



Proceedings of the 14th International Conference of the Society for Global Business & Economic Development (SGBED)

**Global Connectivity, Knowledge and Innovation for
Sustainability and Growth: New Paradigms of Theory and
Practice**

Editors

**Vidya Atal
Ram Sewak Dubey**

**Montclair, New Jersey, USA
June 21-24, 2016**

Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limits of the U.S. copyright law for private use of patrons without fee. University faculties are permitted to photocopy isolated articles for non-commercial classroom use without any charge. For other copying, reprint or replication requirements, write to the Center for International Business, Montclair State University, Montclair, NJ 07043, USA.

CD version: ISBN: 978-0-9797659-9-5

Additional copies of CDs can be ordered from:

The Center for International Business (Room 582)

Feliciano School of Business

Montclair State University, Montclair, NJ 07043, USA

Tel: +1-973 655 7523

Email: cib@mail.montclair.edu

SGBED wishes to recognize the following sponsors

Principal Sponsors

Feliciano School of Business, Montclair State University
PSEG Institute for Sustainability Studies, College of Science and Mathematics,
Montclair State University
Department of Economics, Finance and Real Estate, Montclair State University
Curtin Business School, Curtin University, Australia
Fox School of Business, CIBER, Temple University
EADA Business School, Barcelona, Spain

Gold Sponsor

Bloomberg LP

Silver Sponsors

Anonymous
Dr. P.M. Rao, Long Island University, NY, USA
STC General Fund
Studio 042

Supporting Journals

Evidence Based HRM (EBHRM, Emerald)

International Journal of Business and Emerging Markets

(IJBEM, Inderscience)

Journal of Economics and Administrative Science (JEAS, Emerald)

Journal of Indian Business Research (JIBR, Emerald)

International Journal of Society Systems Science (IJSSS, Inderscience)

JCC: The Business and Economics Research Journal

Conference Executive Committee

Frank Aquilino – Montclair State University
Jonathan Bamber – Montclair State University
Dennis M. Bone – Montclair State University
Martina Broglietti – Università Politecnica delle Marche
A. Gregory Cant – Montclair State University
Marina Cunningham – Montclair State University
Kimberly Hollister – Montclair State University
Christopher KcKinley – Montclair State University
C. Jayachandran – Montclair State University
Phil Mattia – Montclair State University
Aditi Patel – Montclair State University
Robert S. Prezant – Montclair State University
Robert Taylor – Montclair State University
Linda Trainor – Montclair State University
Amy Tuininga – Montclair State University
Roger Salomon – Montclair State University

Conference Program Co-Chairs

Yam B. Limbu – Montclair State University
Susana Yu – Montclair State University

Proceedings Editors

Ram Sewak Dubey – Montclair State University
Vidya Atal – Montclair State University

SGBED Principal Coordinators

Samir Chatterjee - Curtin Business School, Australia
C. Jayachandran - Montclair State University
Silvio Cardinali - Università Politecnica delle Marche, Italy
Lin Guijin - UIBE, China
Johan De Jager - Tshwane University of Technology, South Africa
Phillip LeBel - Montclair State University, USA
Sherriff Luk - Nanjing University of Finance & Economics, China
Ramon Noguera - EADA Business School, Barcelona, Spain
Vasant Raval - Creighton University, USA
Jan Rudy, MBA Director - Comenius University, Slovakia
Yam B. Limbu - Montclair State University
Jose Sanchez-Guiterrez - University of Guadalajara, Mexico
Nitin Sanghavi - Manchester Business School, UK
Sununta Siengthai - AIT School of Management, Thailand
Tony Travaglione - Curtin Business School, Australia
Lubica Bajzikova - Comenius University in Bratislava

Program Committee - Track Chairs

Accounting Track:

Shifei Chung – Rowan University
Betsy Lin – Montclair State University

Economics, Finance, Real Estate, Banking & Public Policy Track:

Chee Ng – Fairleigh Dickinson University
Yudan Zheng – Long Island University

Entrepreneurship, SMEs and NGO Track:

Devon Johnson – Montclair State University

Information Technology and Operation Management Track:

Rashmi Jain – Montclair State University

International Business, MNEs and Global Issues Track:

Susan Hume – The College of New Jersey

Management, Organizational Behavior, Corporate Governance, Legal Issues and Human Resources Track:

Wencang Zhou – Montclair State University

Marketing, Services, E-Commerce Track, Sports and Tourism:

Christina Chung – Ramapo College

Sustainability and Environment Track:

Robert W. Taylor – Montclair State University
Amy Tuininga – Montclair State University
Mark Kay – Montclair State University

Pedagogy:

Yudan Zheng – Long Island University
Mark Kay – Montclair State University

Program Committee – Reviewers

Frank Aquilino, Montclair State University
Vidya Atal, Montclair State University
Hanmei Chen, Western Washington University
Ken Cheng, Morgan State University
Bea Chiang, TCNJ
Laurence DeGaetano, Montclair State University
Ram Sewak Dubey, Montclair State University
Ikechi Ekeledo, Montclair State University
Archana Kumar, Montclair State University
Laurence Lauricella, Montclair State University
Joseph Lipari, Montclair State University
Peter Lohrey, Montclair State University
Richard Lord, Montclair State University
Brian Dean Knox, University of Pittsburgh
Ram B. Misra, Montclair State University
Ramesh Narasimhan, Montclair State University
Joseph R. Nicholson, Montclair State University
Deniz Ozenbas, Montclair State University
Richard Peterson, Montclair State University
Jo Ann Pinto, Montclair State University
Wing Poon, Montclair State University
Vasant Raval, Montclair State University
Hermann Sintim, Montclair State University
Ron Strauss, Montclair State University
Nilufer Usmen, Montclair State University
James Yang, Montclair State University
Mei Zhang, Rowan University
Bruce A. Huhmann, New Mexico State University
Alyssa Reynolds, New Mexico State University
Elmira Shahriari, New Mexico State University
Vasant Raval - Creighton University, USA
Philip LeBel, Montclair State University
Patrali Chatterjee, Montclair State University
Manveer K. Mann, Montclair State University
Yanli Zhang, Montclair State University
Isaac Wanasika, University of Northern Colorado
Yawei Wang, Montclair State University

Society for Global Business & Economic Development (SGBED): Two decades of Accomplishments

■ Dr. C. Jayachandran, President, SGBED

It is my honor to present to you all the 14th SGBED conference organized at the beautiful facilities of the Feliciano School of Business in June 21-24, 2016. We are grateful to Montclair State University President Dr. Susan A. Cole for her interest in SGBED activities as reflected in her participation and presentation of keynote addresses in several of our conferences. Dr. Cole's continued support and encouragement to engage in international collaboration that advance research and teaching had a significant impact on our accomplishments. Our Provost Dr. Willard Gingerich, Feliciano School of Business Dean Dr. A. Gregory Cant and Vice-Dean Dr. Kimberly Hollister, and Dr. Robert Prezant, Dean, College of Science and Mathematics have enthusiastically supported the idea of bringing the SGBED 14th conference to Montclair and helped in crafting a theme that reflects the interdisciplinary nature of the conference. They have provided generous support in terms of financial, physical and above all the encouragement to make this possible. Almost two decades ago, thanks to a US Federal grant Dr. Philip LeBel, former dean of the MSU Business School and myself had an opportunity to meet with President Dr. Sun Weiyan and Dean Dr. Lin Guijun at the University of International Business and Economics (UIBE) in 1995 in Beijing and developed a collaborative proposal to advance academic research and scholarship at an international level and today I am happy that this initiative had matured over the years.

Driven by the above objective, SGBED had successfully implemented 13 major conferences in Beijing (1997, 1999, 2000), Guangdong (1998), Chennai (1998), Bratislava (2001, 2009), Bangkok (2003), Guadalajara (2004), Seoul (2005), Kyoto (2007), Singapore (2011), Ancona, Italy (2014). Five research symposia were implemented in Nanjing (2015), IIM Bangalore (2012), Barcelona (2010), Dubai (2009) and Bangkok (2006). These conferences and research symposiums have attracted more than 4,000 academics and generated peer reviewed publications in 20 volumes of proceedings containing more than 2,000 research papers and several special issues of peer reviewed journals, and five books of readings.

Highlights of the 14th Conference held at the Feliciano School of Business: The SGBED conference presented at the brand new facility of the Feliciano School of Business reflects a feeling of home coming and an accomplishment which started with an informal relationship between Montclair State Center for International Business (CIB) and UIBE, had now matured with a global reach to advance interdisciplinary research that focus on international business and development issues. The 14th conference is jointly presented by Feliciano School of Business and Montclair State PSEG Institute for Sustainability Studies along with UIBE, Curtin School of Business, EADA Business School, FOX School of Business, IIMB, Comenius University in Bratislava, University of Guadalajara, VIT University, and other partner institutions.

Unlike the earlier conferences, the 14th conference is presented in a four day format to facilitate pre-conference workshops: doctoral symposium for Ph.D. scholars and a workshop on manuscript development; besides the conference facilitates a full-day event, "Understanding Global Value Chains: How to Prepare Students for Success in an Increasingly Interconnected World" for Community College faculty and administrators from the Northeast. This event is presented by the Centers for International Business Education & Research (CIBERS) of Temple Fox School of Business, University of Connecticut and Michigan State. The main conference is organized into plenary sessions, multiple concurrent sessions and a poster session to facilitate discussion of more than 150 research submissions from 30 + countries. For the first time, the 14th conference will use Skype to facilitate such of those participants who cannot participate in person. Besides publishing the conference proceedings, the conference will facilitate publication of selected papers in five peer reviewed journals. The conference will end with a gala dinner, awards distribution and a cultural tour of New York City.

Most importantly, this conference wouldn't have been possible without the dedicated work of several colleagues. Our Co-Chairs, Drs. Yam B. Limbu and Susana Yu, proceedings editors Drs. Vidya Atal and Ram Dubey, and Dr. Amy Tuninga, Director, PSEG Institute of Sustainability Studies, along with a committed group of

50 + regional coordinators, Phil Mattia at Feliciano School of Business and Ms. Martina Brogliotti at Università Politecnica delle Marche, Italy who managed the web support have been instrumental in making this conference possible.

Making the Academic Conferences Affordable & Impactful: Unlike other academic organizations, SGBED does not collect annual membership fee and largely depend on institutional support, sponsorships and the support provided by a large network of coordinators make these conferences affordable and also global. Besides our participants like the SGBED format as it provides a balance between academic scholarship and practice by presenting leaders from government and business.

Notable Government Leaders: Government officials who spoke at the SGBED conferences include: China: The Vice-Premier Hon. Li Lanqing, Madame Wu Yi, Ministry of Foreign Trade and Economic Cooperation, Hon. Chen Yuan, Dy. Governor of Peoples' Bank of China, Hon. Wang Guangxian, Dy. Governor of Guizhou Province; India: Her Excellency Justice Fathima Beevi, Governor of Tamil Nadu, The Tamil Nadu Hon. K. Anbazhagan, Minister of Education, The US Consulate General Ms. Michele J. Sison, Slovakia: The Charge D'Affairs of the USA in Slovakia, Mr. Douglas C. Hengel, Hon. Ivan Miklos, Deputy Prime Minister of Slovakia for Economic Affairs, Hon. Lumomir Fogas, Deputy Prime Minister of Slovakia for Legislation and Maria Kadlecikova, Deputy Prime Minister of Slovakia for European Integration.

Nobel Laureates & Leaders from Academia: Former President of Montclair State University Dr. Irvin Reid, and President Dr. Susan A. Cole have delivered keynote at different conferences in China, Mexico, Bratislava and Bangkok; Dr. Edmund Phelps, Nobel Laureate in Economics delivered a keynote in Bangkok; and Dr. Ferid Murad, Nobel Laureate gave a keynote on science and development in Mexico. Dr. Peter Buckley, former President, Academy of International Business (AIB) delivered in keynote in Beijing; Dr. Howard Thomas, former AACSB President and Dean of the Singapore Management University, Provost & Professor Dr. Raj. Srivastava and Dr. G. Viswanathan, Chancellor, VIT University delivered a keynote in Singapore.

