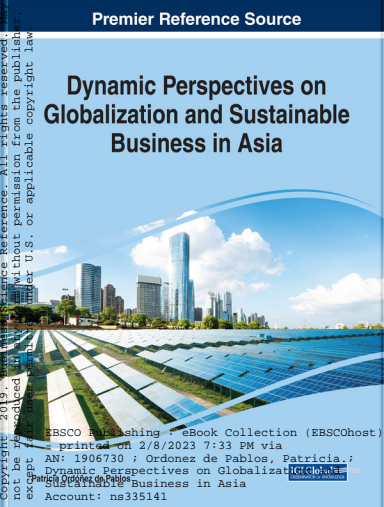


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EBSCO Publishing : eBook Collection (EBSCOhost)
- printed on 2/8/2023 7:33 PM via
AN: 1906730 ; Ordonez de Pablos, Patricia.;
Dynamic Perspectives on Globalization and Sustainable Business in Asia
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Dynamic Perspectives on Globalization and Sustainable Business in Asia

Patricia Ordoñez de Pablos
The University of Oviedo, Spain

A volume in the Advances in Business Strategy
and Competitive Advantage (ABSCA) Book Series



Published in the United States of America by

IGI Global
Business Science Reference (an imprint of IGI Global)
701 E. Chocolate Avenue
Hershey PA, USA 17033
Tel: 717-533-8845
Fax: 717-533-8661
E-mail: cust@igi-global.com
Web site: <http://www.igi-global.com>

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Library of Congress Cataloging-in-Publication Data

Names: Ordonez de Pablos, Patricia, 1975- editor.

Title: Dynamic perspectives on globalization and sustainable business in Asia
/ Patricia Ordonez de Pablos, editor.

Description: Hershey, PA : Business Science Reference, [2019]

Identifiers: LCCN 2018015199 | ISBN 9781522570950 (hardcover) | ISBN
9781522570967 (ebook)

Subjects: LCSH: Sustainable development--Asia. |

Entrepreneurship--Environmental aspects--Asia. | Globalization--Asia.

Classification: LCC HC415.E5 D86 2019 | DDC 338.95/07--dc23 LC record available at <https://lccn.loc.gov/2018015199>

This book is published in the IGI Global book series Advances in Business Strategy and Competitive Advantage (ABSCA) (ISSN: 2327-3429; eISSN: 2327-3437)

British Cataloguing in Publication Data

A Cataloguing in Publication record for this book is available from the British Library.

The views expressed in this book are those of the authors, but not necessarily of the publisher.

For electronic access to this publication, please contact: eresources@igi-global.com.



Advances in Business Strategy and Competitive Advantage (ABSCA) Book Series

Patricia Ordóñez de Pablos
Universidad de Oviedo, Spain

ISSN:2327-3429
EISSN:2327-3437

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Business Science Reference • copyright 2018 • 296pp • H/C (ISBN: 9781522540236) • US \$205.00 (our price)



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Major Asian countries, along with the United States and the European countries, recognize the importance of international cooperation in R&D (research and development). In particular, the U.S. and the European countries recognize the importance of R&D cooperation with Asia, and strive for closer cooperation therewith, especially scientific and technological cooperation. Cooperation in international development and the establishment of networks in the Asian region are crucial to countries' advancement of scientific and technical capabilities. Presented and discussed in this chapter is the R&D innovation strategy for international cooperation in science and technology in Asia. Also presented and discussed are ways of simultaneously satisfying both economic values and the ideal value of the international community's prosperity. It is hoped that this study will contribute greatly to the pursuit of international cooperation in science and technology in Asia.

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The Case of Australian Reluctance With the Chinese Belt and Road Initiative	11
<i>Mona Chung, Deakin University, Australia</i>	
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The One Belt One Road initiative is a global strategy proposed by President Xi in 2013. It was referred to as the new silk road approach which includes a land-based and ocean-based routes. The BRI, were it to reach its milestones, would be a landscape changing plan of the world and not just for China. As Australia's number one trading partner, China plays an important role for Australia especially for its economy. However, there has been a poor and lacking understanding of this strategy since 2013. The chapter highlights the importance of the strategy and the approach by the Australian politicians. Fearing being left behind, Australia politicians begin to pay attention to the strategy and especially any related plans which may or may not include Australia. The aim of this chapter is to ascertain and explain why Australia has adopted a cool and almost negative approach towards the Chinese Belt and Road Initiative (BRI). With further exploration of the Australia-China trade relationship, the chapter raised the question of the importance of China to Australia.

Chapter 3

Market Development Strategy for India's Rail Company Ircon in Asia, Africa, and Middle East..... 22

Sandeep Chinnobaiah, Cardiff Metropolitan University, UK

The Ircon International Limited is major player in rail infrastructure development backed by Indian government and railways. It has presence in Asia, South East Asia, and the Middle East. The idea is to devise a strategic marketing plan based on infrastructure spending data, location accessibility, and market friendliness of the target countries. The research design carried out is of comprehensive study of data analysis from email survey, archive survey, and in-depth interview. The survey data outcomes from relevant sample respondents having international experience in construction business have opined that infrastructure spending of country is of utmost importance in market development, also the deciding factors like market entry plan, entry strategies, and attributes determined penetration level into various markets. The data emphasis for restructuring businesses also summarized Ircon's lacking in marketing and financing means for large-scale projects.

Chapter 4

Mergers and Acquisition by Indian Firms: Managerial Perspectives on Challenges and Solutions..... 41

Som Sekhar Bhattacharyya, National Institute of Industrial Engineering, India

Mergers and acquisition (M&A) has been a dominant form of firm growth strategy and a very potent tool of securing strategic growth in business landscape. However, M&As have generally been attributed with a significant amount of failure and value destruction. The author in this exploratory research undertook 24 in-depth interviews using a semi-structured open-ended questionnaire with M&A experts to understand the reasons for value creation and destruction in Indian M&A context. The data was content analyzed for thematic analysis. The results indicated in the Indian context, M&A initiatives provided quick market growth, access to strategic resources, and such benefits. While M&A failures occurred because of the lack of understanding on decision criteria regarding whether to form SA or do a M&A, strategic clarity, cultural insensitivity, lack of due diligence, and poor M&A post management capabilities.

Chapter 5

Digital Banking Services in Rural India: A Customer's Perspective..... 56

Ashoka M. L., University of Mysore, India

Rakesh T. S., SDM College (Autonomous), India

Madhushree S., SDM College (Autonomous), India

Digitization or digitalization of banking services has established a strong network which supports a quick disbursement of banking services across the world. Digital banking service has enabled India to be more operative in reducing the transaction gaps between rural and urban areas. The awareness about cashless transactions has led to the complete transformation in online-banking services. The government initiatives as well as banks (private and public) efforts in implementing digital services such as internet banking, mobile banking, payment of various utility bills, online-ticket booking, digi-lockers for investors (investment), etc. has created a sense of technical significance among rural population. Favorable network condition plays a major role in making digital banking services more triumphant in both rural and urban India. The chapter reveals the ideology of customer's satisfaction towards the digital banking services in Belthangady Taluk, Dakshina Kannada district.

Chapter 6

Trucker Value Perception and Manufacturer Value Offering in Indian Truck Market: Business Model Through Value Perspective 73

Abhijit Sarkar, Sikkim Manipal Institute of Technology, India

Ajeya Jha, Sikkim Manipal Institute of Technology, India

Diganta Mukherjee, Indian Statistical Institute, India

The concept of business model has been deliberated upon from the value delivery mechanism perspective. The term value has been considered from the perspective of quality and price. The value perception of the Indian transporters and the value offerings of the top three truck manufacturers in India have been considered in this chapter. Value (in terms of quality and price) perception was observed to be different for separate category of customers. It was also found that the business model for offering value to customers was different as manufacturers were differently focused across tonnage segments of the market.

Chapter 7

Facebook as Marketing Tools for Organizations: Knowledge Management Analysis 92

Siti Farzana Izzati Jaman, Universiti Brunei Darussalam, Brunei

Muhammad Anshari, Universiti Brunei Darussalam, Brunei

Facebook has become widely known around the globe. This chapter applies marketing techniques to Facebook. The concern of using Facebook for both users and marketers is also elaborated in this study. Scenarios will help marketers to comprehend how knowledge management tools like plan-do-check-act (PDCA) and root cause analysis (RCA) are used in Facebook marketing. Other than the concern risk, the chapter presents the importance of using Facebook as well as the implication of these technique for future research.

Chapter 8

Relationship Quality and Customer Demographics in Indian Retail 106

Ekta Duggal, University of Delhi, India

Harsh V. Verma, University of Delhi, India

Service industries are becoming highly contested markets in India. This has shifted the focus of players towards quality and relationship quality. Building lasting customer relationships is the only way to sustain in the long run. Accordingly, quality in different forms needs to be articulated and deconstructed. The complexity of services makes it difficult for firms to satisfy and retain customers. Relationship quality is driven by trust, commitment, and satisfaction. The chapter sought to validate the retail relationship quality scale in Indian context. The components defining relationship quality were investigated to determine their relative importance across different customer groups. It was found that satisfaction with the employees is the most valued aspect across select demographic groups. This reinforces the role of employees in producing outcomes that are likely to bind customers with the service firm. Operationally, it implies that employee-customer interaction is important in managing retail business.

Chapter 9

An Empirical Note on Comparative Perceptions of Indian Patients and Physicians in Direct-to-Consumer Promotion of Pharmaceutical Products 128

Jaya Rani Pandey, Sikkim Manipal University, India

Ajeya Jha, Sikkim Manipal University, India

Samrat Kumar Mukherjee, Sikkim Manipal University, India

Saibal Kumar Saha, Sikkim Manipal University, India

Direct promotion of pharmaceutical products to patients is not legal in India. Internet healthcare websites, however, have rendered this law moot. Patients today increasingly flock to websites to find health-related information. With the help of a survey involving 400 patients and 200 physicians, this chapter attempts to identify the differences in the perception of physicians and patients. The results indicate that major differences exist in the beliefs held by physicians and patients vis-à-vis merits and demerits of DTC-promotion through health-related websites. As patients and physicians operate as a team while health-solutions are made available to the patients, such major differences in their beliefs regarding the merits and demerits of DTC-promotion may result in emergence of fault lines in their relationship. An exploratory factor analysis has been conducted to confirm if the underlying variables measure the latent factors or not. Regression model has been developed to measure the impact of information perception on patient-physician relationship.

Chapter 10

Determinants of Financial Literacy Among Indian Youth 154

Jehangir Pheroze Bharucha, Lincoln University College, Malaysia

The purpose of this study is to examine which factors actually determine the level of personal financial literacy among the youth in India's financial capital city. A total of 650 completed and returned questionnaires have been used for the purpose of this study. The data analysis uses descriptive statistics and multivariate analysis. The explanatory variables are gender, district of residence, educational level, father's educational level, employment, marital status, and parenthood. Findings of the study depict that having children is the most positively correlated (+0.327) with financial literacy. Education (+0.245) and employment (+0.140) are positively correlated with financial literacy. It is also concluded that females are less likely to have a high level of financial literacy (-0.271) compared to males.

Chapter 11

Expats in India: Perspectives on Difficulties of Doing Business in India and Its Implications of Having Born Global Firms From India..... 168

Som Sekhar Bhattacharyya, National Institute of Industrial Engineering, India

Born global firms are coming up mostly from the developed world (read Uber, Facebook, Airbnb, and such others). In this chapter, the author attempts to find out why born global firms (BGFs) are not originating from India. The author undertakes an exploratory study to answer the research questions. Seventeen expats working in India were interviewed by in-depth personally administered semi-structured open-ended questionnaire. The 17 expert expats provided insights on the difficulties of doing business in India. These insights helped the author to analyze and synthesize how these insights would be indicative of the difficulties in the development of born global firms from India. The data was content analyzed by thematic content analysis. The findings indicate that there are challenges for BGFs to sprout from India in the near future.

Chapter 12

The Performance Evaluation of Entrepreneurship Education in Chinese Universities 185

Chusheng Chen, Huaqiao University, China

Yenchun Jim Wu, National Taiwan Normal University, Taiwan

Luanyan Du, Huaqiao University, China

The quality of entrepreneurship education at the collegiate level is correlated with its sustainability. Existing studies have focused on the construction and method selection of evaluation systems for entrepreneurship education but have lacked concrete analyses of individual effectiveness. Through a micro-perspective, this study conducted a data envelopment analysis to assess the efficiency of entrepreneurship education in eight higher learning institutions. The input criteria comprised the number of courses and available funding, whereas the output criteria consisted of the number of awards won in two major intercollegiate contests and the initial employment rate. In addition, this study further investigated the most efficient schools to find students' opinions on course content and entrepreneurial needs. The findings in this study may serve as a reference for optimizing collegiate-level entrepreneurship education resources, clarifying developmental goals, and improving resource efficiency.

Chapter 13

Impact of Manipulative Character of Direct-to-Consumer Promotion 198

Jaya Rani Pandey, Sikkim Manipal University, India

Ajeya Jha, Sikkim Manipal University, India

Saibal Kumar Saha, Sikkim Manipal University, India

Marketing of pharmaceutical products has remained under firm hold of ethical and legal norms. Direct advertising or any other form of direct promotion has been illegal in any or every country. Arrival of information technology, however, has ensured patients now have direct access to every possible detail of their ailments and their treatment through direct-to-consumer promotion (DTCP). Certain studies have shown that physicians consider DTCP to have manipulative character and are designed by pharmaceutical companies with ulterior motives. The aim is to explore relationship between manipulative character on self-medication propensity, negative perception, and poor patient-physician relationship as per the perception of physicians. With data from 218 physicians, insights into perceived manipulative character, self-medication propensity, negative perception, and poor patient-physician relationship have been achieved. The finding has important implications for regulatory bodies, pharmaceutical companies, and healthcare sector stakeholders.

Chapter 14

Ready, Set, Go! The Study of Consumer Behavior of Online Hotel Booking in Jakarta 212

Adilla Anggraeni, Bina Nusantara University, Indonesia

Fedora Edlyn Wijaya, Bina Nusantara University, Indonesia

The aim of this research is to identify the factors that could influence customers' attitudes and intentions to continuing online purchases in reserving a hotel room by using the theory of perceived characteristics of innovating scale and the theory of reasoned action as the main theories. Multiple regression analysis was utilized to analyze the relationship between the independent variables and customer attitude and intentions as the dependent variables. The results concluded that all the variables in perceived characteristics of

innovating scale had an influence on attitude, and the variables in the theory of reasoned action except online subjective norms had a negative influence on intention. Visibility had the strongest impact on customer attitude, and offline subjective norms also became the strongest influence on intention to continue online purchases.

Chapter 15

Determinants of Customers' Perceived Value in the Fast Food Industry for Global Brands in Malaysia 225

Jalal Rajeh Hanaysha, DRB-HICOM University of Automotive Malaysia, Malaysia

Haim Hilman, Universiti Utara Malaysia, Malaysia

Zahari Abu Bakar, DRB-HICOM University of Automotive Malaysia, Malaysia

Lee Khai Loon, Universiti Malaysia Pahang, Malaysia

The purpose of this research was to investigate the effect of food quality, customer service, physical environment, and price fairness on perceived value in the fast food industry. A survey method was used for the collection of desired information from the visitors of global fast food restaurants in the East Coast region of Malaysia. The returned questionnaires were analyzed by SPSS and structural equation modeling (PLS-SEM). Overall, the findings showed that the impact of food quality on perceived value is positive. The results also showed that the effect of customer service on perceived value is insignificant. The outcomes also proved that physical environment has a significant positive impact on perceived value. Finally, the findings indicated that price fairness has a positive effect on perceived value. These results enhance the understanding towards the significance of the selected factors in influencing customers' perceived value in the fast food industry.

Chapter 16

A Study of Place Branding of Macao 245

Chi Fong Tang, University of Macau, Macau

MingHao Zhang, Waseda University, Japan

Jennifer H. Gao, Macao Polytechnic Institute, Macau

Macao is stereotyped as a gambling city and its unique cultural connotation is often ignored. Branding Macao effectively may deliver a concise but different image to the world. This research is a quantitative study that attempts to investigate Macao's city characteristics, to explore the importance of place branding, and to assess the influence of place branding on competitiveness and sustainable development. A theoretical framework is established to explain the relationships. Data were collected from 393 respondents in the greater China region. Reliability, correlations, and regressions are run to test various hypotheses. The research findings reveal that Macao is "Exquisite and Exalted," "Fantasy and Passionate," and "Calm and Relaxed." Place branding of Macao is essential to enrich cultural life of residents inside, and to promote good image outside. Moreover, place branding turns out to be the most significant predictor of competitiveness and sustainable development. Discussion, limitations, and implications are presented.

Chapter 17

New Silk Road: Trade and Investment Perspectives for EU and New Partnerships – Global Value Chain Model of China..... 268

Maria Fernanda Pargana Ilhéu, Lisbon University, Portugal

China feels that by being the second world economy it has the moral obligation to actively contribute to a new conceptual model of world economic development. China proposes to develop global value chains led by Chinese companies. Investment and trade cooperation is a major task in implementing this initiative and the removal of investment and trade barriers as well as the opening up of free trade areas are targets to unleash the potential for expanded cooperation. In physical terms, it is a huge logistical and infrastructure project to link Europe and China with six land routes and one maritime silk road, but it is much more than this, because this vision comes embedded into the Confucian ideal of harmony and no uniformity abiding by political consensus with moral content on how different ethnic groups and different states can coexist and cooperate peacefully in a global project, fulfilling the Chinese dream of a harmonious world and a harmonious society.

Chapter 18

Green Business: An Indian Perspective 287

Rabindra Ku Jena, Institute of Management Technology, India

Green business is an enterprise that has minimal negative impact on the global or local environment, community, society, or economy. It is the way of doing business that strives to meet the triple bottom line. Green business embraces sustainable operating procedures, product and material sourcing, labor practices, and shipping methods. The goal of green business is to eliminate any negative impact on the environment on both a local and global scale. This chapter elaborates on the challenge and perspective of green business and explores different dimensions to creating environmentally sustainable organizations in India. Towards the end, this chapter also discussed the initiatives taken by different organizations in India to transact eco-friendly business according to the guidelines of GreenCo, India. GreenCo rating is the first of its kind in the world holistic framework that evaluates companies on the basis of their environmental friendly activities using life cycle approach.

Chapter 19

Mutual Relationship Between Supply Chain, Business Strategy, and Knowledge Management in Supply Chain..... 301

Mohsen Shafiei Nikabadi, Semnan University, Iran

Amir Hakaki, Semnan University, Iran

The goal of this study is to present a multidimensional structure for relationship between supply chain (SC) strategies, business strategies, and knowledge management (KM) strategies with knowledge sharing in SC of the automotive industry of Iran. This is an applied research and has done as a survey, correlation, and cause-effect research. In this research, confirmative factor analysis, correlation test, collinearity test, and path analysis were used. The chapter tries to describe quantitatively all the relations in multidimensional structure. Effective knowledge sharing in SC is influenced by the hierarchy of strategies. Thus, SC strategies influence the business strategies, business strategies affect knowledge strategies, and knowledge strategies influence the effective and systematic knowledge sharing in the SC. Therefore, knowledge sharing is most of all influenced by KM strategies but is indirectly influenced by business and SC strategies.

Chapter 20

The Effects of Entrepreneurship Education on Entrepreneurial Intention Among University Students in China 328

Chunpei Lin, Huaqiao University, China

Yali Pan, Huaqiao University, China

Yenchun Jim Wu, National Taiwan Normal University, Taiwan & Huaqiao University, China

Li-Ming Wang, Huaqiao University, China

Entrepreneurship education for college students increasingly attracts extensive attention of both government and universities in China. However, few studies focus on the effectiveness of this external “input” learning for Chinese college students, and whether entrepreneurship education can be expected to increase college students’ intention of starting a business. Based on cognitive perspective, the authors collected 327 valid questionnaires from college students in China to explore the impact mechanism of entrepreneurship education on entrepreneurial intention. Results shows that entrepreneurship education has a positive effect on risk perception capability and entrepreneurial intention. Risk perception capability positively affects entrepreneurial intention and plays an intermediary role in the relationship of entrepreneurship education and entrepreneurial intention. Then the authors put forward suggestions and strategies for the implementation and popularization of entrepreneurship education for domestic universities in China.

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Preface

Asia is adapting to rapid geopolitical transformation in a global economy. US President Donald Trump's policy in trade, commerce and international relations, the increasing role of China in Asia, the US-Asia relation and the outcomes of North Korea and USA's summit and their future relations, among other factors, create important uncertainties for this important economic region. The new geopolitical context brings new challenges in cybersecurity, diplomacy, politics, and security.

Economics and trade are the most important driver in the cooperation between European Union and Asia. In particular, ASEAN (Association of Southeast Asian Nations) is the world's third largest market in the world. In February EU-ASEAN, Strategic Thinkers Forum¹ hold in Brussels (Belgium) this year under the title *EU-ASEAN: Old friends, new challenges Building a reinvigorated partnership* discussed *some of the most important challenges* for these two major economic regions, gathered some world leaders and experts to discuss these challenges and their implications.

What can Asian businesses and policy makers do to address the emergent challenges and opportunities in Asia? Understanding business in different countries of the Asian region and the particular uncertainties, risks and opportunities associated with doing business in Asia will be key for competing in a global economy. This book aims to provide some insights and recommendations for successful competition in the Asian markets.

The book *Dynamic Perspectives on Globalization and Sustainable Business in Asia* is born with the hope of presenting our readers with different theories, perspectives and experiences on the challenges and opportunities of Asia in a global and sustainable business world, providing some strategic insights about how companies can contribute to the creation of products and services with greater added value. Companies and organizations that want to be successful must be able to produce knowledge and convert it into innovation. Disruptive technologies will contribute significantly to the creation and sustaining of a competitive advantage for companies and economies, a for a fairer society. This book offers interesting lessons and practical recommendations about business in Asia in a global and sustainable economy that will undoubtedly be useful not only for academics, researchers, undergraduate and doctoral students, but also for practitioners, policy makers, governments and other stakeholders in Asia and other regions of the world.

The insights and answers on Asian opportunities and challenges for business globalization sets up implications and dynamics for current and future players interested in understanding business in this region and successfully develop strategies for companies and organizations.

The book is linked to *International Journal of Asian Business and Information Management*, published by IGI Global too. Some chapters are enhanced versions of a selection of best papers published in the journal while other chapters are new manuscript. Previously we edited other books on Asian business, management and information technologies: *Asian business and management practices: Trends and global considerations* (2014) -co-edited with Dasho Kama Ura, Center for Bhutan Studies, Bhutan; *Technological Solutions for Sustainable Business Practice in Asia* (2015); *Managerial Strategies and Practice in the Asian Business Sector* (2015), co-edited with Zeyar Myo Aung (The Ministry of Hotels and Tourism of Myanmar); *Managerial Strategies and Solutions for Business Success in Asia* (2016); *Tourism and Opportunities for Economic Development in Asia* (2017), co-edited with Zeyar Myo Aung (Ministry of Hotels and Tourism of Myanmar).

The book covers a wide range of topics from international cooperation in S&T, mergers and acquisitions, the New Silk Road, digital banking services, green business, knowledge management and supply chain, marketing and pharmaceutical products, place branding, entrepreneurship education and more, both in Asian region and in several specific countries: China, Iran, India, Indonesia, Macau, Malaysia and South Korea.

The book includes 20 chapters that address key issues for sustainability and sustained competitiveness in the Asian region. Let's present a summary of each chapter.

Chapter 1 titled "R&D Innovation Strategy for International Cooperation of Science and Technology in Asia: International Cooperation of Science and Technology in Asia" by Donghun Yoon (Korea Basic Science Institute, Korea) states that major Asian countries, along with the United States and the European countries, recognize the importance of international cooperation in R&D (research and development). In particular, the U.S. and the European countries recognize the importance of R&D cooperation with Asia, and strive for closer cooperation therewith, especially scientific and technological cooperation. Cooperation in international development and the establishment of networks in the Asian region are crucial to countries' advancement of scientific and technical capabilities. Presented and discussed in this chapter is the R&D innovation strategy for international cooperation in science and technology in Asia. Also presented and discussed are ways of simultaneously satisfying both economic values and the ideal value of the international community's prosperity. It is hoped that this study will contribute greatly to the pursuit of international cooperation in science and technology in Asia.

Chapter 2 titled "The Case of Australian Reluctance With the Chinese Belt and Road Initiative" by Mona Chung (Deakin University, Australia) and Bruno Mascitelli, (Swinburne Institute of Technology, Australia) affirms that the One Belt One Road initiative is a global strategy proposed by President Xi in 2013. It was referred to as the new silk road approach which includes a land-based and ocean-based routes. The BRI, were it to reach its milestones, would be a landscape changing plan of the world and not just for China. As Australia's number one trading partner, China plays an important role for Australia especially for its economy. However, there has been a poor and lacked understanding of this strategy since 2013. The paper highlights the importance of the strategy and the apprao by the Australian politicians. Fearing being left behind, Australia politicians begin to pay attention to the strategy and especially any related plans which may or may not include Australia. The aim of this chapter is to ascertain and explain why Australia has adopted a cool and almost negative approach towards the Chinese Belt and Road Initiative (BRI). With further exploration of the Australia-China trade relationship, the chapter raised the question of the importance of China to Australia.

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Sandeep Chinnobaiah (Cardiff Metropolitan University, UK) in his chapter (Chapter 3) titled “Market Development Strategy for India’s Rail Company Ircon in Asia, Africa, and Middle East” affirms that The Ircon International Limited is major player in rail infrastructure development backed by Indian government and railways. It has presence in Asia, South East Asia & Middle East. vision is to expand globally simultaneously sustain intense competition at locally and overseas. The idea is to devise a strategic marketing plan based on infrastructure spending data, location accessibility and market friendliness of the target countries. The research design carried out is of comprehensive study of data analysis from email survey, archive survey and depth interview. The survey data outcomes from relevant sample respondents having international experience in construction business have opined that infrastructure spending of country is of utmost importance in market development, the 56% of survey respondents agreeing to it, also the deciding factors like market entry plan, entry strategies and attributes determined penetration level into various markets. The data emphasis for restructuring businesses, also summarized Ircon’s lacking in marketing, financing means for large scale projects.

Chapter 4 titled “Mergers and Acquisition by Indian Firms: Managerial Perspectives on Challenges and Solutions” by Som Sekhar Bhattacharyya (National Institute of Industrial Engineering, India) discusses how Mergers and Acquisition (M&A) has been a dominant form of organizational growth strategy and “a very potent tool of securing strategic growth in business landscape in However, M&As has generally been attributed with a significant amount of failure and value destruction. The chapter in this exploratory research undertook 24 in-depth interviews using a semi structured open ended questionnaire with M&A experts to understand the reasons for value creation and destruction in Indian M&A context. The data was content analyzed for thematic analysis. The results indicated in the Indian context, M&A initiatives provided quick market growth, access to strategic resources and such benefits. While M&A failures occurred because of the lack of understanding on decision criteria regarding whether to from SA or do a M&A, strategic clarity, cultural insensitivity, lack of due diligence and poor M&A post management capabilities.

Chapter 5 titled “Digital Banking Services in Rural India: A Customer’s Perspective” by Ashoka M.L (University of Mysore, India), Rakesh T S (SDM College- Autonomous, India) and Madhushree S. (SDM College, India) states that digitization or digitalization of banking services has established a strong network which supports a quick disbursement of banking services across the world. Digital banking service has enabled India, to be more operative in reducing the transaction gaps between rural and urban areas. The awareness about cashless transactions has led to the complete transformation in online-banking services. The Government initiatives as well as banks (Private & Public) efforts in implementing digital services such as internet banking, mobile banking, payment of various utility bills, online-ticket booking, digi-locker’s for investor’s (investment) etc. has created a sense of technical significance among rural population. Favourable network condition plays a major role in making digital banking services more triumphant in both rural and urban India. The present study reveals the ideology of customer’s satisfaction towards the digital banking services in Belthangady Taluk, Dakshina Kannada district.

Chapter 6 titled “Trucker Value Perception and Manufacturer Value Offering in Indian Truck Market: Business Model Through Value Perspective” by Abhijit Sarkar (Sikkim Manipal Institute of Technology, India), Ajeya Jha (Sikkim Manipal Institute of Technology, India) and Diganta Mukherjee (Indian Statistical Institute (SOSU), India) develops a study to get a better understanding of the concept of value that transporters look forward to and the business models of manufacturers to cater to that required value

in case of heavy trucks in the category of 25 tonne and 31 tonne trucks. The concept of business model has been deliberated upon from the value delivery mechanism perspective. The term 'Value' has been considered from the perspective of 'Quality' and 'Price'. The 'Value' perception of the Indian transporters and the value offerings of the top three truck manufacturers in India and the have been considered in this chapter. Value (in terms of quality and price) perception was observed to be different for separate category of customers. It was also found that the business model for offering value to customers was different as manufacturers were differently focused across tonnage segments of the market.

Chapter 7 titled "Facebook as Marketing Tools for Organizations: Knowledge Management Analysis" by Siti Farzana Izzati Jaman (Universiti Brunei Darussalam, Brunei) analyzes the results of a study on Facebook marketing and risk. The discussed scenarios will help marketers to comprehend on how knowledge management tools like Plan-Do-Check-Act (PDCA) and Root Cause Analysis (RCA) are used in Facebook Marketing. The chapter presents the importance of using Facebook tool as well as the implication of these technique for the future research to identify.

Chapter 8 titled "Relationship Quality and Customer Demographics in Indian Retail" by Ekta Duggal (Motilal Nehru College, University of Delhi, India) states that service industries are becoming highly contested spaces in Asian economies. This is particularly true for retail in India. Quality has been pushed in the center of service operations. Accordingly, quality in different forms needs to be articulated and deconstructed. The complexity of services makes it difficult for firms to satisfy and retain customers. The customer relationship is a superior strategy in the times when customer attraction is costly. Relationship quality as a comprehensive construct aims at development of trust, commitment and satisfaction with the customers. The present study sought to validate the relationship quality scale in the context of retail services in India. The components defining relationship quality were investigated to determine their relative importance across different customer groups. This would contribute to the upcoming retail sector in India by revealing the crucial parameters of relationship quality as it will assist retailers in achieving market success based on healthy customers' relationships.

Chapter 9 titled "An Empirical Note on Comparative Perceptions of Indian Patients and Physicians in Direct-to-Consumer Promotion of Pharmaceutical Products" by Jaya Rani Pandey (Sikkim Manipal Institute of Technology - Sikkim Manipal University, India), Ajeya Jha (Sikkim Manipal Institute of Technology - Sikkim Manipal University, India), Samrat Kumar Mukherjee (Sikkim Manipal University, India) and Saibal Kumar Saha (Sikkim Manipal Institute of Technology - Sikkim Manipal University, India) observes that the direct promotion of pharmaceutical products to patients is not legal in India. Internet healthcare websites, however, have rendered this law as merely a paper-feast. Patients today increasingly flock to websites to find health related information. With the help of a survey involving 400 patients and 200 physicians This paper attempts to identify the differences in the perception of physicians and patients. The results indicate that major differences exist in the beliefs held by physicians' and patients' vis-à-vis merits and demerits of DTC-promotion through online-health related websites. As patients and physicians operate as a team while health-solutions are made available to the patients, such major differences in their beliefs regarding the merits and demerits of DTC-promotion may result in emergence of fault-lines in their relationship. An exploratory factor analysis has been conducted to confirm if the underlying variables measure the latent factors or not. Regression model has been developed to measure the impact of information perception on patient-physician relationship.

Chapter 10 titled "Determinants of Financial Literacy Among Indian Youth" by Jehangir Pheroze Bharucha (Lincoln University College, Malaysia) presents the results of a study that analyses which factors actually determine the level of personal financial literacy among the youth in India's financial

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capital city. A total of 650 completed and returned questionnaires have been used for the purpose of this study. The data analysis uses descriptive statistics and multivariate analysis. The explanatory variables are gender, district of residence, educational level, father's educational level, employment, marital status and parenthood. Findings of the study depict that having children is the most positively correlated (+0.327) with financial literacy. Education (+0.245) and employment (+0.140) are positively correlated with financial literacy. It is also concluded that females are less likely to have a high level of financial literacy (-0.271) compared to males.

Chapter 11 titled "Expats in India: Perspectives on Difficulties of Doing Business in India and Its Implications of Having Born Global Firms From INDIA" by Som Sekhar Bhattacharyya (National Institute of Industrial Engineering, India) examines why Born Global Firms (BGFs) are not originating from India. The author undertakes an exploratory study to answer the research questions. 17 expats working in India were interviewed by in-depth personally administered semi-structured open-ended questionnaire. The 17 expert expats provided insights on the difficulties of doing business in India. These insights helped the author to analyze and synthesize how these insights would be indicative of the difficulties in the development of born global firms from India. The data was content analyzed by thematic content analysis. The findings indicate that there are challenges for BGFs to sprout from India in the near future.

Chapter 12 titled "The Performance Evaluation of Entrepreneurship Education in Chinese Universities" by Chusheng Chen (Huaqiao University, China), Yenchun Jim Wu (National Taiwan Normal University, China) and Luanyan Du (Huaqiao University, China) proposes that the quality of entrepreneurship education at the collegiate level is correlated with its sustainability. Existing studies have focused on the construction and method selection of evaluation systems for entrepreneurship education, but have lacked concrete analyses of individual effectiveness. Through a micro perspective, this study conducted a data envelopment analysis to assess the efficiency of entrepreneurship education in eight higher learning institutions. The input criteria comprised the number of courses and available funding, whereas the output criteria consisted of the number of awards won in two major intercollegiate contests and the initial employment rate. In addition, this study further investigated the most efficient schools to find students' opinions on course content and entrepreneurial needs. The findings in this study may serve as a reference for optimizing collegiate-level entrepreneurship education resources, clarifying developmental goals, and improving resource efficiency.

Chapter 13 titled "Impact of Manipulative Character of Direct-to-Consumer Promotion" by Jayarani Pandey (Sikkim Manipal Institute of Technology - Sikkim Manipal University, India), Saibal Kumar Saha (Sikkim Manipal Institute of Technology - Sikkim Manipal University, India) and Ajeya Jha (Sikkim Manipal Institute of Technology - Sikkim Manipal University, India) states that marketing of pharmaceutical products has remained under firm hold of ethical and legal norms. Direct advertising or any other form of direct promotion has been illegal in any or every country. Arrival of Information Technology, however, has ensured patients now have direct access to every possible detail of their ailments and their treatment through Direct to Consumer Promotion (DTCP). Certain studies have shown that physicians consider DTCP to have manipulative character and are designed by Pharmaceutical companies with ulterior motives. The aim is to explore relationship between manipulative character on self-medication propensity, negative perception, and poor patient-physician relationship as per the perception of Physicians. With data from 218 physicians' insights into perceived manipulative character, self-medication propensity, negative perception and poor patient-physician relationship have been tried to achieve. The finding has important implications for regulatory bodies, Pharmaceutical companies and healthcare sector stakeholders.

