estadísticamente significativos con un nivel de confianza del 95%. Se especifica que la estimación se realizó con efectos fijos en sección cruzada y periodo. Se trata de un panel (balanceado) con 384 observaciones; Periodos incluidos: 12; Secciones transversales incluidas: 32.

En lo que se refiere a los efectos individuales se identifica una relación entre el tipo de efecto, positivo o negativo, con condiciones de las economías estatales, Tabla 3. Se observa que Baja California Sur, Coahuila, Colima, Ciudad de México, Guanajuato, Jalisco, México, Michoacán, Nayarit, Nuevo León, Puebla, Quintana Roo, Sinaloa, Sonora, Tamaulipas y Yucatán emprenden en mayor proporción. De este grupo, Guanajuato, Michoacán, Nayarit, Puebla, Sinaloa y Yucatán, presentan los valores más bajos, indicando un dinamismo menor en la generación de empresas. En la misma tabla se pueden observar el

resto de las entidades asociadas a un efecto fijo con signo negativo que sugiere que los efectos individuales de cada estado aminoran la actividad emprendedora: Chiapas (-3.39), Chihuahua (-3.08), Guerrero (-2.72), Oaxaca (-2.58), Campeche (-2.49) y Zacatecas (-2.12).

Tabla 3: Efectos Fijos Por Entidad Federativa

Entidad Federativa	Efectos Fijos	Signo	Entidad Federativa	Efectos Fijos	Signo
Aguascalientes	-0.39061	-	Morelos	-0.02353	-
Baja California	-0.35077	-	Nayarit	0.677161	+
Baja California Sur	2.436815	+	Nuevo León	3.432221	+
Campeche	-2.49412	-	Oaxaca	-2.57823	-
Chiapas	-3.38531	-	Puebla	0.006433	+
Chihuahua	-3.07455	-	Querétaro	-1.73084	-
Coahuila	2.307845	+	Quintana Roo	1.929973	+
Colima	2.797244	+	San Luis Potosí	-1.97333	-
Ciudad de México	4.161704	+	Sinaloa	0.664061	+
Durango	-1.63963	-	Sonora	1.042061	+
Guanajuato	0.118879	+	Tabasco	-1.49232	-
Guerrero	-2.72402	-	Tamaulipas	1.544900	+
Hidalgo	-1.90582	-	Tlaxcala	-1.19407	-
Jalisco	2.409857	+	Veracruz	-0.07715	-
México	3.428608	+	Yucatán	0.090563	+
Michoacán	0.109678	+	Zacatecas	-2.12369	-

En esta tabla se muestran los efectos fijos por sección cruzada, en este estudio corresponde a las entidades federativas de México. Como se puede observar, el signo, positivo o negativo, de los efectos individuales específicos, invariables en el tiempo, se vinculan con las condiciones de las economías estatales. Fuente: Los valores de los efectos se tomaron de la ventana de resultados que proporciona el programa Eviews.

Con relación a los efectos fijos por periodo que corresponde a los efectos temporales invariantes entre los estados, prevalecen los signos positivos, Tabla 4. Los años 2003, 2006, 2007 y 2012, son los únicos que presentan signo negativo y corresponden a periodos donde los indicadores asociados al comportamiento del emprendimiento son estables. Lo anterior implica que en esos años la actividad emprendedora disminuyó por un efecto temporal: el impacto fue el mismo para las economías estatales.

Tabla 4: Efectos Fijos Por Periodo, 2003-2014

Año	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Efectos Fijos	-	0.7290	1.1086	-	-	1.0701	0.6115	0.1554	0.1706	-	0.4664	0.1792
	2.854			0.8994	0.6669					0.0702		

En esta tabla se muestran los efectos fijos por periodo, 2003-2014. Como se puede observar, los efectos asociados al periodo, invariantes para cada entidad federativa de México, en su mayoría contribuyen al emprendimiento dado el predominio del signo positivo. Fuente: Los valores de los efectos se tomaron de la ventana de resultados que proporciona el programa Eviews.

Tabla 5: Comportamiento del Emprendimiento en México (Efectos Aleatorios en Sección Transversal y Periodo)

Variable	Coefficiente	Error Estándar	Estadístico T	Probabilidad
Desempleo	0.505406	0.098561	5.127854	0.0000*
PIB	0.00000118	0.0000011	1.011225	0.3126
Educación	-0.0000146	0.00000660	-2.215636	0.0273*
Constante	7.674279	0.648840	11.82769	0.0000*
Especificación de Efectos				
			S.D.	Rho
Cross-section random			1.687272	0.4813
Period random			1.125891	0.2143
Idiosyncratic random			1.341814	0.3044

* significativo al 5%. Los coeficientes asociados a las variables desempleo, educación y el término constante son estadísticamente significativos con un nivel de confianza del 95%. Se especifica que la estimación se realizó con efectos aleatorio en sección cruzada y periodo. Se trata de un panel (balanceado) con 384 observaciones; Periodos incluidos: 12; Secciones transversales incluidas: 32.

Por su parte, el modelo de efectos aleatorios supone que el comportamiento de la variable dependiente, en este caso la actividad emprendedora, se explica a partir de una estimación con datos agrupados e intercepto común, el cual se estima por mínimos cuadrados ordinarios. Para verificar la especificación correcta del modelo se aplicó la prueba de Hausman. La probabilidad del estadístico de prueba χ^2 resultó 0.0819, por lo que, no se rechazar la hipótesis de que los efectos individuales están incorrelacionados con las variables explicativas.

CONCLUSIONES

El trabajo aporta evidencia empírica que contribuye al debate sobre el emprendimiento como resultado de las condiciones del mercado laboral, la dinámica economía y la disponibilidad de capital humano en cada una de las entidades del país. Una contribución del trabajo es la estimación del índice de emprendimiento para México por entidad federativa a lo largo de una serie de tiempo de 12 años. Este índice es una referencia útil en la exploración del proceso emprendedor para México. De acuerdo con los índices de emprendimiento por entidad federativa y los resultados econométricos, se concluye que los estados con destacada actividad emprendedora están asociados a economías dinámicas. En correspondencia con lo anterior, las economías poco dinámicas se caracterizan por una escasa actividad emprendedora lo que da como resultado una creciente desigualdad entre las entidades de mayor y menor emprendimiento. Esta situación manifiesta que las estrategias estatales y locales en materia de emprendimiento han tenido resultados diferentes, siendo más efectivas en algunas entidades. Uno de los resultados que merece la pena reflexionar es el que se refiere al signo positivo del coeficiente asociado a la variable desempleo que implica que en contexto de mercados deprimidos, las personas que aprecian pocas posibilidades de emplearse son más proclives a iniciar un negocio propio. Incluso, con la perspectiva de ingresos bajos, estos serán mayores a los rendimientos por permanecer desempleados o buscando empleo. En consecuencia, la apertura de nuevas empresas configura un panorama emprendedor de escasa innovación, con poco valor en el ámbito económico, no así en el contexto social. Toda vez que el emprendimiento favorece la economía y mejorar los niveles de bienestar de una sociedad, resulta primordial la el análisis de los factores y estrategias que lo determinan. Por lo tanto, es pertinente valorar el impacto de otros factores como las instituciones, la seguridad y las expectativas de los emprendedores, los cuales bajo ciertos contextos impiden o impulsan la creación de nuevas empresas.

BIBLIOGRAFÍA

Audretsch, D., M. Carree, and A. Thurik (2002) "Does Entrepreneurship Reduce Unemployment?" *Tinbergen Institute Discussion Paper*, p. 1-13.

Audretsch, D. B. and M. Keilbach (2004) "Entrepreneurship capital and economic performance," *Regional Studies*, vol. 38(8), p. 949-959.

Audretsch, D. B. and M. Keilbach (2007) "The theory of knowledge spillover entrepreneurship," *Journal of Management Studies*, vol. 44(7), p. 1242-1254.

Baptista, R. and M. Torres (2011) "New Firm Formation and Employment Growth: Regional and Business Dynamics," *Small Business Economics*, Edition 36, p. 419-442.

Carree, M. (2002) "Does Unemployment Affect the Number of Establishments? A Regional Analysis for US states," *Regional Studies*, vol. 36, p. 389-398.

Evans, D. and L. Leighton (1989) "Some Empirical Aspects of Entrepreneurship," *American Economic Review*, vol. 79, p. 519-535.

Georgellis, Y., J. Sessions and N. Tsitsianis (2005) “Windfalls, Wealth, and the Transition to Self-employment,” *Small Business Economics*, vol. 25, p. 407-428.

Hinz, T. and M. Jungbauer-Gans (1999) “Starting a Business after unemployment: Characteristics and Chances of Success (Empirical Evidence from a Regional German Labour Market),” *Entrepreneurship and Development: An International Journal*, vol. 11, p. 317-333.

Marlow, S. and D. Storey (1992) “New Firm Foundation and Unemployment: A Note on Research Method,” *International Small Business Journal*, vol. 10, p. 62-67.

Meager, N. (1992) “Does Unemployment Lead to Self-employment,” *Small Business Economics*, vol. 4, p. 87-103.

Ritsila, J. and H. Tervo (2002) “Effects of Unemployment on New Firm Formation: Micro-Level Panel Data Evidence from Finland,” *Small Business Economics*, vol. 19, p. 31-40.

Spilling, O. (1996) “Regional Variation of New Firm Formation: The Norwegian Case,” *Entrepreneurship and Regional Development*, vol. 8, p. 217-244.

Storey, D. (1991) “The Birth of New Firms – Does Unemployment Matter? A Review of the Evidence,” *Small Business Economics*, vol. 3, p. 167-178.

Tervo, H. and H. Niittykangas (1994) “The Impact of Unemployment on New Firm Formation in Finland,” *International Small Business Journal*, vol. 13, p. 38-53.

BIOGRAFÍA

Michelle Taxis Flores es Doctora en Economía por la Universidad Autónoma de Baja California (UABC). Profesora investigadora de tiempo completo en la Benemérita Universidad Autónoma de Puebla (BUAP), adscrita a la academia de matemáticas. Se puede contactar en la Facultad de Economía de la BUAP, Calle de la Academia, entre Avenida Universidad y Avenida San Claudio, Ciudad Universitaria, Puebla, Puebla, México; C. P. 72570.

Luis Enrique Bueno Cevada es Doctor en Estudios Urbanos del programa conjunto del Institut National de la Recherche Scientifique y la Universidad de Quebec en Montreal, Canadá. Profesor investigador de tiempo completo en la Benemérita Universidad Autónoma de Puebla (BUAP), adscrito a la academia de matemáticas. Se puede contactar en la Facultad de Economía de la BUAP, Calle de la Academia, entre Avenida Universidad y Avenida San Claudio, Ciudad Universitaria, Puebla, Puebla, México; C. P. 72570.

Rafael Eduardo Saavedra Leyva es Doctor en Economía por la Universidad Autónoma de Baja California (UABC). Profesor de asignatura en la UABC, adscrito a la academia de métodos cuantitativos. Se puede contactar en la Facultad de Economía y Relaciones Internacionales de la UABC, Calzada Universidad No. 14418, Parque Industrial Internacional, Tijuana, Baja California.

IMPACTO DE LA APLICACIÓN DE LA UNIDAD DE MEDIDA Y DE ACTUALIZACIÓN EN LA TRIBUTACIÓN DE PERSONAS FÍSICAS EN MÉXICO

Gloria Alicia Nieves Bernal, Instituto Tecnológico de Mexicali

RESUMEN

A partir de 2016 las autoridades fiscales han implementado la aplicación de la Unidad de Medida y Actualización (UMA) que se debe utilizar como índice, base, medida o referencia para determinar la cuantía del pago de las obligaciones y supuestos previstos en las leyes federales mexicanas y en las disposiciones jurídicas que emanen de dichas leyes, partiendo de un valor inicial equivalente al salario mínimo general vigente diario para todo el país, con su respectiva actualización anual de acuerdo al comportamiento de la inflación; de este modo, la conversión inicial de los montos se mantendrán constante en el tiempo su poder adquisitivo, sin generar distorsiones como las que podría ocasionar la vinculación al salario mínimo, no obstante que la intención de los legisladores fue la de dar certidumbre en la desindexación del salario, esta medida ha provocado que al momento de cuantificar el monto de las exenciones previstas en las disposiciones fiscales sean en cantidad inferior determinándose con esto una base superior que conlleva a un incremento en la tributación de las personas físicas mostrando su impacto en el presente artículo.

JEL: E62 y H30

PALABRAS CLAVE: Unidad de Medida y Actualización, Salario Mínimo General y tributación

IMPACT OF THE APPLICATION OF THE UNIT OF MEASUREMENT AND UPDATING IN THE TAXATION OF INDIVIDUALS IN MEXICO

ABSTRACT

As of 2016, the tax authorities have implemented the application of the Measurement and Update Unit (UMA) that should be used as an index, base, measure or reference to determine the amount of payment of obligations and assumptions provided in Mexican federal laws. and in the legal dispositions that emanate from said laws, starting from an initial value equivalent to the general minimum daily wage for the whole country, with its respective annual update according to the behavior of inflation; in this way, the initial conversion of the amounts will remain constant over time its purchasing power, without generating distortions such as those that could cause the minimum wage, although the intention of the legislators was to give certainty in the deindexation of the salary, this measure has caused that at the moment of quantifying the amount of the exemptions foreseen in the fiscal dispositions they are in smaller quantity determining with this a superior base that entails to an increase in the taxation of the physical persons showing its impact in this paper..

JEL: E62 and H30

KEY WORDS: Unit of Measurement and Update, General Minimum Wage and taxation.

INTRODUCCIÓN

Una de las obligaciones que tenemos como ciudadanos mexicanos es la de contribuir al gasto público en forma proporcional y equitativa que dispongan las leyes así lo señala la fracción IV de Constitución Política de los Estados Unidos Mexicanos, en cuanto a esta contribución se establece en la Ley del Impuesto sobre la Renta, el sujeto, objeto, base y tasa o tarifa para su pago, dentro de esta legislación enfáticamente el referente a la tributación de las personas físicas se encuentran plasmadas ciertas exenciones que se referencias con el número de veces del salario mínimo general. A partir del 2016 se decretó la utilización de una unidad que se debe utilizar como índice, base, medida o referencia para determinar la cuantía del pago de las obligaciones y supuestos previstos en las leyes federales mexicanas y en las disposiciones jurídicas que emanen de dichas leyes, partiendo de un valor inicial equivalente al salario mínimo general vigente diario para todo el país.

REVISIÓN LITERARIA

Concepto de salario. También se le denomina sueldo, desde el punto de vista propio del saber económico, el salario es un rédito o ingreso: el que corresponde al trabajador subordinado por la prestación de su trabajo; de modo semejante a como el “beneficio” es el rédito o ingreso peculiar del titular de una empresa. El salario mínimo, a su vez, puede ser un mínimo absoluto, que se suele llamar “vital” y por principio es aplicable a cualquier trabajador; o puede ser un mínimo profesional, aplicable, ya no a cualquier trabajador sin más, sino a determinada categoría o sector de trabajadores (Buen Lozano, Nestor de, 1997). Los salarios reales en México, mínimos y generales, de los últimos años no cumplen con los derechos laborales establecidos en la Carga Magna, y en las leyes secundarias que de ella emanan. Además, a diferencia de lo que sostiene la tecnocracia que gobierna este país, en los últimos años la pérdida del poder adquisitivo del salario, en lugar de beneficiar, ha impactado severamente la economía mexicana, generando bajos niveles de consumo y ahorro de las familias mexicanas, un débil mercado interno y, más importante aún, bajo crecimiento de la economía. Además, como hemos visto, también va acompañado de una persistencia de la desigualdad social y aumento en el número de pobres de este país. (Reyes H., 2011) Una objeción central que se escucha con frecuencia en el debate mexicano: el alza del salario mínimo, dicen, será inflacionaria un aumento sostenido, significativo, continuo debe ser monitoreado y estar acompañado de medidas prudenciales (Mancera, 2015) La Comisión de Salarios Mínimos. En 1963 se creó una comisión nacional y 111 regionales de los salarios mínimos resultado de las reformas a la fracción 6 del artículo 123 constitucional y las correspondientes de la Ley Federal del Trabajo.

METODOLOGÍA

Esta investigación es de tipo descriptiva, transversal ya que se efectúa un análisis de las Leyes del Impuesto sobre la Renta y de la Unidad de Medida y Actualización y su comparación con respecto a las disposiciones que señalan exenciones cuantificadas en base al salario mínimo general y su aplicación con la nueva medida de cuantificación.

RESULTADOS

Ley del Impuesto sobre la Renta (LISR). En esta normativa se señalan diversas exenciones generales para personas físicas que son que no exceden la cantidad equivalente a cinco veces el salario mínimo general que en esta ocasión se determina en 400.20 cuantificando en UMA (Diputados, 2017) se determina una cantidad de \$377.45 resultando un 6% menos de exención para el trabajador. Con lo que respecta a las exenciones de prima vacacional, participación de los trabajadores en las utilidades y las gratificaciones anuales que señala la LISR que son 15 días de salario mínimo general para cada concepto y 30 días del mismo salario para gratificaciones, en total serían 60 días de exención 4,802.4 con la nueva cuantificación resulta \$4,529.40.

Tabla 1: Comparativo del Salario Mínimo General y la UMA

Concepto	Días de Exención	SMG \$80.04	UMA \$75.49	Diferencia
Prima vacacional	15 días de salario mínimo general	1,200.60	1,132.35	68.25
Participación en las Utilidades de las Empresas	15 días de salario mínimo general	1,200.60	1,132.35	68.25
Gratificación anual	30 días de salario mínimo general	2,401.20	2,264.70	136.50
Tiempo extraordinario	hasta 5 veces el salario mínimo general	400.20	377.45	22.75
Previsión Social	hasta 5 veces el salario mínimo general anualizado	146,073.00	137,769.25	8,303.75
Indemnización	90 veces el salario mínimo general por año laborado	7,203.60	6,794.10	409.50
Agricultura, Ganadería y Pesca	20 veces el salario mínimo general anualizado	584,292.00	551,077.00	33,215.00

Fuente: propia

Para efectos de los cálculos a personas físicas asalariados, se determina que para un trabajador que perciba \$200.00 pesos diarios el cálculo anual en base a la exención del Salario Mínimo General es de \$6,195.30 y aplicando la UMA resulta \$6,225.00 con un diferencial superior de \$29.70 equivalente a un 5% adicional de ISR por la cuantificación de la nueva medida. En cuanto a las actividades primarias; Al disminuir la exención resultaría una base para pago de impuesto de \$33,215.00 con un respectivo Impuesto Sobre la Renta (ISR) de 1,860.00 Al ejemplificar la percepción de un trabajador que genera un salario diario de \$200.00 con las prestaciones de acuerdo a la Ley Federal de Trabajo Mexicana que es el monto mínimo que debe de pagarse a los trabajadores por concepto de aguinaldos es el equivalente a 15 días de salario, en cuanto a la prima vacacional el 25% sobre el monto a que se tiene derecho partiendo del primer año que son seis días de vacaciones aumentando de dos en dos hasta que acumulen el noveno año que se aumentará dos años por cada cinco más de antigüedad. Por consiguiente la base gravable para este trabajador considerando la exención con salario mínimo, resulta 80,197.60 con un ISR de \$6,195.30 y considerando con UMA \$80,470.60. Por consiguiente al momento de calcular el ISR a las personas físicas tratándose de sueldos y salarios resulta una tributación superior al 5% y en cuanto a las actividades primarias (agricultura, ganadería y pesca) al disminuir la exención el impuesto determinado es mayor en un 6%.

CONCLUSIONES

No obstante que en la exposición de motivos por parte del legislador al implementar la nueva medida de actualización la que se deberá de ajustar conforme al crecimiento del Índice Nacional de Precios al Consumidor, es decir a la inflación. De este modo, la conversión inicial de los monos será de uno a uno, y éstos mantendrán constante en el tiempo su poder adquisitivo, sin generar distorsiones como las que podía ocasionar la vinculación al salario mínimo, así la UMA da certidumbre a la actualización de los supuestos y montos indexados a ésta. Del análisis anterior se detecta que al utilizar UMA la base del Impuesto sobre la Renta Aumenta ocasionando un impuesto adicional al 5% para asalariados y en cuanto a las actividades primarias sí aumenta una cantidad superior al disminuir la base gravable.

BIBLIOGRAFÍA

Buen Lozano, Nestor de. (1997). Instituciones de Derecho del Trabajo y de la Seguridad Social. México: Instituto de Investigaciones Jurídicas de la UNAM.

Diputados, C. d. (15 de noviembre de 2017). diputados.gob.mx/LeyesBiblio/iniclave/CD-LXIII-I-2P-058/02_iniciativa_27abr16.pdf. Obtenido de diputados.gob.mx/LeyesBiblio/iniclave/CD-LXIII-I-2P-058/02_iniciativa_27abr16.pdf: http://www.diputados.gob.mx/LeyesBiblio/iniclave/CD-LXIII-I-2P-058/02_iniciativa_27abr16.pdf

Mancera, M. Á. (2015). Del Salario Mínimo al Salario Digno. Ciudad de México: Consejo Económico y Social de la Ciudad de México.

Reyes H., M. S. (2011). Análisis Político. Los salarios en México. México: Friedrich Ebert Stiftung.

https://www.gob.mx/cms/uploads/attachment/file/273917/Tabla_de_salarios_minimos_vigentes_a_partir_de_01_dic_2017.pdf

<https://www.gob.mx/conasami/documentos/tabla-de-salarios-minimos-generales-y-profesionales-por-areas-geograficas>

http://www.sat.gob.mx/informacion_fiscal/tablas_indicadores/Paginas/valor_UMA.aspx

http://www.diputados.gob.mx/LeyesBiblio/iniclave/CD-LXIII-I-2P-058/02_iniciativa_27abr16.pdf

BIOGRAFÍA

Gloria Alicia Nieves Bernal, es profesor de Tiempo Completo en el Instituto Tecnológico de Mexicali, adscrita al Departamento de Ciencias Económico Administrativas, imparte las cátedras de Impuestos Personas Morales, Impuestos Personas Físicas, Auditoría para efectos Fiscales, Taller de Investigación I y Taller de Investigación II. C

INCIDENCIA DE LA CADENA DE VALOR EN LA IMAGEN DE MARCA

Erick Paul Murillo Delgado, Universidad Católica Santiago de Guayaquil
Yanina Bajaña Villagómez, Universidad Católica Santiago de Guayaquil
Mónica Andrea Marín Aroca, Universidad Católica Santiago de Guayaquil
María Paula Marzo Icaza, Universidad Católica Santiago de Guayaquil

RESUMEN

Cada vez es más importante la diferenciación de la oferta de servicios en el mercado, la educación universitaria es un servicio intangible, y ese intangible está dado por la percepción de valor por parte de los clientes de la educación recibida. El propósito de este estudio es identificar la relación de la cadena de valor en la percepción de marca de los estudiantes de la Facultad de Ciencias Económicas y Administrativas de la Universidad Católica Santiago de Guayaquil, este estudio es un diseño no experimental, de carácter descriptivo, de corte transversal y se procedió a realizar una regresión lineal utilizando el paquete informático Spss.