Notable Business Leaders: Dr. Raja Mitra of World Bank, Mr. Max Qu, Chairman & CEO of HI Sun Technology Ltd, Mr. Steven Carroll, China Group Controller of Motorola, Mr. Bill Bowers, VP & Controller of Motorola, Mr. Peter O'Connor, CEO, Asia Pacific Region for CIGNA International, Dr. Michael Zipp, MD, Henkel Investment CO. Ltd, Mr. David Alstrom, VP, Ericsson (China) Company Ltd, Mr. Andy Lai, Greater China Marketing Director for HP, Mr. John Parker, Chairman, American Business Council, and Mr. Ron Sommers, CEO, Mangalore Power Co, Mr. Slaomir Hatina, Chairman of the Board of Directors of Slovnoft, Mr. Jozef Uhrik, General Manager of Volkswagen, Mr. Stefanec, President, Coca-Cola Beverages, Mr. Marian Nemec, President, National Bank and Mr. Ludomir Slahor, President, EXIMBank were invited to deliver keynote in Beijing, Chennai, Bangkok, Seoul, Kyoto and Bratislava.

Notable Corporate Sponsors: Ford Operations Ltd (Thailand); Sony Corporation Ltd; Fuji Xerox Ltd; Slovnoft, a.s. Bratislava; ProCS s.r.o (Slovakia); US Steel Corporation Ltd (Slovakia); Cigna Corporation Ltd; Ericsson, China; Motorola (China) Electronic Ltd; Henkel China Investment Corporation Ltd; China Cotton Industries Ltd; Hi-Sun Technology Ltd; Hengan Iron & Steel Group Co. Ltd, China; Sealed Air Corporation, NJ; Precision Custom Coatings LLC, NJ; Shinawatra Corporation Ltd (Thailand); PTT Exploration and Production Plc (Thailand); Konica Minolta, Rohlm Corp; Murata Machinery Corp; Kyocera (Japan); Sun Microsystems (Korea), S.K. Telecom (Korea), Omni Life, Sophia Laboratories, InterAmerican Investment Corp (Guadalajara), and others sponsored our conferences in different locations.

Co-Chairs & Hosts of SGBED Conferences (most recent, first):

Dr. Yam B. Limbu & Susana Yu: Feliciano School of Business, Montclair State University, NJ (2016)

Dr. Silvio Cardinali: Università Politecnica delle Marche, Ancona, Italy (2014)

Dr. Sudhi Seshadri: Lee Kong Chian School of Business, Singapore Management University (2011)

Dr. Jan Rudy: Faculty of Management, Comenius University in Slovakia (2009)

Dr. Okachi Katsuji: Ryukoku University, Kyoto (2007)
 Dr. Namjae Cho: Hanyang University, Seoul (2005)
 Dr. Silvia Dorantes Gonzales: Universidad delle Valle de Atemajec (UNIVA), Guadalajara (2004)
 Dr. Paul Himangshu: Asian Institute of Technology, Bangkok (2003)
 Dr. Jan Rudy, Faculty of Management, Comenius University in Slovakia (2001)
 Dr. Lin Guijun: University of International Business & Economics (UIBE) Beijing (1999, 2000)
 Drs. Balasubramanian & Dastagir: IIM Bangalore & Md. Sathak Trust, Chennai (1998)
 Dr. Lin Guijun: University of International Business & Economics (UIBE) Beijing (1997, 1998)

Co-chairs & Institutional Sponsors of Research Symposia: (most recent, first)

Dr. Sherriff Luk: Nanjing University of Finance & Economics (2015)
 Drs. Vishnuprasad Nagadevara & Vasanthi Srinivasan: Indian Institute of Management Bangalore (2012)
 Dr. Martin Rahe (Late): Dean of Research, EADA Business School, Barcelona, Spain (2010)
 Dr. Michael Thorpe: The Wallongong University in Dubai (2009)
 Dr. Paul Himangshu: Asian Institute of Technology, Bangkok (2006)

Organization: SGBED Board of Governors:

Dr. Samir Chatterjee (Chair) Emeritus Professor of Management, Curtin School of Business
 Dr. Tony Travaglione, Professor & Pro-Vice Chancellor, Curtin School of Business
 Dr. Ramon Noguera, Academic Dean, EADA Business School, Barcelona
 Dr. Jan Rudy, Faculty of Management, Comenius University in Slovakia
 Dr. Dusan Soltes, Professor, Faculty of Management, Comenius University in Slovakia
 Dr. Vishnuprasad Nagadevara, Professor & Dean, Woxsen School of Business, India
 Dr. Vesa Routama, Professor, Dept. of Management, University of Vaasa, Finland
 Dr. Sherriff Luk, Professor of Marketing & Brand Management, Beijing Normal University,
 Dr. Nitin Sanghavi, Professor of Marketing, Manchester Business School, UK
 Dr. Vasant H. Raval, Professor of Accounting, Heider College of Business, Creighton University, USA
 Dr. Jose Sanchez, Professor & Head, Dept. of Marketing, University of Guadalajara, Mexico
 Dr. Harald Kupfer, Professor & Scientific Director of Studies, FOM University, Germany
 Dr. Johan de Jager, Research Professor, Tshwane University of Technology, South Africa
 Dr. C. Jayachandran, Professor of Marketing & International Business, Montclair State University, NJ
 Dr. Richard Lord, Department of Economics & Finance, Montclair State University, NJ
 Dr. Yam B. Limbu, Associate Professor of Marketing, Montclair State University, NJ
 Dr. Silvio Cardinali, Associate Professor of Marketing, Universita Politecnica delle Marche, Ancona Italy

Officers:

President: Dr. C. Jayachandran, Montclair State University, NJ

Vice Presidents:

Dr. Tony Travaglione, Curtin Business School, Perth
 Dr. Silvio Cardinali, Universita Politecnica delle Marche, Ancona, Italy
 Dr. Jan Rudy, Comenius University in Slovakia
 Dr. Yam B. Limbu, Montclair State University, NJ

Some thoughts for the Future:

SGBED is soliciting institutions to sponsor the 6th research symposium in the summer of 2017 and the 15th International conference in the summer of 2018. Interested institutions or coordinators can submit a proposal. SGBED also invites proposals to establish a journal, either online or in print. Any scholar interested in taking a leadership towards this effort is invited to submit a proposal.

Thank you for your continued support and cooperation.

Preface

The world is becoming increasingly interconnected across all fronts at an unprecedented pace; it is deemed that networks, knowledge and innovation, and entrepreneurship drive growth and development. The rise of emerging markets and growth of global supply chains are attributed to globalization and ICT; nations and firms continue to form strategic levers using the power of comparative advantage; and human capital worldwide is becoming more mobile and virtually engaged despite the national boundaries. The developments have also caused dramatic structural and organizational changes and disruption of traditional businesses and job markets. Global investments in commodities and indiscriminate exploitation of natural resources affected the sustainability of global ecosystems. Equal access to education, knowledge and health are also under the microscope. The challenges of rising inequalities in wealth and income, economic stagnation, unemployment, and the impact of globalization have also taken the center stage of public discourse. These trends bring heightened levels of responsibility to business, institutions and society.

In view of the strategic importance of these challenges, the 14th International Conference of the Society for Global Business & Economic Development (SGBED) invited academic and professional perspectives in the form of empirical research, case studies and applications on a wide range of related topics. The overwhelming response received from scholars and practitioners from around the world bear testimony to the importance of the chosen theme and currency of the conference.

The papers included in these Proceedings have been selected through a rigorous review process of over 300 scholarly papers. Both full papers, as well as selected papers in the abstract form are published here. Altogether, the selected papers and research abstracts represent over 150 universities located in 40 different countries. The sheer size and scope of the conference necessitated the publication of the proceedings in the CD-ROM format.

The full papers have been divided in broad categories of themes: Accounting, taxation and business law; Economics, finance, real estate, banking and public policy; Entrepreneurship, SMEs and NGO; Information technology and operation management; International business, MNEs and global issues; Management, organizational behavior, corporate governance, legal issues and human resources; Marketing, services, e-commerce, sports and tourism; Pedagogy; and Sustainability and environmental issues. These papers cover a broad range of issues. To name a few, the topics related to global, regional and country level trends in trade and investment, innovations and volatility in financial markets, rapid advancement of Information and Communications Technology and its influence on business delivery system, pedagogy, sports tourism, new trends in risk and resource management, cultural conflict, environmental equity and challenge of sustainable growth, choice of appropriate corporate governance system, and, enforcement of international accounting standards have received a great deal of attention in the conference contributions. Accordingly, the papers have been grouped under 9 sections representing the major topics of the conference. An additional section, section 10, has been added to accommodate all the selected abstracts with interesting ideas for future research.

Contributions from authors around the world helped make this volume an integrated, cohesive inquiry into the major drivers of global business today and the required directions for sustainable growth in business activities in the future. We express our sincere gratitude to all these authors.

We believe these proceedings offer some of the best information available in the area of global business and economic development. We hope this publication will contribute to the success of those willing to pursue scholarly research on global business trends in the context of a changing environment.

Editors

Disclaimer:

All papers and abstracts included in this volume have been formatted to ensure uniformity in style of representation. Uniform formatting could possibly modify some of the figures appearing in the papers. In view of the variations in writing styles and language proficiency of the authors, proof reading of these papers was kept confined to ensuring conformity with the APA style. Harmonization of language skill reflected across papers was beyond the scope of the editorial process. Language and grammar used in the papers, thus, remain to be the sole responsibility of the respective authors.

TABLE OF CONTENTS

<i>Content</i>	<i>Page Number</i>
Track: Accounting, Taxation and Business Law	1
Implications of Corporate Tax Inversions.....	2
International Taxation: Tax Equity Concerns	18
Abuses And Penalties Of A Corporate Tax Inversion.....	28
Track: Economics, Finance, Real Estate, Banking and Public Policy	39
Working for the Elephant or the Dragon: Indian and Chinese Investment in U.S. firms and the Challenge to Retain and Attract Managerial Talent.....	40
Optimizing Discount Rates: Expressing Preferences for Sustainable Outcomes in Present Value Calculations	59
The Role of Minimum Wage in Compensation Systems of the Slovak Republic.....	70
Productivity and Efficiency: A Comparative Study of Islamic and Conventional Banks in GCC Countries	79
A Link Between the Acculturation Process and Project Management Maturity Model (PMMM) in a Cross-Border M&A: A Case Study of an Acquisition of a Brazilian Firm in the Automobile Industry	96
Signals in Reward Crowdfunding: Evidence from the Jingdong Reward Crowdfunding Platform.....	113
Intellectual Capital in Public Universities: Comparative Analysis, University of Guadalajara and University of Guayaquil.....	129
Do Local Communities Always Benefit from MICE Activities?.....	141
Capital structure of the communication sector in Mexico.....	147
Assessing the Risk-Return Trade-Off in Frontier Markets Using Exchange-Traded Funds	158
Risk management on attracting FDI to infrastructure projects in emerging markets: A conceptual model	174
Financial crisis and Local Banks. A study of the Italian Banking System	187
A Text-Analysis Approach Of Push And Pull Motivations In Heritage Festivals: Evidence From Three Italian Cases.....	207
Momentum Profits and Investor Behavior	210