Chapter 14 titled “Ready, Set, Go! The Study of Consumer Behavior of Online Hotel Booking in Jakarta” by Adilla Anggraeni (Binus Business School, Bina Nusantara University, Indonesia) and Fedora Edlyn Wijaya (Binus Business School, Bina Nusantara University, Indonesia) presents a research that replicates of Andrews and Bianchi’s work. The aim of this study is to identify the factors that could influence customers’ attitude and intention to continuing online purchases in reserving a hotel room by using the ‘Theory of Perceived Characteristics of Innovating Scale’ and the ‘Theory of Reasoned Action’ as the main theories. Multiple regression analysis was utilized to analyze the relationship between the independent variables and customer attitude and intentions as the dependent variables. The results concluded that all the variables in Perceived Characteristics of Innovating Scale had an influence on attitude; and the variables in the Theory of Reasoned Action except online subjective norms had a negative influence on intention. Visibility had the strongest impact on customer attitude, and offline subjective norms also became the strongest influence on intention to continue online purchases.

Chapter 15 titled “Determinants of Customers’ Perceived Value in the Fast Food Industry for Global Brands in Malaysia: Customers’ Perceived Value in the Fast Food Industry for Global Brands in Malaysia” by Jalal Rajeh Hanaysha (DRB-HICOM University of Automotive Malaysia, Malaysia), Zahari Abu Bakar (DRB-HICOM University of Automotive Malaysi, Malaysia) and Lee Khai Loon (Universiti Malaysia Pahang, Malaysia) studies the effect of food quality, customer service, physical environment and price fairness on perceived value in the fast food industry. A survey method was used for the collection of desired information from the visitors of global fast food restaurants in the East Coast region of Malaysia. The returned questionnaires were analyzed by SPSS and structural equation modeling (PLS-SEM). Overall, the findings showed that the impact of food quality on perceived value is positive. The results also showed that the effect of customer service on perceived value is insignificant. The outcomes also proved that physical environment has a significant positive impact on perceived value. Finally, the findings indicated that price fairness has a positive effect on perceived value. These results enhance our understandings towards the significance of the selected factors in influencing customers’ perceived value in the fast food industry.

Chapter 16 titled “A Study of Place Branding of Macao” by Chi Fong Tang (University of Macau, Macau), MingHao Zhang (Waseda University, Japan) and Jennifer H. Gao, (Macao Polytechnic Institute, Macau) proposed that Macao is stereotyped as a gambling city and its unique cultural connotation is often ignored. Branding Macao effectively may deliver a concise but different image to the world. This research is a quantitative study which attempts to investigate Macao’s city characteristics, to explore the importance of place branding, and to assess the influence of place branding on competitiveness and sustainable development. A theoretical framework is established to explain the relationships. Data were collected from 393 respondents in the greater China region. Reliability, correlations, and regressions are run to test various hypotheses. The research findings reveal that Macao is “Exquisite and Exalted”, “Fantasy and Passionate” and “Calm and Relaxed”. Place branding of Macao is essential to enrich cultural life of residents inside, and to promote good image outside. Moreover, place branding turns out to be the most significant predictor of competitiveness and sustainable development. Discussion, limitations, and implications are presented.

Chapter 17 titled “New Silk Road: Trade and Investment Perspectives for EU and New Partnerships – Global Value Chain Model of China” by Maria Fernanda Pargana Ilhéu (Chinalogus, Portugal) states that China feels that by being the 2nd World Economy has the moral obligation to actively contribute to a new conceptual model of world economic development. China proposes to develop Global Value Chains led by Chinese companies. Investment and trade cooperation is a major task in implementing this

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initiative and the removal of investment and trade barriers as well as the opening up of free trade areas are targets to unleash the potential for expanded cooperation. In physical terms is a huge logistical and infrastructure project to link Europe and China with six land routes and one maritime Silk Road, but it is much more than this, because this vision comes embedded into the Confucian ideal of Harmony and no Uniformity abiding by political consensus with moral content on how different ethnic groups and different states can coexist and cooperate peacefully in a global project, fulfilling the Chinese Dream of a Harmonious World and a Harmonious Society.

Chapter 18 titled “Green Business: An Indian Perspective” by Rabindra Ku Jena (Institute of Management Technology, India) defines green business as an enterprise that has minimal negative impact on the global or local environment, community, society, or economy. It is the way of doing business that strives to meet the triple bottom line. Green business embraces sustainable operating procedures, product and material sourcing, labor practices, and shipping methods. The goal of green business is to eliminate any negative impact on the environment, on both a local and global scale. This chapter elaborates on the challenge and perspective of Green business, and explores different dimensions to creating environmentally sustainable organizations. Towards the end this chapter also discussed the initiatives taken by different organizations in India to transact eco-friendly business according to the guidelines of GreenCo, India. GreenCo Rating is the “first of its kind in the World” holistic framework that evaluates companies on the environmental friendliness of their activities using life cycle approach.

Chapter 19 titled “Mutual Relationship Between Supply Chain, Business Strategy, and Knowledge Management in Supply Chain” by Mohsen Shafiei Nikabadi (Semnan University, Iran) and Amir Hakaki (Semnan University, Iran) discusses the results of a study on a multidimensional structure for relationship between Supply Chain (SC) Strategies, Business Strategies, and Knowledge Management (KM) Strategies with Knowledge Sharing in SC of the Automotive Industry of Iran. This is an applied research and has done as a Survey, Correlation and cause-effect research. In this research, confirmative factor analysis, correlation test, co-linearity test, and path analysis were used. The paper tries to describe quantitatively all the relations in multidimensional structure. Findings, effective knowledge sharing in SC is influenced by the hierarchy of strategies. Thus, SC strategies influence the business strategies, business strategies affect knowledge strategies and at least, knowledge strategies influence the effective and systematic knowledge sharing in the SC. Therefore, knowledge sharing is most of all influenced by KM strategies; but is indirectly influenced by business and SC strategies.

The last chapter of the book, Chapter 20 titled “The Effects of Entrepreneurship Education on Entrepreneurial Intention Among University Students in CHINA” by Chunpei Lin (Huaqiao University, China), Yali Pan (Huaqiao University, China) and Yenchun Jim Wu (National Taiwan Normal University, Taiwan) discusses how entrepreneurship education for college students increasingly attracts extensive attentions of both government and universities in China. However, few studies focus on the effectiveness of this external “input” learning for Chinese college students, and whether entrepreneurship education can be expected to increase college students’ intention of starting a business. Based on cognitive perspective, we collected 327 valid questionnaires from college students in China to explore the impact mechanism of entrepreneurship education on entrepreneurial intention. Results shows that entrepreneurship education has a positive effect on risk perception capability and entrepreneurial intention. Risk perception capability positively affect entrepreneurial intention, and plays partly intermediary role in the relationship of entrepreneurship education and entrepreneurial intention. Then we put forward suggestions and strategies for the implementation and popularization of entrepreneurship education for domestic universities in China.

After the summaries of the chapters included in the book, it is important to thank authors for the interest in participation in this book

Finally, I would like to announce to our readers *that International Journal of Asian Business and Information Management* is developing three special issues focused on specific Asian countries: Bangladesh, Brunei and Iran. The titles of the special issues are: *Business, Economy, and Green Issues in Bangladesh: Insights and Reflections*, *Business, Economics and Finance in Brunei Darussalam*, *Disruptive Innovation*, and finally *Management and Culture in Iran: Risks and Opportunities in Post-Sanctions Iran*. The special issues will be published in 2019. I hope you all find them interesting and useful for your teaching and research activities. Thank you very much.

Patricia Ordóñez de Pablos
The University of Oviedo, Spain

REFERENCES

Ordóñez de Pablos, P. (2015). Technological solutions for sustainable business practice in Asia. Hershey, PA: IGI Global. doi:10.4018/978-1-4666-8462-1

Ordóñez de Pablos, P. (2016). Managerial strategies and solutions for business success in Asia. Hershey, PA: IGI Global.

Ordóñez de Pablos, P., & Aung, Z. M. (2017). *Tourism and opportunities for economic development in Asia*. Hershey, PA: IGI Global.

Ura, D. K., & Ordóñez de Pablos, P. (2014). Asian business and management practices: Trends and global considerations. Hershey, PA: IGI Global.

Zeyar Myo Aung, U., & Ordóñez de Pablos, P. (2015). Managerial strategies and practice in the Asian business sector. Hershey, PA: IGI Global.

ENDNOTE

¹ https://eeas.europa.eu/sites/eeas/files/eu-asean_strategic_thinkers_forum_-_draft_programme_2.pdf

Chapter 1

R&D Innovation Strategy for International Cooperation of Science and Technology in Asia

Donghun Yoon

Korea Basic Science Institute, South Korea

ABSTRACT

Major Asian countries, along with the United States and the European countries, recognize the importance of international cooperation in R&D (research and development). In particular, the U.S. and the European countries recognize the importance of R&D cooperation with Asia, and strive for closer cooperation therewith, especially scientific and technological cooperation. Cooperation in international development and the establishment of networks in the Asian region are crucial to countries' advancement of scientific and technical capabilities. Presented and discussed in this chapter is the R&D innovation strategy for international cooperation in science and technology in Asia. Also presented and discussed are ways of simultaneously satisfying both economic values and the ideal value of the international community's prosperity. It is hoped that this study will contribute greatly to the pursuit of international cooperation in science and technology in Asia.

INTRODUCTION

The global economy is growing rapidly through the development of science and technology. Based on the results of the R&D (research and development) innovation, the global economic growth is making human lives better (Zartner, 2010). The growing popularity of this 'new' form of activity is taken as further proof of the unstoppable march of globalization, particularly as a large and growing number of these agreements involve firms of at least two nationalities (Narula & Hagedoom, 1999). R&D cooperation enables firms to internalise the knowledge spillovers and eliminate the disincentive effect of spillovers on R&D (Belderbos et al. 2004). The problems of poverty, environmental degradation, and human rights violations in low-income countries and the development-related problems in developing countries, however, should be addressed worldwide (Henökl, 2018; Jaramillo, 2012). About 20% of the

DOI: 10.4018/978-1-5225-7095-0.ch001

world population lives on less than USD1 a day, and the gap between advanced countries and developing countries is widening. To address the problems of economic growth and poverty reduction in developing countries, advanced countries are providing official development assistance (ODA) (Tallberg, 2010). ODA is a supportive policy tool provided to developing countries to help solve human problems like poverty and environmental degradation, and is given to more than 180 countries worldwide (Sanderson, 2010). The targets and ranges of ODA vary widely and include scientific technologies (Urpelainen, 2012). Since recently, the world has been paying attention to the economic growth and technological developments in Asia, and is very excited about the future developments in Asia. Asian countries have grown to be the most influential countries in the world, with South Korea, Japan, China, Taiwan, Singapore, etc. among the most advanced countries in the world in terms of the R&D system. The R&D investment of 10 Asian countries, including South Korea, Japan, China, and India, is close to the \$400 billion U.S. R&D investment in 2012. Multinational corporations have been paying attention of late to the potential of Asia, setting up R&D centers therein and investing a large research-related amount in the field of human resources in the region. Many Asian countries also have many natural and human resources, making them an alternative to solving the problems related to energy, resources, and science and engineering worldwide. The energy resources in Central Asia, the natural resources in Southeast Asia, and the excellent human resources in China and India can modify the global competitive structure. Asian countries have set many priorities to ensure their continued economic growth and scientific and technological competitiveness, and to enhance innovation. Asia faces significant regional gaps and common problems like environmental issues, infectious diseases, and climate change, which need to be analyzed and evaluated to be addressed. Major advanced countries have been setting up policies of late to comprehensively analyze their qualitative and quantitative innovation capabilities. Major Asian countries, including South Korea, Japan, and China, are working to enhance their capabilities and gain leadership in the region. In this paper, ways of cooperating in selecting leading positions in the Asian region will be proposed.

R&D AND INTERNATIONAL COOPERATION

Like the innovation systems of other OECD economies, government policy, industrial R&D strategies, and international competition have produced significant structural change in the US and other OECD members' national innovation systems (Mowery, 1998). Successful innovation depends on the development and integration of new knowledge in the innovation process (Cassiman & Veugelers, 2002). Investment in R&D activities plays a key role in creating a positive image and produces the level of innovation required in the society. It is also an important tool for enhancing the national competitiveness for economic development (Devictor, 2013). In many countries, the interest in scientific R&D and the demand for its role in their economic development are growing, along with the perception that R&D is important for international competitiveness (Buckley, et al., 2015). Gassmann and Zedtwitz (1999) identify five types of structural and behavioral orientation in international R&D organization: the ethnocentric centralized R&D, the geocentric centralized R&D, the polycentric decentralized R&D, the R&D hub model and the integrated R&D network. Science and technology is presented for the scale of national international competitiveness (OECD 2012). It commands beyond the average level of aid at the recovery or reconstruction level, and the overall scale of the R&D ODA is constantly expanding. The amount of ODA provided for the R&D sector was about 1.0% of the total amount for ODA in the Development

Assistance Committee (DAC) member countries in 2000, and was doubled to 2.1% in 2006, with an annual average increase of 15.7%. Officially, the ODA for the scientific and technological field consisted primarily of free educational training, dispatching experts, support for policy and technical advisors, support for survey and research preparations, and contributions to the development of scientific studies and technologies. The different economic levels and technology gaps between advanced and developing countries cannot be considered the bases for the formation and grant of unilateral aid from advanced countries (Laskar & Harada, 2003). Such unilateral assistance needs to be improved because there could be a decline in the willingness of the recipient countries to participate in it, and the recipient countries may raise questions about practical contributions (Schneider & Slantchev, 2018). Moreover, other areas besides the science and technology sector are likely to be burdened and costly due to the inefficient implementation of development assistance to both advanced countries and developing countries in the international community. Since recently, there have been calls for securing the effectiveness of ODA through outcome-oriented performance management. The international community has discussed the effectiveness of ODA and has come up with the Paris Declaration on Aid Effectiveness (2005) and the Accra Agenda for Action (2008). While most of the existing ODA have been project-centric in relation to in-out, the qualitative aspects of the assistance and the outcome are emphasized. Therefore, the validation of effectiveness to measure performance is becoming increasingly important as it also affects the planning and budgeting decisions for future projects.

SCOPE AND FOCUS OF R&D ODA

In this paper, the scope of R&D ODA is defined as including higher education training for direct R&D activities and support for research institutions. The development of human resources can also be seen as a factor that increases the capacity for R&D innovation. A review of the Organisation for Economic Co-operation and Development (OECD) activity database showed that a total of 10 sectors in the entire ODA are directly and indirectly related to R&D (higher education, advanced tech & managerial training, medical research, energy research, agricultural research, forestry research, fishery research, technological research & development, environmental research, and research/scientific institutes). These 10 sectors can be defined as the range of the R&D ODA. The data statistics of R&D ODA (OECD) are shown in Table 1.

Every year, ODA has no fixed variation. The scale of the R&D related to ODA is also at the 3% level, without major changes. There is a worldwide economic recession, and it is important to note that although the R&D budget in developed countries is growing every year, the international level of R&D is stagnant. The scope of R&D ODA (OECD) is shown in Table 2.

Table 1. Data statistics of R&D ODA (USD million)

Classification	2006	2007	2008	2009	2010
Total ODA	130,486	128,386	155,471	159,125	161,644
R&D ODA	4,208	4,465	3,732	4,053	4,768
R&D ODA (%)	3.23	3.48	2.40	2.55	2.95

Table 2. Scope of R&D ODA (USD million)

Classification	2006	2007	2008	2009	2010
Medical	171	41	39	33	22
Energy	4	-	13	4	2
Farming	248	488	123	185	177
Forestry	5	4	1	2	6
Fishing	3	10	4	14	11
General skill	153	242	72	101	54
Environment	110	11	22	26	80
Higher education	3,156	3,458	3,254	3,407	4,056
Advanced technology and management training	103	102	88	159	176
Science and technology institute	258	109	116	123	184
Total	4,211	4,465	3,732	4,054	4,768

SCIENCE AND TECHNOLOGY TYPE AND ODA VALIDITY IN ASIA

Science and technology cooperation is divided into foreign aid in the field of science and technology and science and technology cooperation in general terms (i.e., international cooperation). Local governments' discretion is recognized, and the central government's responsibility for the decision to prioritize projects is reduced. Foreign aid is divided into bilateral and multilateral assistance, primarily for the purpose of supporting the establishment of a basic infrastructure for science and technology in developing countries. Bilateral assistance is a form of direct aid funding and is supplied by the donor countries to the recipient countries. Multilateral assistance is a form of indirect support through investment by and contribution from international organizations, rather than direct support. Generally, ODA focuses more on poverty alleviation, education, social development in health care, and building economic infrastructure than on science and technology projects. International cooperation is represented as the cooperation through south-south coordination, north-south coordination, international organizations, and intergovernmental organizations. Although international cooperation has the potential for mutual cooperation in the mid to long term, it is characterized as being driven unilaterally in the short term, and from the dispensed viewpoint in the developing countries. Within the international cooperation structure of science and technology, it is difficult for countries to smoothly cooperate with one another on an equal footing as the motives and viewpoints of the key countries are different. The motives and viewpoints of science and technology cooperation are shown in Table 3.

Due to the different economic levels and technology gap between advanced and developing countries, the science and technology cooperation in the early stages is mostly unilateral assistance for the developing countries. In the long run, as the unilateral contribution of developing countries only weakens the will of the developing countries to participate, both the advanced and developing countries should help promote the science and technology capabilities and economic development. The win-win partnership between the donor and recipient countries is highly effective with the funding, manpower, and technical assistance of the donor countries and the human resources, natural resources, and energy of the recipient countries. In particular, it is necessary to push ahead with a cooperative relationship between the donor

Table 3. Motives and viewpoints of science and technology cooperation

Classification	Advanced countries	Developing countries
Advanced countries	Science and technology motivation Reciprocal viewpoint	Humanitarian and economic motivation Dispensed and beneficial viewpoint
Developing countries	Economic, science and technology motivation Reciprocal and beneficial viewpoint	Economic, diplomatic and security motivation Beneficial viewpoint

and recipient countries under the guidance of science and technology, which enables continued development. As the motives and viewpoints of the science and technology cooperation between advanced and developing countries differ by the level of development of a country, logically, it is uncertain that the cooperation between the advanced and developing countries is a mutual technical partnership. The theoretical considerations through the economic model, however, have a reciprocal effect on both the advanced and developing countries. The recent globalization has led not only to the advanced countries becoming the main force in the world but also to the increasing presence and capabilities of the developing countries. It can be said that it is essential to actively push ahead with sustainable cooperation in science and technology in the developing countries in light of the fact that science and technology cooperation is being undertaken at the global level, beyond national borders. At the same time, the effective bilateral science and technology cooperation in developing countries requires a new approach to reflect both the demand and the position based on a bidirectional reciprocal viewpoint.

Private institutions are concentrating on the use of the appropriate technology as they become more interested in solving fundamental problems. Appropriate technology refers to creating technologies that meet the local conditions of the Third World countries, such as the products that are consumed in such region to create technologies suitable for the local environment. Accordingly, the appropriate technology is not necessary an advanced technology. If the technology is suitable for the local conditions, it is appropriate. The appropriate technology projects will develop the benefits of the national advanced technology, thus being able to respond appropriately to the needs of the region.

R&D INNOVATION STRATEGY FOR INTERNATIONAL COOPERATION IN SCIENCE AND TECHNOLOGY IN ASIA

The interest in the creative shared value (CSV), which aims to simultaneously pursue economic and social benefits and strengthen business competitiveness, has been growing of late. Above all, the principle is that both corporate social responsibility (CSR) and CSV comply with the relevant laws and standards, and reduce the damages caused by the corporate activities to the society. CSV can be seen as a more advanced concept in that it accompanies innovation, is based on the maximization of corporate profits, and is reflected in the overall budget of the company. CSV aims to realize the expansion of shared values by simultaneously developing the socioeconomic environment of the community while strengthening the competitiveness of the corporation. If corporations, governments, and NGOs aim to create values that are a combination of economic and social values, the government, businesses, and NGOs will have to work together to create values. Shared values are based on the principle that the social demand beyond the existing economic needs creates a market. Resolving social issues such as energy and raw material

wastage and the high cost of safety accidents will not increase the corporate costs. The problem-solving process is likely to produce innovation using new technologies, operating methods, and management strategies, thereby improving the corporate productivity and expanding the market. CSV is not a concept of redistributing economic and social values through changes in views and innovation, but is a larger aggregate volume. In particular, while the main CSR and CSV actors are corporations, in general, the ODA strategy differs in that the main actor therein is the government. In this research, CSV was applied to the R&D innovation strategy for the international cooperation in science and technology in Asia. The ODA for CSR, CSV, and CSV is shown in Table 4.

The international community is striving to develop the joint millennium development goals (MDGs) established through the United Nations (UN), and to enhance the global social values. In particular, the ODA is working to increase the practical contributions to the recipient countries by sharing research data on the problems. It is also a model of public-private partnerships (PPP) to enhance the quantitative and qualitative improvement of the aid contents and to overcome the limitations and problems of the individual development capabilities of the participating advanced countries.

In this study, in an effort to create the value of common socioeconomic prosperity between the donor and recipient countries, the R&D innovation strategy for international cooperation in science and technology in Asia was explored using the concept and appropriate technologies of CSV. How can both economic values and the ideal value of international community prosperity be simultaneously met? This can be done through the development of science and technology, which is closely related to the people's lives, especially by focusing on science and technology ODA. It can contribute to social infrastructure improvement and job creation, enhance the basic problem-solving capabilities of the recipient countries through mutual interchange and knowledge exchange, and overcome the fundamental poverty of the recipient country. The benefits of technology ODA are as follows. First, it will contribute to the fundamental development in developing countries by creating new added value for sharing and cooperating in the development process. Second, in the long term, it is possible for the recipient country to become a new market foundation by sharing its scientific technologies and experiences with developing countries, and

Table 4. ODA for CSR, CSV, and CSV

CSR	Item	CSV	ODA for CSV
Doing good	Value	Higher socioeconomic value compared to the input cost	High ODA achievements and balanced development of mankind
Corporation	Main agent	Corporation	Government
Citizenship, charity, and sustainability	Activity	Creating value for both the corporation and the community	Recipient countries, donor countries, value creation of global economics
Reaction to free motion or external pressure	Need	Essentials of competition	Sophisticated cooperation and coordination required
Non-profit activity	Recognition	Prerequisites for maximizing profit	Recipient countries, global economics agent
CSR budget limitation corporation	Budget	Include the CSV concept in the corporate budget	Include the ODA concept in the government budget
Fair purchase	Case	Procurement systems are transformed to improve the quality and increase production.	Maximize the synergies with the ODA process innovation and matching global innovation clusters through cooperation and adjustment

establishing cooperative relations with them. Third, it is possible to create productive networks that can collectively create added value not only in the recipient countries but also in the donor countries. In this study, a business creation model was prepared for simultaneously seeking maximum profit and social value amid the growing social demand for CSR after the International Organization for Standardization (ISO 26000) was established. The appropriate technology was developed to take into account the culture and circumstances of the local people rather than the technologies that pursue only the corporate interests, starting from the perception that the benefits from technological developments do not affect everyone. Since more recently, the appropriate technologies have been expanding to technologies that can be used to solve a variety of social problems faced by countries and regions, including developing countries. Appropriate technology does not necessarily mean technologies with a low commercial value, or the past technologies applied by advanced countries in developing countries. In many cases, emerging technologies tailored to the needs and phases of development in developing countries also represent the emergence of new technologies, such as the “great leap downward” or “disruptive innovation.” These technologies are innovative and creative in that they approach problems that even the traditional advanced technologies have not addressed. The South Korean government is exerting efforts to promote and develop appropriate technologies in terms of policies, and to solve the social issues in the country. Appropriate technology is defined in Table 5.

The transition of the appropriate technology through the technology ODA can enhance the image of a country and its business partners, enhance the quality of life in the recipient countries, and increase the income of those in the low-income brackets, thereby expanding the business opportunities that predominate the future middle-class market. Increased economic effectiveness can be made possible by creating new markets and expanding business opportunities through the expansion of the middle class. For this, it is necessary to determine the level of economic development in the recipient country and the demand for technologies capable of being produced in the recipient country, in accordance with the stage of technological development such country is in. In addition, it is necessary to enhance the implementation activities so that the developed technologies can be used in real life through the consumers, and to differentiate them from the existing R&D projects. The transfer of skills and knowledge through education creates a foundation for advancing the other country, and if this results in the creation of a more useful and relevant technology, it can also benefit the countries being moved. It is possible to enhance the competitive advantage in other regions by passing on the technical know-how to the recipient country and creating new, localized, relevant technologies learned from it. In this study, the implementation of the CSV model for the ODA strategy through the utilization of the appropriate technologies is a key content. If creative training on appropriate technologies is conducted and the know-how on economic development is transferred to the recipient countries, it will be possible to push ahead with ODA differentiated from that from the existing advanced countries.

Table 5. Appropriate technologies

Convenient life technology (CT)	Social issue resolution
	Consideration of the socially disadvantaged
Appropriate technology (AT)	Consumer product supply
	Capital goods supply

POLICY IMPLICATION AND CONCLUSION

While the core of the world's scientific technology has moved to Asia of late, including China and India, it is necessary for the government and the private sector to exert efforts to gain a headstart in terms of the cooperation in the region. Major Asian countries, including South Korea, Japan, and China, recognize the importance of cooperation in the region and are working to gain the upper hand therein. As part of laying the foundation for Asia's global science and technology leadership, it is necessary to set up the scientific statistics suitable for Asia, and to evaluate the region's capabilities for innovation. Major countries and international organizations around the world are performing various analyses to assess their own competitiveness levels, but they do not have specific assessments from Asian countries. Asia's unique innovation policy is needed to derive the strong point of technological innovation elements in Asian countries, and to develop custom innovation policies. It is necessary to create a system of indicators to check the policy goals that Asian countries should focus on based on conceptual feasibility rather than current data availability. For countries with a relatively poor scientific and technical statistical infrastructure, laying their statistical foundations may serve as a trigger. Further cooperation and discussion among the Asian countries is necessary to establish unique evaluation methodologies and to construct a common platform for diagnosing the Asian countries' scientific and technical capabilities. A precise identification of the strengths of each Asian country's scientific and technological capabilities requires efforts to maintain and improve the relative strengths and to complement the areas of emphasis. The degree to which innovation capabilities grow is important, and the policy direction should also focus on creating measures to accelerate the strengthening of innovation capabilities. Through inter-Asian consultations, Japan, South Korea, and other advanced Asian countries can share scientific and technological systems, and if the same standards are investigated, it is likely that the statistics on Asian science and technology can be compared to its comparative potential and usability. It is necessary to develop metrics that reflect the characteristics only of the Asian countries. Examples are resources and the labor force, low-paid and high-tech industries, and the indicators of green innovation based on Asia's rich resources. It can also be recognized as a representative and unique Asian assessment by presenting it to other international organizations, such as the Organisation for Economic Co-operation and Development (OECD) and the United Nations (UN), and can be used as a model for R&D development in other countries. By organizing a cooperative meeting of Asian scientists and technology experts and seeking active discussions and development through regular workshops and forums, the capabilities of Asian science and technology can be enhanced. A detailed evaluation and analysis of Asian countries can be used as a basis for consultation with the government and project implementation for the establishment of innovative policies in the region. Development support for basic science can be given, and a statistical model of technology indicators in developing countries can be made, by identifying problems and providing support for the development of a basis for the future development of the country's basic science and technology model through the examination of the scientific capabilities in most of the developing countries. Cooperation in international development and the establishment of networks in the Asian region is crucial to the advancement of scientific and technical capabilities.

REFERENCES

- Belderbos, R., Carree, M., & Lokshin, B. (2004). Cooperative R&D and firm performance. *Research Policy*, 33(10), 1477–1492. doi:10.1016/j.respol.2004.07.003
- Buckley, P.J., Cross, A., & De Mattos, C. (2015). The principle of congruity in the analysis of international business cooperation. *International Business Review*, 24(6), 1048–1060. doi:10.1016/j.ibusrev.2015.04.005
- Cassiman, B., & Veugelers, R. (2002). R&D Cooperation and Spillovers: Some Empirical Evidence from Belgium. *The American Economic Review*, 92(4), 1169–1184. doi:10.1257/00028280260344704
- Devictor, N. (2013). R&D challenges for SFR design and safety analysis: Opportunities for international cooperation. *International atomic energy agency*, 2015(1665), 371-384.
- Gassmann, O., & Zedtwitz, M. (1999). New Concepts and Trends in International R&D Organization. *Research Policy*, 28(2-3), 231–250. doi:10.1016/S0048-7333(98)00114-0
- Henökl, T. (2018). How Brexit affects EU external action: The UK's legacy in European international cooperation. *Futures*, 97, 63–72. doi:10.1016/j.futures.2017.07.002
- Jaramillo, M. (2012). The changing role of international cooperation in developing countries (as they develop): A case study of skills development policies in Peru. *International Journal of Educational Development*, 32(1), 22–30. doi:10.1016/j.ijedudev.2011.03.004
- Laskar, M. S., & Harada, N. (2003). International Cooperation from Japan in Health Care Education. *International Medical Journal*, 10(3), 175–178.
- Mowery, D. C. (1998). The changing structure of the US national innovation system: Implications for international conflict and cooperation in R&D policy. *Research Policy*, 27(6), 639–654. doi:10.1016/S0048-7333(98)00060-2
- Narula, R., & Hagedoom, J. (1999). Innovating through strategic alliances: Moving towards international partnerships and contractual agreements. *Technovation*, 19(5), 283–294. doi:10.1016/S0166-4972(98)00127-8
- OECD. (n.d.). *OECD Data*. Retrieved from <https://data.oecd.org>
- Sanderson, M. (2010). Protection by Persuasion: International Cooperation in the Refugee Regime. *International Journal of Refugee Law*, 22(3), 460–466. doi:10.1093/ijrl/eeq028
- Schneider, C.J., & Slantchev, B.L. (2018). The Domestic Politics of International Cooperation: Germany and the European Debt Crisis. *International Organization*, 72(1), 1–32. doi:10.1017/S0020818317000406

Tallberg, J. (2010). The Power of the Chair: Formal Leadership in International Cooperation. *International Studies Quarterly*, 54(1), 241–265. doi:10.1111/j.1468-2478.2009.00585.x

Urpelainen, J. (2012). How uncertainty about outside options impedes international cooperation. *International Theory*, 4(1), 133–163. doi:10.1017/S1752971911000194

Zartner, D. (2010). The Rise of Transnational Crime: International Cooperation, State Contributions, and the Role of the Global Political Economy. *International Studies Review*, 12(2), 316–319. doi:10.1111/j.1468-2486.2010.00933.x

Chapter 2

The Case of Australian Reluctance With the Chinese Belt and Road Initiative

Mona Chung

Deakin University, Australia

Bruno Mascitelli

Swinburne Institute of Technology, Australia

ABSTRACT

The One Belt One Road initiative is a global strategy proposed by President Xi in 2013. It was referred to as the new silk road approach which includes a land-based and ocean-based routes. The BRI, were it to reach its milestones, would be a landscape changing plan of the world and not just for China. As Australia's number one trading partner, China plays an important role for Australia especially for its economy. However, there has been a poor and lacking understanding of this strategy since 2013. The chapter highlights the importance of the strategy and the approach by the Australian politicians. Fearing being left behind, Australia politicians begin to pay attention to the strategy and especially any related plans which may or may not include Australia. The aim of this chapter is to ascertain and explain why Australia has adopted a cool and almost negative approach towards the Chinese Belt and Road Initiative (BRI). With further exploration of the Australia-China trade relationship, the chapter raised the question of the importance of China to Australia.

INTRODUCTION

The aim of this chapter is to ascertain and explain why Australia has adopted a cool and almost negative approach towards the Chinese Belt and Road Initiative (BRI). Much has been discussed about this grand plan and what it means for China's economic and political standing in the world. Despite China being Australia's main trading power and slowly becoming one of the main investment sources for foreign direct investment the Belt and Road Initiative has attracted less enthusiasm from the Australian government and equally less interest from Australian firms.

DOI: 10.4018/978-1-5225-7095-0.ch002

After years of fanfare and celebrations about the Free Trade Agreement with China signed in 2014, there has been a cooler response about this broader Chinese infrastructure project. Moreover, the unease between Australia and China over alleged Chinese interference in Australia and Australian politics has made discussion of such matters more infrequent and subdued.

The Belt and Road Initiative ceremony conducted in early 2017 with world leaders and dignitaries present saw a paltry presence from Australia both in official government presence as well representatives of Australian firms. To the formal invitation of adherence to the Belt and Road Initiative, Australia has yet to respond but generally seems neither committed nor enthusiastic on the initiative. It, according to one report, has even gone to the point of “discussing with the United States, India and Japan the establishment of a joint regional infrastructure scheme to rival China’s multibillion dollar Belt and Road initiative in an attempt to counter Beijing’s spreading influence” (Coorey 2018). While the Australian political opposition through the voice of the Australian Labor Party (ALP) has expressed support for the initiative, this has not been either voiced loudly and in substance could be interpreted as a “maybe”. The question this chapter will also seek to address is what is behind this decision and why is Australia so unenthusiastic on this project?

Belt and Road Initiative

The BRI, were it to reach its milestones, would be a landscape changing plan of the world and not just for China. Nations around the world, along the belt and road may consider strategies to enhance and promote the initiative for the benefit of their own countries. China of today is assuming the position of being the most visible global player as it competes in almost every economic sector and venture. Besides having the largest population in the world, it is the largest consumer of coal, oil, iron and ore, the largest machine manufacturer, the largest trading nation, the largest luxury goods consumption country and the list continues. How long before China has the world largest GDP?

The open door policy in 1979 (Chung, 2010) has changed the Chinese economy dramatically and provided the impetus for profit making and individual “enrichment”. Two decades later, it was the Asian Financial Crisis and China’s entry into the World Trade Organization (WTO) in 2001 that were landmark turning points which positioned China in such a way as to allow this emerging economy to become a prime trading power. On its journey of becoming a trading power, it began from a relatively low base. Less than a decade after entering the WTO, it overtook Germany (in 2009) as the world’s largest exporting nation. This achievement was truly breathtaking in its dimension and speed. According to one source China’s economic and social advancement over the last three decades has been historically unprecedented in global history (Ruthven, 2018).

China’s trade history with other countries goes back a long way. Silk Road and the Opium War are possibly the two most significant moments representing success and failure along the journey of China’s return to greatness. Much is written about the “open door” policy but much less is highlighted on exactly when China was closed. Qianlong (1736-95), who is often referred to as ‘Qianlong the Magnificent’ closed the door of the country in 1757 leaving only one port for trade, which was Canton (Chang, 2013). When responding to a request from Lord McCartney to provide more trade opportunities, he responded that China had no need for imported products. Qianlong closed China’s doors in large part due to his sense of insecurity despite the fact he was fully aware of the trade benefits to China (Chang, 2013).