PALABRAS CLAVES: Cadena de Valor, Imagen de Marca, Diferenciación

INCIDENCE OF THE VALUE CHAIN IN THE BRAND IMAGE

ABSTRACT

It is increasingly important to differentiate the supply of services in the market, university education is an intangible service, and this intangible is given by the perception of value by customers of the education received. The purpose of this study is to identify the relationship of the value chain in the perception of the students of the Faculty of Economic and Administrative Sciences of the Santiago de Guayaquil Catholic University, this study is a non-experimental, descriptive design, of cross section and proceeded to perform a linear regression using the Spss software package.

JEL: M, M1, M19, I, I2, I23

KEYWORDS: Value Chain, Brand Image, Differentiation

INTRODUCCION

Los gustos y preferencias de los clientes cambian dramáticamente debido a su nueva capacidad de tener acceso a la información. Entender cuáles son las necesidades de nuestros clientes se ha vuelto parte primordial de las estrategias de las organizaciones en la actualidad, este estudio refleja una herramienta para comprender la percepción de valor que estamos entregando al cliente y de esta manera poder realizar las mejoras en los servicios ofertados, esta mejora debe de ser adoptada rápidamente para mantener los factores diferenciadores de nuestra organización.

REVISION DE LA LITERATURA

La mayoría de los productos hoy en día están diseñados y producidos por las cadenas de valor de las empresas. Una cadena de valor en su conjunto se distribuye entre sus miembros a través de la negociación. Para el conjunto de productos, suelen haber varias negociaciones individuales, estructurado de acuerdo a la

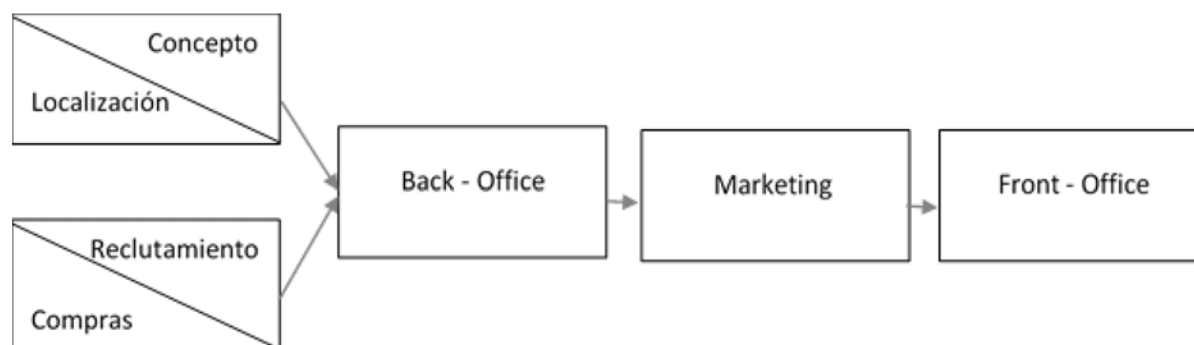
organización jerárquica de la industria respectiva (Hoffmann, A., & Henkel, J. 2015). Se introduce el concepto de "negociación de estructura" para describir la secuencia y los participantes de estas negociaciones individuales. El uso de cooperativa la teoría de juegos, en particular el valor de Shapley y las extensiones de la misma, nos muestran cómo la estructura de la negociación afecta a la distribución del valor entre las empresas que constituyen la cadena de valor. (Hoffmann, A., & Henkel, J. 2015). Una cuestión clave en el intercambio económico es la división del valor entre los actores. Cada actor económico racional pretende apropiarse de una mayor proporción del valor creados en el intercambio: los empleados buscan salarios más altos de sus empleadores, proveedores buscan precios más altos, y los socios de la alianza de mayores dividendos (Obloj, T., & Sengul, M. 2012).

Los mecanismos de aprendizaje individual y organizacional que conduce a la evolución de la división del valor entre los agentes económicos en virtud un acuerdo contractual dado. Centrándose en la división de valor entre una empresa y sus empleados, que la teoría de que después de un cambio en la organización y en la estructura de incentivos, los empleados a aprender, con el tiempo y con la experiencia, cómo ser más productivo en los objetivos implícitos del incentivo régimen, así como la forma de juego o explotarlo (Obloj, T., & Sengul, M. 2012). Se considera importante también hacer referencia a una cadena de valor enfocado a los servicios dado que en el apartado anterior se mencionó a una cadena de valor enfocada a la elaboración y transformación de productos. En lo que concierne a la cadena de valor de servicios es necesario abordar también lo que respecta al marketing de servicios con el objeto de profundizar más del tema. "Cuando aplicamos las metodologías anteriores a una empresa enmarcada en el sector servicios, puede resultar complicado e impreciso. Para solventarlo, se presenta el siguiente esquema" (Andaluza, 2015, pág. 10). Las actividades de servicios se dividen, principalmente, en dos:

Front-office: aquellas que se hacen en unión con el cliente

Back-office: son las que mejor se pueden industrializar, porque tienen un carácter repetitivo y no tienen que hacerse para un cliente en su globalidad

Figura 1: Cadena de Valor Para Servicios



Según Kotter (2004), autor de reconocido prestigio, el valor recibido por el cliente es la diferencia entre los valores positivos y negativos que proporciona un producto y para demostrarlo lo hace basándose en aquellos factores que determinan el valor añadido para el cliente. Entre los valores positivos están: el valor que proporciona el producto, el valor de los servicios, el valor del personal que ha intervenido en la producción y en la realización de los servicios y el valor de la imagen de la empresa o marca del producto. Los valores negativos son el precio, ya que toda adquisición de un producto o servicio representa el desembolso de determinada suma de dinero, el tiempo empleado, la energía y los llamados "costos psíquicos". (Porter, Competitive Advantage., 1985) Señala en su concepto de la cadena de valor que "Las empresas pueden ganar aliándose con un

socio que puede prestar un servicio más eficaz desde una parte diferente de la cadena de valor”. Se interpreta por lo tanto que la debilidad en una de las actividades de la cadena de valor de una empresa puede compensarse aliándose con un socio que realice de mejor forma esta actividad. La administración de la cadena de valor es importante ya que la demanda del mercado se amplifica a lo largo de la cadena ocasionando en algunos casos que requieran recursos de más, para satisfacer una demanda mayor y que en otros momentos se tenga una demanda menor, ocasionando el tener recursos ociosos. Teniendo esto un fuerte impacto en la rentabilidad de las empresas, tanto en sus activos como en los costos (Gonzalez, 2013). La identidad de marca es la expresión externa de una marca, la tangible y comprende desde su nombre hasta su apariencia visual, pasando por su sonido, olor, tacto y sabor. Es un elemento fundamental para que la marca sea reconocida por el consumidor ya que simboliza sus características distintivas. La identidad formal de la marca, es decir, la definición y creación de sus elementos formales y tangibles, es uno de los aspectos cruciales del branding. Su existencia es consustancial al concepto de marca, no puede haber marca sin la materialización de sus elementos formales. Independientemente del tamaño de la compañía o de los recursos que dicha compañía pueda dedicar al branding, siempre tendrá que definir y crear la identidad formal de sus marcas (Sancho, 2011, pág. 35). Los consumidores reaccionan de distinta manera ante la actividad comercial en presencia de marcas conocidas que de marcas desconocidas. Se da un verdadero valor de marca para un consumidor cuando existe un reconocimiento relevante de la marca con asociaciones favorables en determinado contexto de elección de compra. (Martínez, 2008, pág. 71).

METODOLOGIA

El estudio fue de carácter cuantitativo, de corte transversal, para el cálculo de la muestra se utilizó la fórmula para población finita.

$$n = \frac{Z^2 PQN}{Z^2 PQ + Ne^2}$$

$$n = \frac{3.8416(0.5)(0.5)(1195)}{3.8416(0.5)(0.5) + 1195(0.0025)} =$$

$$n = \frac{3.8416(0.5)(0.5)(1195)}{0.9604 + 2.9875} = \frac{1147.678}{3.9479} = 290 \text{ estudiantes}$$

Por lo tanto, la muestra para la realización de encuestas será de 290 comerciantes informales, se tomó un margen adicional de 20% por cualquier inconveniente por encuestas invalidadas por no contestar todas las preguntas. En total se tomaron 346 encuestas, lo que significó que se trabajó con un error máximo de 4.4%. Se realizó un muestreo estratificado por la composición de los alumnos por cada ciclo y carrera. En la carrera de Administración se tomaron 117 encuestas, en la carrera de Contaduría Pública Autorizada se tomaron 83 encuestas, en la carrera de Gestión empresarial se tomaron 84 encuestas y en la carrera de Economía se tomaron 62 encuestas. Todas estas encuestas se distribuyeron de acuerdo a la cantidad de estudiantes en cada ciclo de la carrera.

HIPOTESIS

Hipótesis Nula = H0

Hipótesis Alternativa = H1

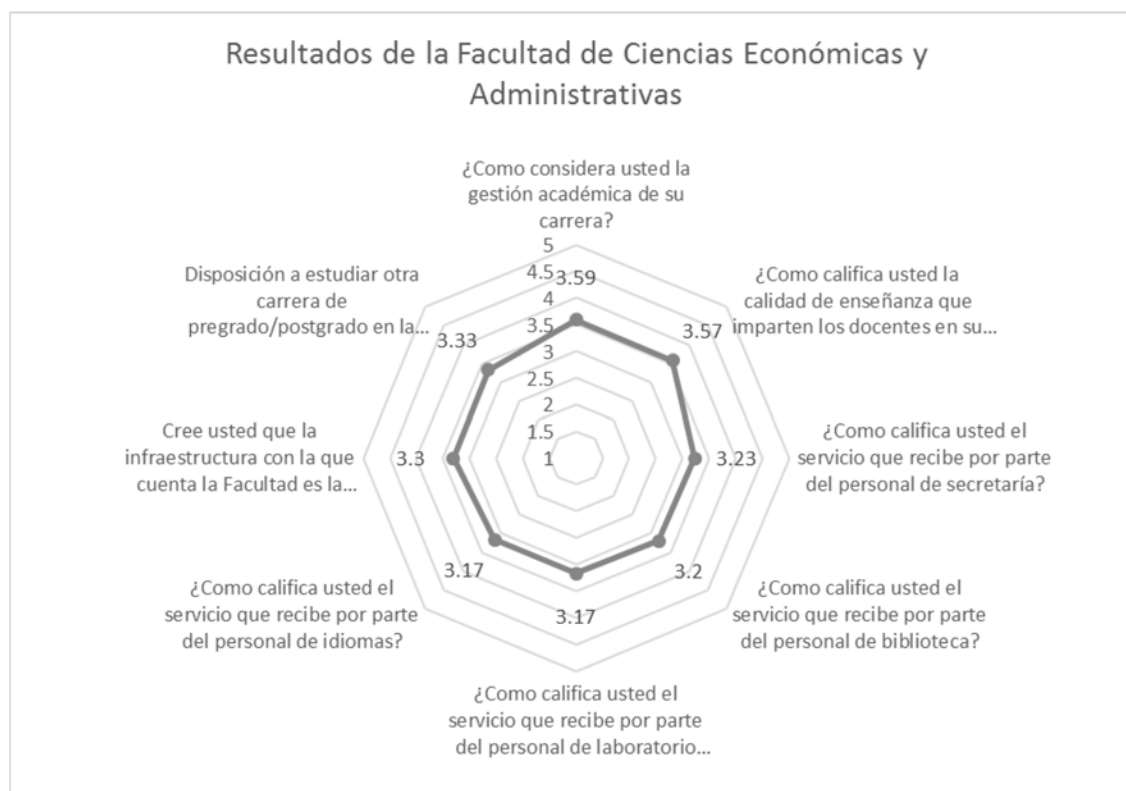
H0 = No existe incidencia de la cadena de valor en la imagen de marca de la FCEA

H1 = Si existe incidencia de la cadena de valor en la imagen de marca de la FCEA

RESULTADOS

Los resultados de la evaluación de los estudiantes de la Facultad de Ciencias Económicas y Administrativas en su puntuación más baja es la percepción de los servicios de apoyo en las áreas de los laboratorios de cómputo y en el área de Idiomas, con una puntuación de 3.17/5 que representa el 63.46% de aprobación a esa gestión, la puntuación más alta es la gestión académica en las carreras con una puntuación de 3.59/5 que representa el 71.8% de aprobación, la percepción de la calidad de enseñanza tiene una puntuación 3.57/5 que representa el 71.4% de aprobación.

Figura 2: Resultados de la Facultad de Ciencias Económicas y Administrativas



Se procedió a realizar una regresión lineal en Spss donde la variable dependiente es la decisión de recompra de nuestros estudiantes y las variables independientes son las preguntas asociadas a las actividades primarias y secundarias, como son las siguientes:

- ¿Cómo considera usted la gestión académica de su carrera?
- ¿Cómo califica usted la calidad de enseñanza que imparten los docentes en su carrera?
- ¿Cómo califica usted el servicio que recibe por parte del personal de secretaría?
- ¿Cómo califica usted el servicio que recibe por parte del personal de biblioteca?
- ¿Cómo califica usted el servicio que recibe por parte del personal de laboratorio de computo?
- ¿Cómo califica usted el servicio que recibe por parte del personal de idiomas?

Cree usted que la infraestructura con la que cuenta la Facultad es la adecuada
Disposición a estudiar otra carrera de pregrado/postgrado en la UCSG

Tabla 1; Anova Modelo Fcea

		Suma de			
Modelo		Cuadrados	Gl	Media Cuadrática	F
1	Regresión	422,655	7	60,379	245,615
	Residuo	83,090	338	,246	
	Total	505,746	345		

Esta tabla Anova nos informa si existe o no relación significativa entre las variables. El estadístico F permite contrastar la hipótesis nula de que el valor poblacional de R es cero, lo cual, en el modelo de regresión simple, equivale a contrastar la hipótesis de que la pendiente de la recta de regresión vale cero. El nivel crítico (Sig) es 0.000. Como $p = 0.000 < 0.05$ rechazamos la hipótesis nula y aceptamos la hipótesis alternativa, por lo que se concluye que las variables están linealmente relacionadas.

Hipótesis Nula = H0

Hipótesis Alternativa = H1

H0 = No existe incidencia de la cadena de valor en la imagen de marca de la FCEA

H1 = Si existe incidencia de la cadena de valor en la imagen de marca de la FCEA

CONCLUSIONES

La construcción del marco teórico es indispensable para encontrar las herramientas necesarias para llevar a buen término la investigación, nuevos autores sugieren una mayor cantidad de constructos para medir la imagen de marca en organizaciones de servicio, por lo tanto, nuevas líneas de investigación pueden generarse a partir de este estudio. La incorporación de nuevas tecnologías permitirá aumentar la eficiencia y la eficacia de los procesos internos, un programa de capacitación es indispensable para el personal docente y para el personal administrativo y de servicio. Es indispensable crear un ambiente diseñado en cambiar los paradigmas de servicio al cliente y crear una expectativa para los clientes. Una mejora sustancial es requerida para entender mejor las necesidades de nuestros clientes, una mejora de procesos es indispensable para automatizar los procesos que sean repetitivos en las áreas de soporte. Un canal de recomendaciones y quejas es importante como medio para poder entender estos requerimientos de nuestros clientes. En las conclusiones se encontró que existe un alto grado de correlación entre la variable dependiente y las variables independientes, las hipótesis nulas fueron rechazadas y se aceptaron las hipótesis alternativas, por lo tanto, la cadena de valor tiene incidencia en la imagen de marca, una mejoría de los ratios en la cadena de valor permitirá una mejor imagen de marca, y la construcción de ese intangible determinará que la FCEA mejore su ventaja competitiva

REFERENCIAS BIBLIOGRAFICAS

Hoffmann, A., & Henkel, J. (2015, January). Value Capture In Hierarchically Organized Value Chains.

In *Academy of Management Proceedings* (Vol. 2015, No. 1, p. 14194). Academy of Management.

Obloj, T., & Sengul, M. (2012). Incentive life-cycles: Learning and the division of value in firms. *Administrative Science Quarterly*, 57(2), 305-347.

Andaluza. (2015). www.andaluciaemprende.es. Obtenido de Cadena de Valor:
<https://www.andaluciaemprende.es/wp-content/uploads/2015/02/CADENA-DE-VALOR.pdf>

Gonzalez, O. L. (2013). Estrategias de la cadena de valor. Obtenido de
http://catarina.udlap.mx/u_dl_a/tales/documentos/lcp/zamacona_s_r/capitulo3.pdf

Kotter, P. (2004). Fundamentos de Mercadotecnia. Mexico: Prentice-Hall.

Porter, M. (1985). Competitive Advantage. New York: Free Press.

Sancho, E. L. (2011). Branding & Pime. Obtenido de
<http://www.pqs.pe/sites/default/files/2016/03/aprende-mas/branding-amp-pyme-un-modelo-de-creacion-de-marca-para-pymes-y-emprendedores.pdf>

Martínez, J. V. (2008). Perfil de valor de marca y la medición de sus componentes. Red de Revistas Científicas de América Latina y el Caribe, España y Portugal, 69-89.

LA PERCEPCIÓN DE LA CALIDAD DEL SERVICIO DE LOS CLIENTES EN RESTAURANTES DE COMIDA CHINA

Marcela Reyes Pazos, Universidad Autónoma de Baja California
Cruz Elda Macías Terán, Universidad Autónoma de Baja California

RESUMEN

El objetivo general de esta investigación es analizar la percepción de la calidad del servicio de los clientes en restaurantes de comida china en la ciudad de Mexicali, Baja California, México; durante el mes de enero del año 2016. La variable a considerar en este estudio es la calidad del servicio. Se presentan diferentes teorías y autores sobre la calidad del servicio. Así mismo, se toma como fundamento el MODELO SERVQUAL de Parasuraman, Zeithaml, y Berry (1988) adaptado al sector restaurantero. El instrumento de investigación que se aplicó tiene un coeficiente Alpha de Cronbach con valor de 0.927. Es un estudio de caso, descriptivo, con apoyo del paradigma epistemológico cuantitativo, e hipotético deductivo. Se espera que los resultados contribuyan al conocimiento de la disciplina de la administración, así mismo que estos sirvan de manera práctica a las empresas restauranteras, clientes, asociaciones, gobierno y a la sociedad.

PALABRAS CLAVE: Calidad del Servicio, Administración, Clientes y Restaurantes

THE PERCEPTION OF THE QUALITY OF SERVICE OF CUSTOMERS IN CHINESE FOOD RESTAURANTS

ABSTRACT

The general objective of this research is to analyze the perception of the quality of service of customers in Chinese restaurants in the city of Mexicali, Baja California, Mexico; during the month of January of the year 2016. The variable to be considered in this study is the quality of the service. Presents various theories and authors about the quality of the service. Likewise, it is taken as a basis the SERVQUAL MODEL of Parasuraman, Zeithaml and Berry (1988) adapted to the restaurant sector. The research instrument that was applied has a Cronbach's Alpha coefficient value of 0.927. It is a case study, descriptive, with support of the quantitative epistemological paradigm, and hypothetical deductive. It is expected that the results contribute to the knowledge of the discipline of management, also that these serve as a practical way to restaurant companies, customers, associations, Government and society.

JEL: M3, L83, Z32

KEYWORDS: Quality of Service, Administration, Customers and Restaurants

INTRODUCCIÓN

En el presente estudio se aborda el problema de la percepción de la calidad del servicio de los clientes de restaurantes de comida china a, b y c, en la ciudad de Mexicali, Baja California durante el periodo 2016. La investigación destaca importancia para los empresarios restauranteros, clientes, asociaciones, gobierno, y sociedad. Se elaboró un instrumento que está conformado por varias dimensiones como percepción de los platillos, elementos tangibles, empatía, capacidad de respuesta, y confiabilidad. El instrumento tiene 26 ítems, los cuales están distribuidos en las diferentes dimensiones. La escala de medición es Escala Likert

de 5 valores. Este instrumento se ha elaborado partiendo del instrumento SERVQUAL de Parasuraman, Zeithaml, y Berry (1988) así mismo se ha realizado una adaptación de algunos indicadores de encuestas de servicio de restaurantes de diferentes tipos de comidas en Mexicali, B.C, y del instrumento DINESERV citado por Carrete (2011). En este trabajo se exhibe la operacionalización de las variables, y el instrumento. Se hizo la aplicación de cuestionarios a 250 consumidores de comida china, y a través del análisis estadístico en SPSS se determinó el coeficiente Alpha de Cronbach y la validez de la encuesta. Se espera que los resultados contribuyan al conocimiento de la disciplina de la administración, así mismo que estos sirvan de manera práctica a las empresas restauranteras, clientes, asociaciones, gobierno y a la sociedad.

Planteamiento del Problema

El problema que se pretende investigar es la percepción de la calidad del servicio de los clientes de restaurantes de comida china A, B, y C, en la ciudad de Mexicali, Baja California durante el mes de enero del año 2016. De acuerdo a La crónica (2015), expresa lo siguiente: “El presidente del Centro de Investigación de la Cultura China en Mexicali, Eduardo Auyón Gerardo, expresó que fue en el año de 1927 cuando se instaló el primer restaurante chino de la ciudad ubicado en callejón chinesca. Al momento de la inauguración del restaurante, éste no hacía la comida china como tradicionalmente la conocemos hoy en día, ya que la primera comida china no era frita, sino al vapor. Así mismo manifiesta que la comida china en Mexicali ha logrado fama internacionalmente, es muy económica, los proveedores son empresas certificadas, y el 70% de los trabajadores son mexicanos. Por otro lado, La crónica (2015a) indica que: “En el mes de abril del año 2015, un restaurante de comida china denominado Lo Yen City de la ciudad de Tijuana, Baja California México, fue clausurado por la dirección de inspección y verificación municipal a causa de una denuncia donde se manifiesta que intentaban cocinar a un perro. Como consecuencia de este incidente, los restaurantes de comida china también de Mexicali, Baja California fueron afectados por la poca afluencia de consumidores. Sin embargo, en el mes de junio de 2015 se mostró a los comensales aquellas carnicerías locales que surten a los restaurantes en Baja California, lo que permitió retomar la confianza de los consumidores, así mismo el consumo de comida china en Mexicali se normalizó. La crónica (2015b) El problema que se pretende investigar es ¿Cuál es la percepción de la calidad del servicio de los clientes de restaurantes A, B, y C de comida china, en la ciudad de Mexicali, Baja California durante el mes de enero del año 2016?