The Eurozone Crisis: Not The Global Financial Crisis But Its Own Governance Is Responsible	220
The Effect Of Cartel On Pig Market In Thailand By Using System Dynamics Model .	228
Heterogeneous Institutional Investors and Earnings Smoothing.....	237
Track: Entrepreneurship, SMEs and NGO	256
A Regional Profiling Of Start-Ups And Spin-Offs In Italy: Is Smart Specialisation A Utopia?	257
Beyond the Nature of the Farm: The Determinants of Farm Integration and Structure	264
Environmental Factors for Social Entrepreneurship Success: Comparing Four Regions.....	278
Predicting Growth Potential of Small and Medium-Sized Logistics Companies	296
An e-Engagement Of Social Media With Micro, Small And Medium Enterprises Of Andhra Pradesh	310
The Role of Business Incubators on Start-Up Growth.....	324
Creation Of Social Value In An Unfavourable Economic Environment: Latin American Agro-Industry Smes In Al-Invest.....	335
The Impact of Educational Level on Behaviour during Knowledge Transfer in Small and Medium Enterprises (SMEs)	344
Research on the CSR of Small and Medium-sized Enterprise: Take a Company Semir as an Example	359
Using the UTAUT Model to explain the adoption of Mobile Money Usage by MSMEs' Customers in Uganda	367
Factors Influencing the Use of HRIS: Case Study from SMEs in Vietnam	377
An Insightful Understanding of Perception and Trust Towards HRIS: A Case Study from SMEs in Vietnam.....	395
CSR Strategies To Improve Competitiveness Development: Manufacturing Industry In Mexico	422
Challenges Faced by Entrepreneurs: An Empirical Study of India	432
Track: Information Technology and Operation Management	440
Access To Cloud Distribution Platforms And Software Safety	441
Solar Based Technology: A Case Study of Challenges in a Developing Economy	455

Emerging Techniques in User Identification and Social Data Consolidation.....	467
Importance, Role and Impact of E-Training on Employees in Workplace	474
A Special Review for the Wave of Big-data Development	486
Track: International Business, MNEs and Global Issues	496
The Impact Of Internal And External Aspects On Foreign Subsidiaries' Performance During Economic Crisis	497
Foreign Direct Divestment in the Water Sector in Brazil: in Search of the Causes...	511
Analysis Of Foreign Direct Investment In The Water Industry And Sanitation Between 1990 And 2010 In Latin America	514
The Impact of Institutional Distance on Survival of Foreign Subsidiaries	523
Revisiting Ownership Advantages of Resources Seeking MNEs: Evidence from Chinese Firms Operating in Emerging Market	536
Foreign Subsidiaries' Attributes And The Location Strategy Of Multinational Firms In Global Cities In Emerging Markets.....	546
Comparative Study on the "New Silk Road" Strategy Between China and the U.S....	562
Study on the Chinese Carbon Emission Trading Market Development under the Globalization.....	572
Does FDI make the world more convergent or divergent?	581
Assessing Development Performance Of Urban Agglomeration Based On Malmquist- Luenberger Index: A Empirical Analysis Of The Urban Agglomeration Around Beijing, China	594
The Determinants Of Expatriation Strategy Of Foreign Subsidiaries In Emerging Markets During Post-2008 Economic Crisis	607
Family Business Groups In Mexico And Their Financial Performance	622
Analysis of the Moderator Effect of RMB Exchange Rate on Export: The Case of Guangdong Province in China.....	629
Track: Management, Organizational Behavior, Corporate Governance, Legal Issues and Human Resources	635
Impact of Organizational Empowerment on Employee Commitment: Moderating role of Organization Learning Culture and Locus of Control	636
Two Decades Of WTO: Governance, Innovation And Prospects	650

Impact of Employees Performance Appraisal on Job Outcomes with the moderation of Distributive Justice	659
Burnout And Career Success	670
Beyond Wit and Grit: Spiritual Quotient the key to Organisational Development... 676	
Employees' Satisfaction on Performance Management Review (PMR) in Navigos Group Vietnam JSC.	684
Performance Evaluation of Indian Cement and IT Companies: An Efficiency- Profitability Matrix Approach	732
Relevance of Ethics Program Components in Slovakia.....	742
Personality, Gender And Four-Factor Model Of Cultural Intelligence – Are Some People Smarter In Culturally Diverse Situations?	755
HR Practices In the new Millennium: Balance between Human Touch & Technology	768
Global Managers and ASEAN Readiness in Thailand	784
Track: Marketing, Services, E-Commerce, Sports and Tourism.....	800
Impact Of Humor In Advertising Marketing, On Purchase Intent A Study To Investigate The Effectiveness Of Humor When Introduced In Marketing Communication As Advertisement	801
Application of Neuromarketing Perception in Commercial Sales in SMEs of Jewellery Industry in Guadalajara	810
The Irresistible Desire for Counterfeit Clothing: The Role of the Symbolic Meaning	819
Partnership and Power: Exploration in a Cause-related Marketing Context	830
The Buyers' Pre-Buying Phase – A View From The Personality Perspective	835
Did the World Watch the 2015 FIFA Women's World Cup? A Comparative Analysis of TV Viewing Trends in the USA and Globally	850
Who Traveled to Canada for the Women's World Cup? A Discussion of the Power of Sports Events to Increase Tourism	859
Are American College Students Interested in International Sports? Implications for Sports Business and Sports Tourism	863
Impact of Social Media Marketing on Customer Purchase Intention: Mediating role of Customer Trust (Marketing and Communication in Connected Environment).....	871

How Innovation Interacts With Mobile Learning In Guadalajara, México.....	883
Urban Impact Investing: Keeping Results Local.....	905
Effect of Pre-consumption and Consumption Experience on Perceived Value and Brand Equity	915
Interface between Marketing, Social Policy and Development: An Evaluation and Future Directions for a Global Economy	931
“I am too BUSY!!!!!! Come back some other time” – Exploring the ability of Entertainment Marketing to change this.....	943
e-Business Decision Making In Mexican Exporting SMEs: An Empirical Study	952
Management Students Engagement with Social Networking Sights (SNS) and Regularity	970
The influence of peers and brands in the skateboarding subculture: A Mexico and U.S.A comparison.....	981
The Interpretation And Enlightenment Of Chicago Marathon Organization To China	992
Analysis on Kun Opera Performing Art Products for Tourism - Taking The Peony Pavilion staged at Kezhi Garden as an example	995
Track: Pedagogy	1005
Bologna Process as one of the Tools of Innovation in Higher Education in the Post-Soviet Kyrgyzstan.....	1006
Racing to the Top – A Case on Competition and Strategy in Crowd Equity Platforms	1010
Track: Sustainability and Environmental Issues	1018
The Drivers of Success in Developing Business Sustainability Standards: Evidence from the LEED Certification of the USGBC	1019
The Role Of Regulation On Innovation And Productivity In The Infrastructure Industries: The Case Of Water And Sewerage Systems In Brazil.....	1026
Abstracts	1029
Event Stream Analytics for Fault Prediction and Optimization	1030
Engineering Systems for Big Data Processing.....	1031
Key Account Management in SMEs: an Italian Case Study	1032

Characteristics of U.S. Public Companies Adopting Pension Accounting Changes for Defined Benefit Plans	1034
Advanced Bioscience Sustainable Solutions Bio Sensing and Monitoring of Plants and Fish for all Ag Biotech Growing Environments.....	1035
Stock Market Financial Ratios: Case Studies of Two Major Australia, New Zealand Banks	1036
Strategy for Diffusion of Technological Innovations	1038
Motivation, Resistance To Stress, And Adaptation To Changes Among Employee Of Different Generations	1041
Critical Issues And Prospects For The Start-Up Companies	1042
It Isn't What You Say, it's How You Say It: Language Abstraction and Enjoyment Orientation in Movie Reviews	1044
Multinational Corporations of Emerging Markets: Evidence from China.....	1046
Ethical Implications of Sustainability Initiatives in Corporations	1048
Innovativeness of Gay Consumers: An Investigation on Turkish Gay	1051
Sustainability Integration: A Model for Developing Corporate Responsibility Commitment Through Effective Sustainability Programs, Reporting, and Governance.....	1053
Accounting Standards Enforcement in an International Setting: Testing the Impact of Cultural, Religious, Political and Legal Environment on National Regulatory Efforts	1056
Assessing the Impact of the Great Recession on Emerging Economies: Latest Evidence	1057
A Conceptual Framework for Leveraging Standard and Big Data Resources to Achieve Sustainable Business Solutions	1058
Identifying and Comparing Tourism Industrial Cluster of Yangtze River Delta in China	1059
Sustainability and Company's Value – A Follow-Up Study of S&P 500 U.S. Companies ...	1066
Sport Events Travel Behavior: The Moderating Role Of Training In Triathlon.....	1068
Towards A Perspective Focusing On The Factors And Practices To Fight The Entrepreneurial Burnout.....	1072
Mining Methods for Information Extraction from Structured and Unstructured Data	1073
Re-defining Customer Equity with Superimposing Customer Loyalty as an Individual Component.....	1074
The Sustainability of the U.S. Corporate Income Tax System	1077

The Impact of the New Revenue Standard on Real Estate Sales.....	1079
Sustainable Rankings – Are They Consistent Across Rating Agencies?.....	1082
Sustainability Practices in European Versus U.S. Corporations - Is the Divide Getting Closer?	1084
The Practice of Job Satisfaction as a Meaningful Tool in Organizational Productivity: A Developing World Perspective	1086
Economic Value Added and Ecology Value Added as a measure for disaster preparedness linked to Corporate Social Responsibility: Japan as a test-bed bridging Asia and North America	1087
Does Islamic Finance Prevent Financial Crises: A Global Perspective	1088
What future development is coming for the brand Made in Italy? A critical analysis	1089
Board Characteristics and Voluntary Corporate Social Responsibility Disclosure –Evidences from Listed Companies in Singapore (2011-2014)	1091
When (and Where) It Is Cool To Lose Your Cool: The Role of Culture In the Relationship Between Online Review Valence and Reader Feedback	1095
Social Norms (and Market Norms) in Social Media: The Relationship Between Ad Placement on User-Generated Content and Viewers' Attitudes Towards the Content	1098
Comparative Research of Medical Tourism between China and America	1101
Exploring Research on the Management Situation of College: Basketball Coach in the United States	1104

e-Business Decision Making In Mexican Exporting SMEs: An Empirical Study

*Celestino ROBLES-ESTRADA¹
Alberto A. SUÁSTEGUI-OCHOA²
Belén Sarai GÓMEZ-GONZÁLEZ³*

*^{1, 2, 3} Universidad de Guadalajara
Periférico Norte 799, Núcleo Universitario Los Belenes
Los Belenes, Zapopan, 45100, México
¹Tel: +523337703343, Email: crobles@cucea.udg.mx
²Tel: +523336620973, Email: alberto_suastegui@yahoo.com.mx
³Tel: +523333660585, Email: zary3636@gmail.com*

*Correspondence address:
Universidad de Guadalajara,
Periférico Norte 799, Edificio G-306
Zapopan, Jal. México. CP 45100*

Abstract

Small and medium sized enterprises (SMEs) are critical to most developed and developing economies. They usually represent the main generator of economic activity and the largest private sector employer group. Effective adoption of an electronic business ebusiness strategy can be used to create value throughout the value chain of any organization. Studies show that nowadays, firms' business strategies supported by the Internet not only create a true competitive advantage, but also reflected long-term profitability. Nevertheless, contrary to early predictions, the evidence suggests that e-business adoption among SMEs has been limited because of resource constraints and a failure to understand the strategic value of e-business. It is thus important to understand what drives these firms to engage in e-business. Importance-Performance Analysis (IPA) offers a simple, yet useful method for simultaneously considering both the importance and performance dimensions when evaluating or defining a strategy. This technique has been successfully utilized to research ebusiness strategies evaluation previously. This study uses IPA to evaluate e-business strategies among Mexican exporting SMEs following a methodology proposed and previously applied in USA. Results indicate that marketing motivations are most important in adopting e-business; improving e-profitability being least important. The present research extends the scope of the analysis of the prior literature on ebusiness strategies and contributes to the debate about whether the path of a "stable" phenomenon differ from the path of one that is more "evolutionary," such as e-business strategy adoption and development.