The British were partially dependent on trade with China and some of its products such as silk and tea came exclusively from China at that time (Wheaton & Simonton, 2007). The custom of tea drinking

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by the British become popular after Thomas Garway introduced tea in his coffee house in 1657. Clearly, it was in the British government's best interests to continue its tea trade with China. For Qianlong, however, the concern was that the empire could well get out of control if it was not sealed off and if foreign elements influenced the local population. Emperor Qianlong, in his letter to King George III, after McCartney's submission, threatened to repel British cargo ships (Chang, 2013).

At the time of McCartney's visit to China, its population was just over 300 million. By the late 18th century, China's population had reached 400 million. The traditional economy was unable to sustain this dramatic population growth, which subsequently led to the decline of the empire. The closed-door policy was continued by the Emperor's son and grandson and remained in force until the Opium War (1839-42) (Chung, 2010) when the door was pushed ajar by the British. The Opium War resulted in the signing of the Treaty of Nanjing in 1842 with an indemnity of US\$21 million owed to China (Chang, 2013).

The Death of Mao and the Rise Deng Xiaoping: China Moves to a New Equilibrium

After the 1949 Chinese revolution led by Chairman Mao, China was never far away from political upheaval and turmoil. Beginning in the 1950s and culminating with the start of "Cultural Revolution" in 1966, Mao ensured that China's door would be closed. For the following decade until 1976 with the death of Mao, China was virtually unknown to the rest of the world. Even the so-called political friendship with the Soviet Union came to a close in the 1950s under Mao's directives and the Sino-Soviet tensions that emerged. Chinese contact with the world was quite limited until 1978 after Deng Xiaoping's return to power. As observed by Jacques:

By the time of Mao's death, the Cultural Revolution had subsided and stood largely discredited, but the country's future direction remained deeply uncertain. The vacuum created by Mao's death was soon filled by the return of those same old leaders who had been persecuted during the Cultural Revolution, with Deng Xiaoping at the helm. (Jacques 2009)

Despite the unstable political past, by the late 1970s China had progressed significantly from its 1949 level. It was still quite poor and agriculturally based. Food supplies were limited and the population in 1978 was close to one billion. Because the bulk of the Chinese resided in the countryside, the priority of the Chinese leadership was to encourage farmers to be more productive. Limited forms of private enterprise in certain farming areas were established and State prices for certain agricultural produce were increased to provide farmers with better incomes. As recalled by one historian, these measures represented:

...the greatest change since the early Communist land reforms and a frontal attack on everything done since the early 1950s. It was also stunningly successful. (Jacques 2009)

China's exports grew faster than imports in the early 1980s, which brought China the much needed access to foreign currency. This led to the next surge of imports which resulted in the foreign trade reform by introducing import duties and quotas. By the end of the 1980s, China's trade totalled \$115.4 billion representing 24 per cent of China's GDP and 3 per cent of total world trade. By 1990 China had become the world's 16th largest trading country (Chung & Mascitelli, 2015).

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In 1982, while addressing the 12th National Congress of the Communist Party, Deng sought to provide some ideological justification to the “capitalistic” methods that were being embarked on. He stated: “We must integrate the universal truth of Marxism with the concrete realities of China, blaze a path of our own and build socialism with Chinese characteristics”. The momentum of reform continued through into the 1990s. The economic growth registered between 1978 and 1992 showed a 9.5 per cent annual growth (Chivakul, Lam et al. 2015).

Deng continued making pronouncements for the Chinese to embrace the market economy and economic reform well into the 1990s. The period was also characterised by rapid inward investment coming from the Chinese diaspora locations such as Hong Kong and Taiwan. Exports to developed economies, especially to the US, multiplied. Chinese economic growth had by now moved into double-digit figures and the massive army of rural labour began migrating to the economic opportunities opening up in the cities (Fenby, 2008).

According to Jacques (2009) China through its economic progression was able to reduce its poverty significantly. Between 1980 and the year 2000, more than 53 per cent of those below the poverty line were reduced to only 9 per cent (Jacques, 2009). This economic growth and improvement provided the backdrop to China’s ability to sidestep the Asian Financial Crisis and prepare for the WTO entry in 2001. A significant development helped define China’s new standing in the world: it soon overtook Japan to become the second largest economy in the world. It was hardly surprising that insecurity and nervousness transpired in centres of world power by this development altering much of the geo-political equilibrium that had remained unchanged for decades. Chinese President Xi, for the second time in only a few months put China’s global economic leadership on a display after the Davos presentation in which he reaffirmed that “No one will emerge as a winner in a trade war” (The Economist, 2017). This was in clear contrast to the protectionism threatened by the new Trump US administration. While the rise of China under eight years of Obama appeared to be almost uninterrupted and the new Trump White House appears to be uneasy, schizophrenic and unpredictable, this new modus operandi may not be to China’s advantage. The unpredictability and inconsistency of Trump actually causes more concern for China than might otherwise be thought.

The announcement of the IBOR which invoked China’s history was more than just an initiative. It was presented as a strategic view of China’s future. Invoked under President Xi, and announced in late 2013 was to “restore the country’s old maritime and overland trade routes”. President Xi at the Peripheral Diplomacy Work Conference laid out the intentions of this initiative. He said: “We must encourage and participate in the process of regional economic integration, speed up the process of building up infrastructure and connectivity. We must build the Silk Road Economic Belt and 21st century maritime Silk Road, creating a new regional economic order” (Xi, 2013). China, through BRI is at the same time pursuing President’s Xi “Chinese dream” involving the “great revival of the Chinese nation” (Wade, 2017). Kissinger in his colossal work on China also affirmed this concept of a returning power, not a rising power that had been temporarily damaged by outside forces (Kissinger, 2012). The project has ambitions which go beyond infrastructure and closer neighbours. The project captures an ambitious China wishing to return to its middle kingdom status as a global power. Amongst other things the IBOR intersects efforts by Xi to keep the economy open and be receptive to global capitalism promoting both external investment as well as inwards foreign investment. Moreover, with these projects comes the challenge of raising its population out of poverty which has been promised and is partially realisable. But to others, more sceptical, Australia inclusive, the IBOR is a soft power initiative by China with strategic power ambitions and sensitivities attached to it.

The Dragon's Footprints Along the Old Silk Road

While China's ability and effectiveness to promote its "soft" and cultural influence, a term coined by American, Joseph Nye, which described the ways in which States seek to shape their international environment through the powers of attraction and agenda-setting. This is in contrast to 'hard' forms of power such as coercion and inducements that rely on military and economic strength. BRI is a measure which straddles between soft and hard power with its intentions to partner neighbours and others into the construction of landmarks, infrastructure, construct activities and other symbols. Much of which has the purpose of underscoring China's new place in the world.

The old Silk Road is the trade route that linked Xian, through central Asia, West Asia, the Middle East to Europe; brought Buddhism to China, and Chinese culture to the rest of the world. The new Silk Road – 'silk road economic belt' and '21st century Maritime silk road'. It will be a cohesive belt through infrastructure, cultural exchanges and broadening trade; parallel plan to foster collaboration in Southeast Asia, Oceania and North Africa, pushing up through the Suez Canal into the Mediterranean. BRI has significant backing in China, including from the China-led Asia-Infrastructure Investment Bank (AIIB) and other recently developed finance initiatives including the Silk Road Infrastructure Fund and the New Development Bank. The infrastructure fund is made up from Chinese foreign exchange reserves and will act like a Chinese sovereign wealth fund established by the BRICS nations (Brazil, Russia, India, China and South Africa).

For the Chinese government, BRI also provides an answer and policy tool for addressing investment in the more backward western provinces by channelling investment from China's wealthy seaboard provinces to the under-developed central and western regions. It channels China's investment into projects for long term benefits at a time when external movement of funds are being curtailed.

Alongside this Chinese prowess and assertion of global leadership is the current state of geo-political uncertainty and perceived American withdrawal. Placing "America First" is opening up possibilities for Chinese global leadership never before encountered. Speculation by some posits the thought of "whether Europe or China might come forward to lead the liberal, international world order of America tires of that task" (The Economist, 2017).

Since the Second World War, the US has enjoyed its position as a world leader due to its economic and military power. The West is not yet accustomed to encountering large numbers of Chinese investors appearing at most of the real estate auctions, acquiring businesses of all scales and especially those businesses which were closely associated with the home country. As one observer has noted:

... since 2001 the US's global position weakened. There is a lot of discussion about the end of the US supremacy and also on why has America's global dominance come to an end and how China found its way up? One obvious explanation is the dynamics of history: it is simply impossible to stop the emergence of new powers. If a civilization, culture, country or region can improve the efficiency of its economy, if it can put human, technological and financial resources at work in a massive way, and if the external environment is favourable, it will become successful. If this happens in a big enough country, it will become a world power. (Marjan, 2015)

Precursor to the OBO: BRICS - China's Alternative Trade Alliances

Over a decade ago, economist Jim O'Neill (2013) coined the term BRIC. The acronym was used to identify four fast growing economies that by 2050 would be bigger than the current richest economies in the world. China has been living up to those expectations though many questioned whether Russia, Brazil, and India deserved to be part of the group. Premier Li Keqiang promised a growth floor of 7.5 per cent in 2013 but was unable even in China to maintain this level of growth.

The establishment of the BRICS arrangement (Brazil, Russia, India, China and South Africa) raised eyebrows in 2006 when it was first mooted and took shape. As a body it was designed to represent the world's emerging markets. Indirectly it was also designed to act as a counterweight to the G8 and G20, dominated by rich-world economies. In the first arrangement of the BRICs it did not include South Africa which joined later in 2010 to make a five nation alliance and providing the missing African representation. Over the years, the BRICS have repeatedly criticised financial structures of global institutions criticising both the World Bank and the International Monetary Fund for not giving developing nations enough voting rights.

As China's relative economic growth has continued apace, its dominance within BRICS has become increasingly entrenched. Almost regardless of its intentions, China's size and national power make it the unavoidable hegemon of BRICS. Yet the other member states distrust of Beijing's economic and strategic plans makes them unwilling to accord China the degree of influence within the grouping that its national power capabilities would suggest. China's growing dominance within BRICS can be demonstrated in any number of ways. Most succinctly, China's GDP is over 1.5 trillion dollars larger than the combined economic output of the other four BRICS members. Furthermore, the current trend is for the disparity to grow even wider. Moreover, China accounted for around 70 percent of the growth in the BRICS' share of global economic output between 2000 and 2011.

China's importance to the individual BRICS members is further demonstrated in other realities. To begin with, China is the largest single nation trading partner of Russia, Brazil, and South Africa, and, as of 2011, was India's largest import market and second largest trading partner. As China's consumption grows, so will its importance as a market for its BRICS counterparts. By contrast, none of the other four BRICS partners are especially important to China's trade in terms of value. According to EU data, for 2011, the value of China's trade with Malaysia was greater than its trade with any single member of BRICS, and Sino-South Korean trade was only slightly less than China's entire intra-BRICS trade (Keck, 2013).

To be sure, not everything that is traded is of equal importance to the countries doing the trading. Crucially, China's imports from Russia, Brazil, and South Africa are highly weighted towards energy and natural resources, which Beijing will be increasingly reliant on foreign sources in the decades ahead. In the case of China, along with India, will be looking to buy quantities of energy that a country like Russia needs to sell. China will have a host of different options when it comes to energy suppliers.

China's dominance is equally pronounced in terms of outbound investment. Notably, whereas BRICS aimed to pool together their investment funds to create a rival to the Western-dominated World Bank, the China Development Bank (CDB) and other state institutions are by themselves rivals to the World Bank. In fact, between 2008 and 2010, China's overseas loans outstripped World Bank lending by US\$10 billion.

It is therefore not surprising that BRICS sought to constrain China's ability to contribute to the joint effort to construct alternatives to the Western-dominated World Bank and International Monetary Fund. Still, this underscores the uncomfortable reality that even as remaking the current international economic

order is the glue holding BRICS together, non-Chinese BRICS members are at pains to avoid replacing the current order with a Chinese-dominated one. Given the power disparity between them and China, this task is a difficult one.

The Sceptical Australian Approach Toward BRI and Australia China Trade Relations

On 17 November 2014, China and Australia finally concluded the long drawn out bilateral free trade agreement (FTA). It was an agreement that had lasted more than 8 years in negotiations and at certain junctures was close to abandonment. The agreement in substance took effect in 2015 in which 85 per cent of Australian products permitted to now enter the Chinese market tariff-free. Eventually, the historic deal would phase out tariffs for 95 per cent of goods from Australia. Besides dairy, China would get better access to Australian products like meat, wine, minerals, wool and agricultural products. With regards to investment, both countries agreed to grant each other the Most Favoured Nation (MFN) status once the FTA takes effect.

The general picture of trade between China and Australia is somewhat special. China is Australia's largest trading partner, both imports and exports, and has been so since 2007 (Chung & Mascitelli, 2015). Recently, China has played a primary role in the Australian economy providing strong demand for its mineral exports, providing cheaper consumer products, investing across many sectors in significant ways. In 2009 when most of the developed world was struggling with the global financial crisis, China's role in the Australian economy was an influential element in absorbing the shock of the crisis and ensuring continued strong economic growth above 2 per cent of GDP growth (Chung & Mascitelli, 2015). Food security concerns in China especially for dairy and other sensitive food items has heightened interest in Australian safe, quality food. The uncontaminated agricultural environment is attracting investments into farming land as well as growth in exports. In 2013, China accounted for 36.1 per cent of Australia total exports, which placed China as number one trading partner¹.

For instance, Australian wool exports to China went from \$A2 billion in 2014 to \$A2.4 billion in 2016 (DFAT Composition of Trade, 2017). Education, services, tourism are all major export areas to China now an industry that is worth over 20 billion to the Australian economy (KPMG/University of Sydney, 2016).

Australia became an unofficial BRI (BRI) partner in 2016, with the launching of a public-private NGO known as the Australia-China OBOR Initiative (ACOBORI), less than a year after the signing of the China-Australia Free Trade Agreement. While warned not ignore the opportunities offered with BRI, Australia expressed a perplexed opinion about its support for it. When Chinese Premier Li Keqiang visited Australia in March 2017 Australia turned down the offer to be part of the BRI although this position slightly changed in September of 2017 when the Trade Minister Ciobo, signed on behalf of Australia a Memorandum of Understanding on the BRI with the qualification that the cooperation was limited to investment and infrastructure in third countries of the BRI (Laurenson et al, 2017). Given the previous indications of close relations between China and Australia, this surprised the Chinese authorities thinking Australia would be keen to connect BRI to Australia's \$5 billion northern Australian infrastructure development plan (Boyd, 2017).

The recently released Australian Foreign Policy White Paper released on 23 November 2017, made one direct notation of the BRI and as other scholars have noted this signalled the Australian Government "cautious approach towards the initiative" (ACRI, 2017). Though the Australian Parliament went

The Case of Australian Reluctance With the Chinese Belt and Road Initiative

through the motions of investigating the BRI in order to make a recommendation to its government, the conclusion was little forthcoming and revealed little except hesitation. The Parliamentary report on the Chinese Belt and Road Initiative cautiously recommended:

Regardless of the credence which one assigns to the various interpretations of the OBOR initiative, progress thus far makes it clear that as Australia becomes increasingly tied economically with China, there is a need to maintain a close watch on the progress of the OBOR initiative globally. It also suggests that Australia needs to adopt a more economically and strategically prudent attitude in determining how the Australia-China economic relationship is to further develop. (Wade, 2017)

This above report alongside a range of other commentary, has seen a divided view in the Australian debate about the approach towards BRI. This was nicely captured by the title of the Laurenson et al observation in the Diplomat entitled “Australia’s misplaced fear over China’s Belt and Road” (Laurenson, 2017). Some policy commentary is of the view that Australia will benefit from China’s recycling of its trade surplus even without being a part of BRI. In addition some in Australia have argued that there a lack of transparency about what the formal relationship would involve. Probably more decisive is Australia’s reluctance to have the northern Australia project in some way captured by a Chinese strategic expansion policy at a time when the electorate is sensitive to Chinese investment in property and agriculture.

The overwhelming concern on the Australian coolness towards BRI is not upsetting the security balance in Asia and especially with ongoing need and loyalty towards the US involvement in the security arrangements in the region (Laurenson et al, 2017). The Parliamentary report made oblique reference to this issue when it said: “Broader concerns [of the BRI] relate to the longer-term aims of China, with the possibility that the OBOR agenda is aimed at creating a Eurasia-wide, China-led bloc to counter the US” (Wade, 2017). Similar inferences are made in the Foreign Affairs White Paper on Australian Foreign policy perspectives. Some have sought to offer warnings of being foolhardy and ignoring the geopolitical machinations bound up with the roll out of BRI. But it would be equally unwise for businesses to turn their back on the wide array of opportunities opened up by what has been called the new Silk Road (Boyd, 2017). Others have warned the Australian government that turning its back on BRI is a risky venture adding the caveat that decisions about such collaborations should be taken “on the basis of what is Australia’s national interest” (De Jonge, 2017).

The AIIB, which Australia has signed up to, has been seen as a challenge to the established institutions of the (US-dominated) World Bank and (Japan-dominated) Asian Development Bank. In some respects China’s BRI can similarly be seen as a challenge to the dominance of US and European investment presence in the region.

There are two key reasons why Australia needs to remain involved in both the AIIB and BRI. The first is the risk of missing out if Australian businesses do not take advantage of the opportunities available. Foreign firms are already moving in such as the Hutchinson Holdings from Hong Kong, which are already in possession of over 20 ports in 18 countries along the BRI route. Some scholars describe the situation surrounding China’s BRI as “contested multilateralism”. This is where states and businesses use new multilateral institutions to challenge established institutions, rules, practises or missions.

The Case of Australian Reluctance With the Chinese Belt and Road Initiative

For China the current global instability may have presented an important opportunity for it to portray itself as a responsible member and leader of the international community. This for example is exactly what it did at the Davos Forum when it countered Trump's nationalistic and protectionist moves and declaring that a range of trade agreements were against US interests.

Despite the inertia from the government on genuinely becoming involved in the BRI, the benefits to the Australian economy for engagement with this project are obvious. Thus far, the services sector has demonstrated more interest and this has included the interest from the large banks, law firms and engineering firms. Not surprising smaller firms are more reluctant to place themselves in the front line and may become more engaged over time. However, their reluctance has not been made easier by the some of the anti-Chinese sentiment expressed in terms of investment in Australia, investment in agriculture and buying up residential properties in Australia's biggest cities. This is not helped by the Australian government, which appears to be torn between a fear of Chinese influence and a desire not to miss potential opportunities for lucrative involvement in BRI projects.

In such a world, clever businesses are not seeing any need to choose sides. So far as possible, they are playing the field; taking advantage of opportunities as they arise. Australia's other advantage in engaging in BRI is to ensure that the country is in a position to influence the longer-term future of the region.

CONCLUSION

There is significant recognition of the scenario that the growing Chinese economy will equally involve greater levels of Chinese living standard improvements. This is especially evidenced in the area of food consumption, access, supply and security. There is realisation that demand in China will far exceed supply and that China will be in need of seeking significant levels of food imports (Chung & Mascitelli, 2015). Many countries are rushing to provide this needed food supply and especially those nations with well-endowed agricultural supplies such as Australia.

China has moved rapidly to becoming an economic powerhouse in a very short time span. Its positioning as the main trading partner of many developed and developing nations is but one example of this prowess. Since accession to the WTO in 2001 China has become the subject in some quarters of fascination and in other quarters of concern. Despite this importance acquired by China, global "distrust" remains ever present with many nations when dealing with China approaching and adopting previous Cold War stances and positioning. China has learnt to live with this "distrust" though it does not like it. The US even with the current unstable and erratic behaviour towards China, has the previous Obama "Asian pivot" instrument, which continues to remind us that China is always been carefully monitored and "countered" where possible. It is unlikely in the short term that this "distrust" will be alleviated. Not all nations are taking the American line and many are pursuing what are inevitably single national priorities in their economic relations with China. At the same time, China proceeds with its own measures of internal stabilisation and sustainable growth as well as global reach and leadership. Few would have imagined that China would be the voice of economic stability and fewer still would have imagined how faint the US leadership call has become.

REFERENCES

- ACRI. (2017). *Australia and the Belt and Road Initiative: An overview, ACRI facts*. Sydney: UTS.
- Boyd, T. (2017). *Opportunities for business in China's one belt one road*. Australian Financial Review.
- Chang, J. (2013). *Empress Dowager Cixi: The concubine who launched modern China*. London: Jonathan Cape.
- Chivakul, M. R., Lam, X., Liu, W., Maliszewski, W., & Schipke, A. (2015). *Understanding Residential Real Estate in China*. IMF.
- Chung, M. (2010). *Doing Business Successfully in China*. Oxford, UK: Chandos Publishing.
- Chung, M., & Mascitelli, B. (2015). *Dancing with the Dragon: Doing business with China*. Business Expert Press.
- Coorey, P. (2018). *Australia mulls rival to China's 'belt and road' with US, Japan, India*, Australian Financial Review, 18 February 2018. Melbourne: Fairfax Press.
- De Jonge, A. (2017). *Australia risks missing out on China's One Belt One Road*. The Conversation.
- DFAT. (2017). *DFAT Composition of Trade Australia, 2016-17*. Canberra: Department of Foreign Affairs and Trade.
- Economist. (2017). *Why nationalists are so bad at foreign policy*. Retrieved from <https://www.economist.com/news/united-states/21723864-donald-trump-skilled-populist-oddly-unworried-global-unpopularity-why>
- Fenby, J. (2008). *Modern China - the fall and rise of a great power, 1850 to the present*. New York: Harper Collins Publisher.
- Jacques, M. (2009). *When China Rules the World: the rise of Middle Kingdom and the end of Western world*. New York: Gildan Media Corp.
- Keck, Z. (2013). *China and the BRICS: Unavoidable Hegemony?* Retrieved from <https://thediplomat.com/2013/03/china-and-the-brics-unavoidable-hegemony/>
- Kissinger, H. (2012). *On China*. New York: Penguin Books.
- KPMG/University of Sydney. (2016). *Demystifying Chinese Investment in Australia: the new normal: health, happiness, lifestyle and services*. KPMG.
- Laurenson, J., van Nieuwenhuizen, S., & Collinson, E. (2017, November 16). Australia's misplaced fear over China's Belt and Road. *The Diplomat*.
- Marjan, A. (2015). *A new world order and China's role in it*. Retrieved from <http://foreignpolicynews.org/2015/09/02/the-new-world-order-and-chinas-role-in-it/>

The Case of Australian Reluctance With the Chinese Belt and Road Initiative

Ruthven, P. (2018). *Australian government environment - At a glance*. Melbourne: Ruthven Institute.

Wade, G. (2017). *China's One Belt, One Road initiative, APH, 2017*. Retrieved from http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/BriefingBook45p/ChinasRoad

Wheaton, W., & Simonton, W. (2007). The secular and cyclic behaviour of 'true' construction costs. *Journal of Real Estate Research, 29*, 1–25.

Xi, J. P. (2013). *Xi Jinping Speech, peripheral Diplomacy Work Conference, Xinhua News Agency*. Retrieved from http://news.xinhuanet.com/politics/2013-10/25/c_117878897.htm

Chapter 3

Market Development Strategy for India's Rail Company Ircon in Asia, Africa, and Middle East

Sandeep Chinnobaiah
Cardiff Metropolitan University, UK

ABSTRACT

The Ircon International Limited is major player in rail infrastructure development backed by Indian government and railways. It has presence in Asia, South East Asia, and the Middle East. The idea is to devise a strategic marketing plan based on infrastructure spending data, location accessibility, and market friendliness of the target countries. The research design carried out is of comprehensive study of data analysis from email survey, archive survey, and in-depth interview. The survey data outcomes from relevant sample respondents having international experience in construction business have opined that infrastructure spending of country is of utmost importance in market development, also the deciding factors like market entry plan, entry strategies, and attributes determined penetration level into various markets. The data emphasis for restructuring businesses also summarized Ircon's lacking in marketing and financing means for large-scale projects.

INTRODUCTION

The development of infrastructure projects of public importance like transportation, public utility buildings like institutions, hospitals and utility buildings are the priority of the developing economy in the world. The construction sector consists 6 – 15% of any national economy and the construction of public infrastructure market is still a bulk market which is fragmented into sub markets as the work is contracted among the set of contractors locally and internationally (Mawhinney, 2001). The world organisations such as World Bank encouraged the governments to pursue policies to involve other country organization and privatization of certain projects for delivering the infrastructure services and projects for more efficiency (Kirkpatrick et al., 2006). The impact of rail transportation development in India has positive impact and benefits interms trade costs and interregional price gaps, increased interregional and international trade,

DOI: 10.4018/978-1-5225-7095-0.ch003

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increased real income level during colonial period (Donaldson, 2018). Iacon International limited is a government of India incorporated company under the Ministry of Railways, India as public-sector company and is a turnkey contractor and specialized in the construction of railways, railway electrification, signal and telecommunication, highways, roadways, industrial, commercial and residential buildings, airports, mass rapid system and leasing of railway machineries. Iacon has completed more than 300 Infrastructure projects in India and 100 projects across the globe in more than 21 countries in Asia, Africa and Europe (Iacon Website, 2015). The company has earned a total foreign exchange of Rs 2117 crore in the period of 2008- 2013 (Jagarn Josh, 2013). The infrastructure budget in East Asia countries has tremendously increasing to match the increased economic activity in the region. India being a developing economy is at task in implementing projects across major cities it needs US \$ 190 billion for the growing needs of infrastructure development (World Economic Forum website, 2010). ASEAN countries have open market principles which are unlikely to change and the positive cooperation as well business integration shows it is largely market driven economies with huge trade and positively increased FDI inflows into the infrastructure sector with strong supply chain network supported by various organisation shows positive economic activity (Bhattacharyay & Nath, 2009). The Table 1 gives the projected spending on infrastructure in Asian countries.

African government historically have shown that they have relied heavily on donor aid and soft financing in developing infrastructure in the region and out of every 10 major projects in Africa 4 are related to transportation sector, country like Ethiopia where the government supported transformation program provides projects worth \$ 20 billion revenue and scope for \$ 2 billion profits to the contractors (KPMG Africa, 2013). In Middle east the public transportation sector is underdeveloped and the thrust lies in the development of railway network as the railway track density is low (Ives et al., 2013). Oman rail project of \$ 15 billion is designed to connect various ports and adjacent cities, similarly other middle eastern countries upgrading their public transportation infrastructure providing billions of businesses to contractors across the world (Urban Transport Technology, 2014).

Problem Statement

The Iacon International limited has vast experience in doing projects in these regions and the areas to be ascertained for reentry and satbilisation of business are listed below.

- Slow pace in tapping market potential in other Asian countries of potential market.

Table 1. Infrastructure spending projection in Asian countries

Sl no.	Asian countries	Projected infrastructure spending till 2025	Projected growth rate annually
1	Indonesia	\$ 165 bn	7%
2	Philippines	\$ 27 bn	10%
3	Singapore	\$ 18 bn	-
4	Thailand	\$ 58.5 bn	-
5	Vietnam	\$ 56 bn	9%

Source: (PwC, 2014)

Market Development Strategy for India's Rail Company Ircon in Asia, Africa, and Middle East

- Counteract aggressive growth of competitors such as Chinese companies foray into the African market vying natural resources which is important to subcontinent India.
- The company has to increase international contractor reputation and orderbook by foraying in lucrative market in Middle East.

Research Objective

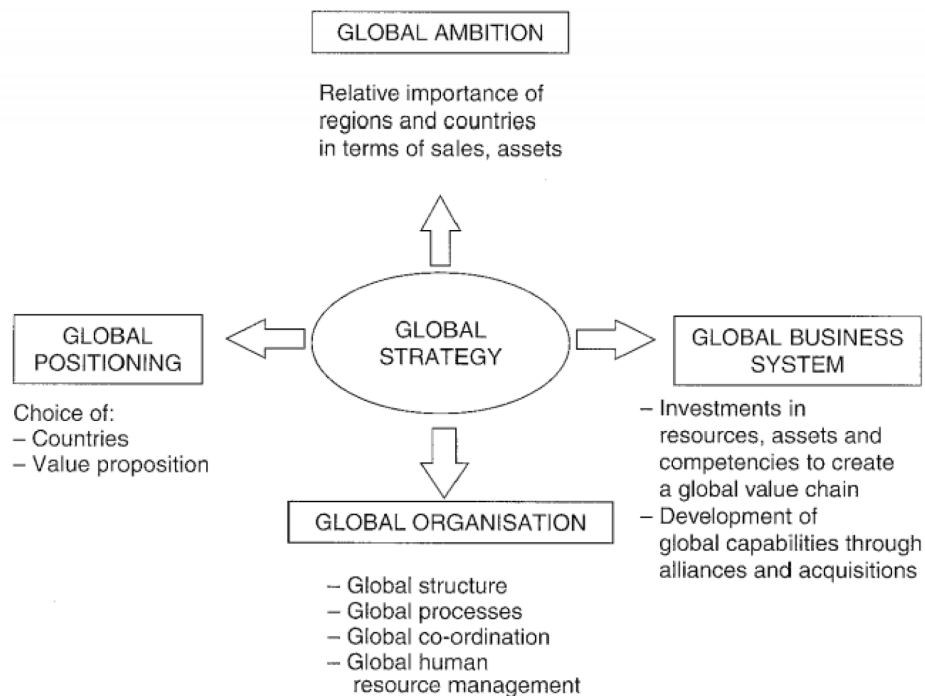
- Strengthen market presence in Asia by using strategic operational plan.
- Market entry analysis based on research design outcomes.
- Country specific marketing design and restructured business development plan for expansion.

LITERATURE REVIEW

The factors being considered for literature review to analyze the business development plan for Ircon International Limited in terms of market expansion across the selected countries in Asia, Africa and Middle East are discussed as following below. Having international presence and running business is a challenge for many companies and certainly few companies have established themselves as international player in construction sector. Figure 1 represents the globalization process in frame work describing all the elements to be implemented for successful foray into global market.

Figure 1. Global entry strategy framework

Source: (Lasserre, 2003)



Market Development Strategy for India's Rail Company Ircn in Asia, Africa, and Middle East

Competitive positioning clearly defines continuous value addition to the organisation in relation to target country market and Ircn being an Indian company has location advantage, access to the resource, political advantage and cultural knowledge of Asia region. The competitive advantage for Indian firms in the overseas market is not the technology rather it is the large pool of talent like managers and technicians and their technical expertise (Iall, 1986). As per Athukorala, 2009 India's share in acquisitions in the developing economy of total was 7.0 percent was larger than that of China

(5.0 percent) and Brazil (5.8 percent) and it is one of the largest country in acquisition surpassing many countries

Ircn is actively present in Malaysia since 25 years with permanent office and recently completed a major project of USD \$ 1.54 billion in Malaysia. In Srilanka Ircn has recently bid and completed \$ 800 million worth of railway project and the financing was done through credit line from the Indian government and Ircn is also vying for highway projects in Srilanka currently breaking the market monopoly of Chinese companies. The Ircn has created a competitive advantage by its low cost construction comparatively to Chinese companies as they executed highway projects have drawn flake in Sri Lanka due to over pricing, opening a room of opportunities to strategically acquire the highway market share for Ircn International Limited (The Sunday Leader, 2015).

Ircn being a government entity of India gives importance in strategic presence in the prominent geographical location to balances China's presence in Pakistan & South Asia, India entry into Iran through Chabhar port deal based on the agreement, Iran to provide land in Chabhar Special Economic Zone to Indian companies for setting up petrochemical, fertilizer and other gas-based industries. India has agreed to build a 500-km railroad from Chabhar to Zahedan, the provincial capital of Sistan-Baluchestan, close to the Afghan border. India's IRCON has agreed to build a rail route at a cost of \$1.6 billion as part of the transit corridor to Afghanistan. After connecting Chabhar to Zahedan, the railroad will be linked to Zaranj in Afghanistan. Hence, when the Afghan cargo arrives in Zahedan, it can be transported by a 1,380-km railroad to Chabhar and then shipped to India. (Chabhar-Zahedan Track-Laying Underway, 2018)

The GDP (Gross Domestic Product) of the selected Asian countries of business interests of Ircn is listed in the Table 2 below.

The Bangladesh railway project construction of infrastructure works such as bridges approach rail routes being carried out on the basis Joint Venture with AFCONS India private limited company for the amount of \$ 700 million funded by credit line support of \$ 1 Billion from Indian government (The Financial Express, 2013). The Table 3 below shows the worth of projects in Asian regions.

Strategic Business Development Plan for Middle East and African Countries

Transportation projects received a substantial attention in the infrastructure development of Iran, Iraq, Turkey and Middle East which were the foremost countries in the development of domestic railways in the region during 19th century (Ives et al., 2013). China is extensively aggressive in pursuing infrastructure opportunities in mineral-rich African countries with an objective of accessing to precious metals and other necessary commodities channelizing to the manufacturing centers of China (Ernst & Young, 2013). Ircn's Mozambique project under the Beira Railway Corridor company executed with a concessionaire agreement had hit a political risk of threat to concessionaire agreement termination (Verma & Bhaskar, 2013). The expansion plans of Chinese companies in business strategies is building and leveraging on commercial success in the market and supported by strong global supply chain network with vast multinational managerial skills (Alden & Davies, 2006).

Market Development Strategy for India's Rail Company Ircon in Asia, Africa, and Middle East

Table 2. GDP growth rate for year 2009-2017 for selective Asian Market

<u>CASE: EXPOSURE TO MARKET ENTRY MODES.</u>	<u>Condition:</u> Have never seen this mode. (%)	<u>Condition:</u> Not commonly used mode (%).	<u>Condition:</u> Have seen this mode (%).
Case 1: Vertical alliance – alliance with Suppliers/sub-contractors in entering new market.	3.3	43.3	53.3
Case 2: Horizontal alliance – alliance with partners operating in the same business area.	16.7	50	33.3
Case 3: Alliance with local contractors.	6.7	36.7	56.7
Case 4: Alliance with International contractors.	16.7	33.3	50
Case 5: Minority (<50%) equity Joint Venture by acquisition.	43.3	30	26.7
Case 6: Equal (50%) equity Joint Venture with other established.	30	30	40
Case 7: Joint Venture requirement in specific market.	16.7	23.3	60
Case 8: Branch/ Regional office of a company in host country.	3.3	26.7	70
Total percentage of respondents have seen/ not seen the entry mode.	17.09%	34.16%	45.84%

Source: (ADB outlook, 2017)

Table 3. Turnover of Ircon from Asian Projects excluding home country.

Project details	Country	Value in USD approximately	Period
SGEDT project	Malaysia	1540 Million	2008 – 2015
Lankan railway projects	Sri Lanka	494 Million	2008 – present
2nd Bhairab Bridge and approaches	Bangladesh	700 Million	2013 – till present
Approximate operating revenue is		2.734 Billion USD	Past 7 years

Figure 2 shows the value of projects as on 2014 being initiated by various governments of Africa and Middle East. As per Timetric report, 2014 the estimated investment value in the transportation network development is US \$ 791 billion worth of road and rail projects in Africa.