Pregunta General

¿Cuál es la percepción de la calidad del servicio de los clientes de restaurantes de comida china A, B, y C, en la ciudad de Mexicali, Baja California durante el mes de enero del año 2016?

Pregunta Específica

¿Cómo es la magnitud de cada una de las dimensiones de la calidad del servicio como percepción de los platillos, elementos tangibles, fiabilidad, capacidad de respuesta, seguridad y empatía, de los clientes de restaurantes A, B, y C de comida china en la ciudad de Mexicali, Baja California durante el mes de enero del año 2016?

Variable

DEFINICION CONCEPTUAL DE CALIDAD DEL SERVICIO EN RESTAURANTE: Es la adecuación de las apreciaciones del consumidor tales como percepción de los platillos, elementos tangibles, fiabilidad, capacidad de respuesta, y empatía, a sus expectativas previas de un establecimiento público donde se sirven comidas y bebidas, mediante precio, para ser consumidas en el mismo local.

REVISIÓN LITERARIA

Calidad del Servicio en Restaurantes

Ron Petty, en 1993 ocupó la dirección de operaciones de las cadenas de restaurantes Denny's, y se concentró en mejorar la calidad del servicio en cada restaurant, porque cree que la fuerza de la marca es una función del valor que los clientes reciben en el restaurant y que la calidad del servicio determina el valor. Denny's se somete a prueba con una tecnología para mejorar la rapidez del servicio y el grado de cocción en el proceso de preparación de las comidas. (Berry, 2002) En un estudio de Vera (2009) se concluye que los clientes de restaurantes tienden a formar su opinión general sobre la calidad del servicio principalmente por la calidad de la comida y de las instalaciones, siendo también importante recibir siempre lo mismo del restaurant, independientemente de las circunstancias, y que sus quejas se solucionen de manera adecuada. Sobre las relaciones entre las variables de la calidad del servicio en restaurantes con la opinión general, se puede decir que se encontraron correlaciones aceptables con dos dimensiones de la gama de tangibles y dos dimensiones de la gama de intangibles. En el caso de las dimensiones de aspectos tangibles, las que se encontraron relacionadas con esta opinión general fueron la percepción hacia la calidad de las instalaciones y la percepción de calidad de la comida. En lo que refiere a las dimensiones de aspectos intangibles, las relacionadas con la opinión general fueron la percepción de calidad hacia el personal y la percepción de calidad hacia la consistencia y honestidad con que se brinda el servicio. Así, la evidencia indica que lo que generaría una percepción general de calidad del servicio favorable serían los aspectos de instalaciones, comida, personal y honestidad percibida. Vera (2009)

El Modelo SERVQUAL

López (2012) afirma que "...la escala o tipo de escala que ha conseguido una mayor difusión en el ámbito turístico tiene su origen en la escala SERVQUAL, que mide la calidad del servicio y que ha sido desarrollada por Parasuraman, Zeithaml y Berry (1988). La versión final de la escala SERVQUAL se compone de cinco dimensiones y 22 ítems en total. Las cinco dimensiones son las siguientes: Tangibilidad, fiabilidad, capacidad de respuesta, seguridad y empatía. De acuerdo a Carrete (2011) en una investigación realizada en México, se creó un instrumento que parte del SERVQUAL, denominado DINESERV, el cual está conformado por las siguientes dimensiones: instalaciones, accesibilidad, personal, ambiente, comida, consistencia y honestidad. Ruiz (2006) indica que en algunos estudios sobre el SERVQUAL se ha visto la réplica parcial de las cinco dimensiones con el desdoblamiento de alguna de ellas. Por ejemplo, se ha encontrado el desdoblamiento de la dimensión empatía en dos dimensiones: conocimiento de los empleados y accesibilidad. En otros han emergido dimensiones nuevas como, por ejemplo, la referida a los resultados, que mide las características y atributos de la comida.

En un estudio sobre el SERVQUAL García (2012) menciona que se aplicaron 60 encuestas a consumidores de un restaurant de cocina valenciana gourmet, los resultados por dimensiones fueron los siguientes: en la dimensión de elementos tangibles, los clientes no se sintieron satisfechos debido a que encontraron el área de servicio con una decoración poco fría, en la dimensión de fiabilidad no se superaron las expectativas de los clientes con respecto a los tiempos de servicio, en la dimensión de capacidad de respuesta se encontró deficiencia con respecto a solucionar problemas de los clientes inmediatamente, y en la dimensión de seguridad hubo una gran satisfacción por parte de los clientes con respecto a la seguridad que dan los empleados durante el servicio y los conocimientos que tienen.

METODOLOGÍA

Estudio de caso, con apoyo del paradigma epistemológico cuantitativo, hipotético deductivo. Es un estudio descriptivo. El contexto o escenario de la investigación es la ciudad de Mexicali, Baja California México, las unidades de análisis son tres restaurantes de comida china de la localidad, y la muestra es no

probabilística a conveniencia de la investigadora. El instrumento a utilizar es: para medir la calidad del servicio, el servqual de Parasuraman, Zeithaml, y Berry (1988) adaptado al contexto de los restaurantes de comida china. Para efectos de confidencialidad de la información los restaurantes se categorizan como A, B y C.

Tabla 1: Operacionalización de las Variables

Variable.	Definición Conceptual.	Dimensiones.	Cantidad de Ítems.
Calidad del servicio en restaurante.	Es la adecuación de las apreciaciones del consumidor tales como percepción de los platillos, elementos tangibles, fiabilidad, capacidad de respuesta, y empatía, a sus expectativas previas de un establecimiento público donde se sirven comidas y bebidas, mediante precio, para ser consumidas en el mismo local.	a) Percepción de los platillos.	5
		a) Elementos tangibles.	6
		a) Fiabilidad.	4
		a) Capacidad de respuesta.	2
		a) Seguridad.	4
		a) Empatía.	5
		Total de ítems:	26

Fuente: elaboración propia.

Objetivos

Objetivo General

Analizar la relación que existe entre la percepción de la calidad del servicio de los clientes de restaurantes de comida china a, b y c, en la ciudad de Mexicali, Baja California durante el periodo 2016.

Objetivo Específico

Analizar las dimensiones de la calidad del servicio de acuerdo al modelo SERVQUAL adaptado en los restaurantes de comida china a, b y c, en la ciudad de Mexicali, Baja California durante el periodo 2016.

RESULTADOS

La elaboración del instrumento se hizo con fundamento en el instrumento SERVQUAL de Parasuraman, Zeithaml, y Berry (1988) así mismo se ha realizado una adaptación de algunos indicadores de encuestas de servicio de restaurantes de diferentes tipos de comidas en Mexicali, B.C, y del instrumento DINESERV de Carrete (2011). Las unidades de análisis son clientes de restaurantes de comida china de la localidad. El instrumento está conformado por 6 dimensiones denominadas: percepción de platillos, elementos tangibles, fiabilidad, capacidad de respuesta, seguridad, y empatía. Con respecto a los ítems son 26 en total. La dimensión percepción de platillos está conformada por 5 afirmaciones, la dimensión elementos tangibles está conformada por 6 afirmaciones, la dimensión fiabilidad está compuesta por 4 afirmaciones, la dimensión de capacidad de respuesta tiene 2 afirmaciones, la dimensión de seguridad está compuesta por 4 afirmaciones, y la dimensión de empatía tiene 5 afirmaciones. La escala de respuesta para este instrumento es la escala de Likert, que según Malhotra (2008) “es una escala de medición ampliamente utilizada que requiere que los encuestados indiquen el grado de acuerdo o desacuerdo de cada una de las series de afirmaciones sobre los objetos de estímulo. Por lo general, cada reactivo de la escala tiene 5 categorías de respuesta”. Las categorías son las siguientes: 1) Totalmente en desacuerdo, 2) En desacuerdo, 3) Ni de

acuerdo ni en desacuerdo, 4) De acuerdo y 5) Totalmente de acuerdo. A continuación, se presentan los resultados. La aplicación de encuestas se realizó en el mes de enero del año 2016. Se acudió a 3 restaurantes de comida china, localizados en la zona oriente de la ciudad de Mexicali, Baja California. Se aplicaron 250 encuestas dentro de los restaurantes en horario de 6:00 p.m. a 9:30 p.m. a comensales desde jóvenes de 18 años hasta adultos mayores de 70 años.

El análisis de confiabilidad indica que el instrumento con sus 26 ítems, tiene un coeficiente Alpha de Cronbach de 0.927. Todas las dimensiones tienen valores superiores a 0.80, y según Frías (2014), cita a George y Mallery (2003) quienes afirman que los valores del coeficiente mayores a 0.80 significan que tienen buena consistencia interna de la escala, y mayores a 0.90 tienen excelente consistencia interna de la escala. Con respecto al análisis descriptivo sobre la calidad del servicio de los restaurantes A, B y C, las afirmaciones obtuvieron resultados satisfactorios al lograr todos los valores mayores a 4, que en escala de Likert significa que los consumidores están de acuerdo con esa afirmación, y valores redondeados aritméticamente con valores de 5, que significa que los consumidores están totalmente de acuerdo con esa afirmación. Las afirmaciones que representan los promedio más altos son las siguientes: de la dimensión ELEMENTOS TANGIBLES, son 3 afirmaciones, la afirmación 10, tiene una media general de 4.60, que redondeado aritméticamente sube a 5, y significa que los clientes están totalmente de acuerdo sobre “los empleados tienen apariencia limpia”, la afirmación 6, tiene un promedio general de 4.58, que redondeado aritméticamente sube a 5, y significa que los clientes están totalmente de acuerdo sobre “Los equipos (televisiones, computadoras, lámparas, y/o caja registradora) son de apariencia moderna”, la afirmación 8, tiene un promedio general de 4.55, que redondeado aritméticamente sube a 5, y significa que los clientes están totalmente de acuerdo sobre “las instalaciones físicas (edificio, piso, paredes, techo, ventanas, puertas, recepción, mostrador y baños) son visualmente atractivas (bonitas)”.

De la dimensión PERCEPCIÓN DE LOS PLATILLOS es solo la afirmación 2, tiene un promedio de 4.54, que redondeado aritméticamente sube a 5, y significa que los clientes están totalmente de acuerdo en “Los alimentos tienen una apariencia agradable.”. De la dimensión EMPATÍA es solo la afirmación 23, que tiene un promedio de 4.54, redondeado aritméticamente sube a 5, y significa que los clientes están totalmente de acuerdo en “Tienen horarios de servicio convenientes para mí.”; de la dimensión de SEGURIDAD, son 2 afirmaciones, la afirmación 18, tienen un promedio de 4.52, y significa que los clientes están totalmente de acuerdo en “El comportamiento de los empleados me transmite confianza.” y la afirmación 20, que tiene un promedio de 4.53, redondeado aritméticamente sube a 5, y significa que los clientes están totalmente de acuerdo en “Los empleados siempre son amables conmigo.”. Se identificaron las afirmaciones que tienen promedios más bajos y representan áreas de oportunidad para los restaurantes, al visualizar a futuro como mejorar para salir con un promedio más alto que podría aproximarse al valor 5 que significa en escala de Likert, totalmente de acuerdo.

Las afirmaciones identificadas con promedios bajos son las siguientes: la afirmación 5 “los platillos tienen un precio justo, la afirmación 16 “los empleados me comunican cuando concluirán el servicio”, tienen un promedio general de 4.15, la afirmación 26 “comprenden mis necesidades como cliente” tiene un promedio de 4.30, la afirmación 25 “se preocupan por los mejores intereses de mi como cliente” tiene un promedio de 4.31, la afirmación 11 “los elementos materiales (cartas del menú, tarjetas de presentación, letrero de entrada con nombre del restaurante) son visualmente atractivos”, y la afirmación 12 “Cuando los empleados prometen hacer algo en cierto tiempo, lo hacen” tienen un promedio de 4.33. En base a los resultados presentados anteriormente, significa que los clientes están de acuerdo con cada una de las afirmaciones expuestas.

Alcances y Limitaciones

El alcance de la investigación es descriptivo y significa que busca especificar las propiedades, características y los perfiles de personas, grupos, comunidades, procesos, objetos o cualquier otro fenómeno

que se someta a un análisis. Se recolectan datos de diversas variables. Se realiza la producción de un conocimiento teórico-práctico de acuerdo al contexto particular de los estudios de caso. En el caso del proyecto de investigación doctoral considera los objetos de las ciencias culturales, las percepciones, creencias y hábitos, del enfoque cualitativo (Mead citado por Briones, 1996) se manejan con herramientas del paradigma cuantitativo como son la medición de actitudes a través de la escala de Likert y se apoya en el método y técnicas estadísticas para lograr el rigor científico y poder hacer predicciones en el contexto particular bajo estudio, la vigilancia epistemológica estaría en la operacionalización de las variables, en la validez y confiabilidad del instrumento de medición de la calidad del servicio como lo propone Parasuraman, A., Zeithaml, V., y Berry, L. (1988) con el SERVQUAL y lo han utilizado Mejías, A., Reyes, O., y Maneiro, N. (2006). Como se realiza en los estudios de mercado, en este caso el servicio es intangible y requiere de conceptualizarlo, operacionalizarlo y medirlo para obtener resultados sobre la calidad del servicio ofrecido. Las limitaciones son que los resultados no se pueden generalizar como lo pretende el paradigma positivista de las ciencias naturales, sólo se podrán utilizar mediante analogías para otros contextos similares.

CONCLUSIONES

Se aplicó el instrumento SERVRESMRP del cual se obtuvo un coeficiente de confiabilidad Alpha de Cronbach de 0.927, y significa que es altamente confiable. Se cumplió con el objetivo general de este estudio, sobre analizar la percepción de la calidad del servicio de los clientes de restaurantes de comida china que para efectos de este estudio se han categorizado como A, B y C, en la ciudad de Mexicali, Baja California durante el mes de enero del año 2016. Se consiguió el objetivo específico, sobre analizar la magnitud de cada una de las dimensiones de la calidad del servicio como percepción de los platillos, elementos tangibles, fiabilidad, capacidad de respuesta, seguridad y empatía, de los clientes de restaurantes A, B, y C de comida china en la ciudad de Mexicali, Baja California durante el mes de enero del año 2016. Los resultados coinciden con la literatura consultada sobre las teorías de la calidad del servicio, y las dimensiones teóricas de la calidad del servicio de los autores clásicos como Parasuraman, Zeithaml y Berry tales como elementos tangibles, fiabilidad, capacidad de respuesta, seguridad y empatía, son idóneas para medir la calidad del servicio. En este estudio se apreciaron dichas dimensiones con los clientes de restaurantes de comida china, a través de los análisis estadísticos realizados.

RECOMENDACIONES

Para futuras investigaciones se recomienda, en el caso de la muestra de restaurantes de comida china, considerar aquellos ubicados en zonas de diferentes estratos sociales de la ciudad de Mexicali, Baja California, y hacer una comparación entre los tipos de clientes. Se sugiere aplicar el instrumento a otro tipo de restaurantes que no sean de comida china, para confirmar la confiabilidad del instrumento con diferentes unidades de análisis.

REFERENCIAS BIBLIOGRÁFICAS

Berry Leonard L. (2002). Un buen servicio ya no basta: cuatro principios del servicio excepcional al cliente. Grupo editorial norma.

Carrete Lorena, López Sara, Trujillo Andrea y Vera Jorge. (2011). Servir con calidad en México. LID editorial mexicana.

Ferrando Sánchez Miguel, y Javier Granero Castro (2005). Calidad total: modelo EFQM de excelencia. España: fundación confemetal.

Ferrel O.C., Hartline Michael D. (2012) Estrategia de marketing. México: Cengage learning.

Frías Navarro Dolores (2014). Apuntes de SPSS. Universidad de Valencia. Recuperado el 10 de diciembre del 2015 de <http://www.uv.es/friasnav/ApuntesSPSS.pdf>

García Jiménez Gimena (2012). Informe de pasantía: Sistema de calidad para el restaurante tridente del hotel Neptuno en Valencia, España. Universidad Simón Bolívar.

Kotler, Philip y Keller Kevin Lane (2006). Fundamentos de marketing. México: Editorial Pearson.

López Bonilla Luis Miguel, y López Bonilla Jesús Manuel (2012). Investigación de mercados turísticos. España: Ediciones Pirámide.

Lovelock, Cristopher y Jochen Wirtz (2009). Marketing de servicios. Personal, tecnología y estrategia.

México: Pearson educación. Malhotra Naresh K (2008). Investigación de mercados. Un enfoque práctico. Editorial Pearson.

Mora Héctor (s.f.). Breve guía de procedimientos para lograr la validez y confiabilidad de cuestionarios. Aplicaciones con SPSS 11.0. Recuperado el 10 de diciembre del 2015 de http://www.academia.edu/1982369/Validez_y_Fiabilidad_con_SPSS

Nava Carbellido, Víctor Manuel. (2005). ¿Qué es la calidad?: conceptos, gurús y modelos fundamentales. Editorial Limusa. p. 15.

Palomo María (2011). Técnicas de comunicación en restauración. España: Paraninfo. Parasuraman, Zeithaml and Berry (1988). "SERVQUAL: A Multiple-Item Scale for Measuring Customer Perceptions of Service Quality," Journal of Retailing. pp. 12-40.

Ruiz de maya Salvador y Grande Esteban Idelfonso (2006). Comportamiento de compra del consumidor: 29 casos reales. España: ESIC Editorial.

Salkind, Neil J. (1999). Métodos de investigación. México: Prentice Hall.

Setó D. (2004) De la calidad del servicio a la fidelidad del cliente, (1ª. Ed.), Madrid, ESIC.

Vera M., Jorge; Trujillo L., Andrea. (2009). El Papel de la Calidad del Servicio del Restaurante como Antecedente de la Lealtad del Cliente. Panorama Socioeconómico, Julio- Sin mes, 16-30.

Zeithaml, Berry y Parasuraman (1996). The behavioral consequences of service quality. Journal of Marketing. Vol.60. p.31-46.

BIOGRAFÍA

Marcela Reyes Pazos es Doctora en Educación, candidata al grado de Doctora en Ciencias Administrativas, Maestra en Administración, y Licenciada en Administración de Empresas. Es Académica Certificada en Administración por la Asociación Nacional de Facultades y Escuelas de Contaduría y Administración (ANFECA) y es Profesora de asignatura de licenciatura en la Universidad Autónoma de Baja California, adscrita a la Facultad de Ciencias Administrativas, y profesora de posgrado en diversas universidades.

Cruz Elda Macías Terán, es Doctora en Ciencias Administrativas, Doctora en Ciencias de la Educación, Maestra en Docencia y Administración Educativa, y Licenciada en Administración de Empresas. Es Académica Certificada en Administración por la Asociación Nacional de Facultades y Escuelas de

Contaduría y Administración (ANFECA) y es Profesor Investigador en la Universidad Autónoma de Baja California, adscrita a la Facultad de Ciencias Administrativas.

COMERCIO ELECTRÓNICO EN EL SECTOR HOTELERO DE LOS MUNICIPIOS DE OAXACA

Eric Amín Ramírez Castillo, Universidad Autónoma “Benito Juárez” de Oaxaca
María de Lourdes Vázquez Arango, Universidad Autónoma “Benito Juárez” de Oaxaca
Abraham Martínez Helmes, Universidad Autónoma “Benito Juárez” de Oaxaca
Harold Wilson Hernández Cruz, Universitaria Agustiniiana

RESUMEN

La implementación del Comercio Electrónico en el sector hotelero de los municipios de Oaxaca es necesaria, ya que dueños de hoteles no ofrecen sitios web apropiados por ser improvisados, mal orientados o copiados, además de que no se ha potencializado de manera adecuada la información referente a los atractivos turísticos, motivo por el cual es importante contextualizar y establecer criterios para la creación de sitios web a la medida de los clientes. Esta investigación se realizó con base a criterios de usabilidad de la Asociación Mexicana de la Industria Publicitaria y Comercial en Internet AMIPCI (2017) y Ramírez (2014), siendo de tipo exploratoria para analizar por medio de un Panel Delphi criterios de usabilidad con base al consenso de expertos en el tema, dueños de hoteles y clientes, además de contemplar cálculos como la moda, mediana, desviación estándar, índice de consenso y el estadístico de Kappa de Cohen como elementos de comprobación. Dentro de los resultados tenemos: el rezago tecnológico existente en Oaxaca como limitante para la implementación; que un sitio necesita ser el contacto directo con el cliente y a su vez permita realizar la contratación de servicios en línea y presente información de alta calidad de atractivos turísticos.

PALABRAS CLAVE: Comercio Electrónico, Sitios Web, Panel Delphi, Sector Hotelero

E-COMMERCE IN THE HOTEL SECTOR OF OAXACA MUNICIPALITIES

ABSTRACT

La implementación del Comercio Electrónico en el sector hotelero de los municipios de Oaxaca es necesaria, ya que dueños de hoteles no ofrecen sitios web apropiados por ser improvisados, mal orientados o copiados, además de que no se ha potencializado de manera adecuada la información referente a los atractivos turísticos, motivo por el cual es importante contextualizar y establecer criterios para la creación de sitios web a la medida de los clientes. Esta investigación se realizó con base a criterios de usabilidad de la Asociación Mexicana de la Industria Publicitaria y Comercial en Internet AMIPCI (2017) y Ramírez (2014), siendo de tipo exploratoria para analizar por medio de un Panel Delphi criterios de usabilidad con base al consenso de expertos en el tema, dueños de hoteles y clientes, además de contemplar cálculos como la moda, mediana, desviación estándar, índice de consenso y el estadístico de Kappa de Cohen como elementos de comprobación. Dentro de los resultados tenemos: el rezago tecnológico existente en Oaxaca como limitante para la implementación; que un sitio necesita ser el contacto directo con el cliente y a su vez permita realizar la contratación de servicios en línea y presente información de alta calidad de atractivos turísticos.

JEL: M10, O33

KEYWORDS: Electronic Commerce, Web Sites, Delphi Panel, Hotel Sector

INTRODUCCIÓN

La implementación del Comercio Electrónico en el sector hotelero de los municipios de Oaxaca es de suma importancia, ya que al día de hoy, no se ha potencializado de manera adecuada la información referente a los atractivos turísticos que tienen los municipios; además de que los dueños de hoteles no ofrecen las herramientas del Comercio Electrónico para la tramitación vía digital de reservación y pago de las habitaciones. Otra situación que se presenta en el estado de Oaxaca es la falta de capacitación e infraestructura tecnológica que permita el adecuado desarrollo en diversos sectores empresariales. Esta investigación se basa en criterios de usabilidad aportados por la Asociación Mexicana de la Industria Publicitaria y Comercial en Internet AMIPCI (2017) y Ramírez (2014). Es un estudio exploratorio que analiza a través de un Panel Delphi criterios de usabilidad con base al consenso de expertos en el tema de Comercio Electrónico, así como los criterios de dueños de hoteles y usuarios de servicios de hotelería. Se parte del supuesto que los involucrados han tenido experiencia en el análisis, diseño, operación y uso de sitios web de hoteles y se busca determinar estadísticamente a través de los cálculos como moda, mediana, desviación estándar, índice de consenso y el estadístico de Kappa de Cohen, para tener elementos de comprobación del consenso de los criterios.