Keywords: importance–performance analysis, e-business, e-commerce, sme

Introduction

It is widely acknowledged that the emergence of information and communications technology (ICT) have contributed to the rapid growth of electronic marketplace (Norzaidi, Chong, Murali, & Salwani, 2007). The favorable characteristics inherent in the Internet such as speed, user friendliness, low cost and wide accessibility have allowed electronic commerce (ecommerce) to be increasingly diffused globally, bringing countries together

into a global networked economy (Gibbs & Kraemer, 2004). It is for these reasons that ecommerce has been widely regarded as a new frontier for business environment and that businesses all over the globe are attempting to shift to EC to achieve their business objectives (Chandran, Kang, & Leveaux, 2001) in terms of pursuing efficiency and quality (Mougayar, 1998).

Early observers forecasted that it would enable small businesses to “level the playing field” when competing with larger firms (e.g., Hsieh & Lin, 1998; Wilder et al., 1997). The argument was that the ubiquitous nature of this technology would allow small and medium enterprises (SMEs) to deploy ebusiness applications to support all aspects of their operations, enabling them to more effectively compete with larger organizations. For example, by implementing ebusiness applications, SMEs could cost effectively extend market scope (Hamill & Gregory, 1997; Wilder et al., 1997), build name recognition, transform their supply chains, (Rayport & Sviokla, 1995), and track customers’ tastes and preferences (Haynes, Becherer & Helms, 1998). These potential benefits were expected to be the motivating characteristics of ebusiness that would spur ebusiness adoption among SMEs. Nevertheless, while some small firms have achieved strong growth through leveraging ebusiness technologies (Strauss et al., 2003), others have been guarded and slower to adopt these new technologies (Grandon & Pearson, 2004; Thong, 1999; Zank & Vokurka, 2003). Consequently, in contrast to early predictions, several researchers have concluded that the firms benefiting the most from ebusiness have been larger, rather than smaller, organizations (Auger & Gallagher, 1997; Griffith & Krampf, 1998; Hart & Ellis-Chadwick, 2000; Haynes et al., 1998; Jeffcoate et al., 2002; Poon & Swatman, 1999).

Firms are under pressure to “do something” with ebusiness lest they be left behind. These pressures can come from internal or external (e.g. trading partners) sources (Beckinsale, Levy, & Powell, P., 2006; Wymer & Regan, 2005;) and have been identified as important reasons for ebusiness investment (Barnes & Mieczkowska., 2003; Chong & Pervan, 2007). SMEs may be expending their limited resources to implement applications without fully understanding their strategic role within their organizations (Chong & Pervan, 2007; Eikebrokk & Olsen, 2007).

Few studies have focused on the business goals that small firms hope to achieve by engaging in ebusiness. While several recent studies have focused on the realized benefits of ebusiness, yielding valuable information about potential EB opportunities (e.g., Pflughoeft, Ramamurthy, Soofi, Yasai-Ardekani, & Zahedi, F.M 2003; Wu, Mahajan, & Balasubramanian, 2003; Zhuang & Lederer, 2003), there is a scarcity of research focused on understanding the motivations, or the anticipated benefits. As a result, the potential for mismatch between ebusiness goals and deployment of applications is high. Given the potential value of ebusiness to organizations and given that small firms represent the vast majority of businesses worldwide (Kuratko & Hodgetts, 2001), this paucity remains surprising. Understanding why firms, especially small ones, engage in ebusiness is an important step in understanding how to match the plethora of ebusiness applications with appropriate strategy, calling for the development of simple, low cost tools to help SMEs develop more effective approaches to ebusiness planning. This can enable firms to more effectively select, use, and monitor ebusiness investments over time (Auger & Gallagher, 1997; Raymond, 2001) and can help small firms to maximize scarce resources (Auger & Gallagher, 2003). Levenburg and Magal (2005), and Magal, Kosalge and Levenburg (2009), have demonstrated the value of importance-performance analysis (IPA) as a tool to: (1) assess e-businesses strategy based on underlying motivations (i.e., anticipated benefits); and (2) to make resource allocation recommendations. This study applied the framework developed by Magal, et al., (2009) to evaluate why and how Mexican exporting SMEs should engage in ebusiness.

Literature review

The Internet and related technologies have enabled firms to change the way they interact and coordinate value chain activities with customers and suppliers with the objective of improving operational and financial performance. These changes, referred to as Net-enabled business transformation (NBT) (Straub & Watson 2001),

involve substitution of everyday business activities involving paper, telephone, and fax-based communication with electronic transaction and information exchange, and significant redesign of processes, incentives and information technology to enable tighter coordination with customers and suppliers. Such changes may enable firms to enhance customer satisfaction, understand customer preferences, reduce inventory, increase inventory turnover, decrease stock-out situations, and improve response time and time-to-market, which may eventually lead to financial benefits (Barua, Konana, Winston, & Yin, 2004)

IS researchers have adopted the theory of RBV to study how IT helps firms gain business value (e.g., Bharadwaj 2000; Mata, Fuerst, & Barney, 1995; Ross, Beath, & Goodhue, 1996) by treating certain IT and IT-related resources (e.g., IT skills, IT human resources, IT knowledge, IT capability) as rare and valuable. Wade and Hulland (2004) provide an overview of the literature on IT-related resources and their impact on firm strategy and performance. They rely on the definition of resources from Sanchez, Heene, and Thomas, (1996) that resources are a set of assets and capabilities available for a firm that is useful in detecting and responding to market opportunities or threats. Assets, both tangible and intangible, are defined as those resources available for a firm to "use in its processes for creating, producing, and/or offering its products (goods/services) to market," whereas "capabilities are repeatable patterns of actions in the use of [IT] assets" (Wade & Hulland 2004).

IPA is a strategic approach to measure users' satisfaction and simply and functionally identify the strengths and the areas of improvement in a particular service. Martilla and James (1977) first adopted IPA to develop the market strategy of an organization. It is also known as quadrant analysis or gap analysis (Bacon, 2003). IPA is based on a set of theoretical contributions, particularly the multi-attribute and expectancy-value models (Fishbein & Ajzen, 1975; Rosenberg, 1956; Wilkie & Pessemier, 1973). It identifies strengths and weaknesses of brands, products, and services (Keyt, Yavas, & Riecken, 1994; Martilla & James, 1977). It combines measures of attribute importance and performance in a two-dimensional grid; its development leads to the production of a graph in which each criterion is placed on a two-dimensional axis (Martilla & James, 1977). The x-axis is the horizontal axis of a two-dimensional plot. It represents the performance, which is measured by the average score of the criteria of all respondents. The y-axis is the vertical axis and it represents the importance, which is also measured by the average score of the criteria of all participants (Oh, 2001). Finally, the graph produces four zones enabling the classification of service attributes according to their importance and performance (see Figure 1). Each area is the combination of the importance and performance assigned by the users to each service attribute. By examining the points in each zone of the graph, managers can identify which attributes have the most or the least priority for improvement. Zone 1, called "concentrate here", combines the attributes of low performance and high importance. This zone constitutes a priority for managers, in case an action should be taken immediately to improve the performance of the attributes. Zone 2, called "keep up the good work", and represents the attributes for which the performance and importance are high. This area is not a priority for improvement; it is nevertheless necessary to maintain the current efforts on these attributes as they represent a strong competitive advantage for companies. Zone 3, called "low priority", it contains elements with low importance and low performance. It is unnecessary to provide additional effort for these attributes. Finally, zone 4, called "Possible Overkill", it combines attributes with high performance and a low importance score. The resources allocated to these attributes must be reduced or even reallocated for other attributes that are most important to customers. Several advantages arise from the use of IPA (Tarrant & Smith, 2002, p. 70). It displays the results as a grid, which makes finding the data easy for managers to read, to interpret, and then to make decisions, as each zone is associated with a particular strategy for resource allocation (add, maintain, reduce or remain at the same level).

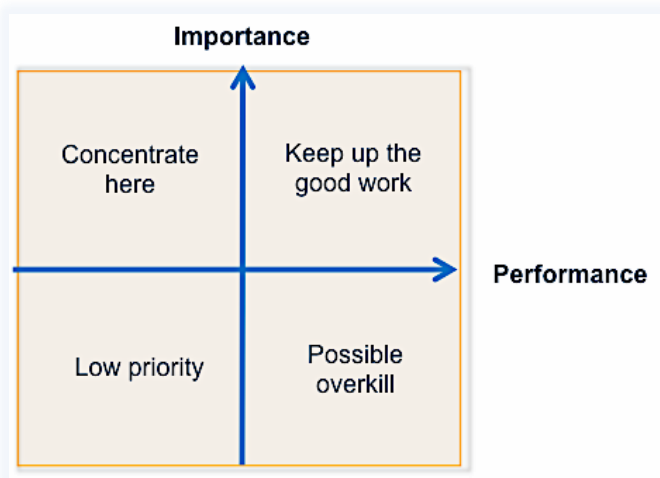


Figure 1. Classic representation of IPA. Source: Martilla and James (1977)

This graph allows an intuitive assessment of its operation and the implementation of appropriate recommendations for management; however, the final location of the axes of the quadrants is one of the main difficulties in IPA. This location will influence the interpretation of the results and the strategic management of the entire organization. (Ferreira Lopes & Frazão Maia, 2012). IPA is based on the conceptual foundations of multi-attribute choice models (Edwards & Newman, 1982; Martilla & James, 1977). These models have been developed as a tool to support managers when formulating product and marketing strategies. IPA is diagnostic in nature, facilitating the identification of attributes for which, given their importance, a product or service under-performs or over-performs.

By using a central tendency e.g. mean, median or a rank-order measure, the attribute importance and performance scores are ordered and classified into high or low categories; then by pairing these two sets of rankings, each attribute is placed into one of the four quadrants of the importance performance grid (Crompton & Duray, 1985). Mean performance and importance scores are used as coordinates for plotting individual attributes on a two-dimensional matrix. This matrix is used to prescribe prioritization of attributes for improvement (Slack, 1991) and can provide guidance for strategy formulation (Burns, 1986).

IPA analysis is a multi-step process. Typically three steps are followed that consist of (a) identifying a list of program attributes that may impact variables management can control, (b) rating the attributes on importance to the experience and how well the agency performed on them, and (c) interpreting the ratings in a two-dimensional grid that also provides a visual data representation (Figure 1). The vertical axis represents the importance scale and the horizontal axis represents the performance scale. Thus, the upper left quadrant represents attributes considered important by respondents, but which rate low in performance. The upper right quadrant signifies attributes considered important by respondents, and that the agency is performing well. The lower left quadrant indicates attributes that are low in both importance and performance and the lower right quadrant represents attributes not considered important, but which respondents rate high in performance. Accordingly, the evaluating organization should provide attention to items in the upper left quadrant, maintain services to those in the upper right, and consider reducing resources to those in the lower right.

Although IPA is an extremely valuable method, previous studies have several important shortcomings. For example, Matzler, Bailom, Hinterhuber, Renzl, & Pichler, (2004) noted that the original IPA has two implicit assumptions: (1) attribute performance and attribute importance are independent variables and (2) the relationship

between attribute performance and overall performance is linear and symmetrical. These assumptions are erroneous in the real world, the relationship between attribute-level performance and overall customer satisfaction (OCS) is asymmetrical (Kano, Seraku, Takahashi, & Tsuji, 1984; Matzler, Rier, Hinterhuber, Renzl, & Stadler, 2005; Matzler & Sauerwein, 2002; Matzler, Sauerwein, & Heischmidt, 2003; Ting & Chen, 2002); and the relationship between attribute performance and attribute importance is causal (Matzler et al., 2004; Oh, 2001; Sampson & Showalter, 1999).