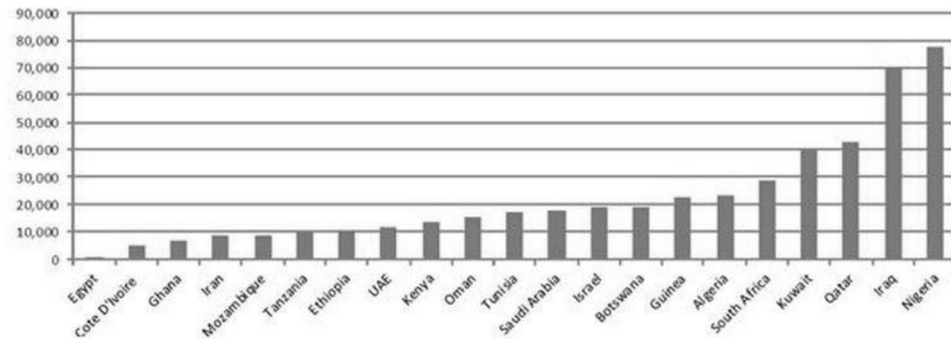
International Market Development Strategy

The higher the risk market control and expected return on investment are connected with direct investments that can be made as an acquisition (sometimes called Brownfield) and Greenfield investments (Terpstra & Sarathy, 2001). The companies go global for diversification and talent resources giving an edge in business and it is possible to cut business overhead costs in countries with relatively deflated currencies and lower costs of living (Twarowska & Kąko, 2013). IMF- International Monetary Fund and (GATT) The General Agreement on Trade and Tariff, are the organisation which facilitates trade among its member countries by providing data of trade records, research articles and other related data of trade

Market Development Strategy for India's Rail Company Ircn in Asia, Africa, and Middle East

Figure 2. Showing Value of Railway projects in Middle East & Africa

Source: (Timetric report, 2014)



Railways projects value US\$ million by country

activities, making use of their policies and research data would facilitate market understanding (Howes & Tah, 2003). Countries restrict the foreign company participation by imposing barriers like price barriers, price fixing, a specified extent of local company participation and quota in jobs for local talent (Howes & Tah, 2003). To attain sustainable position in the target market country the company has to consider factors in addressing the pertaining risks in international business, the risks are currency risk such as foreign exchange fluctuation, political risks due to political action imposing operational restriction and favoritism, legal risk, economic risk like host market economic condition and bank regulations, cultural and social risk like understanding target country cultural and social factors before doing any marketing activities to avoid risk (Doole & Lowe, 2008).

International Human Resources Development

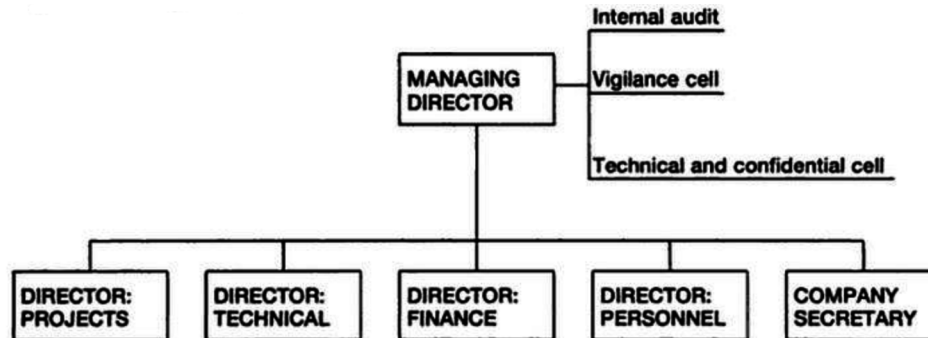
IRCON for its foreign projects while working outside of English speaking countries like Arabian countries and French speaking countries had to train its personals in language training for project only few were successful, the translation services were still required even after training provided (Miles, 1995). The challenges in managing human capital internationally, the differences in culture, legal, employment laws and other social factors to be taken into account (Howes & Tah, 2003). The IRCON's organogram is shown in Figure 3.

RESEARCH DESIGN

The research required for analysis to foray into international business in the construction industry is a constructive approach of data collection from various decision makers, international experienced professionals supported by secondary data like ease of doing business, cost of doing business, political and economic implications for the business.

Figure 3. IRCON's organogram

Source: (Miles, 1995)



Survey Research

The selected executives consisting of overseas experienced professional were surveyed with a set of questionnaire related to the international business experience, country experience, industry experience, company specific experience likewise the needed data were collected.

Archival Research

The archive data was collected and analyzed from the administrative records of various international organizations supporting the international business and reports on infrastructure spending out of country's GDP (Gross Domestic Product) and level of FDI (Foreign Direct Investment) in construction sector in various target markets.

Depth Interview

The project head of Ircon International Limited Malaysia, key person and another most experienced professional from Hill International Limited, Malaysia were interviewed about business experience and challenges. The data obtained from all the research methods are compiled and analyzed for market entry, business challenges and decision making hindrances for targeting markets business development plan.

Sampling Respondents, Sample Collection Method, and Sample Size

The target respondents needed for this research are the key executives who do have extensive international working experience in the construction industry at least have worked outside the home country and experienced dealing with international clients. Mail survey (email survey) using GOOGLE FORMS by emailing directly to target respondents and also via social media like LinkedIn and Facebook. The field survey was carried at central business district of Kuala Lumpur and the depth interview was done at the given appointment time at key office locations. The sample size is highly heterogeneous group as respondents considered are key executive candidates with international experience in construction industry thus the sample size are 30 numbers in total. The ethical code of conduct were taken care with due respect to the participants with their consent and protecting their supporting data.

Questionnaire Design

The questionnaire acts as a research instrument, questionnaires designed are self-completion in nature consisting of both open ended and closed questionnaires.

- Part 1 of questionnaire extracts supporting data needed such as designation and company names which are crucial in determining the source of data.
- Part 2 consists of scaling on 1 to 5, questionnaires are stratified into three sets such as A) Country – selection factor, B) Industry Specific factors and C) Firm Specific factors these are attributes of international business experience at different level.
- Part 3 consists of questionnaire designed to extract on the experience of market entry analysis on 0 to 2 scale of I have never seen it to I have seen it to analyze the exposure towards market entry attributes exists in the industry.

DATA ANALYSIS AND BUSINESS IMPLICATIONS

The data collected as per the research design for this study consisted of a heterogeneous sample group taking part in the survey from various countries like U.K, U.A.E, India and Malaysia. The 9 numbers of respondents out of 30 respondents were directly involved in decision making for international market entry and their opinions are of importance in analysis.

Survey Data Analysis

The responses were specifically collected for extracting supporting data for international business entry in the part 1 questionnaire and the part 2 questionnaire consisted of supporting data for Industry and Company related data. The scale 1 to 5, mentions 1 is not critical and 5 is highly critical in decision making. The data is of 30 numbers of respondents and it is being distributed graphically and numerically. The survey response obtained as per the research methodology of this study has been very conclusive on which area to focus while entering, developing and sustaining the international market and the survey results are analyzed and discussed below.

- The 56.7% respondent's opinion suggested that infrastructure spending of the target market is highly important.
- The target market's competitiveness is highly important as per the survey 60% agreed to it.
- 33.3% agreed that cultural knowledge of the target market is important.
- 43.3% agreed that geographical location access is significant for market entry.
- 46.7% respondents stated that government to government relations are highly important in the business development in the target market.
- Company relations with prospective clients are crucial and important as per 50% respondents.
- Political environment and interests of the host market is important as per 40% respondents.
- Availability of talent and man power in the host market is having least importance as there is a possibility of expatriate staff as per the survey response.

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- 47.8% response economic policy, construction demand and intensity of competition in infrastructure sector are equally important as per.
- 38.9% response indicated that company goals, competitive advantage and international experience of the company are important factors.

The part 3 questionnaire responses were collected by extracting supporting data for analyzing the exposure level of international market entry which gives proper insights of exposure in the market entry mode at 8 different cases of construction firms are compiled in Table 4.

The most preferred entry mode as per respondents commonly seen are case 1, case 3, case 4, case 7 and case 8, as these promote vertical growth with positive market entry development in target projects for example case 8 branch/ regional office of a company in host country is the most seen mode as per 70% respondents as the role played by the branch or regional office is mostly of bagging projects at target market is high. The least preferred mode is minority joint venture with 43.3% have not come across this mode, since this mode allows less control and a sense business insecurity. 45.84% of respondents have seen or come across all the 8 cases of entry modes, 34.16% of respondents have indicated that most of the cases are not commonly used entry mode and 17.09% of respondents have not seen most of 8 cases of entry modes.

ARCHIVE DATA ANALYSIS

The indicators for good economic development of a country are GDP (Gross domestic product) of that country, Infrastructure spending budget of the country, FDI (Foreign direct investment) and various other factors measured against the business performance in-terms of turnover of Ircon in the specific target markets. The data obtained are tabulated in Table 5, which are analyzed for linear regression to obtain relative equation using IBM SPSS statistics data modeler software.

Table 4. Compilation of survey response data consisting of different market entry mode analysis

<i>IRCON'S INTERNATIONAL PROJECTS</i>	(2009-2013) * ¹ Turnover attained from the project in (USD billions)	* ² Average. (2009-2013), GDP of the country (USD billions)	*Average. (2009-2013), Infrastructure spending data of the country (USD billions)	*Average. (2009-2013), FDI of the country (USD billions)
IRCON's International project-countries.	Y	X1	X2	X3
MALAYSIA	1.5400	271.55	64.37	9.464
SRILANKA	0.8000	55.47	15.78	10.74
ALGERIA	0.3530	182.4	75.41	1.824
BANGLADESH	0.0700	125.95	34.618	1.01
ETHIOPIA	0.0139	37.032	12.472	0.34

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Table 5. Correlation of IRCON and other country factors influencing IRCON's businesses

#Select Asian Country.	GDP growth rate per year– 2009 TO 2017									
	2009	2010	2011	2012	2013	2014	2015	2016	2017*	Average
India	7.1	7.4	5.3	3.2	3.5	4.2	8.0	7.1	7.0	6.75
Nepal	2.3	2.7	3.1	3.1	2.2	3.1	3.0	0	6.9	2.9
Sri Lanka	2.4	6.9	7.1	9.2	6.2	6.4	4.8	4.4	4.5	5.76
Cambodia	-1.4	4.8	5.2	5.0	5.8	5.5	7.0	7.0	7.1	5.11
Indonesia	3.3	3.4	3.6	6.0	3.6	4.5	4.9	5.0	5.1	4.33
Malaysia	-2.8	4.8	3.4	4.0	3.2	4.3	5.0	5.4	5.4	3.63
Myanmar	3.8	4.2	4.9	6.3	6.5	6.8	7.0	5.9	7.7	5.9
Philippines	0.5	6.1	1.6	5.0	5.5	3.4	6.1	6.9	6.5	4.67
Singapore	-3.7	13.7	3.8	-0.6	2.4	2.4	1.9	2.0	2.7	2.73
Thailand	-2.3	7.8	0.1	6.5	2.9	2.9	2.9	3.2	3.5	3.05
Vietnam	5.4	6.4	5.9	5.2	5.4	5.6	6.7	6.2	6.3	5.90

Selected based on the location access from India & considering prospective Infrastructure spending projection given in Table 1.

Source: ^{#1}, (IRCON, 2015). ^{*2}(The Global Economy, 2015).

IBM SPSS Data Results of IRCON's Overseas Businesses Against the Country Economic Factors

The results obtained after running the data on IBM SPSS software package with Table 5 data, the following results are stated below.

Output of Data Set From IBM SPSS Modeler

The output of regression analysis data set above obtained are discussed below.

- R value obtained is of 0.984 and adjusted R² is 0.875, which indicates 87.5% of response variation in variables which is a good sign as model explains all the variability around its mean value.
- The coefficients, constant value is -0.256 and X1 is 0.005, X2 is -0.06 and X3 is 0.086, among this the variable has X3 factor such as FDI investment into the target markets of IRCON's plays a significant determinant factor in business output from that country for IRCON's turnover output.
- The overall analysis of data concludes that there are various other factors influencing IRCON's business output which are not being considered as variables in this analysis.

DEPTH INTERVIEW DATA ANALYSIS

The depth interview data are being present in the Table 11.

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Table 6. Variables entered/removed^b

Model	Variables Entered	Variables Removed	Method
1	X3, X2, X1 ^a	.	Enter

a. All requested variables entered., b. Dependent Variable: Y.

Table 7. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.984 ^a	.969	.875	.22372

a. Predictors: (Constant), X3, X2, X1)

Table 8. ANOVA^b

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.549	3	.516	10.316	.224 ^a
	Residual	.050	1	.050		
	Total	1.599	4			

a. Predictors: (Constant), X3, X2, X1., b. Dependent Variable: Y

Table 9. Coefficients^a

Model		Unstandardized Coefficients	
		B	Std. Error
1	(Constant)	-.256	.216
	X1	.005	.003
	X2	-.006	.010
	X3	.086	.026

Table 10. Coefficients^a

Model		Standardized Coefficients	T	Sig.	60.0% Confidence Interval for B	
		Beta			Lower Bound	Upper Bound
1	(Constant)		-1.183	.447	-.553	.042
	X1	.720	1.582	.359	.001	.009
	X2	-.252	-.574	.668	-.019	.008
	X3	.680	3.254	.190	.050	.122

a. Dependent Variable: Y.

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Table 11. Depth interview data of 3 (three) top executives

Interviewed person designation & organization.	Project Director, IRCON Malaysia.	JGM Planning & coordination, IRCON Malaysia.	Managing Consultant, Hill International Limited, Malaysia.
Interview questions.			
<i>International project working experience?</i>	It was great working in Malaysia, which has exposure to Indian culture.	Extensive learning and development at International project.	Tokyo and Qatar project experience was really great.
<i>Factors crucial in International business development?</i>	Socio economic and financial value of the project.	Host government support to international contractor is most important factor.	The value of the project and geographic access from home country.
<i>Preparedness factor to enter new market?</i>	Company competitiveness	Specialization of the company in any trade work is important.	Awareness of the target market industry.
<i>Financials of the international project?</i>	Company cost for international project is at higher side.	Financially should be viable with higher profit margin.	It's the timely completion of the project and financial value of project.
<i>Any other input in market expansion?</i>	Ircan needs strategic marketing.	Construction demand in the host market.	Effective planning of market entry is needed

The overview of the outcome from the depth interview is to focus on key areas of international business by giving importance to strategic marketing in target countries, effective market entry planning and opening to new opportunities and in depth awareness of target country.

Ircon's Business Model

The IRCON's business model is unique when it is compared to other infrastructure business establishments in India and abroad and the business model is presented in Table 12.

- **New Business Driver:** A new market entry strategy for overseas project and strengthening the existing market position in the wake of intensified competition locally and Internationally.
- **Clients:** Ministry of Railways, Government of India, Indian State Governments and Various other governments of foreign countries.
- **Value Propositions:** Competitive staff-man power, Ministry of Railways backed and can operate in any locations.
- **Market Channels:** Government – Government relations, business development activity. Joint Venture. PPP Basis.
- **Business Activities:** Railway, Highway and Building construction, Loco Leasing activities and Electrification works.
- **Market Identity:** Perceived as market leader in railway construction in India and neighboring countries
- **Competitive Strategy:** Timely project completion of projects at difficult terrain locations.

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- **Revenue Streams:** 40-50% Revenue comes from foreign projects and other 40-50% from domestic projects.90-96% of revenue comes from railway project.

BUSINESS DEVELOPMENT PLAN

SWOT (strength, weakness, opportunities and threat) analysis of Ircon is presented in Table 12.

Business plan for international business development required to enhance IRCON’s competitive strategy in sustaining its current business at Asia and developing new market base in African and Middle Eastern countries. IRCON has to upgrade specific marketing strategy at various countries as there is increased spending in other expertise field like light and mass rail transport system. The expenditure of billions worth of projects being planned in South East Asian countries, Middle Eastern countries and in India.

Table 13 has presented a right marketing strategy for country specific needs and basis and a set of conventional marketing strategy presented below need to be implemented.

- **Strategy 1:** A comprehensive marketing mix by increased advertising and promotion in technical events in the target market.
- **Strategy 2:** Actively participating in the exhibition and conferences related to same business areas and mutual collaborations with prospective clients in relevant business.
- **Strategy 3:** Sponsored training and professional development programs to the prospective clients, which helps client to understand IRCON’s effort in building relationship.
- **Strategy 4:** IRCON can use barter trade system, using credit line of government and public organization, it is reliable in executing projects with good quality and service.

Table 12. SWOT analysis of IRCON’s international business

Strength	Being a government of India backed company under ministry of railways, India it has strength in bagging projects on government relations with other nations. The credit line support to other developing countries by government of India for infrastructure development. <ul style="list-style-type: none"> ● Backed by Indian Railways. ● Readily available talent pool in the market. ● Expertise in the industry.
Weakness	<ul style="list-style-type: none"> ● Poor marketing strategies. ● Policy hindrances like limitation on PPPbasis investment in foreign projects. ● Decision making delays. ● Lacking international appeal like developing other competitive areas in Mass Rapid Transit and Light Rail Transit system.
Opportunities	<ul style="list-style-type: none"> ● Opportunities in home country and overseas in the sector railway and light rail and Mass rapid systems. ● New opportunities in new overseas markets like Asia, Africa and Middle Eastern countries.
Threat	<ul style="list-style-type: none"> ● Growing domestic companies into rail infrastructure developing entities posing competition to IRCON at home market and overseas market. ● Intensifying competition at overseas market including IRCON’s existing business units at Srilanka, Malaysia and African countries. ● International business comes with set of risks such as host country policy, host country competition, increasing cost of doing business in the international market.

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Table 13. Specific country based marketing need as per target market opportunities

<u>Sl no.</u>	<u>Target country</u>	<u>Specific marketing need</u>	<u>Remarks</u>
1	Srilanka	Highway sector.	There is a considerable spending in this sector at the target market.
2	Malaysia	Light and Mass Rapid Transit sector and Railway projects.	There are billions worth of projects in execution and in pipeline, specific marketing and bagging projects to increase its skill sets and using Delhi metro project execution experience.
3	Other Asia countries like Thailand, Indonesia, Myanmar and etc.	Specific marketing of IRCON’s expertise in the Railway sector is needed to gain market access as the quantum of projects are more in various sectors.	Expansion strategy into other Asian markets is in need of the hour to establish as a competitive player in the market.

The implementation of all the marketing strategies with the right mix needs an restructuring IRCON’s business development divisions into two segments one as international business development and the other as domestic business development division. The international business development division will lay special focus on all the international marketing and relationship management with the clients, the restructured organization chart is given in Figure 4.

Operational Plan for International Business Entry Foray

The operational plan is subdivided into various stages are described below in Figure 5 pictorial representation of various process of operational plan.

Figure 4. Ircon International Limited’s organizational chart

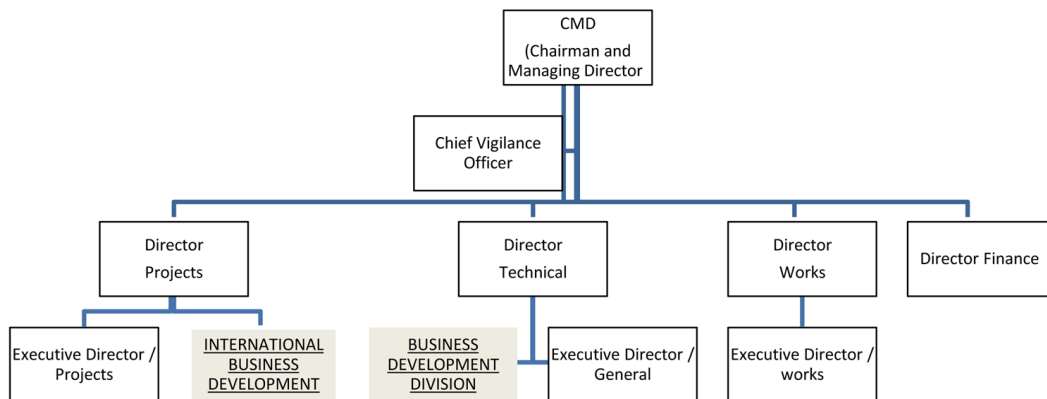
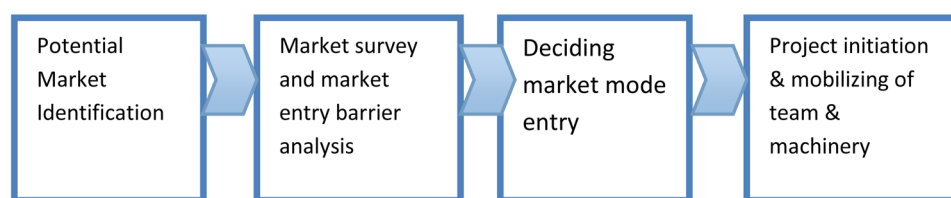


Figure 5. Market identification and entry operational plan



Financial Analysis

The Du- Point analysis was done to determine profit margin, asset turnover ratio, leverage measure ratio altogether to determine RoE (Return on Equity) ratio which gives the rate of return to shareholders of the company.

Return on Equity = Net Income / Sales X Sales / Assets X Assets / Equity.

The data referred from annual reports of IRCON is compiled in the table below.

As per the data from Table 9 the performance and return of Ircon is most consistent and performance in the financial year 2014 shows that there is a thrust for improvement of sales and increasing the assets. Thus the financial plan should be aimed at increasing asset turnover ratio and leverage ratio.

Risk Mitigation and Contingency Plan

The construction business in international market carries certain risks those are stated below.

- **Country Risk:** The risks associated instability of country due terrorism, religious, political clashes would cause losses and delay.

Table 14. Du-Point Analysis of IRCON INTERNATIONAL LIMITED for 2009-2014

DATA REFERRED FROM IRCON INTERNATIONAL ANNUAL STATEMENT. (ANNUAL REPORTS, 2009 - 2014)	FINANCIAL DATA	DATA (in Crore' Rs)					
	FINANCIAL YEAR	2014	2013	2012	2011	2010	2009
Assets		6161	6340	5528	4980	3153	2684
Equity		2993	2300	1743	1383	1205	1200
PBT (pre-tax income)		1250	1015	602	401	264	187
Net Income		907	730	470	241	182	140
PROFIT MARGIN	Net income / Sales	0.726	0.719	0.781	0.601	0.689	0.749
ASSET TURNOVER RATIOS	Sales / Assets	0.147	0.160	0.109	0.081	0.084	0.070
MEASURE OF LEVERAGE RATIO	Assets / Equity	2.058	2.757	3.172	3.601	2.617	2.237
Return on Equity (ROE) ratio is a measure of the rate of return to stockholders		0.303	0.317	0.270	0.174	0.151	0.117

Source: (IRCON, 2015).

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- **Project Based Risks:** The project carries a certain amount of risks, as the acquisition of land, war torn areas excavation risks, environmental risks and various other risks might halt the project or cause delay
- **Currency Risk:** Foreign exchange risk is one major risk in international business it should be taken care with timely available financial measures.
- The additional services provided by Ircon like locomotives and wagon leasing, technical consultancy, rehabilitation works would support overseas office during business development.
- **Limitations:** The Ircon being a government organization will not be having free hands when it comes to financing large scale projects on its own. Chinese companies being aggressive competitor and having higher turnover and assets than Ircon, it is challenging for expansion plans but with strategic market foray based on its competitive advantage it can expand further.

CONCLUSION

The government entity has mainly relied in developing its business through government to government relations, there was a need for developing into a more competitive firm to outsmart the private international firms in the construction business. The historical data of Ircon emphasizes that the marketing plan in the international business is its weakness. The strategy to expand globally and develop sustainable business needs to have an overall understanding of host market conditions politically, economically and policy wise. The study emphasizes the need for understanding cultural aspects in doing business and in keeping the prospects of business the need of the hour is a restructured business development plan. The restructuring involves in division of business development unit domestic and international as a separate unit to handle operations in domestic and overseas market. The separate international business development unit would focus independently on international marketing and bidding projects, financial analysis and manage risks in market. The past financial data clearly indicates the business turnover of Ircon by overseas businesses is approximately 50% share in overall. Ircon should focus in strategic market expansion plan and also spread its businesses into other forms of transport infrastructure such as light rail transit and mass rapid transit projects, as the urban transportation projects are lucrative and by continuous upgrading organizations core skills would give competitive attribute for market leadership.

REFERENCES

- Abidin, M. Z. (2010). *Fiscal Policy Coordination in Asia: East Asian Infrastructure Investment Fund*. Asian Development Bank Institute. ADBI Working Paper No. 232.
- ADB Outlook. (2017). *Economy: India & South Asia*. Retrieved 03 April, 2018, from <https://www.adb.org/countries/india/economy>
- Alden, C., & Davies, M. (2006). A profile of the operations of Chinese multinationals in Africa. *South African Journal of International Affairs*, 13(1), 83–96. doi:10.1080/10220460609556787

Market Development Strategy for India's Rail Company Ircon in Asia, Africa, and Middle East

- Athukorala, P.-c. (2009). Outward Foreign Direct Investment from India. *Asian Development Review*, 26(2), 125–153.
- Bhattacharyay, & Nath, B. (2009). *Infrastructure development for ASEAN economic*. Asian Development Bank Institute (ADBI). Tokyo: ADBI working paper series No. 138.
- Chabahar-Zahedan Track-Laying Underway. (2018). Retrieved 03 April, 2018, from <https://financialtribune.com/articles/economy-domestic-economy/79746/chabahar-zahedan-track-laying-underway>
- Donaldson, D. (2018). Railroad of the Raj: Estimation the impact of Transportation Infrastructure. *The American Economic Review*, 108(4-5), 899–934. doi:10.1257/aer.20101199
- Doole, I., & Lowe, R. (2008). *International Marketing Strategy: Analysis, development and Implementaion*. Retrieved 15 April, 2015, from https://www.cengagebrain.co.uk/content/doole07630_1844807630_02.01_chapter01.pdf
- Ernst & Young. (2013). *Infrastructure 2013: Global priorities, Global Insights*. Retrieved 7 April, 2015, from [http://www.ey.com/Publication/vwLUAssets/Infrastructure_2013/\\$FILE/Infrastructure_2013.pdf](http://www.ey.com/Publication/vwLUAssets/Infrastructure_2013/$FILE/Infrastructure_2013.pdf)
- Howes, R., & Tah, J. H. (2003). *Strategic Management Applied to International Construction*. London: Thomas Telford Publications. doi:10.1680matic.32118
- IRCON. (2015). Retrieved 14 May, 2015, from <http://ircon.org/content.aspx?Title=45>
- Ircon Annual Report 2016-17. (2017). Retrieved 03 april, 2018, from <http://ircon.org/images/file/annual%20report/English%20Annual%20Report.pdf>
- Ircon Website. (2015). *About the company*. Retrieved 2 April, 2015, from <http://www.ircon.org/content.aspx?Title=48>
- Ives, D., Hoscheidt, M. M., Jaeger, B., & Tocchetto, J. S. (2013). Infrastructure Investments in the Middle East and North Africa. *UFRGS MOdel United Nations Journal*, 1, 308–362.
- Jagarn Josh. (2013). *IRCON won the India Pride Award for Excellence in Central PSUs in India Image Enhancement*. Retrieved 2 April, 2015, from <http://www.jagranjosh.com/current-affairs/ircon-won-the-india-pride-award-for-excellence-in-central-psus-in-india-image-enhancement-1387609454-1>
- Kirkpatrick, C., Parker, D., & Zhang, Y.-F. (2006). Foreign direct investment in infrastructure in developing countires: Does regulation make a difference? *Transnational Corporations*, 15(1), 143–171.
- KPMG Africa. (2013). Retrieved 4 April, 2015, from <https://www.kpmg.com/Africa/en/IssuesAndInsights/Articles-Publications/General-Industries-Publications/Documents/Construction%20in%20Africa.pdf>
- Lall, R. (1986). *Multinationals from the Third World: Indian firms investing abroad*. Oxford University Press.
- Lasserre, P. (2003). The process of globalisation. In *Global strategic management* (2nd ed., pp. 36–65). New York: Palgrave Macmillan.

Market Development Strategy for India's Rail Company Ircon in Asia, Africa, and Middle East

LSC London. (2015). *LSC London*. Retrieved 15 may, 2015, from http://malaysiadb.lslondon.co.uk/resources/file.php/909/2_Project_Manual_-_Full_Version.pdf

Mawhinney, M. (2001). *International Business* (M. Mawhinney, Ed.). London: Blackwell Science Ltd.

Miles, D. (1995). International COstruction Management Series No. 6. In *International Project Marketing*. Geneva: International Labour Office.

PwC. (2014). South East Asian *Outlook to 2025*. Retrieved from <http://www.pwc.com/sg/en/capital-projects-infrastructure/assets/cpi-sea-infrastructure-spend-summary-201405.pdf>

Terpstra, V., & Sarathy, R. (2001). *International Marketing*. Chicago: Dryden Press.

The Financial Express. (2013). *Deal signed for construction of 2nd Bhairab Railway Bridge*. Retrieved 6 April, 2015, from <http://www.thefinancialexpress-bd.com/old/index.php?ref=MjBfMDIfMTFfMTNfMV84OF8xODMwMjU=>

The Global Economy. (2015). *The Global Economy*. Retrieved 13 MAY, 2015, from <http://www.the-globaleconomy.com/economies/>

The SundayLeader. (2015). *The SundayLeader*. Retrieved 6 April, 2015, from <http://www.thesunday-leader.lk/2015/02/22/sri-lanka-opens-up-highways-sector-to-india/>

Timetric report. (2014). *Road and rail projects fuel economies in Africa and Middle East*. Retrieved 7 April, 2015, from <https://timetric.com/info/media-center/press-releases/2014/12/17/road-and-rail-projects-fuel-economies-africa-and-middle-east/>

Twarowska, K., & Kačo, M. (2013). International business strategy: Reasons and forms of expansion into foreign. In K. Twarowska & M. Kačo (Eds.), *Management, Knowledge and Learning International Conference 2013* (pp. 1005-1011). Zadar, Croatia: Active citizenship by Knowledge Management & innovation.

Urban Transport Technology. (2014). Retrieved 3 april, 2014, from <http://www.urbantransport-technology.com/features/featurethe-road-to-growth-infrastructure-investment-in-the-middle-east-4321559/>

Verma, R., & Bhaskar, U. (2013). *LIVE MINT: Indian firms to take legal route against Mozambique govt*. Retrieved 8 April, 2015, from <http://www.livemint.com/Industry/thQIHtUC96XYYXwEMezfzJ/Indian-firms-to-take-legal-route-against-Mozambique-govt.html>

World Economic Forum. (2010). Retrieved 3 April, 2015, from World Economic Forum website: http://www3.weforum.org/docs/IN10/WEF_IES_2010_Report.pdf

KEY TERMS AND DEFINITION

Archive Research: Research conducted with the help of archive data as available.

Host Country: Business interest in a foreign country or market.

Ircon International Limited: An Indian public-sector company mainly involved in infrastructure projects.

Market Entry Plan: Plan development for entering into new country or potential market.

Potential Market: A lucrative market for further development or expansion.

Research Design: A research methodology designed for conducting the study.

Sample Respondents: Selected group of people who fit in the required criteria for surveying.

Strategic Marketing Plan: A decisive successive market plan having key success factor.

Survey Research: Research conducted by collecting data in the form surveying.

Turnkey Contractor: A contractor doing a business from inception stage to operational stage.

Chapter 4

Mergers and Acquisition by Indian Firms: Managerial Perspectives on Challenges and Solutions

Som Sekhar Bhattacharyya

National Institute of Industrial Engineering, India

ABSTRACT

Mergers and acquisition (M&A) has been a dominant form of firm growth strategy and a very potent tool of securing strategic growth in business landscape. However, M&As have generally been attributed with a significant amount of failure and value destruction. The author in this exploratory research undertook 24 in-depth interviews using a semi-structured open-ended questionnaire with M&A experts to understand the reasons for value creation and destruction in Indian M&A context. The data was content analyzed for thematic analysis. The results indicated in the Indian context, M&A initiatives provided quick market growth, access to strategic resources, and such benefits. While M&A failures occurred because of the lack of understanding on decision criteria regarding whether to form SA or do a M&A, strategic clarity, cultural insensitivity, lack of due diligence, and poor M&A post management capabilities.

INTRODUCTION

Firm growth is achieved by firms either through expansion of business scope or through increased scale of business (Delmar, Davidsson & Gartner, 2003). Firms can achieve this growth both by organic or inorganic means (McKelvie & Wiklund, 2010). In organic means, firms develop and expand their boundaries slowly over a period of time by incremental addition of resources and capabilities to achieve increased scale or scope (Agnihotri, 2014). Inorganic growth occurs through the practice of Mergers & Acquisitions (M&A) or Strategic Alliances (SA) (Datta & Grant, 1990). M&A comprised of two terms Mergers & Acquisition (Angwin, 2007; Auerbach, 2008; Hitt, Ireland & Harrison, 2001). Mergers stand for the amalgamation of two or more companies of nearly equal size (Galloway, 2017). In mergers two firms integrate their operations in a co-equal basis and in a very friendly manner (Angwin, 2007;

DOI: 10.4018/978-1-5225-7095-0.ch004

Auerbach, 2008; Hitt, Ireland & Harrison, 2001). Acquisition occurs when one firm acquires a stake in another firm (Hitt, Ireland & Harrison, 2001). The stake is either exercised in cash purchase or by purchase of stocks (Galloway, 2017). Generally, the acquiring firm is bigger in size than the firm being acquired (Auerbach, 2008; Hitt, Ireland & Harrison, 2001). Acquisitions can be either friendly or hostile (Hitt, Ireland & Harrison, 2001). M&A is a term that is generally used to denote such aggregation (Angwin, 2007; Auerbach, 2008). Literature indicated that doing M&A sometimes creates firm value as well as it also sometimes destroys firm value (Shelton, 1988; Rahman & Lambkin, 2015). Managers who focus on the merit of M&A often become blind to the difficulties of making an M&A work (Buono, Bowditch, & Lewis III, 1985; Shelton, 1988). Indian business landscape in the last couple of decades have witnessed tremendous growth in M&A space (Ghosh & Dutta, 2014; Lebedev, Peng, Xie & Stevens, 2015). This can be attributed to the reason that because Indian economy has been witnessing growth a large majority of Indian private players also witnessed both revenue as well as profit growth (Dutta & Sundaram, 2004; Das, 2000). Further, competition in Indian business landscape also became vibrant (Jalan, 2004; Das, 2000). The sprouting of a large number of competitors induced pressure on securing competitive gains in Indian market (Das, 2000; Jalan, 2004; Dutta & Sundaram, 2004). Organic paths though build strategic resources (Valuable, Rare, Inimitable and Non-substitutable (VRIN)) resources and capabilities but it consumes too much time horizon to get created in firms (Wernerfelt, 1984). In hypercompetitive contexts time is not on the side of the strategy office (Lee, 2017). Thus, strategy level managers are forced to seek alternate means of securing VIRIN resources and capabilities (Wang, & Moini, 2016). A quick time compressing method for securing strategic assets to achieve superior rent in the market comes through acquisition (Angwin, 2007; Auerbach, 2008; Hitt, Ireland & Harrison, 2001). Thus, a firm can secure ownership stake in another firm possessing strategic asset (Hitt, Ireland & Harrison, 2001). In India, the market potential has also been growing in the last two and half decades (Das, 2000; Jalan, 2004; Dutta and Sundaram, 2004). In India there are vibrant regional firms (which restrict their operations to Northern, Southern, Eastern, Central or Western regions of India) (Ghani, Kerr & O'connell, 2014). Often to expand market base from one region to another, firms had adopted M&A as a route towards geographical expansion (Rani, Yadav & Jain, 2015; Kar, Soni & Singh, 2014). From 2005 onwards, Indian firms had also targeted international firms for acquisition to secure strategic resources or expand geographical reach (Lebedev, Peng, Xie & Stevens, 2015).