De esta forma se conjetura si los sitios web permiten generar un vínculo con los compradores de productos y servicios, procesando la información y obteniendo como resultados más relevantes del conceso: que el sitio web sea el contacto directo con el cliente sin la necesidad de intermediarios para la contratación de los servicios; que el sitio web considere la eficiencia, la cual se refiere a la cantidad de recursos (tiempo, dinero, esfuerzo) que el usuario utilizó para obtener la información; que los sitios presenten información de alta calidad con un conocimiento explícito acerca de los atractivos turísticos, así como contener opciones para la contratación de los servicios; de igual forma se detectó la falta de conocimientos en materia de Tecnologías de la Información y Comunicación para su operación, lo que reafirma el rezago tecnológico existente en el estado de Oaxaca.

REVISIÓN DE LITERATURA

El Comercio Electrónico.

Las TIC y el Internet han propiciado la creación de diversos modelos de trabajo, tal es el caso del Comercio Electrónico, que surgió en el año 1993, momento en que las grandes empresas crearon por primera vez sus sitios web comerciales y se dieron cuenta de la importancia que tienen como mecanismo de publicidad, considerando que este elemento ha cambiado la forma tradicional de realizar las transacciones comerciales, permitiendo con ello la eficiencia y eficacia en los procesos de trabajo, ahorro de dinero, tiempo y esfuerzo (Seoane, 2005). Existen diversos modelos de negocios en Internet que considera el Comercio Electrónico, destacando el comercio entre empresas (B2B por sus siglas en inglés Bussines to Bussines), el cual, constituye la principal actividad de comercio electrónico en el mundo, y fue la primera en utilizar la transferencia electrónica de datos para sus transacciones comerciales, así mismo, el modelo comercio entre empresa y consumidor (B2C Bussines to Consumer), se ha convertido en el gran medio de comercialización en Internet, dada su versatilidad al contar con catálogos virtuales que los usuarios finales pueden adquirir de forma fácil y sencilla, parecería que este modelo es mejor dadas sus características, sin embargo, no se manejan grandes cantidades monetarias en cada transacción en comparación con el B2B. El modelo comercio entre consumidores (C2C Consumidor to Consumidor) ha tenido éxito al realizar transacciones entre particulares o también llamados consumidores finales, quienes son los que interactúan entre sí, al realizar compras o intercambios de información, productos o servicios, sin necesidad de que exista un intermediario (Nieto, 2017).

En su estudio del año 2017 la AMIPCI muestra la evolución del Comercio Electrónico en México en cuanto a los ingresos obtenidos por parte de las empresas por medio de este mecanismo, los cuales representaron 329.85 millones de pesos. Así mismo, analizan el comportamiento de la compra digital, gastos en el área digital, experiencias en las compras, pagos y transacciones, entre otros estudios, sin embargo, en el desglose por entidad federativa no presentan información desglosada de los servicios o productos que adquiere cada Estado, lo cual no permite un análisis adecuado de información específica en sectores tan importantes como el hotelero, además de que Oaxaca solo representa el 1% de los ingresos antes mencionado. El Comercio Electrónico hoy en día no se ha potencializado en el sector hotelero de los municipios de Oaxaca, ya que problemas como el no querer invertir en tecnología para la automatización de procesos, por ser empresas familiares que tienen la ideología referente a que las cosas siempre se han hecho de la misma forma y mientras se obtengan ganancias, lo demás no importa, el desconocimiento del uso de la computadora por parte del personal que labora en los hoteles, la falta de capacitación en materia de TIC, el miedo al cambio, entre otras cosas, provocan rechazo a los mecanismos de Comercio Electrónico, considerando también que en Oaxaca, muchos desarrolladores de software venden soluciones de Comercio Electrónico improvisadas, intermitentes o sin sentido, donde no se preocupan por hacer una análisis real de la necesidad de los hoteles o simplemente no contemplan una solución integral, motivo que provoca un descontento por la adquisición de una solución de automatización fallida que tuvo un alto costo.

El Sector Hotelero y el Estado de Oaxaca

En los últimos años, el sector hotelero en México ha representado una de las tres principales fuentes generadoras de empleos directos e indirectos y de divisas para los Estados de la República Mexicana que basan su crecimiento económico en el turismo y sus actividades afines. El Gobierno Federal por medio del Plan Nacional de Desarrollo, ha establecido estrategias para hacer de México un país líder en la actividad turística por medio de la diversificación de sus mercados, productos y destinos; el fomento a la competitividad de las empresas de este sector, de tal forma que el servicio que brinden sea de calidad internacional; y el desarrollo de programas referentes a la promoción en los mercados y los segmentos turísticos de mayor rentabilidad, fortaleciendo con esto, los programas de información, asistencia y seguridad al turista, a fin de aumentar el número de turistas (Ramírez, 2013).

En México, el turismo realiza un aporte considerable al Producto Interno Bruto Nacional y es caracterizado por producir en mayor medida servicios, ya que del total de la producción turística en los estados los servicios representan el 84.0% y los bienes el 16.0%, destacando el alojamiento, el transporte, los restaurantes y bares, etc. (INEGI, 2015). El estado de Oaxaca está ubicado a 470 kilómetros de la ciudad de México a una altitud de mil 500 metros sobre el nivel del mar, representa el 4.78% del territorio nacional, cuenta con 570 municipios y tiene una población de 3'967,889 habitantes. La capital del estado es el municipio de Oaxaca de Juárez, la cual fue designada como Ciudad Patrimonio Cultural de la Humanidad por la UNESCO en el año 1987. Cuenta con diversos tesoros artísticos y arquitectónicos, convergen diversas etnias y culturas lo cual aumenta su riqueza. Es una ciudad colonial fundada en el siglo XV con una traza urbana admirable, tiene edificios del barroco novohispano, el estado cuenta con una gran gastronomía y bebidas de índole mundial como lo es el mezcal, playas hermosas donde resalta la playa Chahué que fue certificada por el Instituto Mexicano de Normalización y Certificación debido a las excelentes condiciones de conservación y seguridad; así mismo cuenta con un sinnúmero de atractivos y que muchos de ellos no han sido explotados de la forma adecuada (SECTUR, 2017).

Como se mencionó el Estado de Oaxaca ofrece una gran variedad de atractivos turísticos, tales como: sitios arqueológicos que son la herencia de civilizaciones antiguas y momentos históricos ubicados en diferentes municipios destacado el de Oaxaca de Juárez, hermosas playas como las de Santa Cruz Huatulco, ecoturismo proporcionado por los Pueblos Mancomunados donde predomina el Municipio de Ixtlán de Juárez, la gastronomía, bailables, festividades como la Guelaguetza celebrada en el mes de julio, entre otros;

por lo que es necesario establecer criterios adecuados para la construcción de un sitio web para los hoteles, a fin de que sea estratégico de acuerdo a los atractivos y preferencias de los turistas.

METODOLOGÍA

En esta investigación se analizaron los criterios de usabilidad y satisfacción de AMIPCI (2017) y Ramírez (2014), con la finalidad de construir un instrumento que permita realizar un análisis de tipo exploratorio a través de un Panel Delphi, con la finalidad de establecer por medio del consenso, los criterios de usabilidad que debe contener un sitio web enfocado al sector hotelero, de tal forma que la satisfacción de los usuarios sea mayor al contar con los elementos idóneos de uso. Para obtener el consenso se aplicó el instrumento a expertos en el tema de Comercio Electrónico, dueños de hoteles, así como usuarios de servicios de hotelería, quienes tienen experiencia en el análisis, diseño, operación y uso de sitios web de hoteles, considerando también cálculos de estadística descriptiva como la moda, mediana, desviación estándar, índice de consenso y el estadístico de Kappa de Cohen, a fin de contar con un mayor número de elementos de comprobación respecto al consenso de los criterios y de participantes. En este estudio, el uso del Método Delphi es importante, debido a que no existe un modelo contextualizado para la elaboración de sitios comerciales del sector hotelero de Oaxaca, por lo que se tomarán como referencia, independientemente de los criterios mencionados, algunos elementos existentes de sitios de hoteles de otros estados e incluso países. Así mismo, se usó criterios respecto a las ventajas que ofrece el Comercio Electrónico, el nivel económico, la desconfianza del modelo derivado de la falta de conocimientos respecto al tema, entre otros aspectos.

Variable

Cuando nos enfocamos al desarrollo de sitios web del sector hotelero, debemos tomar en cuenta que uno de sus objetivos es realizar cambios respecto a la forma de trabajar de los hoteles. Sin embargo, el desarrollo de estos sitios es difícil debido a que muchos expertos en el tema no contextualizan el lugar donde se pretenden implementar, por lo que es de suma importancia identificar el tipo de información, la forma en que se publican, que opciones del sitio pueden funcionar, la infraestructura tecnológica existente en el hotel, etc., de tal forma que no se construyan sitios enfocados al sector hotelero improvisados, intermitentes, copiados o sin sentido (Salvador, 2002). Motivo por el cual se debe tener de forma clara el término referente a la Facilidad de Uso de los sitios web, mejor conocido como Usabilidad, el cual permite de forma fácil la operación de un sitio web que en este caso se enfocará a los de sector hotelero.

La Usabilidad es la variable que se utilizará en esta investigación, que según Cobo en Ramírez 2014 establece que es: “la facilidad o nivel de uso; es decir, el grado en el que el diseño de un objeto facilita o dificulta su uso”. Esta variable se analiza con el grupo de expertos en la construcción de sitios web enfocados al sector hotelero considerando cada uno de los elementos de Facilidad de Usos (Usabilidad) con la finalidad de obtener un consenso basado en la experiencia y no en la improvisación. La variable se midió con 21 características de la Usabilidad obtenidas del instrumento de Ramírez en el 2014, el cual fue adaptado a un esquema comercial, y las respuestas aportadas por los dueños de hoteles, los usuarios de servicios hoteleros, así como los expertos en la construcción de sitios web comerciales son muy importantes, debido a que al tener un consenso acorde a la experiencia, podemos obtener resultados más precisos referentes a criterios definidos para esta investigación.

El instrumento, el cual fue construido con apoyo de los coautores de este estudio, fue aplicado a los expertos con preguntas referentes a la usabilidad, información que deben contener los sitios comerciales del sector hotelero, ventajas de la implementación de esquemas de Comercio Electrónico, entre otras cosas. Las preguntas se analizaron por medio de cálculos estadísticos como la mediana, la moda, la desviación estándar y el índice de consenso por medio del programa Microsoft Excel; aunado a esto se realizó el cálculo del estadístico de kappa de Cohen, a fin de medir el grado de acuerdo entre cada respuesta de los participantes por medio del programa SPSS.

Selección de Expertos

La selección de los participantes del Panel Delphi se realizó con base en la experiencia en la construcción de sitios comerciales, dueños de hoteles y usuarios recientes de los servicios hoteleros que han tenido experiencia en el uso de sitios web de hoteles. La Tabla 1 muestra los identificadores de los participantes del Panel Delphi.

Tabla 1: Identificadores de los Participantes en el Panel Delphi

Nº	Lugar	Identificador
1	Experto en Construcción de Sitios Comerciales (UABJO).	Ecuabjo
2	Experto en Construcción de Sitios Comerciales (UTM).	Ecutm
3	Experto en Construcción de Sitios Comerciales (ITO).	Ecito
4	Experto en Construcción de Sitios Comerciales (IEU).	Ecieu
5	Dueño de Hotel (Oaxaca de Juárez).	Dhoax
6	Dueño de Hotel (Ixtlán de Juárez).	Dhixt
7	Dueño de Hotel (Santa Cruz Huatulco).	Dhhua
8	Usuario del servicio (Oaxaca de Juárez).	Usoax
9	Usuario del servicio (Ixtlán de Juárez).	Usixt
10	Usuario del servicio (Santa Cruz Huatulco).	Ushua

Fuente: Elaboración propia.

RESULTADOS

Una vez encuestados los expertos y realizados los cálculos correspondientes a la estadística descriptiva, se muestran los resultados obtenidos. El índice de consenso (IDC) es el valor de referencia para las respuestas en torno a los criterios de creación de sitios web enfocados al sector turístico y al uso del mismo, datos como la moda, la desviación estándar y la mediana sirven de referencia cuando en algunos casos, el IDC empata en el consenso de las respuestas. Las respuestas de cada pregunta se ponderaron con el valor “1” para la respuesta más importante, 2 para la segunda y así sucesivamente. De los resultados se observa que la ventaja principal fue “el contacto directo con el cliente, sin la necesidad de intermediarios para la contratación de los servicios” con un consenso del 90%, lo cual establece que el cliente prefiere interactuar directamente con el sitio web en lugar de pagar a una agencia de viajes por tramitar el servicio o en su caso adquirirlo directamente en los hoteles.

Respecto a la principal problemática en la implementación de mecanismos de Comercio Electrónico del sector hotelero se tiene que “el rezago tecnológico existente en el estado de Oaxaca” con un 80%, indicando que en el estado de Oaxaca no se tiene una infraestructura adecuada para la implementación de mecanismos de Comercio Electrónico, sin embargo, conforme pase el tiempo esta problemática quedará eliminada gracias a la Reforma de Telecomunicaciones establecida en el año 2013 por el Presidente de la República, Enrique Peña Nieto desde un aspecto Constitucional. Mientras que los factores que afectan la implementación de esquemas de Comercio Electrónico dentro de su hotel, el consenso más alto se da en la falta de conocimientos en materia de Tecnologías de la Información y Comunicación para su operación” con un 90%, en Oaxaca el desconocimiento del uso de Tecnologías de la Información y Comunicación es alto, por lo que hay que considerar la capacitación al personal de los hoteles antes de incorporar este tipo de mecanismos.

Relacionado con la disposición para propiciar la implementación de mecanismos de Comercio Electrónico, se tiene que la adquisición del hardware y software es necesario para su implementación, con un índice de consenso del 90% es la respuesta que indica la disponibilidad de los dueños de hoteles para adquirir las herramientas necesarias para incorporar mecanismos de Comercio Electrónico. Se tiene que los principales motivos por los que contrataría un servicio de hotel a través de internet, corresponde a un consenso de 80%

fue “Falta de tiempo para realizar la contratación de la forma tradicional”, hoy en día las personas realizan muchas de sus actividades por medio de dispositivos móviles, ya que por su portabilidad permite realizarlas de forma más rápida, evitando desplazamientos, motivo por el cual un sitio web debe ofrecer la característica de eficiencia. A continuación se muestran los resultados obtenidos del cálculo del estadístico de Kappa de Cohen derivado del consenso de los resultados que se obtuvieron de cada uno de los criterios seleccionados por los panelistas, considerando que el valor del nivel de significancia del estadístico es al 100%. Los criterios para los resultados del estadístico son los siguientes: Nivel de Significancia:

Entre los valores 0.81 a 1 - Acuerdo casi perfecto.

Entre los valores 0.61 a 0.80 - Acuerdo importante.

Entre los valores 0.41 y 0.60 - Acuerdo moderado.

Entre los valores 0.21 y 0.40 - Acuerdo Medio.

Entre los valores 0.00 y 0.20 - Acuerdo Pobre.

Tabla 19: Principales Valores de Significancia del Estadístico de Kappa de Cohen

Expertos	Ecuabjo	Ecutm	Ecito	Ecieu	Dhoax	Dhixt	Dhhua	Usoax	Usixt	Ushua
Ecuabjo	1.000			.323			.319			
Ecutm		1.000		.450	.323			.492		.407
Ecito			1.000						.407	
Ecieu	.323	.450		1.000			.532			.407
Dhoax		.323			1.000					
Dhixt						1.000		.238		
Dhhua	.319			.532			1.000			
Usoax		.492				.238		1.000		
Usixt			.407						1.000	
Ushua		.407		.407				.280		1.000

Fuente: Elaboración propia

El valor que se observa de 1.000, se da por el cruce de un panelista con sí mismo en cuanto a sus respuestas del cuestionario siendo este el 100% de coincidencia, los demás valores que significativos que encontramos son: el Experto en Construcción de Sitios Comerciales (UTM) con el Experto en Construcción de Sitios Comerciales (IEU) y el Usuario del servicio (Oaxaca de Juárez) tiene acuerdos moderados; el Experto en Construcción de Sitios Comerciales (IEU) con el Dueño de Hotel (Santa Cruz Huatulco) también contempla un acuerdo moderado en relación con sus respuestas seleccionadas, y de la misma forma el Usuario del servicio (Oaxaca de Juárez) con el Experto en Construcción de Sitios Comerciales (UTM). La mayoría de los participantes del Panel Delphi obtuvieron acuerdos medios en torno a las respuestas del cuestionario, dejando fuera acuerdos importantes, así como pobres, lo cual indica que existieron respuestas donde los panelistas no coincidían en sus criterios.

CONCLUSIONES

El Comercio Electrónico ha crecido a nivel mundial, gracias a sitios web que cambiaron la forma tradicional de hacer negocios, lo cual ha permitido ofrecer productos y servicios de forma más rápida, fácil y sencilla, sin necesidad de tener un lugar físico para la comercialización. Para poder adquirir un sitio web no se necesita tener un gran capital, e incluso para poner un negocio en línea, tampoco es necesario un establecimiento, ya que por el hecho de que el negocio se encuentre en internet, los clientes pueden acceder desde cualquier parte por medio de equipos de cómputo, celular o tabletas. Los negocios del sector hotelero no son la excepción, sin embargo, el Comercio Electrónico no ha sido explotado de la manera adecuada en los hoteles de los municipios del Estado de Oaxaca, por lo que es necesario que las investigaciones giren en este sentido para poder potencializar este esquema.

Como se observa en esta investigación exploratoria, los elementos de “Usabilidad” respecto a los criterios en cuanto a funcionamiento de sitios comerciales del sector turístico, la forma de presentar la información, las ventajas y desventajas en la implementación del Comercio Electrónico, entre otros aspectos, fueron establecidos por medio de un Panel Delphi con base al consenso de expertos en el tema de Comercio Electrónico, dueños de hoteles y usuarios de servicios de hotelería de los municipios de Oaxaca de Juárez, Ixtlán de Juárez y la Agencia Municipal de Santa Cruz Huatulco, quienes por medio de su experiencia determinaron que, presentar información de alta calidad con un conocimiento explícito acerca de los atractivos turísticos, así como contener opciones para la contratación de los servicios es fundamental en los sitios web del sector turístico; facilitar el procesamiento de información y la optimización de la contratación de servicios es una opción que los usuarios de los servicios necesitan para que el sitio sea claro, oportuno, preciso y fácil de utilizar, además de que el sitio web sea el contacto directo con el cliente, sin la necesidad de intermediarios para la contratación de los servicios, que sea eficaz y eficiente a fin de que el sitio sea una verdadera herramienta de Comercio Electrónico.

BIBLIOGRAFÍA

AMIPCI. (2017). *Estudio del Comercio Electrónico en México 2017*. Obtenido de <https://www.asociaciondeinternet.mx/es/component/remository/Comercio-Electronico/Estudio-de-Comercio-Electronico-en-Mexico-2017/lang,es-es/?Itemid=>

Caro Encalada, M. (2008). *El Uso de las Tecnologías de la Información y Comunicación en el Sector Hotelero de la Península de Yucatán; Hacia un Modelo Explicativo*. Madrid España: Universidad Politécnica de Madrid.

Criado Grande, J. I., Ramilo Araujo, M. C. & Salvador Serna, M. (2002). *La Necesidad de Teoría(s) sobre Gobierno Electrónico. Una Propuesta Integradora*. XVI Concurso de Ensayos y Monografías del CLAD sobre Reforma del Estado y Modernización de la Administración Pública "Gobierno Electrónico". Caracas. Venezuela.

INEGI. (2015). *Estadísticas a propósito del día mundial del Turismo*. Agusalientes: INEGI.

Nieto Melgarejo, P. (12 de octubre de 2017). *Nociones Generales sobre el Comercio Electrónico*. Obtenido de http://www.derecho.usmp.edu.pe/cedetec/articulos/el_comercio_electronico.pdf

PROFECO. (23 de octubre de 2017). *Procuraduría Federal del Consumidor*. Obtenido de http://www.profeco.gob.mx/internacionales/com_elec.asp

Ramírez Castillo, E. A. (2014). *Elementos de Valor Público y de Facilidad de Uso en Sitios Oficiales del Gobierno del Estado de Oaxaca*. Oaxaca de Juárez: UABJO.

Ramírez Castillo, E. A., Velázquez-Sánchez R.M., & Vázquez-Arango M. L. (2016) *Elementos de Valor Público en Sitios Oficiales del Gobierno*, XXI Congreso Internacional de Contaduría, Administración e informática UNAM.

Ramírez Navarrete, L. E. (2013). *Estudio sobre el sistema contable manejado en Fiesta Inn Querétaro*, Universidad tecnológica de Querétaro: Santiago de Querétaro.

SECTUR. (26 de septiembre de 2017). <http://www.visitmexico.com>. Obtenido de <http://www.visitmexico.com/es/playas-certificadas-oaxaca>

Seoane Balado, E. (2005). *La nueva era del Comercio Electrónico: El comercio electrónico*. España: Ideaspropias.

Torres Castañeda , D. H., & Guerra Zavala, J. (20 de julio de 2017). *Comercio Electrónico*. Obtenido de <http://www.eumed.net/ce/2012/tcgz.pdf>

Tricas Lamana, F. (2007). *El Gobierno Electrónico: servicios públicos y participación ciudadana*. Fundación Alternativas ISBN: 978-84-96653-56-6.

RECONOCIMIENTO

Los autores agradecen los comentarios de los árbitros y editores del IBFR, quienes contribuyeron a mejorar esta investigación.

BIOGRAFIA

Eric Amín Ramírez Castillo es Doctor en Ciencias de la Administración por la Universidad Autónoma “Benito Juárez” de Oaxaca (UABJO). Profesor Investigador de Tiempo Completo en la Facultad de Contaduría y Administración de la UABJO. Se puede contactar en Av. Universidad S/N Cinco Señores C.P. 68120 Oaxaca, Oaxaca.

María de Lourdes Vázquez Arango es Doctora en Ciencias en Desarrollo Regional y Tecnológico por el Instituto Tecnológico de Oaxaca (ITO). Profesor Investigador de Tiempo Completo en la Facultad de Contaduría y Administración de la UABJO. Se puede contactar en Av. Universidad S/N Cinco Señores C.P. 68120 Oaxaca, Oaxaca.