IPA has been applied in a number of settings with relatively little modification in form (e.g., Chon, Weaver, & Kim, 1988; Nitse & Bush, 1993), however other researchers have extended the basic IPA model. Some extensions of IPA pertain to conceptualization and measurement of attribute performance. To ‘importance’ and ‘performance’ Burns (1986) added ‘performance of competitors as a third dimension. Dolinsky and Caputo (1991) apply what appears to be Burn’s extension in a study of health care. In the study conducted by Slack (1994; 66), service performance and competitor’s performance were taken as composite measure by evaluating performance as being ‘better than competitors’. In 1982, O’Leary and Adams described a method for deriving importance measures as a composite ranking of median importance scores and Pearson correlation coefficients. Crompton and Duray (1985) introduced a similar method involving Spearman’s rank order correlations, which are more appropriate given non-parametric data. Dolinsky and Caputo (1991) solicited attribute performance ratings from customers, which are used to derive importance indicators. The performance scores for the attributes were regressed on scores for overall satisfaction – the standardized regression coefficients were used as measures of attribute importance. This is similar to what others have done to determine attribute importance outside of IPA (e. g., Neslin, 1981; Parasuram et al., 1988; Richard & Allaway, 1993). A slight variation of this method is seen in basic conjoint analysis, which uses dummy variable regression to determine coefficients for specific levels of attributes, and specifies importance as the range of coefficients for each attribute (Liljander & Stradvik, 1993: 19; Malhotra, 2010).

Sampson and Showalter (1999) noted that a weakness of IPA is that it conceptualizes attribute importance as a scalar, which is independent of attribute performance. When attribute performance changes, importance does also, which can change the relative priority of subsequent improvement efforts. They propose a dynamic model, one that views attribute importance as been closely related to attribute performance. Burns (1986) asseverates that traditional IPA has two inherent weaknesses. First, while the technique considers an object’s own performance in terms of a particular attribute, it ignores its performance relative to competitors. Yet consumer evaluations of an object do not occur in a competitive vacuum. On the contrary, the ultimate degree of a differential advantage a product enjoys is determined by its performance relative to competitors. In other words, the absolute own performance measure of the traditional importance-performance analysis needs to be augmented with a relative performance measure. Therefore, Burns (1986) added “performance” of “competitors” as a third dimension. Matzler et al. (2005) applied IPA to modern management and an orientation study of the tools and Yavas & Shemwell (2001) modified IPA by multiplying the gap between the company’s performance and that of rivals using relative performance.

Some other studies have also modified and extended IPA. For example, O’Leary and Adams presented in 1982 a method for generating importance measures as a composite ranking of median importance scores and Pearson correlation coefficients. Crompton and Duray (1985) introduced a similar method utilizing Spearman’s rank order correlations, which are suited to non-parametric data. Easingwood and Arnott (1991) adopted the dimension “current effect on performance” rather than importance, and adopted the dimension “scope of improvement” rather than performance. They also proposed an additional matrix for “ease of change” and “sensitivity to change” to determine the practicality for, and barriers to, improvements. However, the basic framework has largely remained the same (Sampson & Showalter, 1999).

Notwithstanding, the IPA framework has steadily gained in popularity among social science researchers and has been applied in various fields (Eskildsen & Kristensen, 2006). It has been used widely in tourism and hospitality (Cvelbar & Dwyerb, 2013; Dominique-Ferreira & Silva, 2011; Duke & Mont, 1996; Dwyer, Knezevi

Cvelbar, Edwards & Mihalic, 2011; Enright & Newton, 2004; Evans & Chon, 1989; Go & Zhang, 1997; Gupta, 2011; Hollenhorst, Olson, & Fortney, 1992; Oh, 2001; Hudson, Hudson, & Miller, 2004; Oh & Parks, 1997; Weber, 2000; Zhang & Chow, 2004) assessment of consumers (Sampson & Showalter, 1999), marketing management (Ford, Joseph, & Joseph, 1999), health (Ábalo, Varela, & Rial, 2006; Dolinsky & Caputo, 1991; Ferreira Lopes & Frazão Maia, 2012; Hawes & Rao, 1985; Nitse & Bush, 1993; Skok, Kophamel, & Richardson, 2001; Yavas & Shemwell, 2001), banking (Joseph, Allbrighth, Stone, Seknon, & Tinson, 2005; Yeo, 2003), training evaluation (Siniscalchi, Beale, & Fortuna, 2008), industrial marketing management (Hansen & Bush, 1999; Matzler et al., 2004), marketing (Charafa and Rahmouni, 2014; Chon, et al., 1988; Gillespiea, Kennedy & Solbec, 1989; Novatorov, 1997), service quality (Ennew, Reed, & Binks, 1993; Huang, Wu, and Hsu, 2006; Kitcharoen, 2004; Kwon, & Lee, 1994; Matzler, et al., 2003; Tzeng, & Chang, 2011), supply chain analysis (Hong, Kwon & Li, 2014), in studying the performance of IT services (Ainin & Hisham, 2008) and ebusiness strategies (Levenburg, & Magal, S. R. 2005; Magal, et al., 2009).

Since its emergence in 1977 (Martilla & James, 1977), IPA has become a commonly used tool in developing strategies in various fields (Riviezzo, de Nisco, & Napolitano, 2009; Skok, Kophamel, & Richardson, 2001), such as transportation (Feng & Jeng, 2005; Huang et al., 2006), banking (Joseph, Allbrighth, Stone, Seknon, & Tinson, 2005), education (Alberty & Mihalik, 1989; Pike, 2004; Siniscalchi, Beale, & Fortuna, 2008), public management (Riviezzo et al., 2009; Lai & To, 2010), tourism (Fuchs & Weiermair, 2003; Smith & Carol, 2009; Zhang & Chow, 2004; Ziegler et al., 2012), health (Dolinsky, 1991), industry (Sampson & Showalter, 1999), telecommunication (Pexeshki, Mousavi, & Grant, 2009), E-government (Wong, Fearon, & Philip, 2007) and leisure (Rial, Varela, Real, & Rial, 2008; Tarrant & Smith, 2002). The IPA can also be used to assess the strategy evaluation and therefore provides the necessary recommendations to improve resource allocation (Magal et al., 2009; O'Neill, Wright, & Fitz, 2001). IPA has been also applied as an effective means of evaluating a firm's competitive position in the market, identifying improvement opportunities, and guiding strategic planning efforts (Hawes & Rao, 1985; Martilla & James, 1977; Myers, 2001).

A major shortcoming of the quadrant model of Martilla and James (1977) is that a dramatic change in priority can result from a slight change in the position of an attribute in the grid (Bacon, 2003). In Figure 1, for example, if the position of an attribute changes from in the center of the graph just a small distance, its priority can change dramatically from "concentrate here" to "overkill." Bacon suggests the need for a model that allows for a more continuous transition from one priority to another. Slack (1994) developed such a model. His gradient-based IP map identifies four zones (Figure 2) starting from the top left (high importance/low performance), gradually transitioning to the bottom right (high performance/low importance). The four zones are labeled "urgent action," "improve," "appropriate," and "excess," respectively. He further suggests a "lower bound of performance acceptability," above which lies the region for improvement. It is recommended that organizations move from the "urgent action" or "excess" zone to the "appropriate" zone through redistribution of resources.

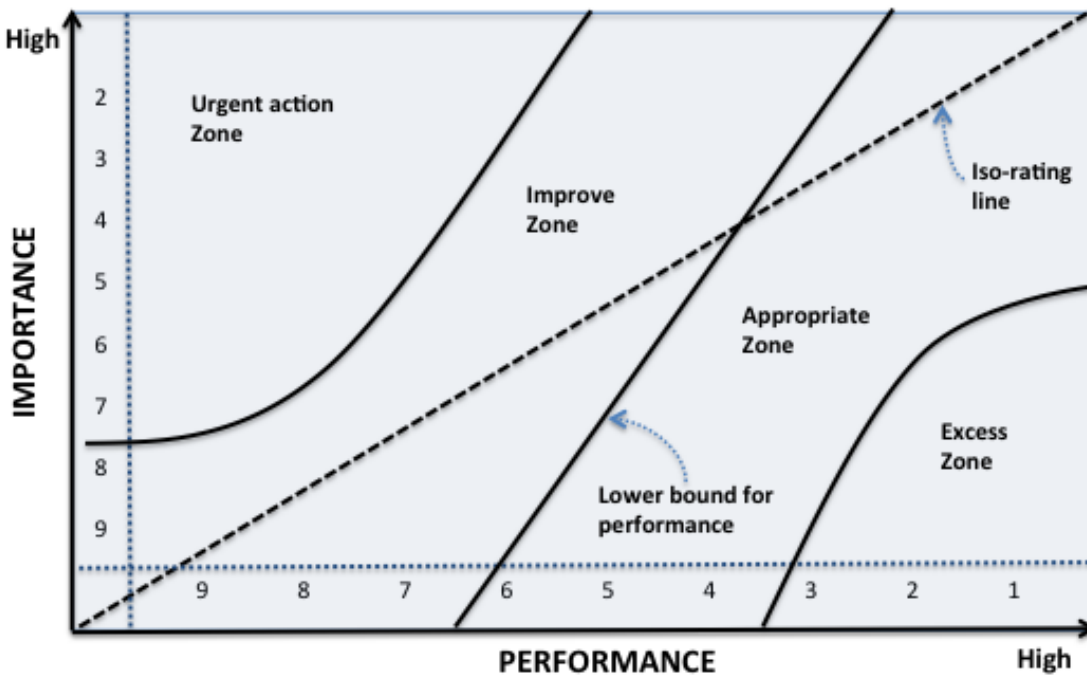


Figure 2. Modified IPA map. Source: Adapted from Slack (1994), Hawes and Rao (1995), Magal et al. (2009).

A third model, the “gap” model, is based on identifying performance gaps determined for each attribute by subtracting the satisfaction rating from the importance rating. These gaps are an indication of how well the organization has performed (O’Neill et al., 2001; Skok et al., 2001; Shaw et al., 2002; Roskowski, 2003). Shaw et al., used in 2002 gap analysis to measure service quality of IS/IT systems and concluded that gap analysis is rigorously grounded and can be appropriately used in an IS context. Others have criticized this method due to theoretical shortcomings (e.g. Bacon, 2003).

Slack (1994) initially suggested a possible relationship between importance and performance, that could influence priority. The existence of a relationship was confirmed and explicated by three studies (Roskowski, 2003; Metzler et al., 2004; Sampson & Showalter, 1999). Sampson and Showalter (1999) hypothesized and found support for a negative relationship, that is, as performance increases, importance decreases. They reference Maslow’s hierarchy of needs theory to argue that, as performance increases and satisfies a need, the need becomes less important. However, they also found that for some attributes, there is a small region on the high end of the performance scale where importance begins to increase or remains unchanged (flat). Roskowski (2003) also found strong evidence that importance and performance are related. He argues that for data with a wider range of performance values, the v-shape is visible (Figure 3); else, only the right side of the v-shape is visible, indicating a positive relationship (Figure 3). Metzler et al., (2004) argue that the nature of the relationship depends on the type of attribute –“basic factors,” “excitement factors,” and “performance factors,”– and suggest a negative, positive and no relationship, respectively.

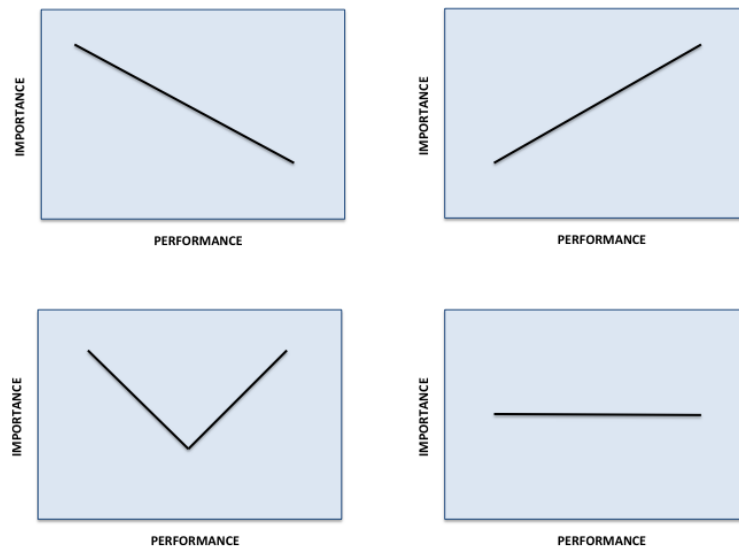


Figure 3. IPA Relationships from the literature. Source: Adapted from Magal et al. (2009)

Research methodology

Traditional IPA consists of identifying the variables of interest through literature review and/or use of managerial judgment, gathering data on the importance and performance dimensions of these variables using an appropriate survey instrument, plotting the data (average importance and average performance of each variable) to generate IPA maps, and an analysis leading to strategy recommendations (Martilla & James, 1977; Skok et al., 2001). We used a total of 19 motivations and four higher-level factors identified by Magal et al. (2009), they are reproduced in Table I. Then we followed Sampson and Showalter's (1999) methodology to evaluate the relationship between importance and performance: correlation analysis to identify the existence of a relationship between importance and performance, and plotting the data to investigate the nature of this relationship.