Mergers & Acquisition (M&A) has for quite some decades become a dominant paradigm in strategic management literature (Shelton, 1988). M & A brings fast inorganic growth to firms (Auerbach, 2008) however M & A also often leads to failures (Rahman & Lambkin, 2015). Thus, M&A activities come with its own share of challenges & benefits (Hitt, Ireland & Harrison, 2001). M&A is also often used as a means of growth in international business strategy (Deng & Yang, 2015). Literature on M&As, has mostly dealt with M&A aspects in developed countries or M&A of developed country firms in the developing and emerging economies (Wang & Moini, 2016). In this study, the author focuses on the M&A activities happening within Indian context. Thus, this paper delves into the phenomenon of M&A challenges confronting Indian companies in India. The history of M&A worldwide and also in India indicated that many of these M&A initiatives though looked lucrative and logical on paper but post acquisition there have been value destruction. The author in this study in the given Indian business context attempts to understand why M&A in present day Indian business landscape are not becoming successful. The next section of this paper presents the literature review.

LITERATURE REVIEW

Strategic management literature focuses on seeking firm growth and sustaining competitive advantage (Delmar, Davidsson & Gartner, 2003). Attainment of firm growth could be primarily done by two methods namely organic and inorganic means (Hitt, Ireland & Harrison, 2001). Organic firm growth happens when a firm grows on its own slowly, incrementally building and expanding its activity base and thus the development of competencies and core competencies take a substantial amount of time (McKelvie & Wiklund, 2010). The coming up of new products and services also require a long-time horizon by organic mechanisms (Davidsson, Delmar & Wiklund, 2006; Davidsson, Delmar & Wiklund, 2006). In organic growth, a firm adds on to its extant base of resources and capabilities incrementally (Shelton, 1988). In inorganic growth strategy, a firm expands into new products, services and geography by buying the assets of another firm (Angwin, 2007; Auerbach, 2008). Thus, the addition of capabilities, market reach and product market portfolio happen relatively much faster than organic growth (Hitt, Ireland & Harrison, 2001; Davidsson, Delmar & Wiklund, 2006). In inorganic growth, M&A has been a primary mechanism widely practiced by firms (Angwin, 2007; Auerbach, 2008). Acquisition happens when one firm (acquirer) buys a controlling stake in another firm (seller/acquired firm) and this acquisition can be either through cash or through stocks (Rappaport & Sirower, 1999). Stock acquisition mode could be through fixed share or fixed value and the choice between cash and stock is based upon the risk appetite of the acquirer (Rappaport & Sirower, 1999).

The classical work of Dyer, Kale and Singh (2004) pointed out that when a firm should pursue strategic alliance or acquisition. Dyer, Kale and Singh (2004) advocated that the logic for choosing between an alliance and an acquisition is dependent upon the synergy to be expected. Bower (2001) on the other hand elaborated that not all the M&A that we witness are similar. Bower (2001) indicated that there are five types of M&A, firstly, in over capacity M&A, the acquiring firm by acquisition of similar players eliminates excess supply capacity of the industry. Secondly, in geographic expansion through acquisition the acquiring firm adds market and thirdly, through product market acquisition the acquiring firm is interested to expand the scope of products (by acquiring a firm that possessing it) (Bower, 2001). Fourth type of acquisition occur when an acquiring firm is not interested to undertake Research and Development (R&D) and for the same it acquires another firm that had done the requisite R&D (Bower, 2001). Finally, because of technology there is tremendous convergence of industries and one firm acquires another firm to address industry convergence issues (Han, Jo & Kang, 2016; Bower, 2001).

The literature of M&A had generally discussed the difficulties in valuation of acquired firms. (Harford 2005: 1999; Martynova & Renneboog, 2008). This is because it is often very difficult to ascertain proper valuation of a firm (Graham et al., 2002). M&A literature also dwells on the difficulties of realization of gains through M&A as the expectations are more than the actuals (Rossi & Volpin, 2004; Moller et al 2004). This is because the acquiring firm managers are not able to properly gauge the realities of the acquired firms business before hand and this creates trouble (Malmendier & Tarte, 2008; Loughran & Vijh, 1997). It has also been observed that firms are not able to properly achieve synergy of the resources and capabilities of the acquired firm and this has also been a source of trouble for acquiring firm managers in creating value (Capron, 1999; Higgins & Rodriguez, 2006).

Researchers had also pointed out that the dynamics of acquisition management has also been an area of challenge between the acquired and the acquiring firm (Capran & Shen, 2007). There are lot of soft issues that transpire when an acquiring firm acquires another firm and these poses integration difficulties (Karim & Mitchell, 2000; Capran & Shen, 2007). Other researchers have mentioned these difficulties

for securing the requisite gains (Stahl & Voigt, 2008 and Makri et al, 2010). Integration entails the configuration of the process and systems between two organizations (the acquired and the acquiring both) and Larsson and Zollo and Singh (2004) emphasized the need to bring in learning into M&A inter-firm interaction so that the mistakes and lessons learnt could be applied for the next M&A integration initiative to make it more effective and accommodating (Haleblian et al, 2006; Barkema & Schijven, 2008). Thus, literature is abound with the challenges of M&A. In Table 1, the author has tabulated literature on M&A empirical studies as well as the methodology used in these studies.

Table 1. M&A Literature review of research methodology and findings

Author (Year)	Methodology	Findings
Morgan, (2001)	Three horizontal mergers were studied for future innovation capabilities of the merged firms.	In the three cases, it was found that each firm viewed the other as potential competitor in developing new product and entering new market. However such mergers resulted in reduced firm R & D expense in R&D as both the firms were into similar type of products.
Agnew, (2000)	Through an investigative study on a series of mergers in US and European pharma sector how R&D function was impacted by M & A process and how firms reacted to this change was studied.	The author found that pharma sector was at the brink of transformation with big mergers and consolidation of business. The trend was shifting from all firms working on similar target, towards working on novel targets as well.
Ayadi, et al (2013)	A two-step approach to analyse whether M&A in European banks led to better synergy and productivity was undertaken by estimating both technical and structural efficiencies.	The research findings has been on lines of technological and productivity improvement of banks because of M&A. It was reported that productivity improvements had lower positive impact because of M&A in European banks. It was concluded that M&A strategies were required to take advantage of complementarities of different business lines and primarily on cost management.
Hannan and Pilloff (2009)	An empirical approach to study and analyse acquisition motives in banks was done.	Banking organisation are more likely to be acquired if its stock is publicly traded. Further, banks with higher capital-asset ratios were less likely to be acquired. Acquired bank's size relative to the size of the potential acquirer also mattered.
Nahavandi and Malekzadeh (1988)	The effect and mode of acculturation was described and studied by analysing mergers.	When two firms were in disagreement on the mode of acculturation it was likely that employees would have high amounts of acculturative stress and face disruption in both individual and group level functioning. Unrelated acquisition could be managed better if the acquired firm was left to operate separately.
Paul and Bhawsar, 2011	An exploratory study to understand the strategy and synergies was undertaken in an acquisition by a Japanese firm of an Indian firm.	The Indian firm confronted litigation worries. For the Japanese firm the deal was better because of cost advantage of the Indian firm as well as the access to tap Indian scientists and research facilities.
Tang and Metwalli (2013)	Database of Worldwide Mergers and Acquisitions of Thomson Financial Services was used to study the M&A transactions (above \$1M) held between 1st, January, 2000 to 31st December, 2009 wherein the acquired or acquirer firms was located in India, Pakistan or Bangladesh.	Firms in these countries were predominantly target firms than acquiring firms. Domestic mergers were popular in Indian firms where as it was less popular in Pakistani and Bangladeshi firms. However service sector was the top grosser in these countries.
Vazirani, (2015)	Description of different merger waves in economic history with four school of thoughts was outlined with justification for the M&A.	The first merger wave was in steel, oil and rail in the US around 1904. The second wave increased the concentration of firms especially in automobile sector until the year 1929. Then till 1969, P/E ratio played a determining role in deciding which company acquired whom. The merger waves were described until the latest trend being syndicate debt mergers involved with leveraged and private equity.
Lal, (2014)	M&A of Indian banking sector was studied based upon market share and the strategic benefits for undergoing M&A was done.	Mergers of Indian banks had resulted in improvement in financial base of the acquiring banks and tax benefits and access to cash resources. Domestic banks were advised not to go for cross border merger having reached a threshold level in domestic concentration otherwise earnings were expected to be lower.

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Table 1. Continued

Author (Year)	Methodology	Findings
Nalwaya and Vyas (2014)	Study of financial performance of telecom sector M&As were done.	Significant difference in financial performance because of M&A was not there. There was considerable difference in shareholder value post-merger of the firms. Also, dividend growth of firms had positive impact post-merger.
Ghosh and Dutta (2014)	M&A performance of firms' pre and post-acquisition was studied through HRM and finance perspective based on ratios (HCROI / PAT, EPS and market share) for 10 telecom M&A deals between the years 2000 to 2010.	HCROI depicted a significant change from pre to post merger state while other parameters didn't exhibit significant change.
Kedia and Reddy, (2015)	Linguistic influence in performance of post-acquisition was studied for 1120 USA based acquisitions in 33 target countries over a period of 7 years.	Linguistic distance had negative relation to merger performance. Cultural distance was found to have the least significant effect when compared to English proficiency.
Hutzschenreuter, Kleindienst and Schmitt, (2014)	A path based approach was applied to get insights on future acquisitions based on past deal parameters. Ordinary linear regression was used to test hypothesis of mindfulness. The paper was novel as it incorporated the concept of mindfulness in an acquisition event.	Degree of mindfulness with which firm managers engage in knowledge transfer in M & A was a significant factor in performance improvement. Sustained learning was found to be least visible in corporate acquisitions but it was driven by relevant inferences based upon past experiences.
Uddin and Boateng (2009)	Event study methodology was used to analyse the short term performance of 373 acquisitions in UK between 1994-2003. Univariate analysis was used to study the acquisition performance using share price as an indicator.	UK acquisitions didn't result in statistically significant share price margin gains in the short run. Size of firm had no relation to the performance of the firm post acquisition. UK acquirers didn't earn positive return on cross border acquisitions.
Aureli (2015)	Bureau VanDijk's database was utilized to study the M&A of Indian firms and Italian firms. Both financial statements and management reports over an eight years period were analysed to ascertain the impact of socio economic growth in pre and post-acquisition stages.	Indian firm managers were more inclined for buying firms in the same sector. Foreign investors were interested mainly in technical expertise from acquisitions and not on financial performance improvement. Indian firms after acquiring other firms didn't destroy the profitability of firms.
Damoiseau, Black and Raggio, (2011)	An interdisciplinary design of experiment model was done with nine factors and three levels of influence namely market, firm and brand portfolio using 125 acquisitions between the years 2001 and 2007 in USA.	Brand expansion strategy was influenced by market and company level factors like competitive intensity, leverage, market concentration and market growth.
Rossi, et al (2015)	Secondary research (with data of existing M&A in high tech sectors) was used to analyse the trend of M&As in biotechnology sector.	Biotechnology sector has been overlooked as an attractive investment option. Big pharma firms with weak product pipelines inevitably required mergers and consolidation in the sector. Factors which were considered by an acquirer were due diligence, post-merger integration and growth strategy.
Strach and Everett (2006)	Three cases of major automobile acquisitions was studied. Effects of brand dilution, brand extension and administrative heritage were studied.	M&A in luxury and mass market segments played a favourable role in scale and scope economies.
Koumanakos and Siriopoulos (2005)	In the context of M & A, discretionary accrual was used to measure the manipulations in manager's earnings (based on time series Jones model) to estimate total accruals.	There were no biased accruals by managers in the year preceding the M&A announcement.
Nikandrou, and Papalexandris (2006)	A survey questionnaire based study was done with two questionnaire sets one for employees of the acquired firm and the other for the managerial team of the merged unit. 135 employees from 27 acquired firms were part of this research.	Employee preference in M & As were considered such as cost of employee action, effectiveness of LCVN (Loyalty, compliance, voice and neglect) and attractiveness of the firm.
Agboola, (2000)	Data interpretation was used to emphasis the post-acquisition change in the management practises between two universities.	Acquisition of university facilities had resulted in staff and course rationalization, internal revenue generation drives and computerization of library and other facilities.
Palmer, et al (2005)	Two case studies of UK carpet industry was done coupled with interviews with the officials involved in the mergers.	Size of union didn't result in bargaining power. Smaller unions were able to reject the merger overtures and used their knowledge to retain independence.

Whenever an acquisition is done, the acquiring firm pays a value to acquired firm and this value often carries a premium (Rappaport & Sirower, 1999). The acquired firm in the short or long run expects to offset this premium value based upon the synergy that the firm expects to achieve (Angwin, 2007; Auerbach, 2008; Hitt, Ireland & Harrison, 2001; Rappaport & Sirower, 1999). Synergy can be based upon the synergies that can come across various levels of the value chain (Garzella & Fiorentino, 2014; Barney, 1988). The acquired firm along with the acquiring firm might seek purchase synergy, operations synergy and such others (Larsson & Finkelstein, 1999). Synergy increases the value of combined entity (Barney, 1988). Synergy involves a level of functional interaction within a stipulated time frame for its achievement (Garzella & Fiorentino, 2014). The more the complexity the more difficulty of achieving synergy (Park, & Yoo, 2017). If an acquired firm is not able to synergy then the acquisition will not be successful (Dutordoir, Roosenboom, & Vasconcelos, 2014). Attainment of synergy thus is a critical issue for managers (Cartwright & Cooper, 2014; Park, & Yoo, 2017).

Literature thus is very rich with reasons and the rationale of doing M&A (Frankel & Forman, 2017). The strategic logic for doing a M&A probably is the easier side of M&A process and the success of M&A practice comes from the implementation of M&A (Cuypers, Cuypers & Martin, 2017). In M&A, execution is the key (Friedman, Carmeli, Tishler, & Shimizu, 2016). The work on M&A execution has been studied extensively but it has been most restricted in the context of developed countries (Angwin, 2007; Auerbach, 2008; Hitt, Ireland & Harrison, 2001). Emerging economies are different from developed countries because of the cultural, administrative and geographical distances (Lebedev, Peng, Xie & Stevens, 2015). Emerging economic also have institutional voids, thus making business landscape very different (Manikandan & Ramachandran, 2015). Given this difference in context it calls for a separate study on M&A as M&A is context dependent (Hassan, Patro, Tuckman, Wang, 2007). Further, the literature review made it evident that there have been very few studies on M&A in the Indian context. Since M&A activity has intensified in India and many M&A initiatives don't witness success it is important to study the reasons of failure of M&A in Indian context. There has been a dearth of studies on M&As in India especially with respect to the challenges of doing M&A. Given the importance of M&A challenges and the paucity of research in this field, the author undertook this study towards making a contribution in this regard. The research objective is to study the drivers and challenges (specially the M&A implementation challenges) faced by Indian firm's managers' while doing M&A in India and abroad. Thus, the research questions are:

1. What are the drivers for pursuit of M&A strategy planning in Indian firms?
2. What are the challenges in M&A strategy planning in Indian firms?
3. What are the challenges in M&A strategy implementation in Indian firms?

RESEARCH METHODOLOGY AND DATA COLLECTION

In this study which was exploratory in nature qualitative study was done as advocated by Maxwell (1996) and Yin (2013). The author used a semi structured open ended questionnaire on M&A strategy planning and implementation challenges (Rubin & Rubin, 2011). 24 M&A experts were interviewed (Roulston, 2010; 2011) for the study the experts had spent more than 7 years in the field of M&A. These managers have been dealing with M&A activities in India as well as abroad for Indian firms. Data was collected between the time period of January 2017 to March 2018. The experts represented sectors like banking, fast

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moving consumer goods, electronics, energy, heavy engineering and such others. The author conducted in depth personal interviews of average duration of 55 minutes to collect data (Roulston, 2010; 2011). The data was transcribed within 72 hours for reducing data loss (Rubin & Rubin, 2011). The interviews were closed at 24 experts because the thematic saturation was reached (Maxwell, 1996). Data was content analyzed for thematic and intensity analysis (Urbina, 1981; Weber, 1990; Popping, 2000; Krippendorff, 2004). The data was coded for content analysis through dictionary code prepared by the author from literature (Urbina, 1981; Weber, 1990; Popping, 2000; Krippendorff, 2004) . The author reloaded the codes after a period of seven days and the intra-coder reliability was 89%. Another expert also did the coding to check for inter-coder reliability and this was 88%. Both inter-coder and intra-coder reliability values were well with in acceptance range (Urbina, 1981; Weber, 1990; Popping, 2000; Krippendorff, 2004). The data analysis helped arriving at the findings which has been provided in the next section. The themes were regarding the challenges and solution on M & A strategy planning and execution.

FINDINGS AND DISCUSSION

The content analysis indicated the major challenges as well as the solutions for the Indian M&A managers for M&A planning and execution. This has been presented in Table 2.

Table 2, takes the theoretical anchor of work of various researchers (Lovallo, Viguerie, Uhlaner, & Horn, 2007; Bower, 2001; Kumar, 2009; Dyer, Kale and Singh, 2004; Nolop, 2007; Angwin, 2007; Auerbach, 2008; Hitt, Ireland & Harrison, 2001).

Table 2. M&A challenges and solutions regarding Indian business M&A planning and execution

S.No	Challenge	Solution
1	In India there is dearth of M&A expertise both within the firm as well as in third parties (consulting firms on M&A).	Indian firms must come together and create a IT or a web based platform or an annual/ quarterly knowledge sharing event where Indian firm managers can gather and share their valuable experiences and insights on M & A. This would help in both creation and dissemination of knowledge on M & A.
2	M & A in Indian firm is carried out by general management and they often lack deep insights regarding the pitfalls of doing M & A.	It is prudent for Indian firms to invest in a dedicated M & A team for securing valuable inputs on M& A planning and execution and gain success in the long term.
3	Lack of clarity regarding when to ally and when to acquire is present in Indian firms.	Indian managers must undertake acquisitions when the type of synergy is reciprocal, extent of redundant resources is high, degree for competition for resources is high and market uncertainty is low. In other cases SA should be carried out.
4	Lack of cultural sensitivity especially in international context is found amongst Indian M & A managers.	The acquiring firm must undertake a human due diligence at pre acquisition stage. During post-acquisition stage a team comprising of both the acquiring as well as the acquired firm must be formed jointly. This would help in empathetically addressing inter firm cultural differences and in achievement of an amicable solution.
5	Post-acquisition phase planning in India is often not properly done.	Indian managers should prepare a detailed plan with check list of do and don't during post-acquisition phase.
6	The details of financial parameters and accounting numbers must be very diligently checked which is often lacking in India. M&A situation in India often becomes a process of haste (because of the possibility of increased participation of bidder already in fray or are expected to get in fray) and this often leads to oversight.	Independent expert opinions must be collected to get fresh perspective. The M & A anchor team must be anchored within the boundary of the acquiring firm but it must have the scope to accommodate unbiased views from outside.

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Table 2. Continued

S.No	Challenge	Solution
7	Indian M&As often becomes a battle of Indian CEOs egos.	Rather than the M & A being done by an individual, a wide and balanced team from the acquiring firm must lead the acquisition.
8	When an M&A happens the acquiring firm management should fix priorities without being unduly concerned with debt. In India, M & As that happen with debt, managers gives too much focus on debt restructuring rather than improvement of business.	The strategic objective of the acquisition should be learning, efficiency improvement, establishment of updated best practices, utilization of complementary strengths and such others as the focus during post-acquisition stage. Financial aspects like debt level management should be a secondary objective.
9	Indian managers often substantially stretch the product / market growth through acquisition or the resources and capabilities assimilation through acquisition. This often result in difficulties.	Indian managers should look into adjacencies (logical extension of product /market or addition/ development of resources/ capabilities) through acquisition.
10	In the past in India when accounting systems were not tightly regulated there were difficulties of financial evaluation of firms. Often the targets were wrongly evaluated. The acquired firms often used to get highly valued because of wrongful evaluation of values. In such cases the acquiring firms often post-acquisition were confronting challenges of managing undue liabilities or reduced level of cash flow projections. This used to be a challenges for acquisition but presently this state has abated.	It is important for the acquiring firm to secure better access to target firm's books to estimate properly the extent of assets and liabilities.
11	In India, often the same team plans as well as implements an acquisition which result in difficulties because of limits of managerial bandwidth for information processing and decision making.	The planning team of M & A should be led by firm leadership team (having adequate clarity of firm mission, vision and culture) while a separate team comprising of senior and middle management (guided by the top management) should handle the operational aspects of M & A planning and execution. This would result in judicious utilization of management bandwidth.
12	The merits and demerits between organic versus and inorganic growth thinking has to be very clear to Indian managers which is often not the case. Indian managers also need detailed firm level discussion while going for an alliance regarding what should be the reason for acquisition from the buyer side as well as the seller side which is also often lacking.	The strategic objective from the acquisition should be clear to the acquiring firm like for geographic extension (regional and international), research and development, product or market extension, overcapacity management and such others. Indian firms should look towards acquiring strategic assets like technology, brand and foreign market customers.
13	In Indian M & As there is often over confidence amongst the acquiring firm's team members regarding the synergy to be achieved. This is not a desirable proposition.	Indian firms while doing M & A must seek a datum as a reference class towards forecasting the estimate regarding the time & money needed for integration. Further, the datum reference class of comparable past deals must be applied to estimate both the extent and valuation of synergies that could be achieved.
14	Indian managers also need clarity regarding the merits and demerits of all cash, all stock or mix of stock and cash options. Often in Indian M and A s, the focus is on the valuation of an acquisition and not on the route to be followed (cash, stock or mix).	The pre-closing and post-closing market risks has to be very well ascertained by the acquiring firm.
15	Indian managers also during M & A pre-acquisition stage exhibit confirmation bias.	Independent expert opinion must be used to find and focus on the discomfoting strands of evidences.
16	Indian managers also especially during international M & A exhibit a strong intent and pay a higher price for the acquisition and thus ultimately they suffer from winners curse.	Indian M & A managers should necessarily ascertain the concluding payment terms and conditions, plus elaborately freeze the closing details.
17	Indian M & A managers embark on acquisition when they believe that there is an immediate need for acquiring a firm (like for product /market growth through acquisition or resources and capabilities assimilation through acquisition). This often result in difficulties.	Indian managers should plan and look into an acquisition much earlier than when it becomes a compelling necessity (that is the acquisition).
18	Indian M & A managers often post-acquisition become myopic managers.	Indian managers should focus on the long term benefits from the M & A and not the short term gains. M & A process should be provided time to materialize.
19	Indian managers also especially during international M & As put all their eggs in one big ticket acquisition which result in difficulties.	Indian managers should rather look to do a large number of small acquisitions so that the eggs are distributed widely for realization of gains from acquisition.

DISCUSSION AND CONCLUSION

The challenges of planning and doing M&A has been mostly consistent with the literature. Morgan, (2001) had reported in the context of M & A, that the drivers for investment in R&D was not well comprehended and the socially optimum level of R&D challenging to ascertain. The author in this study found similar findings. Similar to the findings by Agnew, (2000), in the context of merger in pharma domain, the author noted that mergers were best done when it was involving equals with synergy derived from the overlap of portfolios. Ayadi, et al (2013) reported that M & A in the European context had been strongly presented as an elucidation for developing an integrated European economy and thus trust in M & A has been pivotal. In India also the author in the context of cross regional firms M & A found trust between the players as critical for achieving success. Hannan and Pilloff (2009) reported feeble support for the proposition that managers with greater ownership (and thus stake) demonstrated increased likelihood to welcome, rather than use their shareholding power to deter an offer regarding acquisition. The author's findings in the study remained inconclusive in this regard. Nahavandi and Malekzadeh (1988) stated that the existing failure rate of mergers indicated that neither academicians nor practitioners had an exhaustive understanding regarding the constituent variables involved in shaping a successful merger. The research findings in the study also echoed the same. Paul and Bhawsar, (2011) reported that post acquisition, in the context of Indian pharma sector top management team as well as firm performance weakened. The author based on this study found no such insight. Tang and Metwalli (2013) penned that M&As volume had expanded considerably from 1990 to 2010s because of the increasing influence of globalization in India, Pakistan and Bangladesh and because of large presence of inexpensive labour force and large domestic markets. Tang and Metwalli (2013) also reported that target firms (from India, Pakistan and Bangladesh) demanded that post-merger integration issues are amicably settled within a pre-decided time horizon. The findings of the author also reflected similar point of view. Vazirani, (2015) remarked that rationale behind M&A could be classified under five categories as for efficient management, synergy, diversification, market expansion and tax reduction. The author found similar findings in this research. Lal (2014) had pointed out that Competition Commission of India (CCI) (the Indian government's regulatory body) expects M&A to happen with healthy practices and based only on strategic benefits and the author's finding corroborated to this. Nalwaya and Vyas (2014) pointed out that the telecom industry was operating under huge threats like inadequacy of resources, outdated technology and failures in marketing efforts and thus M&A became more challenging. This is very pertinent for the Indian context as found by the author. Ghosh and Dutta (2014) had pointed out that although M&A deals were planned with long term benefits, but a majority of M&A fail as the M & A doesn't meet the expected performance and thus doesn't achieve strategic objectives. This is observed by the author to be true for the Indian context. Kedia and Reddy (2015) found that linguistic differences and cultural barriers mattered in cross broader M & As. The results of this study also indicated the same. Hutzschenreuter, Kleindienst and Schmitt, (2014) found that M&A managers' mindfulness which is a non-measurable parameter is important for success and the author also reported importance of the same. Uddin and Boetang (2009) penned that cross-border acquisitions had witnessed substantial growth in recent decades and studied short term performance of corporate acquisitions based on share price value. The author felt that similar studies were required to be undertaken in India. Aureli (2015) discussed that western MNCs firms' acquisition in emerging countries and vice versa created socio economic impact. This is particularly relevant for Indian firms acquiring developed country firms in present day context. Damoiseau, Black and Raggio, (2011) analyzed that a firm either can create a new brand or acquire a

brand and they reported that brand acquisition impacted growth of a firm. The author in this study found this was especially pertinent for Indian firms (looking for such acquisition). Rossi, et al (2015) indicated that high growth sectors (like biotechnology) would register increased M & A activity in future and thus it was important to find the factors that needed to be considered by an acquirer like due diligence, post-merger integration plan and growth strategy. This was also found to be relevant in India by the author. Strach and Everett (2006) highlighted the difficulties on brand management that crop up when a luxury firm acquires or merges with mass market segment firm and vice versa. These lessons were applicable for Indian context as indicated by the findings of the author. Koumanakos and Siriopoulos (2005) indicated the importance of rigorous accounting due diligence in M & A, which is the case for India also as per the findings of the author. Nikandrou, and Papalexandris (2006) considered how employee behavior of the acquired firm predisposed the course of action on M & A. The author based on this study found the importance of the subjective nature of employee behavior during an M&A process. Agboola, (2000) described an acquisition process in Nigeria and the author found that many of the acquisition process points pointed out had similarities with Indian acquisition process. Palmer et al (2005) had reported about the management change that occur when a relatively smaller union firm was acquired by a larger union firm. The author based on this study found no such insight for India. This research work is also in sync with the work of Lovallo, Viguerie, Uhlaner, and Horn, (2007) on deal making. Further the study also adheres to the rules of acquisition that Nolop, (2007) had advocated especially in the context of emerging markets Kumar, 2009). Further, the author's findings adhered to the recommendation of Dyer, Kale and Singh, (2004) regarding strategic alliance versus acquisition decision and the type of acquisition to be followed (Bower, 2001).

The findings of this study indicated the various challenges that M&A managers in India confront. Bower (2001) had suggested that not all the types of M&A are similar. One of the first point that could be concluded from this research is that Indian M&A managers are often not very clear why they are seeking a particular M&A like for geographic expansion, research & development seeking or strategic resource seeking. Even if this clarity is there, in Indian M&A teams the clarity on different types of M&A required different types of amalgamation process. This process often lacked clarity. Though cognizance of this fact is there amongst M&A managers, but there is lack of clarity regarding what should be the approach towards post M& A amalgamation. In a nutshell, Indian M&A expertise in planning (for deciphering the logic of M&A) is relatively good but the organizational capability to implement M&A is weaker. In future, Indian organizations have to develop dedicated and committed capabilities to operationalize the implementation of M&A post deal. This research also indicated that third party expertise (like consulting firms' expertise base) has also been limited. Indian M&A managers have to heed to the idea that for M&A, the acquired resource and process (like lowering of costs) has to be mapped in detail as advocated by Christensen, Alton, Rising and Waldeck (2011). The classical work of Dyer, Kale and Singh, 2004 outlined the logic for following M&A or going for a strategic alliance also required the eyeballs of Indian M&A managers in a very detailed manner. This study would help Indian M & A managers to understand the Dos and Don'ts of M & A strategy. Indian M & A managers would also based upon this work comprehend the challenges of doing M & A in Indian context and what could be the probable solutions. This research makes theoretical contribution to the literature of M & A planning and execution in the context of an emerging economy (that is India). Future researchers could undertake a comparative analysis amongst other emerging economies (like China, Brazil, Russia and such others) and in other developed countries.

REFERENCES

- Agboola, A. (2000). Managing an acquisition windfall: A Nigerian university library experience. *Journal of Collection Building*, 19(2), 61–69. doi:10.1108/01604950010326760
- Agnew, B. (2000). When Pharma Merges, R&D Is the Dowry. *Science, New Series*, 287(5460), 1952–1953. PMID:10755948
- Agnihotri, A. (2014). Corporate reputation based theory of choice between organic, hybrid and inorganic growth strategies. *Corporate Communications*, 19(3), 247–259. doi:10.1108/CCIJ-11-2012-0080
- Angwin, D. (2007). *Mergers and acquisitions*. John Wiley & Sons, Ltd.
- Auerbach, A. J. (Ed.). (2008). *Mergers and acquisitions*. University of Chicago Press.
- Aureli, S. (2015). Performance of unlisted Italian companies acquired by multinationals from emerging Markets. *Journal of Organizational Change Management*, 28(5), 895–924. doi:10.1108/JOCM-12-2014-0233
- Ayadi, R., Boussemart, J., Leleu, H., & Saidane, D. (2013). Mergers and Acquisitions in European banking higher productivity or better synergy among business lines? *Journal of Productivity Analysis*, 39(2), 165–175. doi:10.1007/11123-012-0309-8
- Barney, J. B. (1988). Returns to bidding firms in mergers and acquisitions: Reconsidering the relatedness hypothesis. *Strategic Management Journal*, 9(S1), 71–78. doi:10.1002/mj.4250090708
- Bower, J. (2001, March). Not All M & As are Alike – and That Matters. *Harvard Business Review*, 93-101.
- Brown, D. T., & Ryngaert, M. D. (1991). The mode of acquisition in takeovers: Taxes and asymmetric information. *The Journal of Finance*, 46(2), 653–669. doi:10.1111/j.1540-6261.1991.tb02678.x
- Buono, A. F., Bowditch, J. L., & Lewis, J. W. III. (1985). When cultures collide: The anatomy of a merger. *Human Relations*, 38(5), 477–500. doi:10.1177/001872678503800506
- Cartwright, S., & Cooper, C. L. (2014). *Mergers and acquisitions: The human factor*. Butterworth-Heinemann.
- Cuypers, I. R., Cuypers, Y., & Martin, X. (2017). When the target may know better: Effects of experience and information asymmetries on value from mergers and acquisitions. *Strategic Management Journal*, 38(3), 609–625. doi:10.1002/mj.2502
- Damoiseau, Y., Black, W., & Raggio, R. (2011). Brand creation vs acquisition in portfolio expansion strategy. *Journal of Product and Brand Management*, 20(4), 268–281. doi:10.1108/10610421111148298
- Das, G. (2000). *India Unbound*. New Delhi: Penguin.
- Datta, D. K., & Grant, J. H. (1990). Relationships between type of acquisition, the autonomy given to the acquired firm, and acquisition success: An empirical analysis. *Journal of Management*, 16(1), 29–44. doi:10.1177/014920639001600103

- Davidsson, P., Delmar, F., & Wiklund, J. (2006). Entrepreneurship as growth: growth as entrepreneurship. In *Entrepreneurship and the Growth of Firms* (pp. 21–38). Edward Elgar Publishing. doi:10.4337/9781781009949.00009
- Delmar, F., Davidsson, P., & Gartner, W. B. (2003). Arriving at the high-growth firm. *Journal of Business Venturing*, 18(2), 189–216. doi:10.1016/S0883-9026(02)00080-0
- Deng, P., & Yang, M. (2015). Cross-border mergers and acquisitions by emerging market firms: A comparative investigation. *International Business Review*, 24(1), 157–172. doi:10.1016/j.ibusrev.2014.07.005
- Dutordoir, M., Roosenboom, P., & Vasconcelos, M. (2014). Synergy disclosures in mergers and acquisitions. *International Review of Financial Analysis*, 31, 88–100. doi:10.1016/j.irfa.2013.09.005
- Dutta, R., & Sundaram, K. P. M. (2004). *Indian Economy*. New Delhi: S Chand.
- Dyer, J., Kale, P., & Singh, H. (2004, July). When to Ally and When to Acquire? *Harvard Business Review*, 109-115.
- Frankel, M. E., & Forman, L. H. (2017). *Mergers and acquisitions basics: the key steps of acquisitions, divestitures, and investments*. John Wiley & Sons. doi:10.1002/9781119380726
- Friedman, Y., Carmeli, A., Tishler, A., & Shimizu, K. (2016). Untangling micro-behavioral sources of failure in mergers and acquisitions: A theoretical integration and extension. *International Journal of Human Resource Management*, 27(20), 2339–2369. doi:10.1080/09585192.2015.1042003
- Galloway, J. (Ed.). (2017). *Mergers and Acquisitions* (Vol. 3). Routledge.
- Garzella, S., & Fiorentino, R. (2014). A synergy measurement model to support the pre-deal decision making in mergers and acquisitions. *Management Decision*, 52(6), 1194–1216. doi:10.1108/MD-10-2013-0516
- Ghani, E., Kerr, W. R., & O'connell, S. (2014). Spatial determinants of entrepreneurship in India. *Regional Studies*, 48(6), 1071–1089. doi:10.1080/00343404.2013.839869
- Ghosh, S., & Dutta, S. (2014). Mergers and Acquisitions: A Strategic Tool for Restructuring in the Indian Telecom Sector. *Procedia Economics and Finance*, 11(11), 396–409. doi:10.1016/S2212-5671(14)00207-X
- Han, J., Jo, G. S., & Kang, J. (2016). Is high-quality knowledge always beneficial? Knowledge overlap and innovation performance in technological mergers and acquisitions. *Journal of Management & Organization*, 1–21.
- Hannan, T., & Pilloff, S. (2009). Acquisition Targets and Motives in the Banking Industry. *Journal of Money, Credit and Banking*, 41(6), 1167–1187. doi:10.1111/j.1538-4616.2009.00251.x
- Hassan, M., Patro, D., Tuckman, H., & Wang, X. (2007). Do mergers and acquisitions create shareholder wealth in the pharmaceutical industry? *International Journal of Pharmaceutical and Healthcare Marketing*, 1(1), 58–78. doi:10.1108/17506120710740289
- Hitt, M. A., Ireland, R. D., & Harrison, J. S. (2001). Mergers and acquisitions. *The Blackwell handbook of strategic management*, 377-402.