Abraham Martínez Helmes es Maestro en Administración por la Universidad Autónoma “Benito Juárez” de Oaxaca (UABJO). Profesor Investigador de Tiempo Completo en la Facultad de Contaduría y Administración de la UABJO. Se puede contactar en Av. Universidad S/N Cinco Señores C.P. 68120 Oaxaca, Oaxaca.

Harold Wilson Hernández Cruz es Ingeniero Industrial , Docente de la Universitaria Agustiniiana en Bogotá Colombia. Se le puede contactar en Ak. 86 No.11B 95, Bogotá Colombia.

PRINCIPALES CAUSAS POR LAS CUALES LAS PEQUEÑAS EMPRESAS DE TECOMÁN, COLIMA. NO PUEDEN OBTENER UN FINANCIAMIENTO EXTERNO EN LAS INSTITUCIONES DE LA BANCA MULTIPLE

Héctor Priego Huertas, Universidad De Colima
Alejandro Rodríguez Vazquez, Universidad De Colima
Juan Alfredo Lino Gamiño, Universidad De Colima
Hugo Martín Moreno Zacarías, Universidad De Colima

RESUMEN

Esta investigación se realizó en Tecomán, Colima con el fin de saber cuáles son las causas del porque las pequeñas empresas no conocen las fuentes de financiamiento externas y las causas del porque no recurren a estas instituciones de la banca múltiple para obtener un financiamiento para fortalecer su capital de trabajo o para mejorar sus empresas y sean más competitivas en un mercado globalizado en diferentes tipos de financiamientos y que en algunos casos ofrecen mejores tasas de interés a largo plazo. Una de las causas es que las instituciones de la banca múltiple solicitan al micro empresario estados financieros básicos para otorgarles un financiamiento, pero estos a su vez no cuentan con un registro contable en forma, de acuerdo a las normas de Información Financiera de sus actividades comerciales, esto limita a no tener información suficiente y contundente de las operaciones relacionadas a sus actividades, esto frena el otorgamiento de créditos.

PALABRAS CLAVES: Financiamiento, Microempresas, Banca Múltiple

ABSTRAC

This research was conducted in Tecomán, Colima in order to know what are the causes of why small companies do not know the external sources of financing and why they do not resort to these institutions of multiple banking to obtain financing to strengthen their Working capital or to improve their companies and be more competitive in a globalized market in different types of financing and in some cases offer better long-term interest rates. One of the causes is that the institutions of the multiple bank request to the micro entrepreneur basic financial statements to grant them a financing, but these in turn do not count on an accounting register in form, according to the norms of Financial Information of their commercial activities this limits to not having enough and forceful information of the operations related to their activities, this slows the granting of credits.

JEL: G21

INTRODUCCIÓN

La investigación se llevó a cabo para poder determinar si las pequeñas empresas tienen acceso a créditos bancarios o en instituciones financieras y que requisitos deben cumplir para poder obtener el financiamiento, la cual fue realizada en el municipio de Tecomán, Colima. La gran parte de las pequeñas empresas requieren de algún crédito o préstamo para así poder solventar algún gasto del negocio o necesidades personales. Es por esto que se requiere obtener información respecto a las tasas que cada una de las instituciones ofrece, para determinar el costo financiero que les repercutiría al hacer uso de este instrumento financiero.

Planteamiento del Problema

Es la delimitación clara y precisa (sin ambigüedades) del objeto de investigación, realizada por medio de preguntas, lecturas, trabajo manual, encuestas, pilotos, entrevistas, etc. (Dieterich Steffan, 2001) Consiste en describir de manera amplia la situación objeto de estudio, ubicándola en un contexto que permita comprender su origen y relaciones. (Arias, 2006) De acuerdo a la definición que nos redactan anteriormente los autores, es la base fundamental para determinar las necesidades de investigar las causas por las cuales las micro empresas en el municipio de Tecomán, Colima. No puede adquirir financiamiento de la manera más fácil y confiable en las Instituciones de la Banca Múltiple y las relacionadas al sistema financiero Mexicano.

Preguntas de Investigación

¿Qué requisitos requieren las instituciones bancarias para otorgar un financiamiento a las micro empresas en el municipio de Tecomán, Colima?

¿Cuáles son las principales fuentes externas que pueden otorgar un financiamiento en el municipio de Tecomán?

Objeto de Estudio

El objeto de estudio es aquello sobre lo cual recae una acción sobre todo intelectual, en la medida en que define un fenómeno o una perspectiva con la que se aborda un fenómeno, constituye uno de los requisitos que definen un campo de intervención científica. (Pedraza, 2012) Por esta razón nuestro objeto principal es determinar principales causas por las cuales las pequeñas empresas de Tecomán, Colima. No pueden obtener un financiamiento externo en las instituciones de la banca múltiple y el costo financiero que les representa.

Objetivos

Objetivo General

Base fundamental para obtener financiamiento con la banca múltiple de las micro empresas en el Municipio de Tecomán, Colima, tengan conocimiento sobre cómo conseguir un financiamiento, de acuerdo a su costo de capital, sea a una tasa preferencial y competitiva.

Objetivos Específicos

Investigar desde el punto de vista financiero a las micro empresas para disponer de un financiamiento en las diferentes instituciones financieras de la banca múltiple, los requerimientos que se solicitan en cada una de estas. Difundir en las redes sociales y otras tecnologías de información para que los pequeños empresarios conozcan sobre la fuente de financiamiento que ofrece la banca múltiple y así poder tener acceso y poder fortalecer su capital de trabajo.

Hipótesis

A mayor conocimiento de sus estados financieros básicos para tramitar un financiamiento con la banca múltiple, mayor será el beneficio a las micro empresas en el municipio de Tecomán, Colima.

Justificación

La importancia de llevar a cabo esta investigación consiste en que los micro empresarios desconocen los diferentes financiamientos otorgados por la banca múltiple y los requisitos formales que hay que cumplir para tener beneficios y tasas de intereses preferenciales y así fortalecer su capital de trabajo.

Marco Teórico

Pequeñas empresas: Son organizaciones privadas, llamadas de esta forma porque sus activos anuales no exceden los 2 millones de dólares y su nómina no supera los 50 empleados, aunque esta cifra puede variar dependiendo del Estado donde se encuentre ubicada la empresa. Por su tamaño estas no son predominantes en los mercados en los que se desempeñan, pero esto no significa que no sean rentables a la hora de obtener ganancias. (Espinosa Mosqueda)

Por lo general cuando una persona toma la decisión de emprender su propio negocio, es porque ya tiene a la mano un producto que ofrecer en el mercado y con el que piensa podría obtener ganancias, la necesidad de generar dinero extra y el deseo de crear su propia empresa pueden ser otras motivaciones que llevan a los emprendedores a tomar esa decisión. Censos Económicos 2004 INEGI 2 (Anderson, Arthur, “Diccionario de economía y negocios”, 1999). El Banco Interamericano de Desarrollo (BID) establece que la microempresa es “la unidad de producción de bienes o servicios donde el propietario es quien lleva a cabo la mayoría de las actividades del negocio”. Menciona también que por ser una unidad pequeña tiene la capacidad para tener entre tres a cinco personas asalariadas que pudieran ser miembros de la familia o personas de la comunidad donde ubica la microempresa. (Dr. Gregorio Vázquez Alanís, CP Rubicela González)

Financiamiento : Es el conjunto de recursos monetarios financieros para llevar a cabo una actividad económica, con la característica de que generalmente se trata de sumas tomadas a préstamo que complementan los recursos propios. Recursos financieros que el gobierno obtiene para cubrir un déficit presupuestario. El financiamiento se contrata dentro o fuera del país a través de créditos, empréstitos y otras obligaciones derivadas de la suscripción o emisión de títulos de crédito o cualquier otro documento pagadero a plazo. (CP Rubicela González) Se designa con el término de Financiamiento al conjunto de recursos monetarios y de crédito que se destinarán a una empresa, actividad, organización o individuo para que los mismos lleven a cabo una determinada actividad o concreten algún proyecto, siendo uno de los más habituales la apertura de un nuevo negocio. (BEBZUCK, RICARDO. “Asimétrica Información in Financiar Markets”. 1era. Edición. Reino Unido. Cambridge University Press. (2003).

Instituciones bancarias: Un banco es una institución financiera incluida en la categoría de empresas. Su principal función y razón de existencia es la captación de clientes que depositen allí su dinero y a través de esos depósitos poder realizar préstamos a terceros e incluir otros servicios. (Concepto.de, 2015). Son instituciones que tienen como principal actividad la captación de recursos a mediano y largo plazo, con el objetivo principal de realizar operaciones activas de crédito e inversiones, direccionadas a fomentar o promover la creación, reorganización, fusión, transformación y expansión de empresas. (concepto.de/banco-institución-bancaria/).

Marco Histórico

Durante la Segunda Guerra Mundial la mayor parte de las Empresas de Europa fueron destruidas, como debían recuperarse de una manera rápida, la solución a esta situación fue la creación de pequeñas y medianas empresas (PYMES). El potencial de la Unión Europea radica en el Apoyo y fomento que se otorga a las PYMES, ya que se les considera un importante factor en la creación de empleos y base

primordial de su economía, obteniendo con esto un alto crecimiento económico y bienestar de su población. Desde hace mucho tiempo las PYMES han constituido los ingresos principales de muchas familias mexicanas, ya que de ellas una familia puede sostenerse, sin necesidad de realizar algún trabajo adicional, además es de considerarse que constituyen un apoyo para las siguientes generaciones de empresarios, por la transmisión de los secretos de la empresa familiar, contribuyendo al crecimiento y desarrollo de las empresas mexicanas, de una manera empírica en la mayor parte de los casos. El mayor problema que han tenido que superar las PYMES es la Globalización, situación que de entrada provocó que muchas empresas tuvieran que cerrar por el gran número de empresas transnacionales que llegaron a nuestro país.

Marco Legal

Ley de instituciones de crédito: La presente Ley es de orden público y observancia general en los Estados Unidos Mexicanos y tiene por objeto regular el servicio de banca y crédito, la organización y funcionamiento de las instituciones de crédito, las actividades y operaciones que las mismas podrán realizar, su sano y equilibrado desarrollo, la protección de los intereses del público y los términos en que el Estado ejercerá la rectoría financiera del Sistema Bancario Mexicano.

Ley para el desarrollo de la competitividad de la micro, pequeña y mediana empresa : La presente Ley tiene por objeto promover el desarrollo económico nacional a través del fomento a la creación de micro, pequeñas y medianas empresas y el apoyo para su viabilidad, productividad, competitividad y sustentabilidad. Asimismo, incrementar su participación en los mercados, en un marco de crecientes encadenamientos productivos que generen mayor valor agregado nacional. Es de suma importancia que los microempresarios conozcan las leyes mercantiles, contratos, códigos donde se rigen los diferentes tipos de financiamientos y poder cumplir con todas estas disposiciones.

Marco Geográfico

La presente investigación se desarrolló en el municipio de Tecomán, Colima se localiza en la porción sureste del estado entre las coordenadas 103° 59' a 103° 73' de longitud oeste del Meridiano de Greenwich y 18° 41' 20" a 19° 06' de latitud norte. La distancia aproximada de la cabecera municipal a la capital del estado es de 46 km. Ocupa una extensión territorial de 789.74 kilómetros cuadrados que corresponden al 14 por ciento de la superficie estatal.

METODOLOGÍA

El presente proyecto de investigación consiste en el estudio de las “Principales causas por las cuales las pequeñas empresas de Tecomán, no pueden obtener un financiamiento en las instituciones bancarias”. El método que se utilizó fue el cualitativo de acuerdo al autor (Robert K. Yin. 2002). Por lo tanto, buscamos información no cuantitativa respecto a las razones por las cuales las instituciones financieras no les otorgan un financiamiento a las micro empresas.

RESULTADOS

Dentro de los aspectos indispensables para que sobreviva una empresa están:

Hacer buena planeación, objetivos realistas, hacer políticas institucionales, procedimientos, controles, informes y resultados.

Se realizaron cincuenta cuestionarios con diez preguntas cada uno las cuales se aplicaron a personas que laboran en las instituciones bancarias y a su vez a empresas del municipio de Tecomán, Colima. Que han solicitado un financiamiento a dichas instituciones bancarias como lo son Banamex, Banorte, Bancomer,

Santander entre otras. Cada una de las preguntas que se realizaron dio como resultado que hace falta mucha información para toda persona emprendedora que quiera obtener un financiamiento en alguna institución Bancaria. Ya que una de las preguntas nos arrojó que de los 50 cuestionarios aplicados a micro empresas que han requerido de un financiamiento y a mismos trabajadores de las instituciones el 90% han requerido un financiamiento a instituciones y el 10 % si han obtenido financiamientos a auxiliares del crédito como, cajas populares, compartamos banco.

Las causas principales por las cuales es rechazada la solicitud el 20 % de las personas encuestadas no se les otorgó dicho financiamiento por falta de documentación, el 34% por que llevaron falsa información, lo cual tuvo como consecuencia la desconfianza del banco hacia esa persona, el 23% fue rechazado por que no tiene un historial positivo, esto se debe a que no pago en el tiempo que debió haber liquidado el saldo, otra de las razones por las que aparece en dicho historial, es porque no pagaron el financiamiento, o porque son avales de personas que deben aun el financiamiento adquirido, el 10 % es por no contar con el comprobante de ingreso o sus estados financieros básicos, el otro 10 % se debe a que alguno de los socios de dicha empresa tienen adeudos con el mismo banco o con otro, y por último se encuentra con un 3% la falta de garantías o avales para poder obtener dicho financiamiento cabe mencionar que a veces si llevan avales pero no son los adecuados, ya que ellos también tienen deudas con otras instituciones crediticias.

CONCLUSIÓN

Esta investigación dio como resultado que los mismos empresarios no saben en que categoría se encuentran reflejando las tres principales tamaños que existen en esta ciudad como la microempresa, pequeña empresa y mediana empresa, cuya información obtenida se basó siempre dependiendo del sector al que pertenecían, así como el número de trabajadores que conforman cada sector y también el rango de ventas o ingresos preponderantes, así como otros ingresos obtenidos, la comprensión de diferentes problemáticas y características que evalúan cada tipo de empresa. El sector bancario comercial suele establecer una serie de requerimientos que obliga al micro empresario a cumplir para tener la posibilidad de acceder a un financiamiento; sin embargo, en ocasiones, las pequeñas empresas no suelen utilizar esta vía debido a las altas tasas de interés fijadas, expediente crediticio incompleto, deudas por parte de las empresas con otros bancos, aparecen en buro de crédito. Así también es importante mencionar, que, si bien el acceso al financiamiento ha aumentado notoriamente, un gran porcentaje de microempresas no logran obtener crédito. En este sentido, es de vital importancia el apoyo a éstas, en sus primeros dos años de funcionamiento, tiempo en que el financiamiento es más escaso, la inversión es más alta y la vulnerabilidad es mucho mayor. La secretaria de economía, trata de compensar estos financiamientos a micro empresarios, pero su capital de trabajo es insuficiente y esto no les permite disminuir sus costos de operación.

BIBLIOGRAFÍAS

Arriaza Ibarra, K. (2004). Negocios Internacionales en un mundo globalizado. Mexico: Editorial CECSA.
Banxico Educa. (2008). Retrieved Marzo 21, 2017, from Banxico Educa:
http://educa.banxico.org.mx/pages/enlaces/Preguntas_frecuentes.html

Cervantes, J. (2010, Octubre 10). Retrieved MARZO 25, 2017, from Historia del PYME:
<https://pymesdemexico.wordpress.com/2010/11/10/historia-de%C2%A0las%C2%A0pymes/>

Concepto de definicion. (2016, Junio 24). Retrieved Mayo 07, 2017, from Concepto de definicion:
<http://conceptodefinicion.de/marketing-de-causas/>

Concepto.de. (2015). Retrieved Abril 01, 2017, from Concepto.de: <http://concepto.de/banco-institucion-bancaria/#ixzz4g7d5Evxo>

Cortés Cortés, M., & Iglesias León, M. (2004). Generalidades sobre Metodología de la Investigación. Ciudad del Carmen, Campeche, México : Primera Edición.

Definicion ABC. (2007, Marzo 03). Retrieved Mayo 05, 2017, from Definicion ABC: <https://www.definicionabc.com/general/causas.php>

Diccionario Actual. (2006, Junio 09). Retrieved Mayo 07, 2017, from Diccionario Actual: <https://diccionarioactual.com/causa/>

Dieterich Steffan, H. (2001). Nueva Guía para la Investigación Científica. Mexico: Ariel.
Enlace Empresarial. (2006). Retrieved Marzo 16, 2017, from EnlaceEmpresarias: <http://www.enlaceempresarial.com/pyme.htm>

Espinosa Mosqueda , R. (n.d.). Eumed.net. Retrieved Mayo 13, 2017, from Enciclopedia Virtual: http://www.eumed.net/libros-gratis/2012b/1191/concepto_de_pyme.html

Fuentes de Financiamiento. (2015, Mayo 26). Retrieved Marzo 21, 2017, from Fuentes de Financiamiento: <https://fuentesdefinanciamientounivia.wordpress.com/>

Hernández Sampieri, R. (1997). Metodología de la Investigación. Mexico.
Organización de la Empresa. (2015). Retrieved Marzo 23, 2017, from Organización de la Empresa: <http://www.organizacionempresas.com/instituciones-bancarias>

Rodríguez Moguel , E. (2005). Metodología de la investigación. Villahermosa: Colección Hector Merino .
Selltiz. (1976). Olantamiento del problema. Mexico.

Significados. (n.d.). Retrieved MAYO 05, 2017, from <https://www.significados.com/causa/>
Tamayo, M. (2004). Diccionario de la Investigación Científica. Mexico: Lumusa.

BIOGRAPHY

M. en C. Héctor Priego Huertas, Profesor Investigador de Tiempo Completo Asociado C, Facultad de Contabilidad y Administración de Tecomán, Colima. Autopista, Colima-Manzanillo km.40, Colonia la Estación, c.p. 28140.

M.I Alejandro Rodríguez Vázquez, Profesor Investigador de Tiempo Completo Asociado C, Facultad de Contabilidad y Administración de Tecomán, Colima. Autopista, Colima-Manzanillo km.40, Colonia la Estación, c.p. 28140.

DR. Juan Alfredo Lino Gamiño, Profesor Investigador de Tiempo Completo Asociado C, Facultad de Contabilidad y Administración de Tecomán, Colima. Autopista, Colima-Manzanillo km.40, Colonia la Estación, c.p. 28140.

M en A. Hugo Martín Moreno Zacarías, Profesor Investigador de Tiempo Completo Asociado C, Facultad de Contabilidad y Administración de Tecomán, Colima. Autopista, Colima-Manzanillo km.40, Colonia la Estación, c.p. 28140. Área de investigación en la que participan: FINANZAS

BENEFICIO DE LA TASA 0% DEL IMPUESTO AL VALOR AGREGADO (IVA), EN LOS CONTRIBUYENTES DEDICADOS AL EMPAQUE Y COMERCIALIZACIÓN DEL LIMÓN MEXICANO EN EL MUNICIPIO DE TECOMÁN, COLIMA

Héctor Priego Huertas, Universidad De Colima
Alejandro Rodríguez Vazquez, Universidad De Colima
Alfonso Alcocer Maldonado, Universidad De Colima
Hugo Martin Moreno Zacarías, Universidad De Colima

RESUMEN

El presente trabajo es una investigación documental de tipo descriptivo, no experimental que se realizó en el municipio de Tecomán, Colima. Sobre las empresas pertenecientes al sector agropecuario en la producción de limón con el fin de conocer la manera en que afecta el beneficio fiscal que otorga la tasa del 0% de la ley del impuesto al valor agregado, vigente en nuestro país y que permite al contribuyente la opción de solicitar la devolución de los saldos a favor que, por concepto, de este impuesto, pago a sus proveedores en la adquisición de bienes y servicios para el ejercicio de sus actividades agropecuarias. Cabe mencionar la realización de cuestionarios para dar a conocer que tan enterados están cada uno de los contribuyentes dedicados en este mencionado sector agrícola, así saber que tan afondo conocen este tema de la tasa del 0% y de los beneficios que les brinda. Para de este modo conocer si los contribuyentes saben el proceso que deben de realizar para solicitar su devolución de su saldo a favor.

PALABRAS CLAVES: Impuesto, Agricultura, Liquidez

ABSTRACT

The present work is a descriptive, non-experimental documentary research that was carried out in the municipality of Tecomán, Colima. About companies belonging to the agricultural sector in the production of lemon in order to know how it affects the tax benefit that gives the rate of 0% of the law of value added tax, in force in our country and allowing the taxpayer the option of requesting the return of the balances in favor that, by concept, of this tax, payment to its suppliers in the acquisition of goods and services for the exercise of their agricultural activities. It is worth mentioning the completion of questionnaires to show how aware each one of the taxpayers dedicated to this agricultural sector is, and to know how deeply they know about this issue of the 0% rate and the benefits it provides. In order to know if taxpayers know the process they must perform to request a refund of their balance in favor.

JEL: H25

INTRODUCCIÓN

La presente investigación es con la finalidad de presentar la figura de la exención aplicada a la ley del impuesto al valor agregado en sus diversas actividades, así como realizar un análisis de esta en sus apartados más importantes, en lo particular de la tasa del 0%. Esto con la intención de presentar los principales beneficios que ofrece la tasa 0% del impuesto al valor agregado a los contribuyentes dedicados a la agricultura en el municipio de Tecomán, Colima. De acuerdo a los autores anteriores se considera la enorme

necesidad que tienen las personas en la actualidad para emprender un negocio, por más pequeño que sea, no se cuenta con el recurso económico suficiente para establecerlo y ponerlo en marcha, lo cual requieren de un financiamiento. Por esto es que se está llevando a cabo la realización de este trabajo de investigación con el fin de ayudar a los pequeños y grandes contribuyentes que se dedican a agricultura en el municipio de Tecomán, Colima, apoyándolos con accesorias para la exención del impuesto al valor agregado en los productos que se comprenden para la realización de esta actividad agropecuaria.

El gasto fiscal del sistema impositivo consiste en el monto que la autoridad tributaria, para el caso de México el Sistema de Administración Tributaria (SAT), deja de recaudar debido a los tratamientos especiales que la Ley permite. Por ejemplo, para el caso del IVA los tratamientos especiales consisten en los bienes y servicios que se encuentran a tasa 0%, en lugar de la tasa general de 16%,¹ los bienes y servicios exentos, la tasa general de 10% en la zona fronteriza y el régimen de pequeños contribuyentes. (García, 2013)

Planteamiento del Problema

“En realidad, plantear el problema no es sino afinar y estructurar más formalmente la idea de investigación.” (Sampieri, 2008). Por esta razón, surge la investigación, para poder conocer la problemática y darlo a conocer a todos los contribuyentes del sector agropecuario, en especial las emparadoras de limón fruta en estado natural y mostrar que por medio de este régimen del IVA tasa cero, pueden solicitar la devolución de la repercusión de gastos e inversiones que pagaron por algunos productos que se encuentran repercutidos por este impuesto.