In a previous research Levenburg et al. (2006) defined e-business motivation as a reason or a business goal that provides impetus and direction for a firm to adopt e-business applications. Organizations anticipate certain benefits from implementing e-business applications, and these anticipated benefits (e.g. increased sales) drive decision-making regarding technology adoption (Levenburg et al., 2006). Subsequent to their adoption, the firm gathers information concerning the extent to which it believes its goals (i.e. motivations) were achieved. What is actually realized may be the same as or different from the initial motivations. For example, a firm may be motivated to engage in e-business out of desire to increase sales. After deploying the e-business applications the firm deems necessary to increase sales, it may find that it is able to not only increase sales, but also reduce the cost of sales and increase the firm's image. Indeed, it may not even realize any increase in sales, but may instead realize other benefits.

Following Magal et al. (2009), importance and performance data on these items were collected using a survey, with five point Likert-type scales. The questionnaire responses were collected personally from 235 CEOs (or owners) of Mexican exporting SMEs which were randomly selected from the Bancomext (Banco Nacional de

Comercio Exterior, <http://www.bancomext.com>) list of exporting firms. Bancomext is the Mexico's Development Bank in charge of financing international trade and the most reliable source for statistics and information on international trade and commerce in Mexico.

It is important to highlight that there is not so far a formalized internationally or universally accepted definition to describe SMEs. Definitions used vary widely among countries, and depend on their stage of economic development, the size of the country as well as the prevailing social conditions. Although different measurement criteria for defining an SMEs has been used -such as number of employees, capital investment, fixed assets, sales volume and productive capacity-, number of employees seems to be the most frequently used criteria. Globally, in general terms, a firm is considered SMEs if it has no more than 500 employees. Nevertheless many countries use a lower figure, typically between 300 and 100 employees. The Eurostat definition (fewer than 250 employees) is applied in 19 European countries and is currently the most widely accepted definition. Even if some economies use the same criterion to define SMEs, this can result in different ratings for different economies. For example, a manufacturing company in Canada considered medium sized is also considered a medium sized company in Australia, while it would be designated as a large company in China. In any case, criteria used in developed countries are not suitable for developing countries in Latin America. Katz (1999) points out that Latin American SMEs are on average one-tenth the size of their counterparts in developed countries, and that in this region, most of the companies are composed primarily by micro family businesses and self-employed professionals with units economic of about 5 to 10 employees. That's the reason why the criteria used in this study is the existing official criteria in Mexico. Criteria used in Mexico to define SMEs not only depends on the number of employees, but also sector in which the company is located; the number of employees range from 31 to 500 for the industrial sector, 21 to 100 for the services sector, and 6 to 100 for the retail sector.

A total of 235 valid responses were obtained. Of the respondents, 100% percent of the companies have at least one Internet connection. 98% of them had a Webpage, all the companies manifested to conduct occasionally or regularly, business activities supported by TICs or the Internet at the time of the interview. Regarding applications, all the companies said to be using email, 90% of them were using mobile communications (SMS, MMS, WAP, mPOS (mobile point of sale) and/or smartphones). 100% had an extranet, 75% had a Facebook company page, 38% used Twitter for business purposes, and 35% used YouTube.

Table I. Factor analysis: e-business motivations among SMEs. Source: Adapted from Magal et al. (2009).

Market factor	E-profitability factor	Communication factor	Research factor
Enhance company image/brand	Sell products online	Improve communications with customers	Improve marketing intelligence
Distribute product/company information	Reduce administrative costs	Improve communications with channel partners	Find information about new sources of supply
Identify new markets or customers	Reduce direct costs of creating product or service	Improve communications with employees	Find information on industry or other economic data
Generate sales leads	Reduce shipping costs	Comply with requirements of a large customer or supplier	
Gain an edge over competition	Reduce advertising expenses for traditional media		
Provide or improve customer support	Increase net profit		

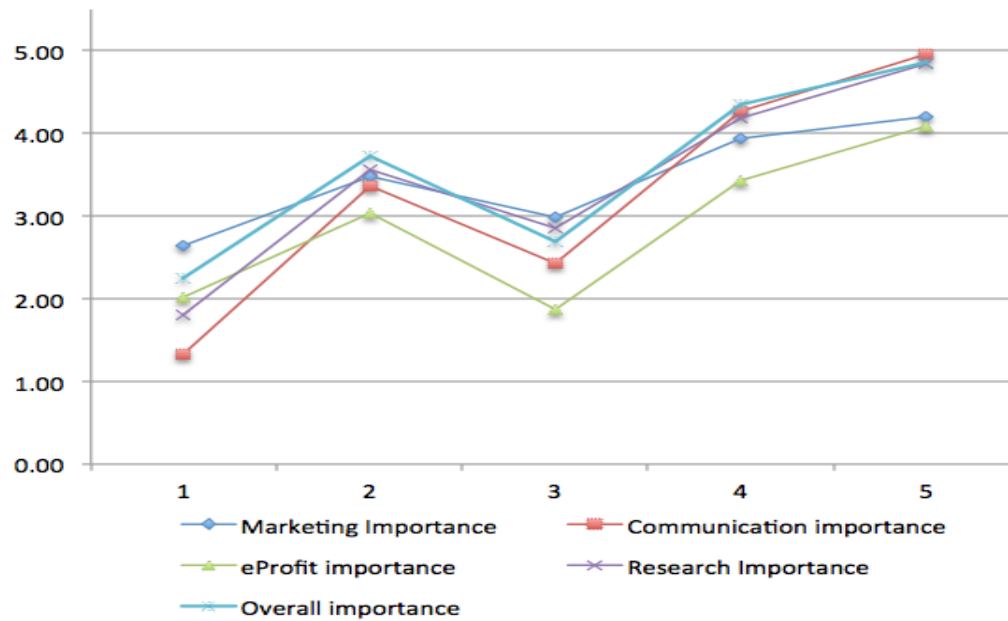
Results

The first step in the analysis was to determine if importance and performance are related. Following Roskowski (2003) and Sampson and Showalter (1999), we used correlation analysis to assess the presence of a relationship. The second step was to determine the nature of the relationship between importance and performance. We followed Magal et al., (2009) method wherein average importance scores are computed for each level of satisfaction and then plotted. The results for the four factors are shown in Figure 4. Our results closely resemble those obtained by Magal et al., (2009) in the sense that in our study the “N” shape emerged. This “N” shape is clearly visible for all the individual variables, the four factors, and the overall average.

Table II. Correlation between importance and performance

E-business motivations/attribute	Mean imp.	Mean sat.	ρ	Pr > ρ
1. Enhance company image/brand	4.36	4.34	0.7252	<0.001
2. Distribute product/company information	4.22	3.54	0.5243	<0.001
3. Identify new markets or customers	4.23	3.64	0.6218	<0.001
4. Generate sales leads	4.28	3.88	0.6321	<0.001
5. Gain an edge over competition	4.25	3.96	0.4981	<0.001
6. Provide or improve customer support	4.20	3.72	0.4256	<0.001
7. Improve communications with customers	4.22	4.68	0.3568	<0.001
8. Improve communications with channel partners	4.14	4.08	0.5896	<0.001
9. Improve communications with employees	3.75	3.50	0.6854	<0.001
10. Comply with requirements of a large customer or supplier	4.28	3.88	0.5245	<0.001
11. Improve marketing intelligence	4.20	3.82	0.4965	<0.001
12. Find information about new sources of supply	4.05	3.62	0.4723	<0.001
13. Find information on industry or other economic data	4.31	3.90	0.4569	<0.001
14. Reduce administrative costs	4.08	3.74	0.4723	<0.001
15. Reduce direct costs of creating product or service	3.87	2.58	0.3542	<0.001
16. Reduce shipping costs	3.05	2.80	0.5214	<0.001
17. Reduce advertising expenses for traditional media	3.87	3.59	0.4725	<0.001
18. Sell products online	4.28	2.88	0.2789	<0.001
19. Increase net profit	4.14	3.28	0.3126	<0.001
Marketing	4.26	3.85	0.4725	<0.001
Communication	4.10	4.04	0.56	<0.001
E-profits	3.88	3.14	0.52	<0.001
Research	4.19	3.78	0.38	<0.001
Overall	4.09	3.65	0.48	<0.001
Note: Rho, ρ = Spearman correlation coefficient				

Figure 4 shows the IPA plot for the average of all the variables. Given that the graphics for almost all individual variables factors are very similar, this plot of the average overall importance was considered sufficiently representative. The literature on the relationships of IPA explains the relationship IPA as the path of change (Sampson and Showalter, 1999; Roskowski, 2003; Mätzler et al, 2004). For example, Sampson and Showalter (1999) and Magal et al., (2009) as well, show how increasing the satisfaction or performance led to a subsequent decrease in importance. Similar to Magal et al., (2009), we arrived at an N-shaped IP relationship that describes a path showing the effect of an increase in satisfaction or performance of e-business in SMEs affects on its importance.



Marketing Importance	2.64	3.48	2.98	3.93	4.21
Communication importance	1.32	3.37	2.43	4.27	4.96
eProfit importance	2.02	3.03	1.87	3.43	4.09
Research Importance	1.80	3.57	2.86	4.18	4.84
Overall importance	2.25	3.73	2.70	4.36	4.85
Satisfaction	1	2	3	4	5

Figure 4. IP Plot for all four factors and the overall total of the 19 variables

As seen in figure 5, initially both importance and performance are low (point A). In addition, the A point is located in the quadrant of "low priority". The quadrant model, either in the area of urgency or improving the model of gradient, and above the line of iso-rating line, which indicates a difference in performance. As performance increases, the movement is toward the point B is in the area of "concentrate here", or 'Urgent action zone'. In addition, the performance difference increases toward the position more undesirable in the map, as indicated by previous researches. Further increases in performance toward the line iso-rating line, possibly move beyond the line of iso-rating (point C) into the "possible overkill" and "improve" zones. Point C is the local minimum point on the path. According to Sampson and Showalter (1999), this minimum corresponds to a point where performance meets expectations. Additional performance improvements result in a movement towards point D, roughly following the iso-rating line and into the "keep the good work" and "appropriate" zone.