Mergers and Acquisition by Indian Firms

Hutzschenreuter, T., Kleindienst, I., & Schmitt, M. (2014). How mindfulness and acquisition experience affect acquisition performance. *Journal of Management Decision*, 52(6), 1116–1147. doi:10.1108/MD-07-2013-0376

Jalan, B. (2004). *The Indian Economy: Problems and Prospects Paperback*. New Delhi: Penguin.

Kar, R. N., Soni, A., & Singh, C. K. (2014). Assessing the Impact of Mergers and Acquisitions on Firm Performance: Evidence from India. *FOCUS: Journal of International Business*, 1(1), 39–67.

Kedia, B., & Reddy, R. (2015). Language and cross-border acquisitions: An exploratory study. *International Business Review*, (25): 1321–1332.

Koumanakos, E., Siriopoulos, C., & Georgopoulos, A. (2005). Firm acquisitions and earnings management: Evidence from Greece. *Managerial Auditing Journal*, 20(7), 663–678. doi:10.1108/02686900510611212

Krippendorff, K. (2004). Content analysis: An introduction to its methodology. *Sage (Atlanta, Ga.)*.

Kumar, N. (2009). How emerging giants are rewriting the rules of M&A. *Harvard Business Review*, 87(5), 115.

Lal, N. (2014). Mergers And Acquisitions In Banking Sector. *International Journal Of Research In Commerce & Management*, 5(5), 68–71.

Larsson, R., & Finkelstein, S. (1999). Integrating strategic, organizational, and human resource perspectives on mergers and acquisitions: A case survey of synergy realization. *Organization Science*, 10(1), 1–26. doi:10.1287/orsc.10.1.1

Lebedev, S., Peng, M. W., Xie, E., & Stevens, C. E. (2015). Mergers and acquisitions in and out of emerging economies. *Journal of World Business*, 50(4), 651–662. doi:10.1016/j.jwb.2014.09.003

Lee, W. I. (2017). The Strategies for Building a New Innovation Ecosystem to Create a Virtuous Cycle Structure between the Hyper-Competitive Environment and the Social Economic Sector in the 21st Century. *International Journal of Innovation, Management and Technology*, 8(2), 118.

Lovullo, D., Viguerie, P., Uhlaner, R., & Horn, J. (2007). Deals without delusions. *Harvard Business Review*, 85(12), 92–99. PMID:18283919

Manikandan, K. S., & Ramachandran, J. (2015). Beyond institutional voids: Business groups, incomplete markets, and organizational form. *Strategic Management Journal*, 36(4), 598–617. doi:10.1002/mj.2226

Maxwell, J. A. (1996). *Qualitative Research Design: An Interactive Approach*. Thousand Oaks, CA: Sage.

McKelvie, A., & Wiklund, J. (2010). Advancing firm growth research: A focus on growth mode instead of growth rate. *Entrepreneurship Theory and Practice*, 34(2), 261–288. doi:10.1111/j.1540-6520.2010.00375.x

Morgan, E. (2001). Innovation and Merger Decisions in the Pharmaceutical Industry. *Review of Industrial Organization*, 19(2), 181–197. doi:10.1023/A:1011144517789

Nahavandi, A., & Malekzadeh, A. (1988). Acculturation in Mergers and Acquisitions. *Academy of Management Review*, 13(1), 79–90. doi:10.5465/amr.1988.4306790

- Nalwaya, N., & Vyas, R. (2014). Merger and Acquisition in the Telecom Industry: An Analysis of Financial Performance of Vodafone Plc and Hutchison Essar. *Journal of Marketing Communications*, 9(3), 67–73.
- Nikandrou, I., & Papalexandris, N. (2008). Employee responses to acquisitions: Evidence from Greek firms. *Journal of Employee Relations*, 30(2), 104–120. doi:10.1108/01425450810843311
- Nolop, B. (2007). Rules to acquire by. *Harvard Business Review*, 85(9), 129. PMID:17886488
- Palmer, G., Parry, J., & Webb, M. (2005). Small unions and mergers: Evidence from two case studies. *Journal of Employee Relations*, 27(4), 340–353. doi:10.1108/01425450510605688
- Park, H., & Yoo, Y. (2017). A Literature Review On Chief Executive Officer Hubris And Related Constructs: Is The Theory Of Chief Executive Officer Hubris An Antecedents Or Consequences? *Journal of Applied Business Research*, 33(4), 705. doi:10.19030/jabr.v33i4.9990
- Paul, P., & Bhawsar, P. (2011). Japanese acquisition in India's Ranbaxy. *Competitiveness Review*, 21(Issue: 5), 452–470. doi:10.1108/10595421111171957
- Popping, R. (2000). *Computer-assisted text analysis*. Lanham, MD: University Press of America. doi:10.4135/9781849208741
- Rahman, M., & Lambkin, M. (2015). Creating or destroying value through mergers and acquisitions: A marketing perspective. *Industrial Marketing Management*, 46, 24–35. doi:10.1016/j.indmarman.2015.01.003
- Rani, N., Yadav, S. S., & Jain, P. K. (2015). Financial performance analysis of mergers and acquisitions: Evidence from India. *International Journal of Commerce and Management*, 25(4), 402–423. doi:10.1108/IJCoMA-11-2012-0075
- Rappaport, A., & Sirower, M. L. (1999). Stock or cash? The trade-offs for buyers and sellers in mergers and acquisitions. *Harvard Business Review*, 77, 147–159. PMID:10662003
- Rossi, M., & Vrontis, D. (2015). Biotechnological mergers and acquisitions: Features, trends and new dynamics. *Journal of Research in Marketing and Entrepreneurship*, 17(1), 91–109. doi:10.1108/JRME-07-2014-0013
- Roulston, K. (2010). Considering quality in qualitative interviewing. *Qualitative Research*, 10(2), 199–228. doi:10.1177/1468794109356739
- Roulston, K. (2011). Working through challenges in doing interview research. *International Journal of Qualitative Methods*, 10(4), 348–366. doi:10.1177/160940691101000404
- Rubin, H. J., & Rubin, I. S. (2011). *Qualitative interviewing: The art of hearing data*. Sage (Atlanta, Ga.).
- Shelton, L. M. (1988). Strategic business fits and corporate acquisition: Empirical evidence. *Strategic Management Journal*, 9(3), 279–287. doi:10.1002/mj.4250090307
- Strach, P., & Everett, A. (2006). Brand corrosion: Mass-marketing's threat to luxury automobile brands after merger and acquisition. *Journal of Product and Brand Management*, 15(2), 106–120. doi:10.1108/10610420610658947

Mergers and Acquisition by Indian Firms

Tang, R., & Metwalli, A. (2013). Mergers and acquisitions in India, Pakistan and Bangladesh. *International Journal of Commerce and Management*, 23(4), 327–338. doi:10.1108/IJCoMA-04-2013-0039

Uddin, M., & Boateng, A. (2009). An analysis of short-run performance of cross-border mergers and acquisitions. *Review of Accounting and Finance*, 8(4), 431–453. doi:10.1108/14757700911006967

Urbina, S. P. (1981). Methodological issues in the quantitative analysis of dream content. *Journal of Personality Assessment*, 45(1), 71–78. doi:10.1207/15327752jpa4501_14 PMID:16370753

Vazirani, N. (2015). A Literature Review on Mergers and Acquisitions Waves and Theories. *SIES Journal of Management*, 11(1), 1–9.

Wang, D., & Moini, H. (2016). Motivations, Valuation, and Performance Assessment in Cross-border Mergers and Acquisitions: Theory and Field Evidence. In *Perspectives on International Business*. Adonis & Abbey Publishers Ltd.

Weber, R. P. (1990). *Basic Content Analysis* (2nd ed.). Newbury Park, CA: Sage. doi:10.4135/9781412983488

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180. doi:10.1002/mj.4250050207

Yin, R. K. (2013). *Case study research: Design and methods*. Sage Publications.

Chapter 5

Digital Banking Services in Rural India: A Customer's Perspective

Ashoka M. L.

University of Mysore, India

Rakesh T. S.

SDM College (Autonomous), India

Madhushree S.

SDM College (Autonomous), India

ABSTRACT

Digitization or digitalization of banking services has established a strong network which supports a quick disbursement of banking services across the world. Digital banking service has enabled India to be more operative in reducing the transaction gaps between rural and urban areas. The awareness about cashless transactions has led to the complete transformation in online-banking services. The government initiatives as well as banks (private and public) efforts in implementing digital services such as internet banking, mobile banking, payment of various utility bills, online-ticket booking, digi-lockers for investors (investment), etc. has created a sense of technical significance among rural population. Favorable network condition plays a major role in making digital banking services more triumphant in both rural and urban India. The chapter reveals the ideology of customer's satisfaction towards the digital banking services in Belthangady Taluk, Dakshina Kannada district.

INTRODUCTION

Indian economy constitutes almost 60% of rural population which means majority community. India being a developing economy the technological innovations in banking sector effects the rural population in large. The consciousness of understanding and utilization of wide range of digital banking services is a key factor which apprehends the success of a digital economy. India has the highest number of bank

DOI: 10.4018/978-1-5225-7095-0.ch005

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branches in the world. According to IMF data for 2015 there were over 1.2 lakh bank branches in India. RBI data as on June 2016 quarter shows over 1.3 lakh bank branches in India. The regional-wise distribution of banks is almost equal in urban and rural sector (Data: RBI, June 2016). Financial inclusion drive in India has contributed to the success of opening accounts in banks, as on 6.12.2017, total 30.71 crore accounts have been opened under Pradhan Mantri Jan Dhan Yojana (PMJDY), including 18.05 crore accounts opened in rural/semi-urban areas. The government has already rolled out direct transfer of benefits for various programmes. This includes the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) in 300 districts that's expected to cover 4.3 crore beneficiaries with a fund flow of Rs 15,000 crore annually besides transfers under various pension and scholarship schemes and even cooking gas subsidies are also being transferred to 15.34 active consumers and even government has vision to move to a cash-less society in the long run. So banks have a big role to play in the nearest future along with traditional banking. Technology up gradation is an inevitable aspect to face challenges. The level of consumer awareness is significantly higher as compared to previous years. Now-a-days they need internet banking, mobile banking and ATM services (Goyal & Joshi, 2012). In the world of banking, the development of information technology has an enormous effect on development of more flexible payments methods and more-user friendly banking services. Internet banking involves, consumer using the internet to access their bank account and to undertake banking transactions. At the basic level, Internet banking can mean the setting up of a web page by a bank to give information about its products and services. At an advanced level, it involves provision of facilities such as accessing accounts, transferring funds, and buying financial products or services online. This is called "transactional" online banking (Sathye, 1999). In India, slowly but steadily, the Indian customer is moving towards Internet banking. But they are very concerned about the security and privacy of internet banking (Malhotra & Singh, 2009). Mobile banking services introduced under Digital Payments in banks, such as Unified Payments Infrastructure (UPI) including BHIM (Bharat Interface for Money) mobile app developed by National Payments Corporation of India (NPCI), Bharat Bill Payment System (BPSS), mobile money, e-wallets, payment aggregation etc. have created a milestone to outreach enormous population with respect to digital banking services in rural India. Some of the other revolutionary developments in Indian banking sector like launch of payment banks which provide digital wallets like –Paytm, Mobikwik, Free Charge apps have contributed for the smooth transaction flow with respect to digital payments are concerned. It has created a wider space and scope for the digital banking services especially in rural sectors of India. Strong digital infrastructure and secured digital banking services are mandatory to enhance the utilization of online banking services to be more ubiquitous in rural sector. Right information dissemination on digital services and proper cyber protection laws which govern the financial transactions which restricts cyber-crime is the need of the hour.

In this background, this study is undertaken with the following objectives:

1. To analyse the factors of consideration to utilize digital banking services by rural banking customers in Belthangady Taluk.
2. To ascertain the level of awareness on digital banking services and its security norms.
3. To assess the implications of customers perspective towards satisfaction on digital banking services with respect to internet & mobile banking.
4. To understand the convenience level of the rural customers in using digital banking services.

LITERATURE REVIEW

Rani (2012) consumers are using various services provided by their respective banks and the highest used services are the ATM & bill payment across various income groups followed by viewing of the account history. Sudhagar (2012) highlights the power of the credit card through which consumers are allowed to buy goods and services based on the holder's promise to pay for these goods and services. The issuer of the card creates a revolving account and grants a line of credit to the consumer (or the user) from which the user can borrow money for payment to a merchant or as a cash advance to the user. Lal and Saluja (2012) highlights the challenges faced by Indian banks in adoption of technology and recommendations are made to tackle these challenges. (Kamel, 2005) highlighting the role of the information technology to transform the banking sectors of the developing countries and also identified that these banks are investing heavily in technology to maintain a competitive edge, to contribute to the development of the community at large, and to demonstrate their added value to the society. Sureshchandar et al. (2003) investigated the critical factors of customer perceived service quality in banks of a developing economy – India and identifies the factors that discriminate the three groups of banks. Customers in developing economies seem to keep the “technological factors” of services such as core service and systematization of the service delivery as the yardstick in differentiating good and bad service while the “human factors” seem to play a lesser role in discriminating the three groups of banks. The service quality indices with respect to the three groups and the Indian banking industry as whole, offer interesting information on the level of service quality delivered by banks in India. Kesharwani and Singh Bisht (2012) reveals that perceived risk has a negative impact on behavioural intention of internet banking adoption and trust has a negative impact on perceived risk. A well-designed web site was also found to be helpful in facilitating easier use and also minimizing perceived risk concerns regarding internet banking usage. Therefore, banks need to give attention to the inhibitors or perceived risk factors of internet banking adoption in order to retain existing customers as well as attract new consumers. Arunachalam and Sivasubramanian (2007) tried to highlight the futuristic banking facilities/services requirement like internet and mobile banking facilities for the developing country like India which leads the banks to be proactive and adopt a range of measure to shape their future. Mukherjee and Nath (2003) highlighting the role of trust encompasses the exchanges and interactions of a retail bank with its customers on various dimensions of online banking. Specifically lays stress on the bank-to-customer exchanges taking place through the technological interface. AlSudairi (2012) discussed various models related to online banking for the customer satisfaction which can lead to build and measure an innovative e-service model that is applicable to evaluate the web-based internet banking service quality. Jamaluddin (2013) Information technology has not only simplified the operation but it has also given a great comfort an individual who does not have a god knowledge of IT but need to access banking in an optimum manner (Chavan, 2013). Online banking has a lot of benefits which add value to customers' satisfaction in terms of better quality of service offerings and at the same time enable the banks gain more competitive advantage over other competitors. Ainin, Lim, and Wee (2005) illustrated that there was more adopters among the youngsters age groups, among those with higher salaries and those holding higher positions. Datta (2010) investigates the factors which are affecting the acceptance of e-banking services among adult customers and also indicates level of concern regarding security and privacy issues in Indian context. Sikdar and Makkad (2013) highlights the benefits of internet banking which provides from the point of view of bank's customers as well the banking organisation. Nayak et al. (2017) highlighted the need of the technology to reach more consumers across the country to convert the whole economy into

cashless economy. Digitalization of transactions is the best way to move towards cashless economy. Such a cashless economy may be achievable by promoting electronic money instruments, developing financial infrastructure and spreading digital transaction habits among people. Semi-urban and rural markets are currently growing at a pace faster than the larger centers and, consequently, a large proportion of the recent branch expansion has been in these areas. The focus is to make the branches a single point interface for all services. Technology is a great enabler for financial inclusion, which includes Branch and Wheels, a mobile-van-based branch that aims at providing banking services to a cluster of remote unbanked villages. Ashoka et al. (2017) highlighted the issue related to the internet and mobile banking usage and its impact on the consumers and their satisfaction towards the facilities offered by the nationalized banks in the rural part of the India. Nair and Gupta (2018) tried to highlight the consumer awareness of the people towards financial inclusion by conducting a study on Mahanagar Co-op Bank in Kharghar, Mumbai and found that there was no Association between demographic variables and some of the financial inclusion services (Sangeeta & Simarpreet, 2018). E-Banking services have gained a lot of attention due to its in enormous advantages, many consumers are still not willing to use them because of the risk involved in the conducting transactions online, hidden charges, lack of trust and system failure. Priya et al., (2018) analyses the factors affecting mobile banking adoption among young Indian consumers and perceived risk was found to be statistical insignificant in terms of its relationship with behavioral intention to use the mobile banking services. Chawla and Joshi (2018) providing insights into the factors influencing consumers' attitude to adopt mobile banking applications and highlights demographical characteristics like Gender, age, qualification experience, occupation, income and marital status with significant moderate variables. But educational qualification of the consumers didn't show moderate effect on mobile banking application. Gupta and Gupta (2018) highlighted the four demographic characteristics (Age, education level, professional, and income) of the consumers which has influenced their awareness level towards technology and Banking services. Chawla and Joshi (2011) identifies the factors influence is mobile banking adoption and examine the perceptions, attitudes and intentions of mobile users. (Gupta et al., 2017) reveal the important role of perceived risk and control in influencing consumers' intention to adopt mobile banking. Perceived risk and control significantly influenced mobile banking adoption by customers in urban areas, but only perceived control significantly influence mobile banking adoption by metropolitan customers. Ashoka and Vinay (2017) tried to examine the acceptance of new generation banking products among customers and its relationship with that age, occupation and educational qualification and highlighted the educational qualification has nothing to do with usage of digital banking products and they suggested that more awareness is need to be created among the senior age groups individuals. Vidyapriya and Mohanasundari (2015) highlighted the rural customers and not widely open to the banking service offered to then and these is urgent need of the spreading the awareness among the common people. Bhardwaj and Aggarwal (2016) identifies the factors that influence the attitude towards mobile banking adoption and found trust and social influence equally important influencing the attitude for adoption as perceived usefulness and ease of use. Dasgupta et al. (2011) investigates the antecedents to behavioural intention of mobile banking usage of Indian customers and apart from the traditional TAM variables like Perceived usefulness and Perceived Ease of Use, factors like Perceived image, Perceived Value, Self-Efficacy, Perceived Credibility and Tradition all significantly affects Behavioural Intentions towards mobile banking usage.(Mittal & Kumar, 2018) highlighted the initiation taken by the Government of India to promote cashless transactions by offering attractive deals, discounts and cashback for the those customers who are using mobile wallets and also tried to analyses the types of transactions carried out by the customers and their preference

while selecting an m-wallet for payments. Rajanna (2017) highlighted that many rural bank customers are not aware of mobile banking and online banking and customers who are using internet has lack of awareness, no proper guidance, fear attached with the personal information may get revealed and risk cyber-crimes etc. and there is need for training these people to create more interest in using e-banking facility. Vinayagamorthy and Ganesan (2015) highlighted the core features and functions of the internet banking which are offered to Indian consumers along with multiple modes of accessing banking transactions, including Tele-banking, mobile banking, PC banking and banking through ATMs. It has the core features and functions designed to improve the consumer's retention and adoption while placing the utmost emphasis on system security.

The above review of literature explains that no more study has been undertaken in Belthangady taluk especially to know the "Consumers' Perception towards Internet and Mobile banking". To fill the gap this study has been taken up.

LIMITATIONS OF THE STUDY

- The study is based on samples of 400 Nationalized Bank's net banking and mobile banking users (respondents) of Belthangady taluk, Dakshina Kannada district.
- The generalizations made in the study are applicable only for Belthangady taluk, Dakshina Kannada district.

RESEARCH METHODOLOGY

The study that has been undertaken is a minor research study. So based on the objectives of the study the research methodology is adopted for carrying out the study. The collection of data is mainly on the basis of two methods. (a) Primary Data: The primary data has been collected through questionnaires. The respondents for the study were selected at various levels; sampling was done on the basis of simple random sampling method. A sample size taken for the present study is 385 with a margin of error at 3% and confidence level at 95% (Krejcie & Morgan, 1970) and it has been rounded off to 400 (as the total population of the Belthangady taluk is more than 1 lakh with referencing to the table stated in the paper work authored by R.V. Krejcie and D.W. Morgan (1970). Questionnaires were distributed to collect the primary data in the form of responses and opinion from the respondents. The data collected was analysed and interpreted with the tables, figures and charts. "Content score technique" has been used for analysing the factors influencing the purchase behaviour of consumers and Chi-square tool has been used to test the hypotheses. Among total 400 respondents interviewed, 64% of the respondents are male and 34% are female respondents. (b) Secondary Data: Secondary data has been collected from many sources. The major sources of secondary data are various journals, magazines, and websites.

DATA ANALYSIS AND INTERPRETATION

Table 1 indicates the cross tabulation of respondents age, occupation and their internet and mobile banking usage. Out of the total respondents interviewed, 60 were students, who are aged between a range of 26-35

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Table 1. Customers' age and their using net and mobile banking for the transaction purposes along with their occupation cross tabulation

Occupation	Age	using Net and Mobile banking for the transaction purposes					Total	%
		Occasionally	Frequently	Never	Often	very often		
Student	26-35	54	6				60	15
House-wife	18-25	6	0				6	1.5
	36-45	0	55				55	13.7
Private employees	18-25			0	0	38	38	9.5
	36-45			55	0	0	55	13.7
	60 above			0	42	0	42	10.5
Government employees	46-60				51		51	12.8
Businessman	26-35			42		0	42	10.5
	60 above			0		51	51	12.7
Total		60	61	97	93	89	400	100

Source: Primary Data

years and they use internet and mobile banking for the transaction purpose (54 respondents stated that they use it occasionally and 6 stated that they use frequently). Out of 400 respondents, 61 were House-wife's, 6 respondents are aged between 18-25 year and use the net and mobile banking occasionally, rest 55 respondents (house-wife's) are aged between 36-45 years and use the net and mobile banking frequently. Out of 400 respondents 135 were private employees in which 38 use the net and mobile banking for the financial transactions, but rest 55 respondents stated that they never use this facility. 51 respondents were government employees who utilize the net and mobile banking for the transaction purpose. Out of 400 respondents interviewed 93 respondents were businessman, in which 42 respondents are aged between 25-35 year, stated that they never use the net and mobile banking for the transactions and remaining 51 respondents are aged above 60 years, stated that they use this facility transactions.

Table 2 reveals that 62% of the respondents have savings account and 24% of the respondents are having loan account. Whereas 13% of the respondents are having fixed deposits account and only 2% respondents are having current account.

Table 3 reveals that 39% respondents are using the internet for more than a year. 27% respondents are using the internet between 6 to 12 months. 18% respondents are using the internet between the 1 to 6 months. Less than a month is like 16% of the respondents.

Table 4 indicates that, 22% respondents visit their bank's branch over 12 times in a month. Whereas, 23% respondents visit their bank's branch 8 to 12 times. 27% respondents visit their bank's branch 3 to 8 times. 12% respondents visit their bank's branch less than one time.

Table 5 indicates the reasons for customers visit to their bank's branch. 36% of the customers stated that they visit their bank's branch to withdraw cash. 27% of the customers stated that they visit their bank for enquire about the balances and to get their pass book updated. 24% of the respondents stated

Table 2. Kinds of account held by customers

Particulars	Frequency	Percent
Current account	6	1.5
Savings account	246	61.6
Loan account	97	24
Fixed Deposit account	51	12.8
Total	400	100

Source: Primary Data

Table 3. Duration of using the bank's Internet and mobile banking facilities by the customers

Particulars	Frequency	Percent
Less than a month	64	16
1 to 6 months	72	18
6 to 12 months	109	27.2
More than a year	155	39.2
Total	400	100

Source: Primary Data

Table 4. Frequency of visiting banks branch by the Customers

Particulars	Frequency	Percent
Less than 1	48	12
1 to 3 times	60	15.2
3 to 8 times	110	27.2
8 to 12 times	93	23.2
Over 12 times	89	22.4
Total	400	100

Source: Primary Data

Table 5. Reasons for customers visiting the bank

Particulars	Frequency	Percent
to make a deposit	48	12
to get advice for investment options	99	24.8
to enquire about balances	109	27.2
to withdraw cash	144	36
Total	400	100

Source: Primary Data

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that they visit their branch to get advice on investment options. 12% of the respondents stated that they visit their branch to deposit the funds.

Table 6 reveals the factors which influence the respondents to prefer mobile and internet banking services of Bank. Curiosity, ease to use and quick payments and convenience factors ranks fifth and awareness of the services and its benefits ranks fourth. The cost of using internet banking ranks fourth. The safety and security of transacting over the internet scored third rank. The access to computer or internet factor ranks second and easy to maintain my banking transactions factor ranks at 1st place.

Table 7 reveals about respondents' usage of internet and mobile banking with respect to their bank in Belthangady taluk. 23% stated that they use internet banking for the purpose of downloading the applications. 14% of the respondents stated that they use internet banking to apply for consumer loans or credit card facility through online. 14% of the respondents implicated that they use internet and mobile banking for the inter accounts transfers. 10% stated that they use internet and mobile banking for the online bill payments.

Table 6. Factors which effect the customers' to prefer mobile banking and Internet banking services

Particulars	Content Score	Percentage	Ranks
Awareness of the services and its benefits	1130	10.45	IV
Easy to use and quick payments	1110	10.27	V
The safety and security of transacting over the internet	1245	11.52	III
The cost of using internet banking	1236	11.43	IV
The access to computer or internet	1289	11.92	II
Curiosity	1110	10.27	V
Low service charge	1290	11.93	I
Convenience	1110	10.27	V
Easy to maintain my banking transactions	1290	11.93	I
Total	10810	100	

Source: Primary Data

Table 7. Customers' usage of Internet banking and mobile banking

Particulars	Frequency	Percent
Seeking product and rate information	6	1.5
Calculate loan payment information	6	1.5
Download loan applications	93	23.2
Download personal bank transaction activity	51	12.8
Check balances on-line	51	12.8
Apply for consumer loans or credit cards online	54	13.5
Inter account transfers	55	13.8
On-line bill payments	84	21
Total	400	100

Source: Primary Data

Table 8 reveals that the most important reason that respondents chose the bank for internet and mobile banking. 51% of the respondents implicated that they have chosen bank’s internet and mobile banking because of the brand name of the bank. 37% of the respondents opinioned that they have chosen bank’s internet and mobile banking because of the excellent service offered by the bank and the rest 12% respondents states that they have chosen bank’s internet and mobile banking just because they have traditional bank account with the same bank.

Table 9 indicates that, 27% of the respondents stated that the first thing which comes to their mind about their bank is “Customer service” and 23% of the respondents stated that the first thing which comes to their mind is reduced risk of carrying cash and with enhanced Digital banking services and 23% of the respondents stated that the first thing which comes to their mind is core banking. The remaining 24% of the respondents’ opinion that the first thing which comes to their mind is wide branch network.

HYPOTHESIS TESTING USING CHI-SQUARE TEST

Hypothesis

1. **Null Hypothesis (H_0):** Demographical factors are not significantly influences on using Net and Mobile banking for the transaction purposes
2. **Alternate Hypothesis (H_1):** Demographical factors are significantly influences on using Net and Mobile banking for the transaction purposes

Table 8. Reason for customers to choose nationalized bank’s mobile and Internet banking

Particulars	Frequency	Percent
I have a traditional bank account with the same bank	48	12
The brand name of the bank	204	51
The excellent service offered by this bank	147	37
Total	400	100

Source: Primary Data

Table 9. Factors that influences the customers’ when they think about the nationalized bank

Particulars	Frequency	Percent
Personalized service	6	1.5
Wide branch network	99	24.8
customer service	109	27.2
Reduced risk of carrying cash and with enhanced Digital banking services	93	23.2
Core banking	93	23.2
Total	400	100

Source: Primary Data

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Table 10. Cross-tabulation of consumers' gender and their using net & mobile banking

Gender	using Net and Mobile banking for the transaction purposes					Total	Chi-Square Value	df	Asymp. Sig. (2-sided)	Result
	Occasionally	Frequently	Never	Often	very often					
Male	54	55	58	48	41	256	55.089	4	.000	Reject H ₀
Female	6	6	39	45	48	144				
Total	60	61	97	93	89	400				

Source: Compiled from the primary data

H₀a: There is no significance factors influence on using net and mobile banking for the transaction purposes between male and female

The above table 10 present the critical (or table) value of $\chi^2 = 14.860$ at significance level (α) = 0.05 and degree of freedom (df) =4. Since the calculated value of $\chi^2 = 55.089$ is greater than its critical value, the null hypothesis is rejected. Hence, we concluded that there is a significant factors influence on using Net and Mobile banking for the transaction purposes between male and female.

H₀b: There is no significance factors influence on using Net and Mobile banking for the transaction purposes between various age groups

Table 11 presents the critical (or table) value of $\chi^2 = 34.267$ at significance level (α) = 0.05 and degree of freedom (df) =16. Since the calculated value of $\chi^2 = 7.021$ is lesser than its critical value, the null hypothesis is accepted. Hence, we concluded that there is no significant factors influence on using Net and Mobile banking for the transaction purposes between various age groups.

H₀c: There is no significance factors influence on using Net and Mobile banking for the transaction purposes between various occupation groups

Table 11. Cross-tabulation of consumers' age and their using net & mobile banking

Age	using Net and Mobile banking for the transaction purposes					Total	Chi-Square Value	df	Asymp. Sig. (2-sided)	Result
	Occasionally	Frequently	Never	Often	very often					
18-25	6	0	0	0	38	44	7.021	16	0	Accept H ₀
26-35	0	6	42	0	0	48				
36-45	0	55	55	0	0	110				
46-60	54	0	0	51	0	105				
60 >	0	0	0	42	51	93				
Total	60	61	97	93	89	400				

Source: Compiled from the primary data

Table 12. Cross-tabulation of consumers' occupation and their using net & mobile banking

Occupation	using Net and Mobile banking for the transaction purposes					Total	Chi-Square Value	df	Asymp. Sig. (2-sided)	Result
	Occasionally	Frequently	Never	Often	very often					
Student	54	6	0	0	0	60	8.77	16	0.000	Accept H_0
House-wife	6	55	0	0	0	61				
Private employee	0	0	55	42	38	135				
Govt employee	0	0	0	51	0	51				
businessman	0	0	42	0	51	93				
Total	60	61	97	93	89	400				

Source: Compiled from the primary data

Table 12 presents the critical (or table) value of $\chi^2 = 34.267$ at significance level (α) = 0.05 and degree of freedom (df) =16. Since the calculated value of $\chi^2 = 8.77$ is lesser than its critical value, the null hypothesis is accepted. Hence, we concluded that there is no significant factors influence on using Net and Mobile banking for the transaction purposes between various consumers' occupation groups.

H_{0d} : There is no significance influence on using Net and Mobile banking for the transaction purposes between various educational qualification levels

Table 13 presents the critical (or table) value of $\chi^2 = 34.267$ at significance level (α) = 0.05 and degree of freedom (df) =16. Since the calculated value of $\chi^2 = 28.505$ is lesser than its critical value, the null hypothesis is accepted . Hence, we concluded that there is no significant factors influence on using Net and Mobile banking for the transaction purposes between various educational qualification levels.

Table 13. Cross-tabulation of consumers' education qualification and their using net & mobile banking

Education	using Net and Mobile banking for the transaction purposes					Total	Chi-Square Value	df	Asymp. Sig. (2-sided)	Result
	Occasionally	Frequently	Never	Often	very often					
School level	0	0	1	4	1	6	28.505	16	0.027	Accept H_0
P.U	13	6	21	16	14	70				
UG Degree	27	25	28	46	36	162				
Professional	9	17	30	13	27	96				
PG	10	12	15	12	9	58				
Total	59	60	95	91	87	392				

Source: Compiled from the primary data

Hypothesis

1. **Null hypothesis (H_0):** Customers are satisfied with Nationalized Banks' Internet and Mobile Banking facilities
2. **Alternate Hypothesis (H_1):** Customers are not satisfied with Nationalized Banks' Internet and Mobile Banking facilities

Level of significance: 5%

Since the p value 0.003 is less than 0.05 confidence level, ($p < 0.05$ (i.e.) $0.003 < 0.05$) we accept Null Hypothesis and reject alternative hypothesis. Therefore, respondents are satisfied with internet and mobile banking facilities provided by the Nationalized Bank in Belthangady taluk.

Table 14 shows customers' satisfaction level towards nationalised bank's mobile and internet banking services. Table 15 shows Chi-square test.

FINDINGS

- 27% of the respondents opinioned "Good" for overall service provided by the bank.
- 73% of the respondents stated that they are very much happy that nationalized bank has fulfilled their needs.
- 51% of the respondents implicated that they have chosen nationalized bank's internet and mobile banking because the brand name of the banks.

Table 14. Customers' satisfaction level towards nationalized bank's mobile and internet banking services

Particulars	Observed N	Expected N	Residual
Highly Dissatisfied	93	80	13
Dissatisfied	61	80	-19
Neutral	80	80	-20
Satisfied	89	80	9
Highly Satisfied	97	80	17
Total	400		

Source: Primary Data

Table 15. Chi-square test

	Satisfaction Level towards Internet and Mobile Banking
Chi-Square	16.250 ^a
Df	4
Asymp. Sig.	0.003

- Easy to maintain my banking transactions ranks first by scoring 1290 out of 10810 total content score. Curiosity, ease to use and quick payments and convenience factors ranks fifth by scoring 1110 out of 10810 total content score respectively.
- 87% of the respondents stated that they would like to recommend nationalized bank to their friends, relatives and associates.

CONCLUSION

India is one among the rapidly emerging economies of the world. Sustainable development and robust economic development are the key drivers of any economy. Refined financial policies equipped with digitalization, with proper implementation and execution standards will lead to transparency and superior corporate governance, which in turn reduces the parallel cash-based economy. Such progress could be convenient to the rural India to embrace the digital banking transactions. The digital opportunities need to be considered for market dynamics by the various banks in India. Indian nationalized banks have established a wider penetration to rural India through their 50% of the branches operating in rural parts of the country and providing better banking services to the rural population, when compared to private sector banks. Considering the corpus of opportunities, still there is a lot of necessary detailing required for banking reforms to be adequately adopted by the banks. The banks need to financially educate their customers on pros and cons of usage of internet and mobile banking for enabling digital transactions. This survey extrapolates the major problems of the customers which restrict them by using net banking/mobile banking. Well-defined and secured financial transactions, secured payment gateways, enhanced cyber security laws which govern digital transactions, privacy and confidentiality of data etc., should encourage the internet banking and mobile banking in rural India. It can be significantly noticed that the maximum internet bank account holders and mobile banking facility users are youth and businessmen's at large. Considering the facts and figures banks have more responsibility of creating a proper awareness drive to educate the rural customers to use either internet or mobile banking facilities to encash the benefits in lieu. Looking forward the banks should make their websites friendlier so that the customers can access their accounts and transact with ease. India has set a global platform and transforming into a technological hub. With the changing scenario, people are accepting the technological change, but there is a perceptual delay which has become an obstacle for the growth of internet and mobile banking. Going cashless is a decisive tool taken by the Government of India to fight against corruption and curb black money which will in turn boost up the urban and rural usage of internet and mobile banking. Thus cashless economy will definitely ignite the customers to switch over to internet and mobile banking in the country.