Pregunta de Investigación

¿Qué beneficio tiene la tasa 0% del impuesto al valor agregado, en los contribuyentes del sector agropecuario, empaadores de limón fruta en estado natural en el municipio de Tecomán, Colima?. ¿Tienen conocimiento los contribuyentes del sector agropecuario empaadores de limón fruta en estado natural los beneficios que tienen con la tasa 0% del valor agregado?

Objeto de Estudio

El objeto de estudio es aquello sobre lo cual recae una acción sobre todo intelectual, en la medida en que define un fenómeno o una perspectiva con la que se aborda un fenómeno, constituye uno de los requisitos que definen un campo de intervención científica. (Pedraza, 2012) Por esta razón nuestro objeto principal es dar a conocer los beneficios que tiene el impuesto al valor agregado de la tasa del 0%, en los contribuyentes dedicados al sector agrícola, empaadoras de limón fruta en estado natural y junto con ello, la gran variedad de productos exentos de IVA, los cuales son necesarios para llevar a cabo las actividades agropecuarias, en el municipio de Tecomán, Colima.

Objetivo General

(Arias, 1999, p. 11) Consiste en lo que se pretende realizar en la investigación, es decir, el enunciado claro y preciso de las metas que se persiguen en la investigación a realizar. Realizar un análisis de los beneficios y repercusiones de la aplicación de la tasa del 0% en las adquisiciones y enajenaciones que realiza, y saber que tan informados están de este apartado de la ley los contribuyentes en el sector agropecuario en el Municipio de Tecomán, Colima.

Objetivo Específico

Los objetivos específicos "indican con precisión los conceptos, variables o dimensiones que serán objeto de estudio. Se derivan del objetivo general y contribuyen al logro de éste". (Arias, Metodología, 2006) Son de un alcance menor y básicamente se refieren a sub-problemas o a partes del objetivo general. (Tamayo, 2006) Hacer el análisis del Sector Agrícola, sus derechos y obligaciones, procedimientos de devoluciones de impuestos especialmente a las emparadoras de limón fruta en estado natural y el tiempo que recuperan ese impuesto.

Hipòtesis

A mayor conocimiento de los impuestos, mayor será el beneficio que obtendrán los inversionistas en el sector agropecuario y mejorar su liquidez fortaleciendo su capital de trabajo.

Justificación

Por justificación se entiende sustentar, con argumentos convincentes, la realización de un estudio; en otras palabras, señalar porqué y para qué se va a llevar a cabo. Para estar en posibilidad de presentar una justificación correcta se requiere conocer ampliamente las causas y propósitos que motivan la investigación. Esta puede originarse por la inquietud de lograr mayores conocimientos teóricos en ciertas áreas de la ciencia social, o surgir por la necesidad con elementos de juicio para estructurar políticas y estrategias operativas que permitan la solución de los problemas que se investigan; también existen estudios que se realizan por ambas razones. (Soriano, 2012) Con la presente investigación daremos a conocer si los contribuyentes dedicados a las actividades agropecuarias dedicados al empaque de limón fruta en estado natural, conocen los beneficios del IVA tasa cero, de igual forma se pretende saber si los contribuyentes saben que hay implementos agrícolas los cuales son necesarios para llevar acabo sus actividades agrícolas, y dar a conocer que estos implementos están gravados bajo la tasa 0% de IVA, así como investigar si los ejidatarios productores de limón fruta piden su devolución de IVA a tiempo o conocer las razones por lo cual no lo hacen.

Marco Teórico

Se le conoce como impuesto directo a todo impuesto que recae directamente sobre la persona, como es el caso del impuesto de renta o el impuesto al patrimonio. (Los Impuestos, 2012)

Impuesto al valor agregado (IVA): Es un impuesto sobre los bienes o servicios que las empresas recaudan por etapas, pero recae en su totalidad sobre los compradores finales.

La persona física: en términos generales, es todo miembro de la especie humana susceptible de adquirir derechos y contraer obligaciones. En algunos casos se puede hacer referencia a éstas como personas de existencia visible, de existencia real, física o natural.

Las Personas Morales: son el conjunto de personas físicas que se unen para la realización de un fin colectivo, como es por ejemplo la formación de una Sociedad o Empresa y ésta puede ser en Nombre Colectivo, Comandita Simple, Responsabilidad Limitada, Anónima (que es la más común) Comandita por Acciones, Cooperativas, Civiles (Asociaciones o Sociedades. Las personas morales son entes (existencias) creadas por el Derecho. No tienen una realidad material o corporal (no se puede tocar como tal como en el caso de una persona física). Sin embargo, la ley les otorga capacidad jurídica para tener derechos y obligaciones.

REVISION DE LITERATURA

Marco Histórico

De acuerdo a la Constitución Política de los Estados Unidos Mexicanos de 1917, la cual nos menciona en su artículo 31 fracción IV que una de las principales obligaciones es contribuir con los impuestos para ayudar en 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. Una vez expuesto lo siguiente a continuación daremos inicio a una breve reseña acerca del cómo surgió el impuesto al valor agregado, su origen y desde que tiempo se empezó a utilizar, de igual forma les daremos un resumen sobre la causa en que esta contribución llegó a nuestro país y de qué forma era aplicado. (Veronica, Clara, & Rosa, 2003)

Impuesto al valor agregado en México: Se dice que antes de entrar en vigor el Impuesto al Valor Agregado (IVA) en México (1980), se aplicaba el Impuesto Sobre Ingresos Mercantiles (ISIM), el cual estuvo vigente desde 1948 hasta 1979. El ISIM fue un impuesto indirecto de recaudación federal que no gravaba la totalidad de las actividades, esto provocó que se impusieran gravámenes federales y locales a ciertas actividades específicas. (IMCP, 2015)

Marco Legal

La Constitución Política de los Estados Unidos Mexicanos. (CPEUM)

Artículo 31 Fracción IV: Todos los mexicanos están obligados a contribuir al gasto público, 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. (CPEUM, 1917)

Ley del impuesto al valor agregado (LIVA)

artículo 2o.-A.- Fracción I Inciso e): Tractores para accionar implementos agrícolas, así como llantas para dichos tractores; motocultores para superficies reducidas; arados; rastras para desterronar la tierra arada; cultivadoras para esparcir y desyerbar; cosechadoras; aspersoras y espolvoreadoras para rociar o esparcir fertilizantes, plaguicidas, herbicidas y fungicidas; equipo mecánico, eléctrico o hidráulico para riego agrícola; sembradoras; ensiladoras, cortadoras y empacadoras de forraje; desgranadoras; abonadoras y fertilizadoras de terrenos de cultivo; los Fertilizantes, plaguicidas, herbicidas y fungicidas, siempre que estén destinados para ser utilizados en la agricultura o ganadería se gravarán a la tasa del 0% del impuesto al valor agregado.

Fracción II Inciso a): tiene las siguientes facilidades administrativas las cuales describe que los prestados directamente a los agricultores y ganaderos, siempre que sean destinados para actividades agropecuarias, por concepto de perforaciones de pozos, alumbramiento y formación de retenes de agua; suministro de energía eléctrica para usos agrícolas aplicados al bombeo de agua para riego; desmontes y caminos en el interior de las fincas agropecuarias; preparación de terrenos; riego y fumigación agrícolas; erradicación de plagas; cosecha y recolección; vacunación, desinfección e inseminación de ganado, así como los de captura y extracción de especies marinas y de agua dulce. (IVA, 2013)

Diario Oficial de la Federación 30/12/2014

Las personas morales dedicadas exclusivamente a actividades agrícolas, ganaderas, pesqueras o silvícolas, que no realicen las actividades empresariales por cuenta de sus integrantes, podrán aplicar las facilidades a que se refieren las reglas anteriores, siempre que tributen en el Régimen de Actividades Agrícolas, Ganaderas, Silvícolas y Pesqueras a que se refiere el Título II, Capítulo VIII de la Ley del ISR. (DOF, 2014)

Resolución miscelánea fiscal 2016: Devolución de saldos a favor del IVA para contribuyentes del sector agropecuario. Para los efectos del artículo 22, primer y sexto párrafos del CFF y la regla 2.3.4. Las personas físicas y morales que se dediquen exclusivamente a actividades agrícolas, ganaderas, pesqueras o silvícolas de conformidad con el artículo 74, sexto párrafo de la Ley del ISR, podrán obtener la devolución del IVA en un plazo máximo de veinte días hábiles,

Marco Geográfico

La investigación se realizó en el municipio de Tecomán, Colima. Por esto es importante conocer sus características, su economía, historia y la importancia del sector agropecuario en el desarrollo de su economía. Su vista geográfica a nivel nacional.

Localización

La presente investigación se desarrolló en el municipio de Tecomán, Colima se localiza en la porción sureste del estado entre las coordenadas 103° 59' a 103° 73' de longitud oeste del Meridiano de Greenwich y 18° 41' 20" a 19° 06' de latitud norte. La distancia aproximada de la cabecera municipal a la capital del estado es de 46 km. Ocupa una extensión territorial de 789.74 kilómetros cuadrados que corresponden al 14 por ciento de la superficie estatal.

METODOLOGÍA

La metodología cuantitativa de acuerdo con Tamayo (2007), consiste en el contraste de teorías ya existentes a partir de una serie de hipótesis surgidas de la misma, siendo necesario obtener una muestra, ya sea en forma aleatoria o discriminada, pero representativa de una población o fenómeno objeto de estudio. Por lo tanto, para realizar estudios cuantitativos es indispensable contar con una teoría ya construida, dado que el método científico utilizado en la misma es el deductivo; mientras que la metodología cualitativa consiste en la construcción o generación de una teoría a partir de una serie de proposiciones extraídas de un cuerpo teórico que servirá de punto de partida al investigador, para lo cual no es necesario extraer una muestra representativa, sino una muestra teórica conformada por uno o más casos, y es por ello que utiliza el método inductivo, según el cual se debe partir de un estado nulo de teoría. De acuerdo a los autores anteriores se utilizaron los métodos de investigación que ayudo a la realización de este trabajo, dichos métodos fueron de manera cuantitativa y cualitativa, por lo tanto, se busca el análisis sobre los beneficios del IVA tasa 0% en los contribuyentes con actividades agropecuarias en el valle de Tecomán. Este tipo de estudio se basó en una investigación de campo, realizando visitas a los diferentes productores de limón, para lograr el objetivo principal, que es dar a conocer a los contribuyentes las ventajas y desventajas de los diferentes beneficios que existen en sus actividades agropecuarias.

RESULTADOS

De acuerdo a la pregunta sobre la antigüedad que tienen dedicados a esta actividad, el 6.42% contesto menos de un año, el 12.84% de 1 a 5 años, el 30.28% de 6 a 10 años y el 50.46% más de 10 años. El resultado de que si su actividad es rentable, el 50.46% muy rentable, el 42.20% poco rentable, el 4.59% nada rentable y el 2.75% no contesto. La pregunta que se les realizo de si conocía la tasa del impuesto al valor agregado aplicada a sus actividad el 28.44% dijo que era el 16%, el 32.11% dijo que estaba excenta, y el 39.45% contesto que la tasa es del 0%, esto muestra que el 60% desconoce que tiene beneficios al estar a una tasa 0% Al cuestionarles sobre si tributaba a la tasa del 0%, tendría beneficios, el 31.19% contesto que si, el 68.81% dijo que no, esto demuestra que no existe una cultura fiscal. Al cuestionarles si el gobierno los a apoyado en sus programas para el desarrollo del campo el 79.82% contesto que si, el 20.18% dijo que no. Al preguntarles sobre si conoce y usa implementos agrícolas en el cual están gravados con impuestos del IVA contestaron el 44.95% que sí, el 17.43% que no, el 37.62% no sabe, esto demuestra que compran

sus implementos y desconocen que tienen un beneficio de pedir su devolución de impuesto. Uno de los puntos importantes de la investigación es de que si saben hacer una devolución de impuestos y contestaron lo siguiente: el 6.42% dijo que si, el 55.05% contesto que no, el 38.53 no sabe. Una de las preguntas importantes es saber si ha solicitado devolución del Impuesto al Valor Agregado que les repercute en sus costos, gastos o inversiones contestaron que si el 22.94%, el 44.95% que no, el 32.11 que no sabe, por consiguiente es importante la difusión del beneficio que tienen y desconocen del mismo y eso le genera una pérdida de liquidez.

CONCLUSIÓN

Esta investigación se realizó con el propósito de saber si el empresario del sector agropecuario conoce el beneficio de la tasa del 0% del IVA que tienen las empresas dedicadas a esta actividad en el municipio de Tecomán, en el cual de acuerdo con nuestra preguntas de investigación ¿Qué beneficio tiene la tasa 0% del impuesto al valor agregado, en los contribuyentes del sector agropecuario en el municipio de Tecomán, Colima?, y según el análisis de los resultados obtenidos en las encuestas, donde centra la esencia de esta cuestión, y en las entrevistas, que ayudaron a conocer diferentes detalles de la realidad que se tiene en el municipio con relación a este tema se puede concluir que: Con base a los resultados arrojados en las gráficas derivadas del cuestionario aplicado a los contribuyentes con actividades agrícolas en el municipio de Tecomán, Col. Se puede observar claramente que si conocen que su actividad agrícola se maneja bajo la tasa del 0% de IVA, así como tienen conocimiento acerca de la ley de Impuesto al Valor Agregado (IVA). Sin embargo, los contribuyentes muy a pesar de que conocen que su actividad empresarial está regida al 0% y conocen o han escuchado de la ley del IVA se puede observar claramente como solo el 35.77% de la población encuestada ha solicitado su devolución de saldos a favor y conocen las fechas y como es que se realiza dicha devolución, es decir que el 64.23% de las personas no tienen ni la menor idea de que existe este beneficio fiscal, esto sucede porque los contribuyentes solo se pasan la información a su contador y se deslinda de cada obligación y es por esto que desconocen las fechas y si en realidad han solicitado su saldo a favor del IVA, de sus operaciones relacionadas a su actividad preponderante.

RECOMENDACIONES

Recomendamos que las instituciones encargadas de brindar información a los contribuyentes con actividades agrícolas, lo realicen de una forma clara y precisa, ya que están dentro de este régimen y no conocen lo suficiente y además no tienen los estudios suficientes para conocer muy a fondo este tema. Y si las instituciones realizan estas acciones será de suma importancia para los contribuyentes puesto que con ello podrán conocer que implementos agrícolas están gravados con la tasa cero y con ello no deben de pagar IVA. De igual forma opinamos que se les brinde apoyo ya sea con asesorías fiscales, para que conozcan que pueden solicitar su devolución de saldos a favor, por esta parte se beneficiarían bastante cada contribuyente puesto que dentro de la encuesta aplicada mencionaron que hay meses en los cuales la producción es muy baja y nos decían que aun así tenían que pagarle al gobierno por su actividad que realizaban.

BIBLIOGRAFÍA

Arias, F. (2006). Metodología.

Asti Vera, A. (2005). Metodología de la Investigación . Buenos Aires: Kapelusz.

CPEUM, C. P. (5 de Febrero de 1917). Obtenido de <http://www.sct.gob.mx/JURE/doc/cpeum.pdf>

Dane. (2005). Departamento Administrativo Nacional de Estadística. México.

DOF, D. O. (30 de 12 de 2014). Obtenido de <http://www.dof.gob.mx/index.php?year=2014&month=12&day=30>

Hernandez. (2008). metodología de investigacion .

IMCP, I. M. (Agosto de 2015).

INEGI. (2010). Recuperado el 20 de Abril de 2016

IISR, L. d. (18 de 11 de 2015). Obtenido de http://www.diputados.gob.mx/LeyesBiblio/pdf/LISR_181115.pdf

IVA, L. d. (11 de 12 de 2013). Obtenido de <http://www.diputados.gob.mx/LeyesBiblio/pdf/77.pdf>

LFT, L. d. (18 de Noviembre de 2015). Obtenido de http://www.diputados.gob.mx/LeyesBiblio/pdf/LIF_2016.pdf

Los Impuestos. (lunes de Agosto de 2012). Obtenido de <http://losimpuestos.com.mx/impuestos-directos/>
RISR, R. d. (06 de Mayo de 2015). Obtenido de http://www.fifomi.gob.mx/web/images/fifomi/documentos/marcolegal/32.%20Reg_LISR.pdf

RLIVA. (25 de 09 de 2014). Reg_LIVA_250914. Obtenido de REGLAMENTO DE LA LEY DEL IMPUESTO AL VALOR AGREGADO:
http://www.diputados.gob.mx/LeyesBiblio/regley/Reg_LIVA_250914.pdf

RLIVA, R. d. (25 de Septiembre de 2015). Obtenido de http://www.sat.gob.mx/informacion_fiscal/normatividad/Documents/RLIVA.pdf

RMF, R. M. (2016). Obtenido de http://www.sat.gob.mx/informacion_fiscal/normatividad/Paginas/resolucion_miscelanea_2016.aspx
Tamayo. (2006). Metodos de Investigación. mexico.

BIOGRAPHY

M. en C. Héctor Priego Huertas, Profesor Investigador de Tiempo Completo Asociado C, Facultad de Contabilidad y Administración de Tecomán, Colima. Autopista, Colima-Manzanillo km.40, Colonia la Estación, c.p. 28140.

M.I Alejandro Rodríguez Vázquez, Profesor Investigador de Tiempo Completo Asociado C, Facultad de Contabilidad y Administración de Tecomán, Colima. Autopista, Colima-Manzanillo km.40, Colonia la Estación, c.p. 28140.

M.I Alfonso Alcocer Maldonado Profesor Investigador de Tiempo Completo Asociado C, Facultad de Contabilidad y Administración de Manzanillo, Km. 20.5 Carretera Manzanillo-Cihuatlán el Naranjo, Colima. c.p. 28870.

M en A. Hugo Martin Moreno Zacarías, Profesor Investigador de Tiempo Completo Asociado C, Facultad de Contabilidad y Administración de Tecomán, Colima. Autopista, Colima-Manzanillo km.40, Colonia la Estación, c.p. 28140. Área de investigación en la que participan: FINANZAS

ESTUDIO SOBRE LA COMPRENSIÓN LECTORA EN EL NIVEL SUPERIOR

Yenisey Castro García, Universidad Michoacana de San Nicolás de Hidalgo
Alma Rosa García Ríos, Universidad Michoacana de San Nicolás de Hidalgo
Marcela Patricia del Toro Valencia, Universidad Michoacana de San Nicolás de Hidalgo

RESUMEN

Una vez en el entorno universitario los alumnos se enfrentan con diversos géneros de lectura, algunos muy específicos y no siempre son explícitos (Moyetta, Luchesse, & Fernández, 2013). Este trabajo trata de analizar el nivel de comprensión lectora en estudiantes universitarios del último año de la carrera de Contaduría. El estudio presenta una investigación-acción la cual se dividió en tres fases, dentro de la primera fase determinó el nivel de comprensión lectora de los estudiantes, en la fase posterior se desarrollaron técnicas y elementos que promovieron la comprensión lectora y en la última fase se hizo una evaluación. Al igual que Gonzalez (1998) se identificaron las dificultades que ofrecen textos como los de corte científico y humanístico para la comprensión lectora.

PALABRAS CLAVE: Comprensión Lectora, Nivel Superior, Investigación Acción

READING COMPREHENSION STUDY BASED ON UNIVERSITY LEVEL

ABSTRACT

Once in the university environment, students are confronted with different genres of reading, some very specific and not always explicit (Moyetta, Luchesse, & Fernández, 2013). This paper tried to analyze the level of reading comprehension in university students in the last year of the Accounting career. The study presents an action research which was divided into three phases, within the first phase determined the level of reading comprehension of the students, in the later phase techniques and elements that promoted reading comprehension were developed and in the last phase it was did an evaluation. As Gonzalez (1998) identified the difficulties offered by texts such as scientific and humanistic for reading comprehension

JEL: M11, M29

KEY WORDS: : Reading Comprehension, University Level Education,

INTRODUCCIÓN

Si la lectura nos da el acceso al conocimiento, en la actualidad el desarrollo científico técnico actual demanda de profesionales altamente preparados para la comprensión lectora de textos relacionados con su especialidad, que les posibiliten obtener y procesar la información necesaria en correspondencia con los avances de la ciencia (Muñoz, Muñoz, García, & Granado, 2013). En la universidad, sin importar la especialidad de la que el alumno forme parte, se leen textos variados de carácter académico y científico, es decir: manuales, libros, capítulos de libros, artículos de investigación, informes, tesis, etc. (Moyetta, Lucchese & Fernández, 2013), los cuales se caracterizan por poseer un discurso elaborado basado en el método científico, los cuales para su comprensión y posterior tratamiento requieren de operaciones intelectuales de mayor grado de abstracción, pues comúnmente se lee para conocer la idea de un autor, para

fundamentar o discutir sobre algún tema (Vidal & Manriquez, 2016) Es a través de la lectura es como los estudiantes de nivel superior toman contacto con la producción académica de una disciplina y a pesar de que leer es imprescindible en los estudios superiores, los alumnos lo hacen poco y con dificultad (Carlino, 2006). Derivado de la importancia del tema, este trabajo, dentro de sus objetivos planteados, buscó abordar esta problemática desde una óptica teórica, generando conocimiento científico, en la cual se pretende identificar el grado de comprensión lectora en 75 alumnos de noveno semestre, ubicados en tres secciones distintas, de la carrera de Contaduría de la Facultad de Contaduría y Ciencias administrativas de la Universidad Michoacana de San Nicolás de Hidalgo de Morelia, Michoacán, México. Esta investigación es guiada a través de la investigación acción cuyo primer paso, presentado para este trabajo, fue diagnosticar el nivel de comprensión lectora de los estudiantes universitarios para posteriormente desarrollar técnicas y estrategias para incrementar la competencia lectora concluyendo con el establecimiento, seguimiento y medición de dichas técnicas. El trabajo se encuentra dividido de la siguiente manera: En la sección primera se abordó la introducción, posteriormente se encuentran la revisión literaria sobre los aspectos de la comprensión lectora, en la tercera sección se describe la propuesta metodológica y exponen parte de los resultados hasta este momento y por último se encuentran las conclusiones

REVISION LITERARIA

Como afirman Guzmán y Sánchez (2006) en (Vidal & Manriquez, 2016), la lectura posibilita el pensamiento crítico, el cual se encuentra íntimamente relacionado con el juicio reflexivo, el pensamiento e inferencias lógicas, la resolución de problemas y la toma de decisiones, tras argumentos coherentes y válidos que aumentan la posibilidad de alcanzar un resultado deseable en cualquier actividad que se realice. Leer es aplicar el pensamiento a un escrito para interpretar sus signos, recuperar y valorar la información de que son portadores y que estuvo en la mente del autor, de acuerdo con los propósitos, el contexto, las condiciones de los sujetos y el tipo de discurso (Trillos, 2013) De acuerdo con pisa [*Programme for International Student Assessment*], una competencia fundamental que permite el aprendizaje dentro y fuera del ámbito escolar, que ayuda a asumir formas de pensar y de ser en la sociedad (Instituto Nacional para la Evaluación de la Educación [inee], 2013).