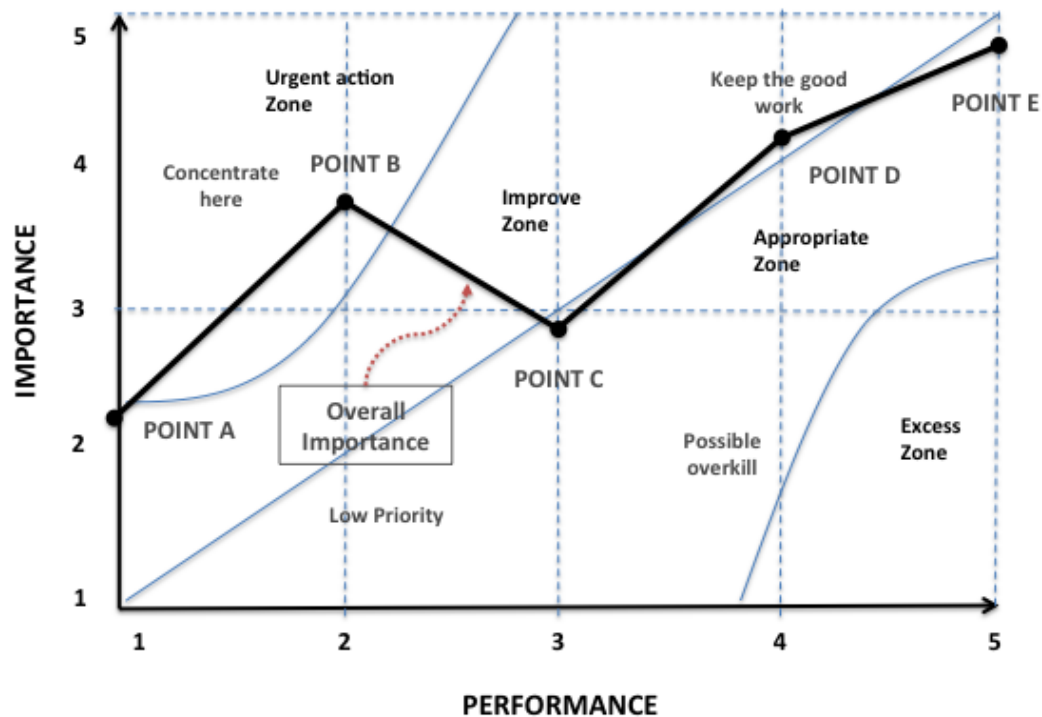


Figure 5. Results superimposed on IPA model

With this, our results confirm the results obtained by Magal et al., (2009), since small differences in the values of importance can be attributed to sampling errors or different technology assessments derived from different view about the importance of e-business for firm performance among managers of SMEs in Mexico and the United States. It also can be due to different analysis capabilities or differences in knowledge about the uses and applications of TICs. The small differences can come also from the rapid advance of TICs, ebusiness applications, ebusiness processes and technological infrastructure as studies were performed with a six years gap between them

Discussion

The purpose of this paper is to explore the relationship between importance and performance, and replicate the work by Magal et al. (2009) in a different technological and economic context to prove if the relationships suggested in the literature and the results obtained by these researchers hold for our population of Mexican exporting smes engaging in e-business. We find that there does indeed appear to be a specific path that these firms follow as they move across the IPA map no matter if there are differences in the business environment. Our findings indicate the presence of a similar “N” shaped relationship to the one obtained by Magal et al., (2009) that is an extension of the “V” shape identified by Roskowski (2003).

Conclusions, limitations and implications for future research

This paper was aimed to explore the relationship between importance and performance of the motivating characteristics of e-business among Mexican exporting SMEs. We confirmed that importance and performance are indeed related as previously found by MAGAL et al., (2009). The specific nature of the relationship was somewhat different from that suggested in the literature, but closely similar to the one found in this similar research. The results provide additional validation for the use of IPA maps as low cost tools for SMEs to shape e-business strategy

at a global level. Findings can prove useful for owners or director of SMEs as they can first identify their location on the IPA map relative to the N-shaped path and then identify the path to the optimum location on the map. For example, the map will identify the extent of change in performance necessary to reach the optimum. This can be used to influence resource allocations decisions and helping improve investment decisions. In their paper, Magal et al., (2009) made a question: Does the path of a “stable” phenomenon differ from the path of one that is more “evolutionary,” such as e-business? If so, do theories of learning or those related to stages of growth offer insight on this phenomenon? Apparently and following our results, we can confirm that paths for “stable” phenomenon do not differ from the path of one as “evolutionary” as the ebusiness phenomenon. It is still pending the second part of the question as a venue for future research in this area.

References

- [1] Ábalo, J., Varela, J., & Rial, A. (2006). El análisis de importancia-valoración aplicado a la gestión de servicios. *Psicothema*, 18(4), 730-737.
- [2] Ainin, S., & Hisham, N. H. (2008). Applying importance-performance analysis to Information systems: An exploratory case study. *Journal of Information, Information Technology and Organizations*, 3, 95-103.
- [3] Auger, P., and Gallagher, J.M., (1997). Factors Affecting the Adoption of an Internet-Based Sales Presence for Small Businesses. *The Information Society*, 13, 55–74.
- [4] Auger, P., Barnir, A., and Gallagher, J.M., (2003). Strategic Orientation, Competition, and Internet-Based Electronic Commerce. *Information Technology and Management*, 4(2–3), 139–164.
- [5] Bacon, D.R.(2003). A Comparison of Approaches to Importance Performance Analysis. *International Journal of Market Research*, 45 (1), 55-72.
- [6] Barnes, D., Hinton, M., and Mieczkowska, S., (2003). Competitive advantage through e-operations. *Total Quality Management and Business Excellence*, 14(6), 659-75.
- [7] Barua, A., Konana, P., Winston, A. B. and Yin, F. (004). An Empirical Investigation of Net-Enabled Business Value. *MIS Quarterly*, 28(4), 585-620
- [8] Beckinsale, M., Levy, M., and Powell, P., (2006). Exploring Internet adoption drivers in SMEs”, *Electronic Markets*, Vol. 16 No. 4, pp. 361-70.
- [9] Bharadwaj, A. S. (2000). A Resource-Based Perspective on Information Technology Capability and Firm Performance: An empirical investigation, *MIS Quarterly*, 24(1), 169-196.
- [10] Burns, A.C. (1986). Generating Marketing Strategy Priorities Based on Relative Competitive Position. *Journal of Consumer Marketing*, 3(3), 49-56.
- [11] Chandran, D., Kang, K. S., and Leveaux, R., (2001). Internet culture in developing countries with special reference to e-commerce. *Proceedings of the 5th Pacific Asia Conference on Information Systems (PACIS): Information Technology for Estrategy*, Seoul, 656-64.
- [12] Charafa, K. and, Rahmouni, A. F-A., (2014). Using importance performance analysis to evaluate the satisfaction of Activity-Based Costing adopters. *Accounting and Management Information Systems*, 13(4), 665–685.
- [13] Chon, K. S., Weaver, P. A. and Kim, C. Y., (1988). Marketing your community: Image analysis in Northfolk’. *Cornell H. R. A. Quarterly*, 31(4), 31-37.
- [14] Chong, S., and Pervan, G., (2007). Factors influencing the extent of deployment of electronic commerce for small and medium-sized enterprises. *Journal of Electronic Commerce in Organizations*, 5(1), 1-29.
- [15] Crompton, J. L. and Duray, N. A., (1985). An Investigation of the Relative Efficacy of Four Alternative Approaches to Importance-Performance Analysis, *Journal of the Academy of Marketing Science*, 13(4), 69-80.
- [16] Cvelbar, K. L. and Dwyerb, L. (2013). An importance–performance analysis of sustainability factors for long-term strategy planning in Slovenian hotels. *Journal of Sustainable Tourism*, 21(3), 487–504.
- [17] Denga, W-J., Kuob, Y-F. and Chenc, W-C. (2008). Revised importance–performance analysis: three-

- factor theory and benchmarking. *The Service Industries Journal*, 28(1), 37– 51.
- [18] Dolinsky, A. L., & Caputo, R. K. (1991). Adding a competitive dimension to importance-performance analysis: An application to traditional health care systems. *Health Marketing Quarterly*, 8(3/4), 61-79.
- [19] Dominique-Ferreira, S., & Silva, A. (2011). Análisis estratégico de la oferta turística portuguesa: el Análisis de importancia-valoración (IPA). *Estudios y Perspectivas en Turismo*, 20, 997-1008.
- [20] Duke, C. R., & Mont, A. S. (1996). Rediscovery performance importance analysis of products. *Journal of Product and Brand Management*, 5(2), 143-154.
- [21] Easingwood, C. J., and Arnott, D.C., (1991). Priorities in Services Marketing. *International Journal of Service Industry Management*, 2(2), 20-37.
- [22] Eikebrokk, T.R., and Olsen, D.H., (2007). An empirical investigation of competency factors affecting e-business success in European SMEs, *Information and Management*, 44(4), 364-83.
- [23] Ennew, C. T., Reed, G. V., & Binks, M. R. (1993). Importance-performance analysis and the measurement of service quality. *European Journal of Marketing*, 27(2), 59-70.
- [24] Eskildsen, J. K., & Kristensen, K. (2006). Enhancing IPA international. *Journal of Productivity and Performance Management*, 55(1), 40-60.
- [25] Evans, M. R., & Chon, K. (1989). Formulating and evaluating tourism policy using importance-performance analysis. *Hospitality Education and Research Journal*, 13, 203-213.
- [26] Ferreira Lopes, S. D., and Frazão Maia, S. C. (2012). Applying Importance-Performance Analysis to the Management of Health Care Services. *China-USA Business Review*, 11(2), 275-282.
- [27] Fishbein, M., & Ajzen, I. (1975). Beliefs, attitudes, intentions and behavior: An introduction to theory and research. Reading, M.A.: Addison-Wesley.
- [28] Ford, J. B., Joseph, M., & Joseph, B. (1999). Importance-performance analysis as a strategic tool for service marketers: The case of service quality perceptions of business students in New Zealand and the USA. *Journal of Services Marketing*, 13(2), 171-186.
- [29] Gibbs, J. L., and Kraemer, K. L., (2004). A cross-country investigation of the determinants of scope of e-commerce use: an institutional approach. *Electronic Markets*, 14(2), 124-37.
- [30] Gillespiea, K. A., Kennedy, D. W. & Soblec, K., (1989). Utilizing Importance-Performance Analysis in the Evaluation and Marketing of Activity Programs in Geriatric Settings, *Activities, Adaptation & Aging*, 13(1-2), 77-90.
- [31] Graf, L.A., Hemmasi, M., & nielsen, W. (1992). Importance-Satisfaction Analysis: A Diagnostic Tool for Organisational Change. *Leadership and Organisation Development Journal*, 13 (6), 8-12.
- [32] Grandon, E. E., and Pearson, J. M., (2004). Electronic Commerce Adoption: An Empirical Study of Small and Medium US Businesses. *Information & Management*, (42), 197–216.
- [33] Griffith, D. A., and Krampf, R. F., (1998). An Examination of the Web-Based Strategies of the Top 100 U.S. Retailers. *Journal of Marketing Theory and Practice*, 6(3), 12–23.
- [34] Gupta, B. (2011). Competencies' Importance and Performance in Tourism Industry: An Application of the Importance Performance Analysis Model. *The International Journal of Interdisciplinary Social Sciences*, 5(10), 117-133.
- [35] Hamill, J., and Gregory, K., (1997). Internet Marketing in the Internationalization of Adopters and Non-Adopters of WWW. *Journal of Marketing Management* 13(1–3), 9–28.
- [36] Hansen, E., & Bush, R. (1999). Understanding customer quality requirements. *Industrial Marketing Management*, 28, 119-130.
- [37] Hart, K., Doherty, N., and Ellis-Chadwick, F., (2000). Retailer Adoption of the Internet. *European Journal of Marketing*, 34(8), 954–974.
- [38] Hawes, J. M., & Rao, C. P. (1985). Using importance-performace analysis to develop health care marketing strategies. *Journal of Health Care Marketing*, 5(4), 19-25.
- [39] Haynes, P. J., Becherer, R. C., & Helms, M. M., (1998). Small and Mid-Sized Businesses and Internet Use: Unrealized Potential? *Internet Research*, 8(3), 229–235.
- [40] Hendricks, W. W., Schneider, I. E. & Budruk, M. (2004). Extending Importance-Performance