REFERENCES

- Ainin, S., Lim, C. H., & Wee, A. (2005). Prospects and Challenges of e-banking in Malaysia. *The Electronic Journal on Information Systems in Developing Countries*, 22. Retrieved from <http://ejisd.org/ojs2/index.php/ejisd/article/view/163>
- Akinci, S., Aksoy, S., & Atilgan, E. (2004). Adoption of internet banking among sophisticated consumer segments in an advanced developing country. *International Journal of Bank Marketing*, 22(3), 212–232. doi:10.1108/02652320410530322
- AlSudairi, M. A. T. (2012). E-service quality strategy: Achieving customer satisfaction in online banking. *Journal of Theoretical and Applied Information Technology*, 38(1). Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.299.8787&rep=rep1&type=pdf>
- Arora, S., & Kaur, S. (2018). Perceived risk dimensions & its impact on intention to use e-banking services: A conceptual study. *Journal of Commerce & Accounting Research*, 7(2).
- Arunachalam, L., & Sivasubramanian, M. (2007). The future of internet banking in India. *Academic Open Internet Journal*, 20.
- Ashoka, M. L., Rakesh, T. S., & Madhushree, S. (2017). Consumer Perception and Satisfaction Towards Internet Banking and Mobile Banking with Reference to Nationalized Banks in Rural India. *International Journal of Asian Business and Information Management*, 8(4), 29–40. doi:10.4018/IJABIM.2017100103
- Ashoka & Vinay. (2017). Customer Acceptance of Millennial Generation Banking Services: *Challenges and Prospects*. Available at SSRN: <https://ssrn.com/abstract=2929837>
- Basavaraj, K. (2013). Customers Preference And Satisfaction Towards Banking Services With Special Reference To Shivamogga District In Karnataka. *Trans Asian Journal of Marketing & Management Research*, 28. Retrieved from <http://www.tarj.in/images/download/AJMMR/TAJMMR%20CONTENTS%20JANUARY%202013%20COMPLETE%20-%20PDF/1.3,%20RAVI%20C.S.pdf>
- Bhardwaj, M., & Aggarwal, R. (2018). *Understanding Dynamics of Mobile Banking Adoption by Youth: Empirical Evidence from India*. FIIB Business Review.
- Bhat, L. A., & Bhat, B. J. (2013). Automated Teller Machines (ATMs): The Changing Face of Banking in India. *IUP Journal of Bank Management*, 12(4), 16.
- Brown, I., Hoppe, R., Mugera, P., Newman, P., & Stander, A. (2004). The Impact of National Environment on the Adoption of Internet Banking: Comparing Singapore and South Africa. *Journal of Global Information Management*, 12(2), 1–26. doi:10.4018/jgim.2004040101
- Chavan, J. (2013). Internet banking-Benefits and challenges in an emerging economy. *International Journal of Research in Business Management*, 1(1), 19–26.
- Chawla, D., & Joshi, H. (2017). Consumer perspectives about mobile banking adoption in India—a cluster analysis. *International Journal of Bank Marketing*, 35(4), 616–636. doi:10.1108/IJBM-03-2016-0037
- Chawla, D., & Joshi, H. (2018). The Moderating Effect of Demographic Variables on Mobile Banking Adoption: An Empirical Investigation. *Global Business Review*, 19(3), S90-S113.

- Daniel, E. (1999). Provision of electronic banking in the UK and the Republic of Ireland. *International Journal of Bank Marketing*, 17(2), 72–83. doi:10.1108/02652329910258934
- Das, S. C., Satpathy, I., Patnaik, B. C. M., & Panch, N. (n.d.). *Government Initiatives for Rural Banking: An Overview*. Academic Press.
- Dasgupta, S., Paul, R. I. K., & Fuloria, S. (2011). Factors affecting behavioral intentions towards mobile banking usage: Empirical evidence from India. *Romanian Journal of Marketing*, (1), 6.
- Datta, S. K. (2010). Acceptance of e-banking among adult customers: An empirical investigation in India. *Journal of Internet Banking and Commerce*, 15(2), 1.
- Gebreslassie, T. W. (2017). *E-Business Strategy to Adopt Electronic Banking Services in Ethiopia*. Academic Press.
- George, A., & Gireeshkumar, G. S. (2012). Risks in Internet Banking: Sample Evidence from Idukki District, Kerala. *IUP Journal of Bank Management*, 11(3), 53.
- Goyal, K. A., & Joshi, V. (2012). Indian banking industry: Challenges and opportunities. *International Journal of Business Research and Management*, 3(1), 18–28.
- Gupta, R., & Gupta, A. (2018). Awareness Among Rural Customers About Customers about Electronic Banking. *Digitalization*, 10(4).
- Gupta, S., Yun, H., Xu, H., & Kim, H. W. (2017). An exploratory study on mobile banking adoption in Indian metropolitan and urban areas: A scenario-based experiment. *Information Technology for Development*, 23(1), 127–152. doi:10.1080/02681102.2016.1233855
99. Indian households are covered by a bank account - Livemint. (n.d.). Retrieved March 25, 2018, from <https://www.livemint.com/Specials/vVKbQ0cMmiNbdwOlfD0Z4N/99-Indian-households-are-covered-by-a-bank-account.html>
- Internet banking in India. (n.d.). Retrieved July 24, 2015, from https://www.google.co.in/?gfe_rd=cr&ei=j3eyVciJG6zv8weYzrbYBw&gws_rd=ssl#q=internet+banking+in+India.pdf
- Jamaluddin, N. (2013). *E-Banking: Challenges and Opportunities in India*. In *Proceedings of 23rd International Business Research Conference* (pp. 1–15). Melbourne, Australia: Marriott Hotel. Retrieved from http://www.academia.edu/7787990/1384600741_607-Jamal
- Joshua, A. J., & Koshy, M. P. (2011). Usage patterns of electronic banking services by urban educated customers: Glimpses from India. *Journal of Internet Banking and Commerce*, 16(1), 1–12.
- Kamel (2005). *The use of information technology to transform the banking sector in developing nations*. Academic Press. Doi:10.1002/itdj.20023
- Kamel, S. (2005). *The use of information technology to transform the banking sector in developing nations*. Taylor & Francis.
- Karjaluoto, H., Riquelme, H. E., & Rios, R. E. (2010). The moderating effect of gender in the adoption of mobile banking. *International Journal of Bank Marketing*, 28(5), 328–341. doi:10.1108/02652321011064872

Digital Banking Services in Rural India

- Kesharwani, A., & Singh Bisht, S. (2012). The impact of trust and perceived risk on internet banking adoption in India: An extension of technology acceptance model. *International Journal of Bank Marketing*, 30(4), 303–322. doi:10.1108/02652321211236923
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610. doi:10.1177/001316447003000308
- Laforet, S., & Li, X. (2005). Consumers' attitudes towards online and mobile banking in China. *International Journal of Bank Marketing*, 23(5), 362–380. doi:10.1108/02652320510629250
- Laforet, S., & Li, X. (2005). Consumers' attitudes towards online and mobile banking in China. *International Journal of Bank Marketing*, 23(5), 362–380. doi:10.1108/02652320510629250
- Lal & Saluja. (2012). E-Banking: The Indian Scenario. *Asia Pacific Journal of Marketing & Management Review.*, 1(4), 16–25.
- Little known facts about India's banking network - Business Line. (n.d.). Retrieved March 25, 2018, from <https://www.thehindubusinessline.com/economy/infographic-little-known-facts-about-indias-banking-network/article9381949.ece>
- Malhotra, P., & Singh, B. (2009). Analysis of Internet banking offerings and its determinants in India. *Internet Research*, 20(1), 87–106. doi:10.1108/10662241011020851
- Mittal, S., & Kumar, V. (2018). Adoption of Mobile Wallets in India: An Analysis. *IUP Journal of Information Technology*, 14(1), 42–57.
- Mukherjee, A., & Nath, P. (2003). A model of trust in online relationship banking. *International Journal of Bank Marketing*, 21(1), 5–15. doi:10.1108/02652320310457767
- Nair, S., & Gupta, G. (2018). Consumer Awareness towards Financial Inclusion in India: A Study on Mahanagar Co Op Bank Ltd, Mumbai. In *Marketing Techniques for Financial Inclusion and Development* (pp. 165–185). IGI Global. doi:10.4018/978-1-5225-4035-9.ch009
- Nayak, S. S., Panda, S. N., & Mishra, M. A. (2017). Prospects and challenges of cashless rural economy: An analysis. *International Education and Research Journal*, 3(9).
- Priya, R., Gandhi, A. V., & Shaikh, A. (2018). Mobile banking adoption in an emerging economy: An empirical analysis of young Indian consumers. *Benchmarking: An International Journal*, 25(2), 743–762. doi:10.1108/BIJ-01-2016-0009
- PTI. (n.d.). *Jan DhanYojna makes it to Guinness World Records, 11.5 cr Jan Dhan accounts opened*. Retrieved from http://economictimes.indiatimes.com/articleshow/45955376.cms?intenttarget=no&utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
- Rani, M. (2012). A study on the Customer Perception towards E-banking in Ferozpur District. *ZENITH. International Journal of Multidisciplinary Research*, 2(1). Retrieved from <http://www.zenithresearch.org.in/images/stories/pdf/2012/Jan/ZIJMR/8%20%20MALIKA%20RANI%20A%20STUDY%20ON%20THE%20CUSTOMERS%20PERCEPTION%20TOWARDS%20E-BANKING.pdf>

- Sathye, M. (1999). Adoption of Internet banking by Australian consumers: An empirical investigation. *International Journal of Bank Marketing*, 17(7), 324–334. doi:10.1108/02652329910305689
- Sathye, M. (2005). Privatization, performance, and efficiency: A study of Indian banks. *Vikalpa*, 30(1), 7–16. doi:10.1177/0256090920050102
- Sikdar & Makkad. (2013). Internet Banking in India – A perspective on Benefit and Challenges involved. *International Journal of Engineering, Business and Enterprise Applications*, 15-23.
- Singh, S., Srivastava, V., & Srivastava, R. K. (2010). Customer acceptance of mobile banking: A conceptual framework. *Sies Journal of Management*, 7(1), 55.
- Sudhagar, S. (2012). A Study on Perception and Awareness on Credit Cards among Bank Customers in Krishnagiri District. *IOSR Journal of Business and Management*, 14–23.
- Sureshchandar, G. S., Rajendran, C., & Anantharaman, R. N. (2003). Customer perceptions of service quality in the banking sector of a developing economy: A critical analysis. *International Journal of Bank Marketing*, 21(5), 233–242. doi:10.1108/02652320310488411
- Thulani, D., Tofara, C., & Langton, R. (2009). Adoption and use of internet banking in Zimbabwe: An exploratory study. *Journal of Internet Banking and Commerce*, 14(1), 1.
- Vidyapriya, P., & Mohanasundari, M. (2015). Customer Responsiveness on Banking Technology Products in Rural South India. *Asian Journal of Managerial Science*, 4(1), 27–32.
- Vinayagamoorthy, D. A., & Ganesan, M. (2015). A Study on Rural Consumer Perception towards Internet Banking Services In Salem District. *International Journal of Applied Research*, 1(12), 726–732.

Chapter 6

Trucker Value Perception and Manufacturer Value Offering in Indian Truck Market: Business Model Through Value Perspective

Abhijit Sarkar

Sikkim Manipal Institute of Technology, India

Ajeya Jha

Sikkim Manipal Institute of Technology, India

Diganta Mukherjee

Indian Statistical Institute, India

ABSTRACT

The concept of business model has been deliberated upon from the value delivery mechanism perspective. The term value has been considered from the perspective of quality and price. The value perception of the Indian transporters and the value offerings of the top three truck manufacturers in India have been considered in this chapter. Value (in terms of quality and price) perception was observed to be different for separate category of customers. It was also found that the business model for offering value to customers was different as manufacturers were differently focused across tonnage segments of the market.

INTRODUCTION

In literature the term business model has often been used with varied implications and at times with diverse perspectives. It has been observed by (Zott, Raphael, & Massa, 2011) that despite enormously large academic activity on ‘business model’ there is hardly any consensus on a common and widely accepted definition on the aforementioned topic. But the authors still broadly identify a commonality on e-business models, business models as activity system and as cost/revenue architecture. Given this backdrop of hugely diverse take on business model, it was found by (Schafer, Smith, & Linder, 2005)

DOI: 10.4018/978-1-5225-7095-0.ch006

that although there is hardly any commonality among the plethora of ‘business model’, at least twelve definitions for the term ‘business model’ coined between 1998 to 2002, but none of these definitions seem to have been fully acknowledged by the business community completely. However, the authors concluded that broad areas like: strategic choices, creating value, capturing value and value network to be relevant and significant in terms of previous and contemporary researches in this regard. Besides, the consideration for business model various researchers like (Casadesus-Masanell & Ricart, 2010) also lay down a relationship between strategy and business models, they claim that the process of designing business models is more of an art and it is necessary that an integrated framework separates the domains of strategy, business models and tactics.

The researchers of this chapter have come across such different perspectives on business models in the following cases:

Studies have been conducted on importance of information and relevance of the e-environment, the study conducted by (Hedman & Kalling, 2003) concludes that an effective information system has a positive effect on business model development in an e business environment. The authors also stress upon the relevance of quantitative study and recognition of key variables in this regard.

Financial performances were also found to be Also, (Malone, et al., 2006) while discussing business model by ‘creators’ or manufacturers have resolved that while classifying financial performance of a business model ‘market value and growth’, ‘profitability’ and ‘operating efficiency’ should be focused upon.

Aspects like service innovation as a major contributing factor to improve end experience have discussed by (Curtis, 2006). The researcher discusses the significant benefits on how through service innovation, companies can provide improved end user experience. According to this paper, service innovation comprises of: service model innovation – which is establishment of the service strategy and service business model of the firm concerned; Service operational innovation – which is about bringing in efficiency through innovative approaches in existing service operations that helps to dramatically lower the costs; Service growth innovation – which is about managing the creation, development and delivery of new services using the same discipline and rigor as used in new product development.

The report also suggests three main considerations to make service led growth. They are: Creation of a service growth strategy that recognizes and accounts for different growth models; identification and addressing of process and capability gaps; Management of service development and delivery differently than product development.

The human aspects of business model developments have also been covered by researchers, wherein they have tried to study and compare the various aspects of and approaches towards the skill development through manufacturer and governmental initiatives. (Thompson, 1995) took up a comparative study to understand the common trends in manufacturing in Sweden, Austria and the UK. The study focused on various approaches to the creation of skilled labor with an emphasis on skill formation; things done by manufacturers in labor (human resources) processes and initiatives taken up by the governmental/regulatory bodies in education and training. The researchers state that – “New paradigms of work organization espousing a radical break in production systems assert a natural identity between advanced manufacturing and utilization of skilled labor.” The authors of this comparative study have tried to identify common tendencies in advanced manufacturing (growth in cognitive and extra-functional abilities in context to a team.

Researchers have also studied business models from the perspective of leadership and work culture transformation across all levels of the trucking industry. Terminologies like globalization, brand develop-

ment, technology integration, partnerships and workforce transformation have been found to be possible through capable leadership and transformation of workforce. The study by (Rishi, 2009) have looked into some decisive actions taken by manufacturers in the areas of: globalization, brand development, technology integration, partnerships and workforce transformation. So that organizations stay relevant to ever changing client requirements. The analysis found that the dilemma regarding globalization that numerous manufacturers face could be resolved by decisively charting a path toward global integration or regional specialization. Another challenge of brand redefinition requires substantial moves to realize and respond to the needs of the future. Changeover of a brand towards services and solutions through technological innovation and a strong ecosystem of partners may create short term organizational discomfort but it should be a priority to ensure long term success. Amid massive industry wide changes only strong leadership would ensure a transformation in culture and workforce through all levels of a progressive truck enterprise by 2020.

(Vahlne, Ivarsson, & Johanson, 2011) Study the globalization process of Volvo's heavy truck business through management of complexities and uncertainties. The authors adapt the Uppsala Internationalization model (17 and 18) to explain the globalization process. The Uppsala model is a theory that explains how firms gradually intensify their activities in foreign markets. The key features of the models is that the firms first gain experience from the domestic market before they move to foreign markets; initially the firms start their foreign operations from culturally and/or geographically close countries and move gradually to culturally and geographically more distant countries; firms start their foreign operations by using traditional exports and gradually move to using more intensive and demanding operation modes (sales subsidiaries etc.) both at the company and target country level. The authors state that since globalization, like the internationalization process, is also characterized by the management of various complexities and uncertainties, a globalization process variant of the Uppsala Internationalization model (17 and 18) is suitable to be adapted to "test" explain the globalization of Volvo's heavy truck business and the inherent economic and managerial intricacies involved in this process.

(Dressler, 2009) Aimed to examine erstwhile current changes in the truck industry landscape and explored the factors influencing them and tries to determine where the industry would be in 2020. The study found that local sourcing with global coordination, multi-regional platform within one segment, strong cross OEM cooperation are very important for globalization in long term perspective.

The study found that OEMs which look forward to globalization can essentially choose between three strategies: (a) enter the emerging market in the higher budget (or lower premium) segment, adapting premium products to the local market requirements; (b) enter the emerging market in the low-cost (or lower budget) segment by means of partnering with local OEMs for engineering, sourcing, and production or sales; (c) enter the emerging market in the low-cost (or lower budget) segment, meeting current market requirements only and following it up by exporting the low-cost truck or a second brand to other emerging markets.

The study also points out the most powerful tools to facilitate the truck OEMs globalization efforts as: (a) platform architectures – a one truck concept valid for numerous markets with minor changes, part sharing & platform sharing; (b) networks – decentralized/local purchasing for less critical low value parts from regional suppliers, critical or strategic parts delivered by suppliers with worldwide reach to ensure strong global coordination for exploitation of all market benefits; (c) organization – collaboration between OEMs, integrating engineering, purchasing and other key functions should be fully integrated across the world.

The concepts of vertical integration, horizontal integration and Product Life Cycle has also been found to be important in terms of providing value and capturing value from the business model viewpoint. (Kortmann & Piller, 2016) has brought up two important perspectives to the study of business models of various manufacturing companies. Besides vertically integrating the entire product life cycle, traditionally separated tasks are being reallocated horizontal stakeholders, as due to ease of information sharing, integration with external partner entities in new product development has become a norm. Organizations now pay increasing attention to not just value creation but also on value capture. But organizations also face conflict in adapting varying degree of customization (in terms of providing value) they would like to offer across different brands of the same group that focuses upon different degree of value offering, while discussing impact of business model on PLM (Ogwell, 2015) mentions such a challenge in terms of the conflict in degree of customization that is preventing a seamless integration and acceptance of a common product design platform for all the truck brands of the Volkswagen Group.

The researchers of the present chapter have found that the Indian truck market is unique in terms of literature on business models. The following literature particularly covers issues related to uniqueness, market attractiveness, deregulation aspects, value for money aspects, social & environmental aspects, competitive priorities and critical success factors.

The study by (Becker & Diez, 2011) say that although emerging markets like Russia, India and China are all growing and very often clubbed together in terms of their long term economic growth potential, there are key differences among them. The researchers of this paper provide an overview in terms of competitive environment, market characteristics and market development of the BRIC countries. They found that market characteristics in terms of customer requirements would be shaped by stricter emission norms which will lead to increase in technological sophistication; in spite of traditionally being a low cost market, total cost of ownership is also a growing area of focus among a large chunk of customers. The report also points out that poor road conditions are still prevalent which necessitates robust trucks (which may be technically unsophisticated) to be offered to the market. The Indian market is turning increasingly attractive for the global manufacturers due to constantly declining restrictive regulations but on the other hand globalization activities of the Indian manufacturers have not been very strong which to a large extent is because of the fast-growing local markets – which have kept them more focused in the Indian market itself.

Highlighting the deregulation aspect of the Indian market (Narayanan, 1998) Published a discussion paper series at the UN University (Institute for New Technologies); #9703; he tries to analyze the effect of the policy of deregulation in India during mid-1980s on various aspects like technology acquisition and competitiveness in the automobile industry of India during 1980s. The various econometric analyses have shown that even under constraints like capacity licensing, the development of competitive skills crucially depended upon the ability to build specific technological competitive advantages. It was found that when new firms depend on intra-firm transfer of technology and promote in-house R&D efforts, it was also found that under a liberal scenario capability of vertical integration drives competitiveness of organizations.

The market attractiveness and uniqueness of the Indian truck market has been dealt with by (Lang & Dauner, 2012) where it has been pointed out that the Indian market is dominated by local manufacturers while foreign manufacturers are investing heavily and localizing their products to take advantage of a great potential in terms of growth in volume terms and segment upshift over the next decade. For companies to taste success, it would be essential that they are aware that the price sensitive Indian mid-market is suited for low cost products, where ideally production needs to be fully localized and manufacturers

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need to have a dense local sales-and-service network. The end product offering also needs to be topped with good value for money local financing options (a flexible, locally adaptable credit-scoring model will be the key).

The social and environmental aspects of the Indian automotive industry has been discussed through a case format by (Chaklader, 2010). It is highlighted in this case study on how the growing degree of interest in the business fraternity is focused on to improve the sustainability of operations; which often turns out to be a balance between short term goals (of turnover and profits) with long term goals in social and environmental performance. The authors try to use the ‘balanced score card’ (BSC) - Kaplan and Norton, (1996) which is a strategy-centred performance measurement tool that enables firms to align their operations to business strategy. Though the conventional balance focuses on the financial, customer, internal process and learning & innovation; it excludes two important long-term aspects: environmental and social. The authors try to address this lacuna by covering the environmental and social aspects to evolve a relevant strategy at Tata Motors Ltd. through a case study.

Finally, the competitive priorities and critical success factors of selected Indian automotive companies are discussed by (Dangayach, 2001). Through their extensive survey of selected Indian automotive companies, which were diverse in terms of their sales volume, product range and geographic location, they identified some common traits like use of advanced manufacturing technologies and other improvement aspects. The manufacturing strategy processes were analyzed and it was found that their competitive strength was sustained through quality, innovation and delivery. The process of strategy formulation varied among the companies in terms of participants, complexity and degree of formalization; so effectively the approach practiced by each company was different. But it was found that the process of manufacturing strategy was in line with corporate strategy. Using cluster analysis, the companies were classified in four strategic groups, wherein they were termed as reactive enterprise, neutral enterprise, active enterprise and proactive enterprises in terms of their manufacturing strategy. After extensive and rigorous discussions with managers, the study also determines the competitive priorities, order winners and critical success factors. Based on some strategic manufacturing issues, a manufacturing competence index was worked out and a framework for manufacturing strategy was proposed.

INTRODUCING THE HYPOTHESES

Based on the above observations on the academic deliberations of academicians and professionals on the importance, relevance and peculiarities of business models, we found it motivating to delve into this aspect of the trucking business and the truck manufacturing industry. The value aspects of the long distance on – road applications of the trucking industry put forward some pressing queries.

Is it true that the values sought by the truckers are different? Are manufacturers really trying to deliver unique and varying value proposition through their significantly different value propositions (business models) to deliver these values? Are different products catering to different types of customer groups?

H_{5A 0}: Customer Value perceptions are not different across Truck Brands in India

H_{5B 0}: Business models of the top three Truck Manufacturers in India are not different from each other

Data

The study presented here focuses upon the MHCV truck segment in general and particularly on multi axle heavy trucks of 25 tons GVW and above; which is seeing new product introductions, influx of established global OEMs and rising product refinement, productivity and complexity.

Secondary data in the form of: Annual report of market leading manufacturers of heavy trucks in India, market survey reports and research papers dealing with truck brands.

Besides these secondary data, primary data has also been collected from 171 respondents (unorganized road transporters) from 11 cities across India. The cities covered in North Zone were New Delhi and Ghaziabad; in the East Zone the cities covered were Bhubaneswar, Cuttack, Guwahati & Kolkata and in the South Zone the cities covered were: Bengaluru, Chennai and Hyderabad.

The primary data collection (from transporters) was done to understand the importance of personal attributes & preferences and the effect of certain business aspects of operating truck/s on brand purchase decisions. The authors have tried to understand the perceptual difference of the two leading brands in the MHCV truck market, namely Tata and Ashok Leyland.

Sample: Stratified Random Sampling was used to collect primary data from transporters (unorganized), drivers, manufacturers and financiers from each of the aforementioned cities. Only certain relevant responses for transporters are discussed in this section and section number 4.

BUSINESS MODEL DISCUSSION

Strategic intent and business models are inherent aspects of any large organization's workings. The large organizations that operate in the Indian truck manufacturing industry are no exceptions to this norm. But, the driving query in the minds of this paper's researchers was: Does the brand/product perceptions of the end customer justify the assumption of this industry to be a monopolistic competition of differentiated products, where the business models employed would be significantly different from each other?

The extensive survey of relevant literature and further studies conducted by (Schafer, Smith, & Linder, 2005), led them to define business model as "a representation of a firm's underlying core logic and strategic choices for creating and capturing value within a value network", this core logic should be exhaustive as possible.

Thus, business models can typically consist of strategic choices, value creation, value capturing and maintaining a value network.

The concept of strategic choices can be viewed as a pattern, as a plan, as a position to be held or as a perspective to be developed. After duly identifying the various strategic options, the choices are made. A business model is a representation of the underlying strategic choices, but a business model is not a strategy.

After going through a diverse approach in literature to determine what business model is, the authors of this chapter intend to focus on business model as a strategic choice in terms of value.

Business Model Through Value Perspective

What Is Value? (Price and Quality)

Several researchers have extensively worked on understanding the meaning and implication of 'customer value', and what it stands for, (Bradley & Wood, 1994) has observed that customer value is the quality that is perceived by the market and that is further adjusted by the price of a given product; others like (Monroe, 1979) stated that a buyer's perception value characterize a trade-off between the perceived value derived in relation to the price that is payed. The perception aspect in value determination is important to be noted, as pointed by (Woodruff, 1997) customer value is the perceived preference and evaluation of relevant product attributes, their performances and the resultant fulfilment of certain expectations from a given product.

Another extensive study on customer value by (Ziethmal, 1988) dealing with two components – price, and quality; states that 'Value' may be: a) low price, b) whatever a customer wants in a product, c) the quality a customer gets for the price he/she pays, and d) what a customer gets for what he/she gives. The authors of this chapter found this approach suitable to express the value perception aspect of the transporter respondents.

These perspectives show that customers understand value in terms of the Product Quality they receive and the 'Price' they pay; for some both are (almost) equally important, for others 'Quality' is more important and for others still, 'Price' is most important. 'Quality', as discussed in this chapter is a combination of perceptions of eleven Key Buying Factors (elaborated further under 'Value Expectation & Perception' section), where Price has been set as ordinal, $P_T = 0$ (Price for Tata) and $P_{AL} = 1$ (Price for Ashok Leyland).

Value Expectation and Perception: Transporter

The primary data on the responses of eleven 'Key Buying Factors' (KBF) namely: Quality, Price, Technology, After Sales Service, Parts Availability, Maintenance Cost, Tyre Life, Resale Value, Turnaround Time, Aesthetics and Mileage were taken into consideration. These eleven 'Key Buying Factors' were selected after a rigorous exploratory study comprising of unstructured interviews and panel discussion of some transporters and marketing officials of leading truck manufacturers of India.

To understand the value payoff in cases where a transporter owned both Tata and Ashok Leyland brands in 25 tonnes and 31 tonnes category, an 'Weighted Average Value Score' (WAVS) was derived for each of the brands. Since more than 80% of the MHCV Truck market is held by the brands Tata and Ashok Leyland we continue the subsequent discussions on these two brands only.

To derive the WAVS, the brand independent weightage provided for each of the eleven KBF was multiplied to the respective KBF rating for each brand and the resultant summation of these two were divided by hundred.

Weighted Average Value Score (WAVS) for a Particular brand
= (Weightage for 11 Key Buying Factor X Rating for 11 Key Buying Factor)/100
WAVS =
Where, = Key Buying Factor Irrespective of Brand (Part A)
= Key Buying Factor for a particular Brand (Part B)

A scatter plot was developed with WAVS (difference of WAVS of Ashok Leyland and Tata) on one axis and proportion of ownership of the Ashok Leyland and Tata brands on the other axis. The scatter plot was further divided into four quadrants, the vertical axis (Y – Axis) was put at the zero point where the value derived from Tata and Ashok Leyland trucks were equal. The horizontal axis (X – Axis) was put up at 0.5 where the proportion of Tata and Ashok Leyland Trucks were equal. The resultant four quadrant were named A, B, C and D.

DISCUSSION OF RESULTS

‘Value Perception’

Quadrant A represents a scenario where the proportion of Ashok Leyland Trucks are higher but the respondent gives a lower rating in terms of perceived overall value rating to the truck manufacturer; no respondents were categorized into this quadrant. The next block, quadrant B represents a situation where the proportion of Tata trucks are higher and ratings given for perceived overall value for Tata trucks are also higher; six respondents were categorized into this quadrant. Quadrant C represents a situation where the proportion of Ashok Leyland Trucks are higher and the respondent ratings for perceived overall value derived from the trucks of Ashok Leyland brand is also higher; thirteen respondents were categorized into this quadrant. The last of these four sections, quadrant D represents a scenario where the proportion of Tata trucks are higher but the ratings given for perceived overall value for Tata trucks are lower; ten respondents were categorized into this quadrant.

Once the scatter plot was prepared a ‘Truck Buy Value Payoff Matrix’ (provided for in Table 1) was derived from it in terms of two considerations – ‘Primary Buy’ and ‘Value Derived’.

In the matrix provided in Table 1, the symbol ↑ represents a sense of high value derived from the brand that is majorly owned (has higher proportion in the total fleet composition) by that single transporter, whereas the symbol ↓ represents a sense of low value derived from the brand that is majorly owned (has higher proportion in the total fleet composition). Ordinal notations for the prices of Ashok Leyland (AL) is designated ‘1’ and Tata (T) is designated ‘0’, this has been done to denote a marginal premium Ashok Leyland Trucks carry over their Tata counterparts in 25T & 31T categories. It may be noted here that Quadrant B, C and D in the Payoff Matrix represent equilibrium choices from game theoretic perspective for various types of customers purchasing these differentiated products. Whereas, Quadrant A is a non-equilibrium zone.

Furthermore, as discussed by (Shy, A modified Hotelling vertical-differentiation model, 1998), *Figure 2* represents the relative position of the equilibrium choices of customers represented in quadrants B, C, and D on a singular plane as in a ‘Modified Hotelling Vertical Differentiation Model’, in terms of ‘quality’. The term ‘quality’ stands for the relative WAVS as explained in Section 3.1; Price of an Ashok Leyland (P_{AL}) is denoted as 1 and price of a Tata (P_T) is denoted as 0.

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Figure 1. Value perception matrix

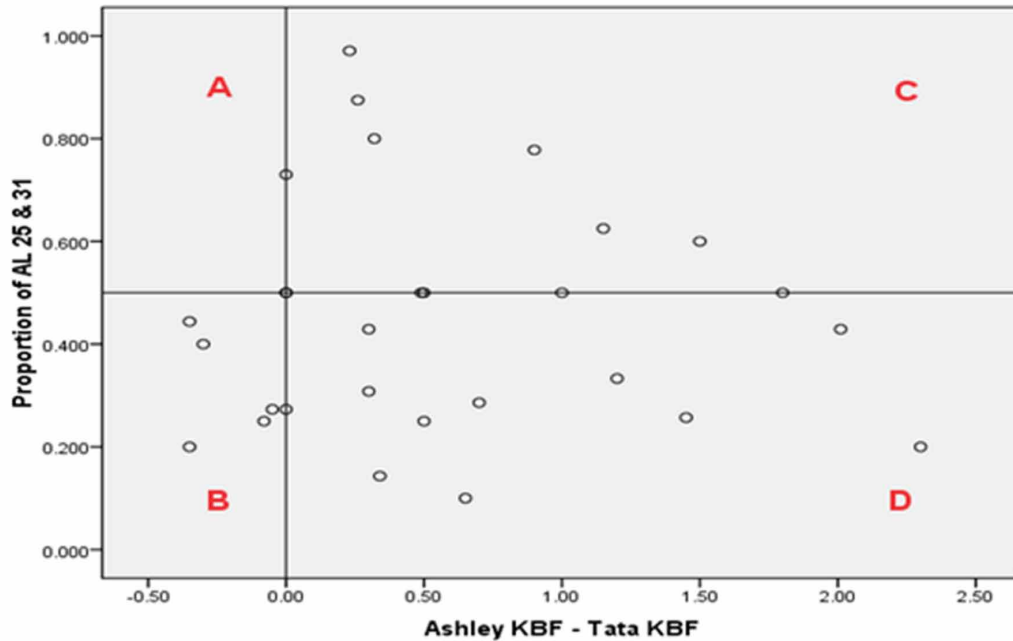


Table 1. Truck Buyer's Value Payoff Matrix (25T & 31T)

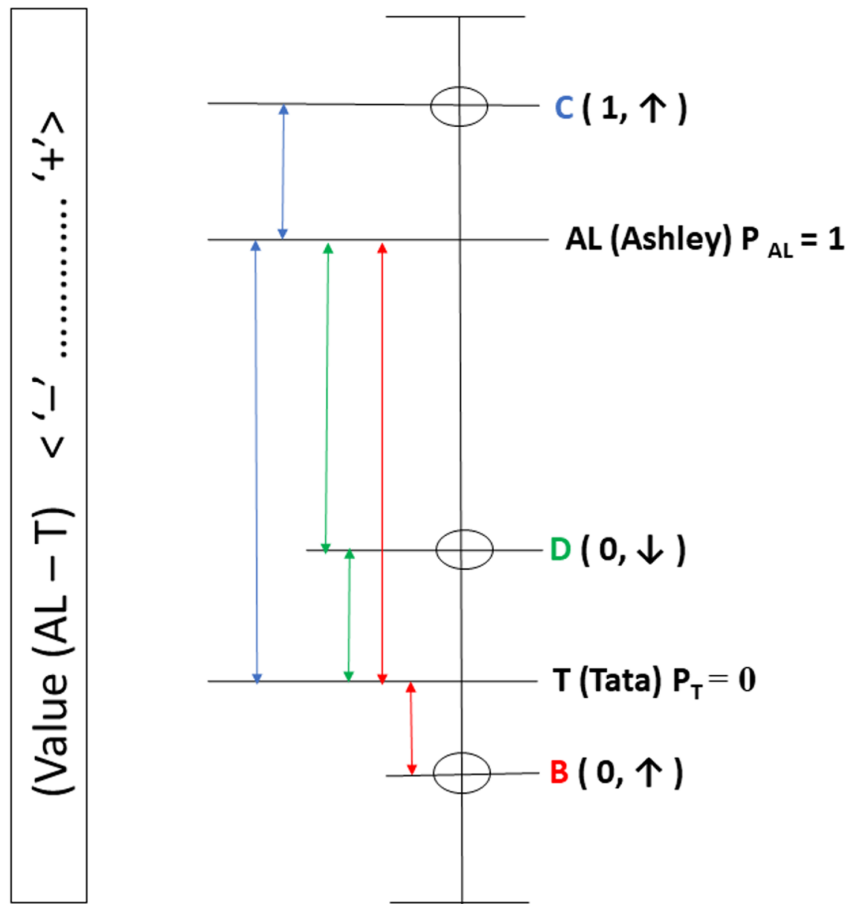
		<u>Δ Value: AL – Tata</u>	
		AL > T	AL < T
<u>Price</u>	Buy	C	A
	AL = 1	(1, ↑)	(1, ↓)
		13	00
	Tata = 0	D	B
		(0, ↓)	(0, ↑)
		10	06

Truck Buyer's Value Payoff Matrix (25T & 31T)

The A quadrant [AL = 1, AL < T] (0, ↓) in above table, represents the set of customers in a segment where the transporter has bought a larger proportion of Ashok Leyland trucks in 25T & 31T category and perceives that the Ashok Leyland trucks provide comparatively lower overall value. No respondents were categorized under this zone of non-equilibrium.