La comprensión de un texto es definida como la construcción de una representación del significado del texto, que implica una integración entre lo dicho en el texto y los conocimientos del lector, y conduce a la elaboración de un modelo mental situacional. (García Madruga, 2006) en (Zavala, 2008). Cabrera (1994) en añade una tercera operación o subproceso asociado a la lectura: el proceso creativo, el cual enfatiza el papel activo del lector ante las ideas que lee en el texto ya que no es un mero receptor de éstas. El lector tiene una presencia importante antes, durante y después de efectuada la lectura. De esta manera, entran en contacto la información y actitudes que tiene en el lector con la información proporcionada por el texto, generándose nuevas elaboraciones. En la práctica, para los otros autores, este proceso aparece incluido en el anterior, es decir, cuando se desarrolla lo que implica la comprensión (Zavala, 2008).

En las últimas décadas investigadores han incursionado en torno a la proyección de estrategias de lectura para la conducción y evaluación del proceso lector. De acuerdo al criterio de Isabel Solé, que acepta al lector como sujeto agente en la realización de dicho proceso, al respecto se precisa que las estrategias de lectura son sospechas inteligentes acerca del camino a tomar para comprender lo que leemos, y que implican la dirección y el proceso de lectura, son en síntesis, procedimientos que permiten plantearse objetivos, planificar acciones para lograrlos y evaluar el resultado obtenido (Muñoz, Muñoz, García, & Granado, 2013). Estas estrategias se clasifican en:

Previas a la lectura: Implican el por qué y para qué se va a leer, un objetivo y finalidad, sirven para activar el conocimiento previo del contenido del texto o de la tipología a que pertenece.

Durante la lectura: Para inferir y formular hipótesis que se van verificando o anulando durante el proceso lector, se hacen predicciones, preguntas sobre lo leído, aclaran dudas, releen las partes, consultas a diversas fuentes de información, se crean imágenes mentales, elaboran esquemas, resúmenes, anotaciones.

Posteriores a la lectura: Se evalúa la comprensión obtenida del texto, se formulan y responden nuevas preguntas, se hacen memorizaciones y resúmenes.

Todos los modelos se enmarcan en la teoría cognitiva desde la perspectiva del procesamiento de la información.

Propuesta Metodológica de Análisis y Resultados Preliminares

La presente investigación es no experimental, con enfoque cualitativo mayormente exploratoria, realizada a través de la metodología de la investigación acción participativa (IAP). Derivado de que la investigación acción se guía por cinco etapas: Pre-investigación, Diagnostico, Programación, Conclusiones y propuestas, y por último se pone en marcha de la propuesta así como la realización de una nueva evaluación. El presente trabajo muestra el progreso de las etapas relativas a la pre-investigación y diagnóstico. Para la etapa de diagnóstico se aplicó un test de comprensión lectora en 75 alumnos de noveno semestre de la licenciatura de Contaduría de la Facultad de contaduría que eran los que quisieron participar en el estudio. Se decidió utilizar el test de comprensión lectora de Violeta Tapia y Maritza Silva, que de acuerdo a la mayoría de los test revisados, era el que se adaptaba a los estudiantes universitarios sujetos de estudio. La prueba consta de 10 textos de lectura sobre diferentes temas en los que predominan aquellos que han sido escritos por autores peruanos. La prueba tiene: 38 reactivos, 8 con 4 ítems y 2 con tres ítems. Cada ítem tiene cuatro distractores, uno de ellos es la respuesta correcta. El examinado responde en una hoja de respuestas, elaborado para efectos de la aplicación colectiva. La prueba tiene como propósito medir la habilidad general de comprensión lectora de sujetos entre 12 – 20 años que cursan Educación Secundaria y I ciclo de Educación Superior. El test está estructurado de la siguiente manera:

Tabla 1: Estructura del Test de Comprensión Lectora de Violeta Tapia y Maritza Silva

HABILIDADES	Nº	Nº ÍTEMS
Información de hechos	1,2,13,24,27,29	6
Definición de significados	5,16	2
Identificación de la idea central del texto	14,23,28	3
Interpretación de hechos (identificar el significado de partes del fragmento expresado con proposiciones diferentes)	4,6,7,9,10,12,15,17,18,21,22,31,32,36	14
Inferencia sobre el autor (punto de vista del autor)	37,38	2
Inferencia sobre el contenido del fragmento (extraer una conclusión de un párrafo con diferentes proposiciones)	19,20,25,30,34,35	6
Rotular (dar un título a un texto)	3,8,11,26,33	5
Total		38

Fuente: (TAPIA, 2003)

RESULTADOS

Etapas Pre-investigación. Se observó durante clases de una hora, cuatro horas a la semana, el desempeño de los estudiantes relativo al hábito de lectura, a lo cual se mostraron renuentes e incluso mostraron un desinterés total por la misma. De los 75 participantes el 56% eran mujeres y 44 hombres, sus edades oscilaban en promedio los 22 años.

Etapas Diagnostico. Los resultados del test observamos que en el rubro relativo a Información de hechos” de manera general en su mayoría podía establecer elementos esenciales de la lectura (preguntas 1 y 2) sin

embargo el resto de los ítems no pudieron ser resueltos correctamente. Esto sucedió con la mayoría de los participantes solo un número muy pequeño logro tener estos ítems bien

El ítem relativo a “Inferencia sobre el contenido del fragmento” la mayoría de los participantes tuvieron problemas con la identificación del contenido de las lecturas. Los textos principales eran los de corte científico y humanístico.

CONCLUSIONES

Derivado de la importancia del nivel Universitario dado que los conocimientos ahí impartidos forman parte de la profesionalización de los estudiantes y por ende de su desarrollo en la sociedad, una buena auto enseñanza de la lectura por parte de los estudiantes dependerá que los estudiantes entiendan su aprendizaje como un medio de ampliar las posibilidades de comunicación, gozo y acceso al conocimiento.

Tristemente los jóvenes no están interesados en adquirir esta competencia tan valiosa para el futuro y sus resultados hasta el momento son considerables. El no comprender el contenido de textos científicos genera problemas futuros ya que al momento de ingresar a un posgrado generara frustraciones o/y un desempeño pobre. Queda abierta la investigación relativa a las fases faltantes de la IAP, Programación, Conclusiones y propuestas, y por último se pone en marcha de la propuesta así como la realización de una nueva evaluación.

BIBLIOGRAFÍA

Carlino, P. (2006). Escribir, leer y aprender en la universidad: Una introducción a la alfabetización académica. Buenos Aires: Fondo de Cultura Economica.

Fajardo, H. A., Hernández, J., & González, S. Á. (2012). Acceso léxico y comprensión lectora: un estudio con jóvenes universitarios. *Revista Electrónica de Investigación Educativa*, 14(2), 25-33.

García, S. A., & Macías, R. F. (2007). Producción de maguey y mezcal: estrategias de desarrollo rural en Teúl de González Ortega, Zacatecas. *Geografía Agrícola* 45.

Iglesias, S. (2014). Crecimiento de la Industria Mezcalera. *El Financiero*.

Moyetta, D., Luchesse, M., & Fernández, R. (2013). Leer en áreas de conocimiento: La experiencia en la Facultad de CS. Médicas U.N.C. *Revista del Instituto de Estudios en Educación Universidad del Norte*, 86-94.

Muñoz, C. E., Muñoz, M. L., García, G., & Granado, L. L. (2013). La comprensión lectora de textos científicos en el proceso de enseñanza-aprendizaje. *Humanidades Medicas*, 772-804.

TAPIA, M. V. (2003). Programa psicopedagógico de comprensión lectora: aprendo a leer a través de la lectura. Universidad Nacional Mayor de San Marcos. Lima: Perú.

Trillos, P. J. (2013). La lectura hipermedial y su incidencia en la comprensión lectora en estudiantes universitarios. 944-992.

Vidal, M., & Manriquez, L. L. (2016). El docente como mediador de la comprensión lectora en universitarios. *Revista de la Educación Superior*, 95-118.

Zavala, G. A. (2008). Relación entre el estilo de aprendizaje y el nivel de comprensión lectora en estudiantes de 5to. de secundaria de colegios estatales y particulares de Lima Metropolitana. Lima, Perú.

PERSPECTIVA MULTIDISCIPLINARIA DE LAS PEQUEÑAS Y MEDIANAS EMPRESAS DEL SECTOR SERVICIOS DEL ESTADO DE MORELOS, MÉXICO

Yadira Toledo Navarro, Universidad Politécnica del Estado de Morelos
Miguel Ángel Ruiz Jaimes, Universidad Politécnica del Estado de Morelos
Alejandro Reyes Velázquez, Universidad Politécnica del Estado de Morelos
Alejandra Fernández Hernández, Universidad Politécnica del Estado de Morelos
Jorge A. Ruiz-Vanoye, Universidad Autónoma del Estado de Hidalgo
Ocotlan Díaz-Parra, Universidad Autónoma del Estado de Hidalgo

RESUMEN

El presente trabajo forma parte de un diagnóstico en las pequeñas y medianas empresas del Sector Servicios en el estado de Morelos; de manera particular se analizan 5 áreas funcionales de una organización. A través del análisis organizacional se obtuvo información para conocer el funcionamiento de este sector tan importante para la economía del Estado de Morelos. Las áreas en las que se realizó el estudio para lograr una perspectiva multidisciplinaria de las empresas fueron: administración, operaciones, mercado y ventas, recursos humanos y por último finanzas. Lo anterior, con el objetivo de conocer la situación actual de las pymes del sector servicios del estado de Morelos, mediante un análisis organizacional, con relación al funcionamiento en la administración de sus operaciones y la toma de decisiones.

Como parte de los resultados que se obtuvieron en este proyecto, la mayoría de las empresas que participaron tienen experiencia sobre la administración del negocio, identifican las actividades y materiales necesarios para brindar el servicio a sus clientes, contratan al personal idóneo para el puesto adecuado, llevan el control de las funciones financieras y sobre todo, tienen conocimiento sobre el funcionamiento de su organización que les permite tomar decisiones con respecto al crecimiento de la misma.

PALABRAS CLAVE: Análisis Organizacional, Toma de Decisiones, Pymes

MULTIDISCIPLINARY PERSPECTIVE OF SMALL AND MEDIUM-SIZED ENTERPRISES TO THE SERVICES SECTOR OF THE STATE OF MORELOS, MEXICO

ABSTRACT

This work is part of a Diagnosis in small and medium-sized enterprises belong to the Services Sector of the state of Morelos. In particular are analyzed 5 functional areas of an organization. Through the Organizational Analysis information was obtained in order to know the operation of this sector so important to the economy of the State of Morelos. The areas in which this research was carried out to achieve a multidisciplinary perspective were: Management, Operations, Marketing and Sales, Human Resources and Finance. The above, with the aim of knowing the current situation of SMEs (PYMES) in the Services Sector of the state of Morelos, through an organizational analysis, related to the Business functioning of its operations and decision-making.

As part of the results obtained in this project, most of the companies involved have experience on the Administration of their businesses, identify the activities and necessary materials to provide the service to their customers, hire qualified staff for the right job, take control of the financial functions and above all, they have knowledge about the functioning of their organization that allows them to make decisions in regard to their growth.

JEL: M10, M11, M12, M31, M41

KEY WORDS: Organizational Analysis, Decision-Making, SMEs

INTRODUCCIÓN

La participación de las Pymes en México, representa un grupo importante para el crecimiento y desarrollo económico, en la generación de empleos, la contribución a más de 50% del producto interno bruto nacional, y sobre todo, en el impacto al desarrollo local, regional y nacional, como parte de la base de la economía mexicana. El diagnóstico empresarial al interior y exterior de las empresas se convierte en un factor clave para el éxito de las organizaciones. (PRO MÉXICO, 2017)

Regalado (2007) señala que las Pymes en México constituyen el 97% del total de las empresas, generadoras de empleo del 79% de la población, ya que junto con las micro representan un 99% de total. Las microempresas generan 2,058,867 empleos, las medianas 2,317,328, contra 4,318,374 que generan las grandes empresas del sector productivo.

En esta investigación se plantean los argumentos que sustentan el diagnóstico como parte del análisis, tanto interno como externo de la empresa para la toma de decisiones. Se presenta un diagnóstico de la situación actual de las pequeñas y medianas empresas del sector servicios del estado de Morelos, mediante un análisis organizacional, con relación al funcionamiento en la administración de sus operaciones y toma de decisiones. Para el desarrollo, se utilizará como referencia la metodología de la Agencia de Cooperación Internacional del Japón (Pérez, 2008), que permite conocer la situación general de la empresa, su planeación, procesos y funcionamiento, así como la relación existente entre las principales áreas de la organización: administración, operaciones, mercado y ventas, recursos humanos y finanzas. Seguidamente, se presentan los resultados y las conclusiones de la investigación.

REVISIÓN LITERARIA

Las organizaciones deberán contar con los elementos necesarios para cumplir con su razón de ser. Una forma de identificar el funcionamiento de la empresa es a través de un análisis organizacional. Schemelson (2014) lo define como una disciplina teórica, metodológica, basada en conocimientos científicos, que ofrece un modelo de abordaje para lograr los cambios que un sistema organizativo particular requiere.

Henri Fayol creador de la Teoría Clásica de la administración hace énfasis en la estructura de la organización como base para lograr la eficiencia. Se distinguía por el énfasis en la estructura que debe tener una organización para lograr la eficiencia en todas las partes involucradas, departamentos o personas. Fayol propone seis funciones básicas de la empresa, mismas que a continuación se describen:

Funciones Técnicas, relacionadas con la producción de bienes o servicios de la empresa;

Funciones Comerciales, relacionadas con la compra, la venta o el intercambio;

Funciones Financieras, relacionadas con la búsqueda y gestión de capitales;

Funciones de Seguridad, relacionadas con la protección y preservación de los bienes y las personas;

Funciones Contables, relacionadas con los inventarios, los registros, los balances, los costos y las estadísticas; y

Funciones Administrativas, relacionadas con la integración de las otras cinco funciones en la dirección, que coordinan y sincronizan las demás funciones de la empresa, y están siempre por encima de ellas. (Chiavenato, 2006)

Según Chiavenato (2006) la perspectiva de Fayol ha sido superada. Hoy en día las funciones básicas de la empresa se denominan áreas de administración; la función administrativa se denomina Administración General; las funciones técnicas son el área de Producción u Operaciones; las funciones comerciales se llaman Ventas o Marketing; las funciones contables se subordinan al área de Finanzas; y las funciones de seguridad pasan a ubicarse en un nivel inferior y surge el área de recursos humanos.

Administración

Según Münch (2012) la administración es un proceso cuyo objeto es la coordinación eficaz y eficiente de los recursos de una organización formal para lograr sus objetivos a través de otros. Sin embargo, para Kast (2007) la administración comprende lo siguiente:

Coordinar los recursos humanos, materiales y financieros para el logro efectivo y eficiente de los logros organizacionales

Relacionar a la organización con su ambiente externo y responder a las necesidades de la sociedad

Desempeñar ciertas funciones específicas como determinar objetivos, planear, asignar recursos, organizar, instrumentar y controlar.

Producción

El área de producción desempeña una función técnica, que consiste en transformar entradas en salidas o productos terminados, a través de una serie de operaciones que constituye el proceso productivo. El departamento de producción se encargará del control de todos los procesos, métodos y tecnologías que permiten la obtención de productos y/o servicios. (Delgado, 2011)

Marketing

La American Marketing Association, define a la mercadotecnia como el proceso de planeación, ejecución y conceptualización de precios, promoción y distribución de ideas, mercancías y términos para crear intercambios que satisfagan objetivos individuales y organizacionales. (Fisher, 2004)

Kotler (2001) afirma que la empresa debe construir un departamento de marketing que pueda poner en práctica las estrategias y planes de marketing. Si la empresa es muy pequeña, una persona podría realizar todo el trabajo de marketing: investigación, ventas, publicidad, servicio a clientes y otras actividades. A medida que la empresa se expande, surge una organización del departamento de marketing para planear y poner en práctica las actividades.

Finanzas

Los estados financieros representan información de tipo financiera que proporciona los elementos de juicio confiables que permiten tanto al usuario interno como externo evaluar lo siguiente:

El comportamiento económico-financiero de la entidad, su estabilidad y vulnerabilidad, así como efectividad y eficiencia en el cumplimiento de sus objetivos.

La capacidad de la entidad para mantener y generar valor agregado a sus recursos, obtener financiamientos adecuados y evaluar la viabilidad de la entidad, su crecimiento, diversificación y valor del negocio. (Coello, 2016)

Recursos Humanos

La administración de recursos humanos hace referencia a la participación de individuos en la organización, que cumplen con un rol determinado para el cumplimiento de los objetivos. La teoría del comportamiento organizacional es un campo de estudio en el que se investiga el impacto que individuos, grupos y estructuras tienen en la conducta dentro de las organizaciones con la finalidad de aplicar estos conocimientos a la mejora de la eficacia de tales organizaciones (Robbins, 2004).

La teoría del comportamiento concibe a la organización como un sistema de decisiones. Un sistema en donde las personas participan en la toma de decisiones en cada una de las funciones y actividades que le son asignadas como parte de su responsabilidad dentro de la empresa y que la decisión que se tome en cada una de ellas de entre tantas alternativas, tendrá relación con el cumplimiento de los objetivos organizacionales.

Chiavenato (2006) establece que la decisión es el proceso de análisis y escogencia, entre diversas alternativas disponibles, del curso de acción que la persona deberá seguir. Para poder decidir, existen seis elementos comunes a toda decisión.

- La persona que elige a opción adecuada
- Los objetivos a alcanzar
- Criterios a seguir para elegir la opción adecuada
- La estrategia para alcanzar los objetivos
- El ambiente que afecta a la persona que tomará la decisión
- El resultado

El proceso decisorio es complejo, lo que conlleva a seguir una serie de pasos o etapas antes de decidir cuál es la mejor alternativa para alcanzar el objetivo establecido. Cada una de las etapas del proceso decisorial influye en las demás y todo el conjunto del proceso. Existen tres etapas del proceso decisorio que se pueden abreviar o suprimir en caso de una decisión inmediata, la definición de objetivos, evaluación y comparación de alternativas y la implementación de la estrategia escogida, concluyendo el proceso en la elección de alternativa más adecuada para una situación determinada.

Según López y Montes (2007) las pequeñas y medianas empresas poseen algunas ventajas para competir con las grandes, como la flexibilidad, la capacidad de adaptación que le permite detectar demanda insatisfecha, rapidez de respuesta, ligera estructura de costos y capacidad de innovación. Sin embargo, presentan algunos inconvenientes, como el difícil acceso a los mercados de capitales, escasez de recursos y escaso poder negociador frente a los clientes y proveedores. El volumen de facturación no les permite negociar buenas condiciones con proveedores o clientes. La toma de decisiones es más ágil en las Pymes, al no ser necesario esperar a los consejos de administración ni poner de acuerdo a un numeroso grupo de personas, ni tampoco reunir información relevante.

METODOLOGÍA

La investigación es de aspecto cualitativo de tipo descriptivo, enfocada a conocer la situación actual de las Pymes del sector servicios del estado de Morelos, mediante un análisis organizacional, con relación al funcionamiento en la administración de sus operaciones y toma de decisiones. Se determinó una muestra por conveniencia de 50 Pymes, derivado de la disponibilidad de las empresas para participar en el proyecto de investigación. Aunado a lo anterior, estas empresas pertenecen a los 5 municipios con mayor número de habitantes en el estado de Morelos, entre los que se encuentran: Cuernavaca, Jiutepec, Cuautla, Zapata y Temixco (INEGI, 2015).

El cuestionario para el diagnóstico fue aplicado a los directivos, representantes de las empresas que participaron en el proyecto, derivado del conocimiento de la administración de su negocio, funciones que se llevan a cabo en cada una de las áreas o departamentos, control de las operaciones financieras y la toma de decisiones para lograr los objetivos organizacionales. Las variables que se utilizaron en la investigación son: Administración, Operaciones, Mercado y Ventas, Recursos Humanos y por último, Finanzas. El instrumento de medición utilizado para obtener información, es un cuestionario que se integra por 11 preguntas para cada apartado. La información obtenida fue analizada a través del sistema estadístico SPSS Statics. Las variables fueron medidas a través de la escala de Likert, representada de la siguiente manera: 10 = Siempre; 8 = Casi siempre; 6 = A veces; 4 = Casi nunca; 2 = Nunca.

Administración: El área contempla la visión y políticas administrativas; Objetivos de la organización; Plan de negocios; Manual de organización; Experiencia en el campo laboral; Situación actual de la empresa; Maquinaria y equipo; Responsabilidad Social empresarial; Capacitación; Administración estratégica.

Producción/operaciones: Integra los Procedimientos documentados; Infraestructura; Manual de operaciones; Control de calidad; Estudio de tiempos y movimientos; Cadena de suministro; Análisis de costos; Capacitación especializada; Análisis de la productividad; Ventaja competitiva.

Mercado y venta: Incluye la Competencia; Estrategias de Mercadotecnia; Precio; Calidad del producto y/o servicio; Identificación del producto/servicio; Identificación del mercado meta; Canales de distribución; Atención a clientes; Servicio postventa; Identificación de la empresa.

Recursos Humanos: Desde la Selección de personal; Contratación de personal; Capacitación; Evaluación del desempeño; Evaluación de la productividad; Normatividad institucional; Prestaciones sociales; Premios y reconocimientos; Clima organizacional; Canales de comunicación.

Finanzas: Se compone de los siguientes elementos: Toma de decisiones; Estados financieros de la empresa; Liquidez; Flujo de efectivo; Costos totales; Presupuesto; Rentabilidad; Cartera de clientes; Contabilidad de la empresa; Inversión.