- Analysis with Benefit-Based Segmentation. *Journal of Park and Recreation Administration*, 22(1), 53-74
- [41] Hollenhorst, S., Olson, D., & Fortney, R. (1992). Use of importance-performance analysis to evaluate state park cabins: The case of the West Virginia state park system. *Journal of Park and Recreation Administration*, 10(1), 1-11.
- [42] Hong, S. J., Kwon, I-W. G., and Li, C. (2014). Assessing the Perception of Supply Chain Risk and Partnerships Using Importance-Performance Analysis Model: A Case Study of SMEs in China and Korea. *Supply Chain Forum*, 15(2), 110-125.
- [43] Hsieh, C-T., and Lin, B., (1998). Internet Commerce for Small Businesses. *Industrial Management + Data Systems*, 98(3), 113–119.
- [44] Huang, Y.C., Wu, C.H. and Hsu, C.J. (2006). Using Importance- Performance Analysis in evaluating Taiwan medium and long distance national highway passenger transportation service quality. *J. Am . Acad. Bus.*, 8, 98-104
- [45] Jeffcoate, J., Chappell, C., and Feindt, S., (2002). Best Practice in SME Adoption of e-Commerce. *Benchmarking*, 9(2), 122–132
- [46] Joseph, M., Allbrigh, D., Stone, G., Seknon, Y., & Tinson, J. (2005). IPA of UK and US bank: Customer perceptions of service delivery technologies. *International Journal of Financial Services Management*, 1(1), 66-88
- [47] Katz, J., (1999). Structural Reforms and Technological Behavior: The Sources and Nature of Technological Change in Latin America in the 1990s, presented to the International workshop: The Political Economy of Technology in Developing Countries. Isle of Thorns Training Centre, Brighton, 8-9 October.
- [48] Keyt, J. C., Yavas, U. and Riecken, G. (1994). Importance - Performance Analysis. *International Journal of Retail & Distribution Management*, 22(5), 35-40.
- [49] Kitcharoen, K. (2004). The importance-performance analysis of service quality in administrative departments of private universities in Thailand. *ABAC Journal*, 24(3), 20-46.
- [50] Kuratko, D. F., and Hodgetts, R.M., (2001). *Entrepreneurship: A Contemporary Approach*, 5th ed. Fort Worth, TX: Harcourt College Publishers.
- [51] Kwon,W. And Lee,T. J. (1994). Measuring service quality in Singapore retail banking. *Singapore Management Review*, 16(2), 1-24.
- [52] Levenburg, N. M. and Magal, S. R. (2005). Applying Importance-Performance Analysis to Evaluate E-Business Strategies among Small Firms. *e-Service Journal*, 29-48
- [53] Liljander, V., & Strandvik, T. (1993). Estimating Zones of Tolerance in Perceived Service Quality and Perceived Service Value. *International Journal of Service Industry Management*, 4(2), 6-28.
- [54] Magal, S. R., Kosalge, P. and Levenburg, N. M., (2009). Using importance performance analysis to understand and guide e-business decision making in SMEs. *Journal of Enterprise Information Management*, 22(1/2), 137-151.
- [55] Malhotra, N., Ballbaki, I. B., & Beshwati, N. N. (2010). *Marketing Research. An applied orientation*, Global Edition. New York: Pearson Education Inc.
- [56] Martilla, J. A., & James, J. C. (1977). Importance-performance analysis. *Journal of Marketing*, 41, 77-79.
- [57] Mata, F. J., Fuerst, W. L., and Barney, J. B. (1995). Information Technology and Sustained Competitive Advantage: A Resource-Based Analysis. *MIS Quarterly*, 19(4), 487-505.
- [58] Matzler, K., Bailom, F., Hinterhuber, H., Renzl, B., & Pichler, J., (2004). Importance-performance analysis revisited: The role of the factor structure of customer satisfaction. *Service Industries Journal*, 23(2), 112-130.
- [59] Matzler, K., Rier, M., Hinterhuber, H.H., Renzl, B. and Stadler, C. (2005). Methods and Concepts in Management: Significance, Satisfaction and Suggestions for Further Research Perspectives from Germany, Austria and Switzerland. *Strategic Change*, 14 (1), 1-13.
- [60] Matzler, K., Sauerwein, E., & Heischmidt, K. A. (2003). The asymmetric relationship between

- attribute-level performance and overall customer satisfaction: A reconsideration of the importance-performance analysis. *Industrial Marketing Management*, 33(4), 271-277.
- [61] Mougayar, W., (1998). *Opening Digital Markets: Battle Plans and Business Strategies for Internet Commerce*. New York, N Y: McGraw-Hill.
- [62] Neslin, S. A. (1981). Linking products features to perceptions: Self-stated versus statistically revealed importance weights. *Journal of Marketing Research*, 18(2), 80-86.
- [63] Nitse, P. S., and Bush, R. P. (1993). An examination of retail dental practices versus private dental practices using an importance-performance analysis. *Health Marketing Quarterly*, 11(1/2), 207-221.
- [64] Norzaidi, M. D., Chong, S. C., Murali, R. and Intan Salwani, M., (2007). Intranet usage and manager's performance in the port industry. *Industrial Management & Data Systems*, 107(8), 1227-50.
- [65] Novatorov, E. V. (1997). An importance-performance approach to evaluating internal marketing in a recreation Centre. *Managing Leisure*, 2, 1-16.
- [66] O'Leary, J. T., and Adams, M.B., (1982). *Community Views Concerning Urban Forest Recreation Resources, Facilities and Services*. Chicago: North Central Forest Experiment Station.
- [67] O'Neill, M., Wright, C. and Fitz, F., (2001). Quality evaluation in on-line service environments: an application of the importance-performance measurement technique. *Managing Service Quality*, 11(6), 402-17.
- [68] Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A Multiple-item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, 64(1), 12-40.
- [69] Pexeshki, V., Mousavi, A., & Grant, S. (2009). Importance-Performance analysis of service attributes and its impact on decision making in the mobile telecommunication industry. *Measuring Business Excellence*, 13(1), 82-92.
- [70] Pflughoeft, K.A., Ramamurthy, K., Soofi, E.S., Yasai-Ardekani, M. and Zahedi, F.M., (2003). Multiple conceptualizations of small business web use and benefit. *Decision Sciences*, 34(3), 467-469.
- [71] Poon, S., and Swatman, P.M.C., (1999). An Exploratory Study of Small Business Internet Commerce Issues. *Information and Management*, 35(1), 9-18.
- [72] Raymond, L. (2001). Determinants of Web Site Implementation in Small Businesses. *Internet Research*, 11(5), 411-422.
- [73] Rayport, J. F., and Sviokla, J. J., (1995). Exploring the Virtual Value Chain. *Harvard Business Review*, 73(6), 75-85.
- [74] Rial, J., Varela, J., Real, E., & Rial, A. (2008). Modeling and measuring perceived quality in sport centres: QSport-10 scale, *Journal of Sport Management*. (Submitted for publication).
- [75] Richard, M. D., & Allaway, A. W: (1993), Service Quality Attributes and Choice Behavior. *Journal of Services Marketing*, 7(1), 61-71.
- [76] Riviezzo, A., de Nisco, A., & Napolitano, M. R. (2009). Importance-performance analysis as a tool in evaluating town Centre management effectiveness. *International Journal of Retail & Distribution Management*, 37(9), 748 – 764
- [77] Rosenberg, M. J. (1956). Cognitive structure and attitudinal affect. *Journal of Abnormal and Social Psychology*, 53, 367-372.
- [78] Roskowski, M. J., (2003). The nature of the importance-satisfaction relationship in ratings: evidence from the normative data of the Noel-Levitz student satisfaction inventory. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 16, 211-21.
- [79] Ross, J. W., Beath, C. M., and Goodhue, D. L. (1996). Develop Long-Term Competitiveness through IT Assets. *Sloan Management Review*, 38(1), 31-42.
- [80] Sampson, S. E., & Showalter, M. J. (1999). The performance importance response function: Observation and implications. *The Services Industries Journal*, 19(3), 1-25.
- [81] Sanchez, R., Heene, A., and Thomas, H., (1996). *Introduction: Towards the Theory and Practice of Competence-Based Competition*, Oxford: Pergamon Press.

- [82] Shaw, N. C., DeLone, W. H., and Niederman, F., (2002). Sources of dissatisfaction in end-user support: an empirical study. *Database for Advances in Information Systems*, 33(2), 41-56.
- [83] Siniscalchi, J. M., Beale, E. K. and Fortuna, A. (2008). Using importance-performance analysis to evaluate training. *Performance Improvement*, 47(10), 30-35.
- [84] Skok, W., Kophamel, A., & Richardson, I. (2001). Diagnosing information systems success: Importance-performance maps in the health club industry. *Information and Management*, 38, 409-419.
- [85] Slack, N. (1991). The ImportancePerformance Matrix as a Determinant of Improvement Priority. *International Journal of Operations & Production Management*, 14(1), 59-75.
- [86] Straub, D. W., and Watson, R. T. (2001). Research Commentary: Transformational Issues in Researching IS and Net-Enabled Organizations. *Information Systems Research*, 12(4), pp. 337-345.
- [87] Strauss, J., El-Ansary, A., and Frost, R., (2003). *E-Marketing*, 3rd ed. Upper Saddle River, NJ: Prentice Hall.
- [88] Tarrant, M. A., & Smith, E. K. (2002). The use of a modified importance-performance framework to examine visitor satisfaction with attributes of outdoor recreation settings. *Managing Leisure*, 7, 69-82
- [89] Thong, J. Y. L., (1999). An Integrated Model of Information Systems Adoption in Small Businesses. *Journal of Management Information Systems*, 15(4), 187-214.
- [90] Tzeng, G-H. and Chang, H-F. (2011). Applying Importance-Performance Analysis as a Service Quality Measure in Food Service Industry. *Journal of Technology Management & Innovation*, 6(3), 106-114
- [91] Wade, M., and Hulland, J. (2004). The Resource-Based View And Information Systems Research: Review, Extension, and Suggestions for Future Research. *MIS Quarterly*, 28(1), 107-142.
- [92] Weber, K. (2000). Meeting planners' perceptions of hotel-chain practices and benefits: An importance-performance analysis. *Cornell Hotel and Restaurant Administration Quarterly*, 41(4), 32-38.
- [93] Wilder, C., Caldwell, B., and Dalton, G., (1997). More than Electronic Commerce. *Information Week*, 30-40.
- [94] Wilkie, W., & Pessemier, E. (1973). Issues in marketing's use of multi-attribute attitude models. *Journal of Marketing Research*, 10, 428-441.
- [95] Wu, F., Mahajan, V. and Balasubramanian, S., (2003). An Analysis of E-Business Adoption and its Impact on Business Performance. *Journal of the Academy of Marketing Science*, 3(4), 425-447.
- [96] Wong, K., Fearon, C., & Philip, G. (2007). Understanding e-government and e-governance: stakeholders, partnerships and CSR. *International Journal of Quality & Reliability Management*, 24(9), 927-943.
- [97] Wymer, S. A., and Regan, E. A., (2005). Factors influencing e-commerce adoption and use by small and medium businesses. *Electronic Markets*, 15(4), 438-53.
- [98] Yavas, U., & Shemwell, D. J. (2001). Modified importance-performance analysis: An application to hospitals. *International Journal of Health Care Quality Assurance*, 14(3), 104-110.
- [99] Yeo, A. Y. (2003). Examining Singapore bank's competitive superiority using importance-performance analysis. *Journal of American Academy of Business*, 3(1/2), 155-161.
- [100] Zank, G. M., and Vokurka, R. J., (2003). The Internet: Motivations, Deterrents, and Impact on Supply Chain Relationships. *SAM Advanced Management Journal*, 33-40.
- [101] Zhang, H. Q., & Chow, I. (2004). Application of importance-performance model in tour guides' performance: Evidence from mainland Chinese outbound visitors in Hong Kong. *Tourism Management*, 25, 81-91.
- [102] Zhuang, Y., and Lederer, A. L., (2003). An Instrument for Measuring the Business Benefits of e-Commerce Retailing. *International Journal of Electronic Commerce* 7(3), 65-99.