RESULTADOS

El Estado de Morelos se localiza en el centro del país, cuenta con una superficie de 4,879 km², geográficamente su extensión representa 0.25% del territorio nacional, con una población de 1,912,211 habitantes, se integra por 33 municipios, de los más poblados son: Cuernavaca, Jiutepec, Cuautla, Temixco, Yauatepec y Emiliano Zapata. (INEGI, 2015)

En el Censo Económico que realizó el Instituto Nacional de Estadística y Geografía (2014), se determinó que existen 84,651 unidades económicas en el Estado de Morelos, que representa el 2% del total del país. El 50.3% de las unidades económicas están enfocadas al Comercio, el 38.1% están a los Servicios Privados no Financieros, el 10.1% la Industria Manufacturera y el 1.4% al resto de actividades. Del total de Unidades Económicas en el Estado de Morelos, 20,326 unidades económicas corresponden a Cuernavaca, 12,235 a Cuautla, 8,577 a Jiutepec, 4,624 a Temixco y Emiliano Zapata 2,747. El personal ocupado en el Estado de Morelos es de 297,797, y la producción bruta total de \$144,574,831 pesos.

De las Pymes que participaron en el proyecto de investigación, el 24% brindan servicios de información en medios masivos; el 18% servicios educativos; 18 % alojamiento temporal y preparación de alimentos y bebidas; con el 12% transporte turístico y de pasajeros; 6% otros servicios; con un 4% en cada uno, se encuentran los servicios financieros y de seguros, de apoyo a los negocios, de salud, entre otros; y con la menor participación servicios de esparcimiento, cultural y deportivo.

En el área de Dirección – Administración, se identifica el funcionamiento de las Pymes en el Estado de Morelos, sus objetivos, planes, administración, organización del negocio. Como parte de los resultados obtenidos, el 60% de las Pymes del Sector Servicios en el Estado de Morelos, muestran una situación estable en cuanto a la Dirección – Administración, dada su experiencia en el sector y la administración de negocio. Estas empresas tienen definida su filosofía y políticas administrativas, mismas, que son conocidas por el personal que labora en ellas. Más de la mitad de las empresas participantes, han iniciado sus operaciones con un plan de negocios, que les ha permitido llevar una adecuada administración de la empresa para la correcta toma de decisiones. Así también, ofrecen oportunidades de crecimiento al personal que labora en su empresa.

El 38% de las empresas tienen por escrito de manera formal la misión, visión, objetivos y políticas administrativas que servirán de guía para alcanzar sus propósitos u objetivos a largo plazo, sin embargo, esta información no se actualiza constantemente. Estas empresas no analizan y aprovechan la información generada para la toma de decisiones. Aún les falta mucho por trabajar en el tema de la Responsabilidad Social Empresarial. Sin embargo, el resto de las empresas, no tienen establecido un plan de negocios, llevan a cabo su administración de manera informal, con la falta de experiencia en el sector y la administración del director del negocio. Siendo así, inestable la situación actual de las Pymes.

En el área de Operaciones se puede identificar el flujo del proceso de operaciones, problemas en calidad, tiempos de entrega, costos de producción, costos unitarios de los productos fabricados, proveedores, desperdicios en tiempo, equipo, materia prima, personal, volúmenes de producción, compras e inventario, etc. El 64% de las empresas participantes, cuentan con la infraestructura y materiales necesarios para brindar el servicio, tienen establecido los tiempos para la realización de sus operaciones e identificado el costo unitario de cada servicio. Más del 20% de las Pymes encuestadas no cuentan con un control de calidad apropiado, y el resto de ellas, no cuentan con la infraestructura y materiales necesarios para el funcionamiento de sus operaciones y dar un servicio de calidad.

En materia de Mercadotecnia, más del 50% de las empresas tiene conocimiento de su competencia, tienen identificadas las necesidades y expectativas de sus clientes, y en su caso, cuentan con los canales de distribución efectivos. Más del 30% de las Pymes tienen establecido un precio de venta adecuado, muchas de estas, no ofrece servicios de postventa, no conoce a su competencia. El resto de estas empresas, no tienen un precio adecuado para los servicios que brinda a sus clientes, ni identificado las necesidades y expectativas de los mismos.

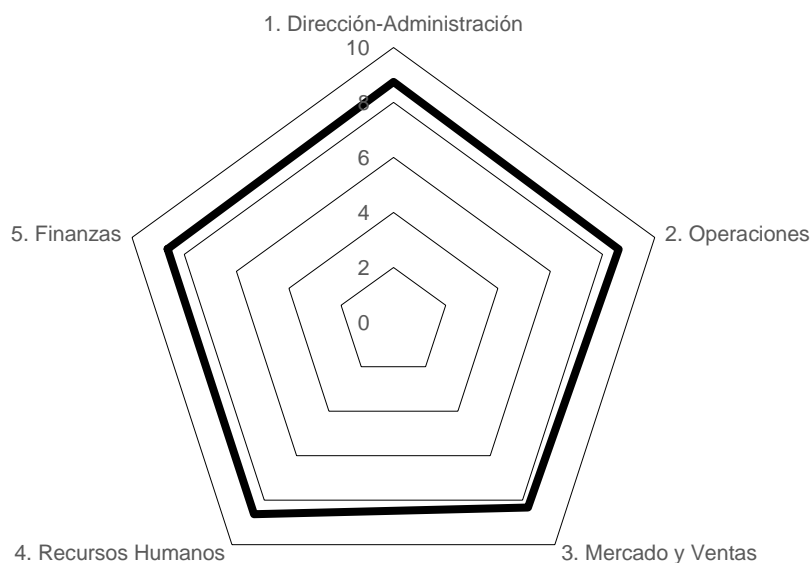
La administración de recursos humanos en una empresa, es de gran relevancia, permite llevar a cabo la correcta gestión de capital humano con la que cuenta una Pyme. Su objetivo principal es contribuir al éxito de la empresa, mediante el adecuado proceso de reclutamiento, selección, contratación, capacitación, desarrollo del personal y de acuerdo con el perfil de puestos que se requiera para el funcionamiento de la organización. En materia de Recursos Humanos, la mitad de organizaciones participantes cuentan con contratos y reglamentos de trabajo de manera formal y por escrito, con prestaciones superiores a las que marca la Ley Federal del Trabajo y un programa de capacitación de personal. Tan solo el 48% de las empresas tienen por escrito un mecanismo para mejorar la productividad, pero no se actualiza. Casi siempre existe buena comunicación en todos los niveles y buen ambiente laboral. El resto, no identifica la capacidad y el desempeño de los empleados de manera individual, no contrata al recurso humano adecuado y no existe un buen ambiente laboral.

En el área de Finanzas en la Pymes del Sector Servicios en el Estado de Morelos, se genera información de tipo financiera que brinda los elementos necesarios al usuario para conocer el comportamiento económico – financiero de la organización, a través de realizar análisis de tipo cuantitativo pertinentes, para la toma de decisiones de inversión o asignación de recursos.

El 62 % de las Pymes del Sector Servicios en el Estado de Morelos identifica claramente las cifras de ventas y utilidades por producto y/o servicios, llevan el control y el registro contable adecuadamente. El 30% de las organizaciones señalan que casi siempre la estabilidad de la empresa ha mejorado y el flujo de caja tiene una tendencia positiva. El resto de ellas, señala que a veces evalúan el presupuesto contra los resultados, así también, no tienen asegurada una tasa de utilidad adecuada.

Existe un equilibrio entre las cinco áreas evaluadas, sin embargo, si analizamos los resultados con mayor profundidad, se identifica en el área de Mercado y Ventas el porcentaje más bajo del promedio general presentado. El área de Dirección – Administración con 8.75 de promedio final, siendo la variable con mayor puntaje; De ahí le sigue, el área de Finanzas con 8.64 de promedio General; En tercer lugar, se ubica el área de Recursos Humanos con un puntaje de 8.63; Enseguida, con un promedio general de 8.75 el área de Dirección – Administración y finalmente, Mercado y Ventas con un promedio general de 8.33; identificando en este último un área de oportunidad en la mayoría de los casos de estudio.

Figura 1. Promedio general del resultado del diagnóstico de las áreas funcionales



d

CONCLUSIONES

La pequeña y medianas empresas del sector servicios en el estado de Morelos, en estudio, requiere fortalecer el área de Mercadotecnia y Ventas, con la finalidad de identificar a su competencia en el mercado; en algunos casos, existe faltante de productos para brindar el servicio adecuado, deberán hacer promoción de los servicios que ofrecen; la cartera de clientes para algunos es limitada; no cuentan con recursos para realizar publicidad; y sobre todo, la falta de un departamento de mercadotecnia en su estructura que diseñe y ponga en práctica las estrategias de marketing, investigación, ventas, publicidad, servicio a clientes, necesaria para lograr el posicionamiento de la empresa en un mercado competitivo.

Sin embargo, algunas de las empresas encuestadas se enfrentan a obstáculos que impiden el crecimiento en las organizaciones, entre los que destacan, financiamiento necesario para su operación, experiencia por parte de la dirección para la correcta administración del negocio, además, de no contratar al personal idóneo para realizar las funciones específicas y cumplir con las expectativas de los clientes.

Robles (1999) señala características predominantes de la micro, pequeña y mediana empresa; la empresa crece principalmente a través de la reinversión de utilidades; las actividades de administración se concentran en el dueño de la empresa y generalmente son una empresa de tipo familiar. Así mismo, se logró conocer la situación actual de las pymes del sector servicios del estado de Morelos, mediante un análisis organizacional, con relación al funcionamiento en la administración de sus operaciones y toma de decisiones. Por todo lo anterior, se concluye que las Pymes del Sector Servicios en el Estado de Morelos cuentan con los elementos y herramientas necesarias para el funcionamiento en la administración de sus operaciones y la toma de decisiones.

BIBLIOGRAFÍA

Chiavenato, I. (2006). Introducción a la Teoría General de la Administración. 2ª. Ed. Colombia: McGraw-Hill.

Delgado, S. & Ventura B. (2011). Recursos Humanos. 4ª. Ed. Madrid: Paraninfo.

Fisher, L. & Espejo J. (2004). Mercadotecnia. 3ª. Ed. México: McGraw Hill.

INEGI (2015). Instituto Nacional de Estadística y Geografía. Recuperado el 10 de Octubre de 2017, de Instituto Nacional de Estadística y Geografía. <http://www.beta.inegi.org.mx/app/areasgeograficas/?ag=17>

Kast, F. & Rosenzweig, J. (2007). Administración en las organizaciones. 4ª. Ed. México: Mc Graw Hill.

Kotler, P. & Armstrong, G. (2001). Marketing: Edición para Latinoamérica, 8ª. Ed. México: Pearson

López, N.; Montes, J. & Ordás, C. (2007). Como gestionar la innovación en las Pymes. España: Netbiblo.

Münch, G. (2012). Fundamentos de administración. 9ª. Ed. México: Trillas.

Pacheco, C. (2016). La información financiera y administrativa. Recuperado 11 de diciembre de 2017 en <https://books.google.com.mx>

Pérez, A. (2008). Procedimiento para la práctica empresarial. México: Consultores PYME con metodología JICA

PRO MÉXICO (2017). PRO MEXICO Trade and Investment. Consultado en: <http://www.promexico.gob.mx/documentos/revista-negocios/html/2014-11/english/11-2014/paraExportadores/art05.html>. Recuperado el 14 de diciembre de 2017.

Regalado R. (2007). Las Pymes en Latinoamérica. Recuperado el 13 de diciembre 2017 en <https://books.google.com.mx>

Robbins, S. (2004). Comportamiento Organizacional. 8ª. Ed. México. Pearson.

Robles, G. & Alcérreca, J. (1999). Administración, un enfoque interdisciplinario. México: Pearson.

Schlemenson, A. (2014). Análisis Organizacional en Pymes y Empresas de Familia. Buenos Aires: Granica.

RECONOCIMIENTO

Los autores agradecen al Programa para el Desarrollo Profesional Docente por el apoyo financiero para la realización del proyecto. Asimismo, agradecen los comentarios de los árbitros y editores del IBFR. Los cuales contribuyeron a mejorar la calidad de esta investigación.

BIOGRAFÍA

Yadira Toledo Navarro es Doctora en Administración. Actualmente Profesor de Tiempo Completo, adscrita a la Licenciatura en Administración y Gestión de la Universidad Politécnica del Estado de Morelos. Se puede contactar en Boulevard Cuauhnáhuac No. 566, Col. Lomas del Texcal, C.P. 62550, Municipio de Jiutepec del estado de Morelos, México.

INDEX OF AUTHORS

Akwawao, Efiang	163	Gaona Tamez, Laura Leticia.....	265
Alcalá Silva, Saidt Gabriel.....	430	García Contreras, Paul Jair	522
Alcocer Maldonado, Alfonso.....	573	García Ríos, Alma Rosa	383, 580
Alsalmi, Noora A.....	194	García Ríos, Zoila Margarita	383
Álvarez González, Alma Lucero.....	490	Géczy, Peter.....	208
Ananthanarayanan, Umapathy	79	González Hidalgo, Karla.....	455
Araiza Garza, Zóchitl.....	366	Grant, Dustin M.....	17
Aranibar Gutiérrez, Mónica Fernanda	336	Gutiérrez Castillo, Orlando W.....	430
Arévalo-Avecillas, Danny.....	346, 508	Gutiérrez González, Leonor.....	285
Argüelles Ma, Luis Alfredo	278	Gutiérrez Rangel, Héctor Fabián	251
Arias Valencia, Ma. del Carmen.....	383, 393	Haro-Zea, Karla Liliana.....	89, 114
Armas Aguirre, Jimmy.....	285	Haro-Zea, Yadira Rosbinelly.....	89
Bajaña Villagómez, Yanina	259, 545	Harris, Peter	74, 79
Bellmann, Vivian K.	189	Herberger, David	39, 45
Benavides Espinosa, Karla Viviana.....	319, 406, 449	Hernández Castro, Nidia Estela.....	366
Benjamin, Michael.....	74	Hernández Cruz, Harold Wilson.....	559
Bermúdez Gallegos, Christian Wladimir	259	Hernández García, Pedro Abel	479, 490
Buenaño Cabrera, José Javier	319, 406, 449	Hernández Rubio, Anyi Marcela	307
Bueno Cevada, Luis Enrique	532	Jalbert, Terrance	157
Burgos Madariaga, Yesenia	246	Kaszai, Ildikó.....	170
Bussemer, Felix.....	39, 45	Kemerer, Kevin L.	194
Cano Plata, Carlos Alberto	307	Kim, Seung-Chul	64
Cárdenas Espinoza, Diana Sofia	307	Kim, Young-Duk	227
Castro García, Yenisey	383, 393, 580	Kumar, Raman.....	139
Caudill, Jason.....	152	Lapoint, Patricia A.....	53
Chávez Macías, Adriana Guadalupe.....	301, 371	Leventhal, Richard.....	163
Chávez Márquez, Irma Leticia.....	356	Lino Gamiño, Juan Alfredo	567
Contreras Tovías, Aranza María	301	López Montoya, Oscar Hernán.....	375
Cruz Mora, Carlos Enrique	278	López Saldaña, Cristina Del Pilar.....	301, 371
Dedominicis, Benedict E.	98	López Vizcarra, Jesús Amparo	497
Dehesa Vargas, Octavio Augusto	241	Macías Terán, Cruz Elda	551
Del Toro Valencia, Marcela Patricia.....	393, 580	Maher, John J.....	139
Delgado, Rodolfo.....	145	Mahoney, Michael	142
Demuner Flores, María Del Rosario.....	366	Maldonado Mera, Betzabé del Rosario	319, 406, 449
Díaz Jiménez, Mitzi Abigail	291	Marín Aroca, Mónica Andrea.....	545
Díaz-Parra, Ocotlan.....	584	Martínez Helmes, Abraham.....	559
Dong, Jinwoo	227	Marzo Icaza, María Paula.....	545
Elizondo Sandoval, Melchor David.....	326	Mata Izquierdo, Jesús	485
Espinosa Ayala, Enrique.....	479, 485, 490	McCabe, Mary Beth	7
Espinoza Bazán, Fabián.....	462	McConville, Arlene	30
Fajardo, Mario Javier	278	Medina Blum, Fernando	278
Felix, Carolin	57	Medina Vara, Marlene Graciela	371
Fernández Hernández, Alejandra.....	584	Melendres Carlos, Victor Daniel	336
Flores Morales, Carmen Romelia	356	Miranda Torres, Marisol.....	462

Montalvo Morales, Jesús Alberto	326, 430	Romero Castillo, Martín	413, 422
Morales Vázquez, Blanca H.....	440	Ruíz Díaz, Fernando Miguel.....	265
Morales, Betzabeth Dafne.....	291	Ruiz Jaimes, Miguel Ángel.....	584
Moreno Zacarías, Hugo Martín.....	567, 573	Ruiz Riva Palacio, Martha Elba.....	485
Mullen, Kelly C.	124	Ruiz-Vanoye, Jorge A.	584
Muñoz Peña, Kelly Alejandra.....	265	Saavedra Leyva, Rafael Eduardo.....	532
Muñoz Velazquez, Rebeca.....	440	Saldaña Contreras, Yolanda.....	265
Muñoz, José Andrés	326	Sánchez Acosta, Luis Raúl	356
Muñoz, Luis Daniel	326	Sánchez Gil, Abraham.....	490
Murillo Delgado, Erick Paul	259, 471, 545	Sánchez Sánchez, Samanta.....	89
Nahuat Arreguín, Juan Jesús	265	Schmidt, Maurice.....	181
Nieves Bernal, Gloria Alicia.....	541	Schmiedgen, Peter	45
Noennig, Jörg-Rainer	45	Segura Lozano, Xóchitl	326
Nyhuis, Peter.....	39, 45, 181, 189	Serna González, Patricia.....	399
Ordóñez Parada, Ana Isabel.....	356	Sesento García, Griselda.....	399
Ortiz Zambrano, Rafael	462	Sesento García, Leticia.....	399
Osman, Alnour Nadir Alnour.....	174	Shin, Mannsoo	173
Osman, Diaeldin	174	Singh, Nisha.....	211
Ospina Pacheco, Gloria Yolanda	514	Soriano Martínez, Jazmín	479
Padilla Lozano, Jodie	346	Swanson, Andree	30, 163
Padilla-Lozano, Carmen	508	Takefuji, Yoahiyasu.....	132
Park, So-Hyun.....	64	Tenopala Hernández, Crisanto.....	455
Peña Cárdenas, Maricela Carolina	301, 371	Terán Varela, Omar Ernesto .	241, 246, 479, 485, 490
Pinzón Marín, Inés Yohanna.....	514	Taxis Flores, Michelle	532
Polo García, Uriel	455	Toledo Navarro, Yadira	584
Priego Huertas, Héctor.....	567, 573	Tomita, Satoshi	132, 197
Quijano García, Román Alberto	278	Torres López, Alejandra	455
Rakestraw, Joseph R.	139	Vázquez Arango, María de Lourdes	522
Ramírez Castillo, Eric Amín.....	522, 559	Vázquez Arango, María De Lourdes	559
Ramírez Domínguez, María De Jesús.....	440	Veres, Zoltán	170
Ramírez Ramírez, Enrique.....	375	Villarreal Moreno, Liza Mariana	366
Rangel Enciso, Julián Alberto.....	375	Weaver, Richard	7
Reséndiz Ortega, Martha Elva	440	Wilburn, H. Ralph	2
Reyes Pazos, Marcela	551	Wilburn, Kathleen M.	2
Reyes Velázquez, Alejandro	584	Yamamoto, Hiroshi	132
Ríos Vázquez, Adriana Guillermina	497	Zavala Chacón, Liliana Patricia.....	285
Rivera Guerrero, Álvaro	471	Zhang, Yi.....	108
Roblero-Mazariegos, Gudiel.....	89	Zobisch, Paula	30, 163
Rodríguez Vázquez, Alejandro.....	567, 573		
Rodríguez Villanueva, Baltazar	430		

PUBLICATION OPPORTUNITIES

The International Journal of
R Business and Finance
RESEARCH
The International Journal of Business and
Finance Research ISSN 1931-0269

The International Journal of Business and Finance Research (IJBFR) publishes high-quality articles in all areas of finance, accounting and economics. Theoretical, empirical and applied manuscripts are welcome for publication consideration.

All papers submitted to the Journal are blind reviewed. Visit www.theibfr.com/journal.htm for distribution, listing and ranking information.

IJMMR
INTERNATIONAL JOURNAL OF MANAGEMENT AND MARKETING RESEARCH
International Journal of Management and
Marketing Research ISSN 1933-3153

The International Journal of Management and Marketing Research (IJMMR) publishes high-quality articles in all areas of management and marketing. Theoretical, empirical and applied manuscripts are welcome for publication consideration.

All papers submitted to the Journal are blind reviewed. Visit www.theibfr.com/journal.htm for distribution, listing and ranking information.

Global Journal of
R Business
Research

Global Journal of Business Research
ISSN 1931-0277

The Global Journal of Business Research (GJBR) publishes high-quality articles in all areas of business. Theoretical, empirical and applied manuscripts are welcome for publication consideration.

All papers submitted to the Journal are blind reviewed. Visit www.theibfr.com/journal.htm for distribution, listing and ranking information.

 **Revista Internacional**
ADMINISTRACION
& FINANZAS

Revista Internacional Administración y
Finanzas ISSN 1933-608X

Revista Internacional Administración y Finanzas (RIAF), a Spanish language Journal, publishes high-quality articles in all areas of business. Theoretical, empirical and applied manuscripts are welcome for publication consideration.

All papers submitted to the Journal are blind reviewed. Visit www.theibfr.com/journal.htm for distribution, listing and ranking information.

PUBLICATION OPPORTUNITIES

REVIEW of BUSINESS & FINANCE STUDIES

Review of Business & Finance Studies

Review of Business & Finance Studies (ISSN: 2150-3338 print and 2156-8081 online) publishes high-quality studies in all areas of business, finance and related fields. Empirical, and theoretical papers as well as case studies are welcome. Cases can be based on real-world or hypothetical situations.

All papers submitted to the Journal are blind reviewed. Visit www.theibfr.com/journal.htm for distribution, listing and ranking information.

Business Education & Accreditation

Business Education and Accreditation (BEA)

Business Education & Accreditation publishes high-quality articles in all areas of business education, curriculum, educational methods, educational administration, advances in educational technology and accreditation. Theoretical, empirical and applied manuscripts are welcome for publication consideration.

All papers submitted to the Journal are blind reviewed. Visit www.theibfr.com/journal.htm for distribution, listing and ranking information.

Accounting & Taxation

Accounting and Taxation (AT)

Accounting and Taxation (AT) publishes high-quality articles in all areas of accounting, auditing, taxation and related areas. Theoretical, empirical and applied manuscripts are welcome for publication consideration.

All papers submitted to the Journal are blind reviewed. Visit www.theibfr.com/journal.htm for distribution, listing and ranking information.

REVISTA GLOBAL de NEGOCIOS

Revista Global de Negocios

Revista Global de Negocios (RGN), a Spanish language Journal, publishes high-quality articles in all areas of business. Theoretical, empirical and applied manuscripts are welcome for publication consideration.

All papers submitted to the Journal are blind reviewed. Visit www.theibfr.com/journal.htm for distribution, listing and ranking information.