The B quadrant [T = 0, AL < T] (0, ↑) in Table 1, represents the customer where the transporter has bought a larger proportion of Tata trucks in 25T & 31T category and perceives that the Tata Trucks provide comparatively higher overall value. This zone can be categorized to represent an optimal choice

Figure 2. Quality as vertical product differentiation



for ‘price sensitive’ as well as ‘quality sensitive’ customers. The B Quadrant Customer position has also been marked out in Figure 2, to show the shortest distance in terms of ‘value’ the customer in B quadrant covers to point T (at $P_T = 0$) instead of travelling to point AL (at $P_{AL} = 1$) and be very happy with the perceived higher ‘quality’ that Tata provides at a slightly lesser price. For the six respondents found within this quadrant value implies price as well as quality. In other words, delivering value through only differentiation (quality) focus (porter’s generic) or cost (price) focus will not be effective, rather the product should provide a perceived value wherein price is within an acceptable range and the quality of the product is perceived to be adequate.

The expression for this category of respondent’s perception in terms of vertical product differentiation is provided in *equation 1* below:

$$P_T + < P_{AL} + \dots \tag{1}$$

The C quadrant [$AL = 1, AL > T$] (1, ↑) in Table 1, represents the customer where the transporter has bought a larger proportion of Ashok Leyland trucks in 25T & 31T category and perceives that the Ashok Leyland trucks provide comparatively higher overall value. This zone can be categorized to rep-

represent an optimal choice for ‘quality sensitive’ customers. The C Quadrant Customer position has been marked in Figure 2 as well, to show the shortest distance in terms of ‘value’ the customer in C quadrant covers to point AL (at $P_{AL} = 1$) instead of travelling to point T (at $P_T = 0$) and be contended with the perceived higher ‘quality’ that Ashok Leyland provides at a slightly higher price point, there were thirteen respondents found within this quadrant value implies price as well as quality. In other words, delivering value through only differentiation (quality) focus (porter’s generic) or cost (price) focus will not be effective, rather a cost leadership would be more suitable. The expression for this category of respondent’s perception in terms of vertical product differentiation in this category is provided in *equation 2* below:

$$P_{AL} + < P_T + \dots \quad (2)$$

The D quadrant [$T = 0, AL > T$] (0, ↓) in Table 1, represents the customer where the transporter has bought a larger proportion of Tata trucks in 25T & 31T category by initially putting more importance to the relatively lower price point and cost structure of Tata trucks, however in terms of relative perceived quality, these customers felt that Ashok Leyland trucks provided them better value. This zone can be categorized to represent post purchase dissonance – where customers failed to appropriately evaluate the value they looked forward to and the value offering of a particular manufacturer. The D Quadrant Customer position has also been marked in Figure 2, to show comparatively lesser distance from the value customer in C quadrant (as opposed to the B quadrant customer), but D still ends up choosing point T as the distance to point T (at $P_T = 0$) is less than distance to point AL (at $P_{AL} = 1$). In this case, although D does not travel the extra distance to point AL and settles for point T; this category of customer is not satisfied with the value offered at point T

The expression for this category of respondent’s perception in terms of vertical product differentiation in this category is provided in *equation 3* below:

$$P_T + < P_{AL} + \dots \quad (3)$$

So, it is proven through Figure 1, Table 1 and Figure 2 that the null hypothesis:

H_{5A0}: Customer Value perceptions are not different across Truck Brands in India

Stands rejected, it is furthermore proven through Equation 1, 2 and 3 that using the concept of vertical product differentiation it is established that customer perception in terms of appropriate price is indeed different across customer belonging to group B, C and D. These customers appreciate the value provided by Tata trucks and Ashok Leyland Trucks differently.

The Value Offerings in Indian Truck Making

The Indian truck market (manufacturer side) is highly consolidated as the top four manufacturers sum up to almost 95% of MHCV trucks. The three top manufacturers of MHCV trucks – Tata Motors (51.2%), Ashok Leyland (33.1%) and Volvo Eicher (11.25%) make up for the bulk of the market (CV NEWS, 2017).

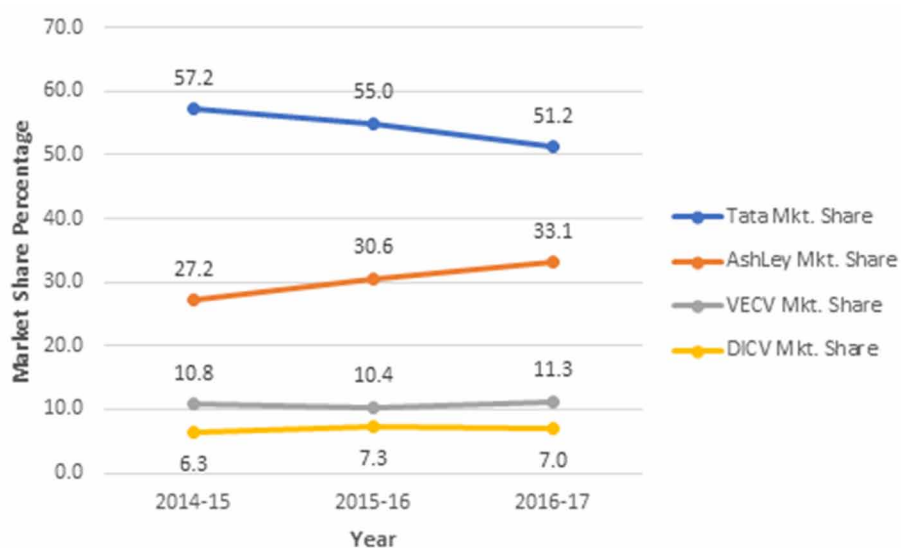
Each of the manufacturer’s basket of offering varies in terms of the automotive products manufactured; Tata Motors makes small automobiles (hatchbacks, MUVs, SUVs etc.) and commercial vehicles of a wide tonnage range. Ashok Leyland manufactures only commercial vehicles and that to primarily

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focused into the MHCV category whereas VECV a joint venture between Eicher Motors Ltd. and Volvo AB is primarily focused on making commercial vehicles in the ICV and MHCV categories. Although commercial vehicle manufacturing is the core area of operation for Volvo AB but Eicher Motors has a significant focus on motorcycle manufacturing through its brand 'Royal Enfield'. So, the manufacturing variety and focus areas of these top three manufacturers are quite different. Even when it comes to manufacturing HCVs it is seen that the basic portfolio of the three-manufacturer's sales patterns across different GVW category is also different from each other. As on year 2015 (Sharpe, 2015), out of Tata Motors' total sale of commercial vehicles, 38% (approx.) were trucks with a GVW of 16T or more; on further breaking up this we find that in the weight category of 16T – 25T

GVW the proportion was roughly 19% (approx..) of total commercial vehicle sales by Tata motors and in the weight category of greater than 25T GVW 19% (approx..) of total commercial vehicle sales by Tata Motors. On the contrary out of Ashok Leyland's total sale of commercial vehicles, 42% (approx..) were trucks with a GVW of 16T or more; when further broken to 16T – 25T GVW, the representation of this weight category was 18% (approx..) of total commercial vehicle sales by Ashok Leyland and the category of greater than 25T GVW represented 24% (approx..) of total commercial vehicle sales by Ashok Leyland. The third largest manufacturer, Volvo Eicher Commercial Vehicle (VECV) had only 7% (approx..) of its total commercial vehicle sales in the weight category of 16T or more. On breaking up this figure into weight categories of 16T – 25T GVW and greater than 25T GVW the sales proportion were found to be of 3% (approx..) and 4% (approx..) respectively (Sharpe, 2015). This clearly shows that Tata and Ashok Leyland lead the MHCV truck market and their sales proportion of truck sales in the 16T GVW and above weight category are higher than competition. It can also be observed that Ashok Leyland's product portfolio is more focused towards the higher tonnage categories especially in the 25T GVW and above (in the multi axle trucks category).

Figure 3. MHCV truck brand wise market share



Source of Information: www.cvnews.in/2016-17-heavy-commercial-vehicles-sales-a-round-up/

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The industry leader, Tata Motors is a full line provider of commercial trucks and an overall industry leader in the commercial vehicle industry, with a strong market presence in northern India. The company has products from 1 tonne (Ace Zip) to 49 tonnes category. In the ICV and MHCV category, Tata products like 1109, 1616 etc. as well as 2515, 2518, 2523, 3118, 3718 are made available in the formats of cowl, normal cab, Ultra series, Signa series and Prima series cabs cater to various transporter requirements. To meet emission norms of BS- IV Tata Motors have focussed its engine developments based on the SCR technology, to power its trucks the company has access to engines developed inhouse, as well as ones sourced from Cummins. Tata Motor's access to research & development capabilities of Daewoo (Tata Daewoo Commercial Vehicle Co.) also helps it to bring technologically advanced products into the Indian truck market.

The second in the industry, Ashok Leyland is the overall second largest seller in MHCV market and is a strong performer in the southern India. The company traditionally leads in the 12M bus category and is second largest truck maker in MHCV truck segment. Ashok Leyland has products that are strong performers in MHCV segment, it is worthwhile to note that this company has been gaining market share in MHCV trucks segment continuously for the last three financial years (2014-15 to 2016-17) at the cost of Tata Motors as seen in Figure 2. Although, Tata motors managed to sell more than 50% of the MHCV trucks in 2016 but the figure is down from around 64% as it did in the year 2007 (Teter, Cazzola, & Gul, 2017). Although, Ashok Leyland has a product to cater to the last mile distribution category through its product – 'Dost' – (a 2.5T delivery truck to counter the 'Tata Ace') it's product offerings primarily cater from 10T category (like Boss, Guru and Ecomet) onwards, although 'Partner' 4 tyre version launched early in the year 2017 also covers the 6T category. But from 16T category onwards Ashok Leyland has products like Ecomet 1616, 2516, 3116, 3118, 3518, etc. are putting on the strong competition which has eaten into the Tata Motors' market share. In fact, as of 2016 – 17 it was the market leader in the 37T category. The various models in the ICV and MHCV categories offered by Ashok Leyland are made available in cowl format and cabin options include the normal cabins as well as U-Truck series and the recently launched Captain series. Ashok Leyland is banking upon EGR based technology against primary competitor Tata's SCR based engine technology. Named as iEGR it does not require any urea based additive and has comparatively less electronic sensors. The company also offers various products in different weight categories with Hino engines.

The third largest truck seller VECV or Eicher Motors (11.3%) has a range of trucks that cater from the 6T to 49T, the PRO series of trucks have been launched (in 2014) to modernize the truck (and bus) offerings from Eicher, primarily based on technology inputs from Volvo AB. Volvo Eicher also has a strong potential in MHCV segment due to its now improved technical capabilities due to its access to vehicle and systems technology of Volvo AB.

Also, Daimler India Commercial Vehicles (DICV), a fully owned subsidiary of Daimler AG, has also made strong initial progress and moved ahead of MNAL in the MHCV truck segment, presently has a market share of ~7%. It is important to note here that the brand Bharat Benz (DICV) offers its products in the range of 10T to 49T, although it is a relatively new player in the Indian truck market but given that the parent organization – Daimler AG, is the largest commercial vehicle manufacturer of the world, this brand could have a strong growth potential.

As may be observed in Table 2, it is obvious that the sales portfolio of Tata, Ashok Leyland and Volvo Eicher Commercial Vehicles are very different. On one hand the market leader Tata Motors has an evenly laid out offering across various tonnage categories, whereas Ashok Leyland is more focused on higher tonnage segments, in fact it's sales performance improves further in More than 25T category.

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Table 2. Sales portfolio breakup in percentage across tonnage categories for major truck manufacturers as on year 2015-16

Overall Mkt. Share % in the Truck Market ->					
		51.2	33.1	11.3	
		Tata	Ash Ley	VECV	DICV
Non - Multi Axle Trucks	Below 7.5T	14	2	16	0
	More than 7.5T - 12T	12	8	46	29
	More than 12T - 16T	14	19	7	19
Multi Axle Trucks	More than 16T - 25T	19	18	4	24
	More than 25T	19	24	3	26

Source: Market analysis of heavy-duty vehicles in India, ICCT (2015)
Percentage figures are approximations suitable for contrast and comparison purposes.

It is also clearly demonstrated that Ashok Leyland's sales focus has a significant disadvantage vis-à-vis Tata Motors in Below 7.5T category. Whereas, VECV has a tremendous sales focus on the More than 7.5T – 12 T product category and is also a strong performer in the Below 7.5T category.

So, the top three manufacturers have different business models or approaches in delivering value to their prospective customers. It is important to note here that DICV, the comparatively new player in this market has a sales portfolio that can put up significant challenge to Tata Motors and Ashok Leyland especially in the multi axle tonnage categories. It is worthwhile to note that parent organization, Daimler Trucks is the largest commercial vehicle manufacturer in the world and has immense technical capabilities of churning out products which have been successful in various developing countries under diverse operating environments.

Since Tata Motors and Ashok Leyland take up around 85% market share of the MHCV truck and 38% & 42% of their sales portfolio represent truck with or more than 16T GVW respectively it was decided to further focus on the 'ROCE' of Tata Motors (NDTV Profit, 2018) and Ashok Leyland (NDTV Profit, 2018)

Although Tata Motors and Ashok Leyland have very different product portfolio in terms of manufacturing of commercial vehicles and passenger vehicles. Tata Motors is a manufacturer of commercial vehicles and passenger vehicles whereas Ashok Leyland primarily manufactures commercial vehicles. But still, the researchers felt it to be justified to contrast the ROCE of the two manufacturers. Firstly, the sales portfolio of Tata Motors has primarily had commercial vehicles (hovering around 70 – 75 percent since 2013 to 2016) (Tata Motors, 2017) and secondly, as in case of a multi plant monopoly, the marginal revenue (MR) and marginal cost (MC) would have to be equated to arrive at the profit maximization

Year	Tata Motors ROCE	Ashok Leyland ROCE
2012-13	4.39	12.55
2013-14	0.93	4.67
2014-15	-6.73	10.85
2015-16	4.03	14.07
2016-17	-2.07	18.46

output produced by each plant. So, the overall ROCE would be similar across different plants (Shy, The Multi Plant Monopoly, 1998) and thus comparing the ROCE of these two manufacturers Tata and Ashok Leyland is justified.

From table 3 it can be observed that on comparing the ROCE of Tata Motors and Ashok Leyland it is found that both the Manufacturers have very different observations across the years and Ashok Leyland has provided a much steadier return.

From the above discussion, it is quite clear that the value proposition of the Business models of the top three Premium Multi-Axle Vehicle Manufacturers in India i.e. Tata Motors, Ashok Leyland and Volvo Eicher are quite different from each other. Their focus on various product categories (different tonnage categories) are also different – thus their business models for providing appropriate value (to their prospective customers in terms of quality and price) is different as well.

Thus, the hypothesis: “Business models of the top three Premium Multi-Axle Vehicle Manufacturers in India are not different from each other” is rejected.

Aligning ‘Value Perception’ on Demand Side (Transporter) and ‘Value Offerings’ on Supply Side (Manufacturer)

The previous sections have clearly shown that on the demand side there are distinctive set of customers who are suitable for Ashok Leyland or Tata.

The B quadrant (0, ↑) customers are extremely satisfied with their purchase due to the better perceived quality at a relatively lower price, those who make up segment B are dedicated Tata customers. The B quadrant customers are loyal towards the Tata brand and have a very positive brand judgement feeling in terms of credibility, consideration and sense of superiority and brand value progression (in terms of the Trucker’s CBBE model – discussed in article 1 of the forthcoming issue of International Journal for Asian Business and Information Management (IJABIM) Vol 10, Issue 3). In fact, some of them could have reached the Brand Based Fraternity level of the Trucker’s CBBE model. These motivated Tata customers value the product characteristics in terms of Quality, Technology, Resale value and parts availability (Points of Difference). Tata customers find it important that the overall quality to be high; they expect their products to be high on technology and Tata Motors correctly has focused itself on SCR based engine technologies which although has extra electronic complexities and urea based additives has globally emerged as the leading technology to conform to stringent emission norms Tata Motors has also successfully integrated the engines of Cummins into its higher tonnage trucks for this category of customers to reiterate and emphasize the technology competence aspect of its products. Since Tata Motors is the market leader it also does lead in the used truck market where it commands a healthy resale value in most of its strong markets across India. It also happens to maintain one of the largest and most expansive network of spare parts outlets across India.

Aspects like Price, after sales service, turnaround time, mileage and aesthetics are also very important for quadrant B customers. Tata trucks are priced comparatively lower than the nearest competitor and that positively affects these customers. As a market leader Tata trucks are supported with relatively cheap and easily available after sales service network. Turnaround time and mileage are now an objective possibility in post GST era; also, initiatives for RFID based automatic toll collections (FASTag) ensures that inter-state border check points can clear off trucks faster than before. The Signa and Prima range of trucks specifically cater to the aesthetics aspects of a vehicle purchase for a typical quadrant B customer.

The C quadrant (1, ↑) customers greatly appreciate the perceived better-quality level in their Ashok Leyland Trucks and purchase them in greater proportion, such customers who make up segment C are dedicated Ashok Leyland customers. They are loyal towards the Ashok Leyland brand, these group of transporters have a very positive brand judgement feeling in terms of credibility, consideration and sense of superiority and brand value progression (in terms of the Trucker's CBBE model – discussed in cite brand paper). In fact, some of them could have reached the Brand Based Fraternity level of the Trucker's CBBE model. These customers value the product characteristics that Ashok Leyland provides to them in terms of technology and parts availability (Points of Difference). Since these customers are apprehensive of excessive usage of technology¹ they prefer less sensors and electronic presence in their trucks, which in their opinion increases service related complexities and costs. It is indeed a smart move by Ashok Leyland to use technologies like iEGR where there are less number of sensors and there is no requirement for urea-based additives as required in SCR based combustion technologies, to ensure parts availability Ashok Leyland has increased its network of spare parts outlets through Leyparts initiative. Other aspects like Aftersales service (service mandi), maintenance cost (increased service gap), tyre life (X-Guard tyres for mileage) and turnaround time (with effect of GST and FASTag) are also very important for quadrant C customers.

And finally, there are the D (0, ↓) customers who own a higher proportion of Tata trucks but perceive the Ashok Leyland trucks do provide a higher level of quality satisfaction; this are the price sensitive customers for whom cost of the truck is more important and buy the brand which they believe would cost them less. But this group of customers tend to suffer from post purchase dissonance. Although they had predominantly purchased Tata Motors products primarily based on price, after sales service, maintenance cost, mileage, tyre life, turnaround time and aesthetics; after using the products from both the brands these group of customers have perceived that Ashok Leyland products perform better in terms of after sales service, tyre life, maintenance cost and turnaround time. This customer group also realized that high technology content is not very desirable for them, neither did they find resale value to be an important/significant aspect. In terms of parts availability this customer group has shown confidence in Ashok Leyland's spare-parts outlet network.

Implication

The discussion earlier clearly reveal that the value perceptions are significantly different across various customer groups using Tata and Ashok Leyland trucks in the 25T and 31T categories. Also, their value perceptions are in terms of quality they perceive to get in terms of the comparative price they pay for their trucks. The customer groups B, C and D clearly show different customer perceptions. These varied customer perceptions implied that there were loyal Tata customers, loyal Ashok Leyland customers and Tata customers who were suffering from post-purchase dissonance. The discussions in section 4.2 clearly demonstrate that the market leader Tata Motors have an evenly spread product portfolio across most tonnage segments whereas the market follower Ashok Leyland is more focused on the higher tonnage segments or the multi axle segments. VECV or Volvo Eicher Commercial Vehicles is very focused on the 7.5T – 12T category.

CONCLUSION

It can be concluded from the above discussions previously that customer perceptions do vary among truck customers in 25T and 31T categories. The main consideration for this chapter i.e. value (in terms of quality and price) was observed to be different for separate category of customers. There was one category which appreciated the differential premium for the perceived superior value, another category of customer was also found who was satisfied with the price advantage and associated quality of a given brand of truck. There were also few customers who can be categorized into a post purchase dissonance state where they seem to not appreciate the value derived from the products of the brand which they had primarily purchased.

It was also found that the business model for offering value to customers was different as manufacturers were differently focused across tonnage segments of the market.

REFERENCES

- Becker, D., & Diez, P. (2011). *Competing in the global truck industry - Emerging Markets spotlight*. KPMG International.
- Bradley, G. T., & Wood, R. C. (1994). *Managing customer value: Creating quality and service that customers can see*. New York: Free Press - Simon and Schuster.
- Casadesus-Masanell, R., & Ricart, J. E. (2010). From strategy to business models and onto tactics. *Long Range Planning*, 43(2), 195–215. doi:10.1016/j.lrp.2010.01.004
- Chaklader, B., & Roy, D. (2010). Sustainable development using the sustainability balanced score card: The case of Tata Motors, India. *International Journal of Sustainable Strategic Management*, 2(2), 155–167. doi:10.1504/IJSSM.2010.032558
- Curtis, K. &. (2006). *Hiding in plain sight: service innovation—a new priority for chief executives*. Somers, NY: IBM Institute for business value.
- CV NEWS. (2017, April 26). *2016 – 17, Heavy Commercial Vehicles Sales – A round up*. Retrieved from CV NEWS: www.cvnews.in/2016-17-heavy-commercial-vehicles-sales-a-round-up/
- Dangayach, G. S., & Deshmukh, S. G. (2001). Practice of manufacturing strategy: Evidence from select Indian automobile companies. *International Journal of Production Research*, 39(11), 2353–2393. doi:10.1080/00207540110040448
- Dressler, N. (2009). *Truck industry 2020: The future is global*. Roland Berger Strategy Consultants.
- Hedman, J., & Kalling, T. (2003). The business model concept: Theoretical underpinnings and empirical illustrations. *European Journal of Information Systems*, 12(1), 49–59. doi:10.1057/palgrave.ejis.3000446
- Kortmann, S., & Piller, F. (2016). Open Business Models and Closed-Loop Value Chains. *California Management Review*, 58(3), 88–108. doi:10.1525/cmr.2016.58.3.88

Trucker Value Perception and Manufacturer Value Offering in Indian Truck Market

- Lang, N. S., & Dauner, T. (2012). *Winning the BRIC Truck Battle*. Boston, MA: Boston Consulting Group, Inc.
- Malone, T. W., Weill, P., Lai, R. K., D'Urso, V. T., Herman, G., Apel, T. G., & Woerner, S. L. (2006). *Do some business models perform better than others?* MIT Sloan Working paper 4615-06.
- Monroe, K. B. (1979). *Pricing: Making profitable decisions*. New York: McGraw-Hill.
- Narayanan, K. (1998). Technology acquisition, de-regulation and competitiveness: A study of Indian automobile industry. *Research Policy*, 27(2), 215–228. doi:10.1016/S0048-7333(98)00037-7
- Ogwell IV. (2015, April 16). Retrieved from <http://www.engineering.com/PLMERP/ArticleID/9961/VolkswagensEpicChallengetosynchronizePLMforitsTruckBrands>
- Profit, N. D. T. V. (2018a, January 19). *Ashok Leyland's 5 years Financial Summary*. Retrieved from NDTV Profit: http://profit.ndtv.com/stock/ashok-leyland-ltd_ashokley/financials-historical-ratio
- Profit, N. D. T. V. (2018b, January 19). *Tata Motor's 5 years Financial Summary*. Retrieved from NDTV Profit: http://profit.ndtv.com/stock/tata-motors-ltd_tatamotors/financials-historical-ratio
- Rishi, S. G. (2009). *Truck 2020: transcending turbulence*. Somers, NY: IBM Corporation.
- Schafer, S. M., Smith, H. J., & Linder, J. C. (2005). The power of business models. *Business Horizons*, 48(3), 199–207. doi:10.1016/j.bushor.2004.10.014
- Sharpe, B. (2015). *Market analysis of heavy-duty vehicles in India*. Washington, DC: The International Council on Clean Transportation.
- Shy, O. (1998). *A modified Hotelling vertical-differentiation model*. Cambridge, MA: The MIT Press.
- Shy, O. (1998). The Multi Plant Monopoly. In *Industrial Organization: Theory and Applications* (pp. 80-81). Cambridge, MA: The MIT Press.
- Tata Motors. (2017). *Annual Report*. Mumbai: Tata Motors.
- Thompson, P. W., Wallace, T., Flecker, J., & Ahlstrand, R. (1995). It ain't what you do, it's the way that you do it: Production organisation and skill utilisation in commercial vehicles. *Work, Employment and Society*, 9(4), 719–742. doi:10.1177/095001709594005
- Vahlne, J. E., Ivarsson, I., & Johanson, J. (2011). The tortuous road to globalization for Volvo's heavy truck business: Extending the scope of the Uppsala model. *International Business Review*, 20(1), 1–14. doi:10.1016/j.ibusrev.2010.05.003
- Woodruff, R. B. (1997). Customer value: The next source for competitive advantage. *Academy of Marketing Science*, 25(2), 139–153. doi:10.1007/BF02894350
- Ziethmal, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 2–22.
- Zott, C., Raphael, A., & Massa, L. (2011). The Business Model: Recent Developments and Future Research. *Journal of Management*, 37(4), 1019–1042. doi:10.1177/0149206311406265

KEY TERMS AND DEFINITIONS

Business Model: Given approaches to create, deliver, and capture value.

Customer Value Perception: Value that a customer feels that he/she is deriving.

DICV: Daimler India commercial vehicles.

EGR: Exhaust gas recirculation.

GVW: Gross vehicle weight.

KBF: Key buying factors.

MHCV: Medium and heavy commercial vehicles.

ROCE: Return on capital employed.

SCR: Standard catalytic reduction.

Value Offering: Value put on offer by the manufacturer or service provider.

VECV: Volvo Eicher commercial vehicles.

Vertical Product Differentiation: A model that displays the relative mind distance that a customer needs to travel from his preferred price position to the nearest available price position on offer.

WAVS: Weighted average value score.

ENDNOTE

¹ Technology has a significantly negative correlation with aftersales service (-0.424).

Chapter 7

Facebook as Marketing Tools for Organizations: Knowledge Management Analysis

Siti Farzana Izzati Jaman
Universiti Brunei Darussalam, Brunei

Muhammad Anshari
Universiti Brunei Darussalam, Brunei

ABSTRACT

Facebook has become widely known around the globe. This chapter applies marketing techniques to Facebook. The concern of using Facebook for both users and marketers is also elaborated in this study. Scenarios will help marketers to comprehend how knowledge management tools like plan-do-check-act (PDCA) and root cause analysis (RCA) are used in Facebook marketing. Other than the concern risk, the chapter presents the importance of using Facebook as well as the implication of these technique for future research.

INTRODUCTION

In the year 2003, people began to grow more comfortable by interacting with one another through social network sites (SNSs) (Treadaway & Smith, 2010, p. 7). The usage of SNSs become more beneficial when large number of users communicate (Anshari & Lim, 2017) and shared information amongst themselves. Boyd and Ellison (2010) distinguish social network as web-based services that enable users to; create a public or semi-public profile within restricted boundary of system, integrate with a list of other users that they share connection with and examine and traverse the users list of connections and those created by others within the system.

Nevertheless, SNSs not only allow users to interact and share information but also to assist users to extend beyond their own personal network. In case of organisation such as businesses, it allows them to tap into consumer behaviour with little amount of risk in financial investment (Stokes, 2010, p. 189; Anshari et al., 2016). Marketers for instance can obtain benefit from using this social network. Social

DOI: 10.4018/978-1-5225-7095-0.ch007

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network helps them to interact with customers and conveniently open up a new way to reach the potential customers. Indeed, to stand out and compete with other competitors, the presence of businesses within Facebook has become necessary.

Ever since Facebook was founded in 2004, it aggressively emerged into one of the world's dominant SNSs surpassing more than 1.1 billion active daily users by 2016 (Facebook, 2018). Thus, making them promising for target marketing audience rather than old traditional tactic of marketing to approach the customers (Noyes, 2018; Anshari & Alas, 2015). The previous method employed by marketers such as e-mail promotion, telemarketing and other type of approaches to distribute the information concerning to business products and services might still be effective (Tiago & Veríssimo, 2014). But these days to maintain long-term customer relationship, it is important to include web-based strategy. Facebook for instance have continue to revolve and its trends has gain more popularity among the digital marketers and organisations (Landicho, 2017). Facebook site enable users to develop their own personal profile and obtain opportunity to discover insights of others 'lifestyle and interests (Acar & Polonsky, 2007; Ahad, Anshari, & Razzaq, 2017). With Facebook as powerful portal for organisation and business to spread information about their products and services, the focus has been shifted from developing specific individual relationships to reaching the current and potential customers.

Nevertheless, the research on the social media particularly in Facebook marketing trends are quite minimal. Therefore, this paper will the theory of mantras and the modern risk management, the current practices of Facebook marketing tools exist, the scenario as well as their benefits alongside with critical success factors and risks concerns. Meanwhile the literature review will critically analyse the existing studies on social media and Facebook. Further suggestion on how organisations use Facebook as social marketing tool will be discussed in this study.

WEB 2.0 AND SOCIAL NETWORKS

The new advancement of technology has transformed the usage of internet into more social interactive environment (Allen, 2017). By facilitating the web 2.0 individuals able to communicate and develop online content easier (Lai & Turban, 2008; Montalvo, 2016). With the rise of SNS globally, people more incline to be more engaged in the sites (Mueller et al., 2011). Senecal and Nantel (2004) stated that by using the web 2.0 users especially customers able to gain access different knowledge and enlightenment provided by other customers' reviews and suggestions. Surrounded the web 2.0 there is a development of platforms that connect people together through social network. The ability for them to produce and share the online content with other users within social media and able to architect the success by participating in the community (Meadows-Klue, 2008; White, 2016). With the current situation, organisation especially marketers trying their best to utilise the usage of web 2.0 to bring benefits for their organisation.

Even though many scholars have debated on the topic of social networks and many theories have been developed on how SNS act as marketing tool for marketers, but the academic studies merely focus on social network as a whole. The work publishes earlier circulated on social media such as Twitter, Myspace, Facebook and others packed into one study (Charnigo & Barnett-Ellis, 2007). Chen et al. (2011) mention social media allows business to be more attractive and communicative. A possible platform where customers able to interact and become more familiar with each other may enhance the likelihood the source of trust. Bear in mind that there is a slight different between social network and social media. Social media often referred to the formation of online communities where the main intention is to interact,

share and exchange information with one another (Buss & Strauss, 2009; Hiremath, & Kenchakkanavar, 2016). Meanwhile social network is namely status update, posts, video, links, pages in the websites (Eley & Tilley, 2009). As being mentioned above, this paper will explore on how organisation use Facebook as marketing tool while in the same time considered risk associated with it.

Facebook as Marketing Tool

Distinct from other social media, Facebook data is quite reliable and useful to comprehend customer's patterns and behaviours (Casteleyn, Mottart, & Rutten, 2009). From looking through the Facebook site, users action can be distinguished from the *news feed* at the right end corner of the sites where *top stories* and *most recent* can be viewed by the users. Nevertheless, let's face the reality, users can create their own profile base on whatever they wish to do but it is not necessary the users would provide a valid and accurate information about themselves (Doyle, 2007; Palmer & Koenig-Lewis, 2009; Treadaway & Smith, 2010). For instance, an individual would create different name rather than using his or her real name and manipulate his or her profile details and status in Facebook. Nevertheless Casteleyn et al. (2009) pointed out that by using Facebook, marketers may able to obtain valuable information from the users' profile, post and preferences. After all, not everyone uses Facebook to create a different version of them. Other most likely use Facebook to find the common interest and preferences of other individual users. Hence, by understanding the customers (users) preferences, it will help marketers to plan ahead and target their market segmentation. In the same time position themselves one step forward against their competitors (Acar & Polonsky, 2007; Treadaway & Smith, 2010). The next section, we will further highlight the approach that can be useful for the marketers when targeting customers in Facebook.

ASEAN Digital Marketplace

ASEAN countries are no exception from this case and can be more highly at risk than the other countries. There are cases where many physical stores have to close down due to the increase in the number of people purchasing goods and products from the digital market. Half of the ASEAN countries received more than 50% Internet penetration with Singapore as the country with the highest percentage of Internet penetration, while Myanmar is at the last position, with its 13% internet penetration. The same statistic also shows that Indonesia has the most internet users, where there are 88 million internet users. However, the internet penetration for this country falls below 50% as the number of the internet users are relatively low compared to the population in the country, which is 258.7 million people. Brunei, with only 0.3 million internet users, is the country with the least number of internet users, but, Brunei is right behind Singapore, making it the second country with the highest percentage of internet penetration (Sen, Attravar, & Jaiswal (2016). By 2017, it is expected of ASEAN to expand its market size up to 25%, making ASEAN one of the digital market leads, together with China. By 2018, every ASEAN country is predicted to have above 50% of internet penetration. This increase is expected to continue over years, and the advancement of the internet penetration will contribute a raise of at least In addition to this, if new industries are established and mobile workers' productivity is increased, ASEAN may have a total of about \$5,000 to \$5,600 GDP for its digital market economy (Maria et al., 2017). Based on this, it is safe to say that ASEAN countries have high potential in becoming countries with strong digital developments.

PROBLEM SOLVING TOOL

Plan, Do, Check and Act (PDCA)

In the early of 1950s, Edward Deming organised seminars with manager in Japan. During that time Deming Wheel (Cycle) was introduced to discuss on the concern of stability interface surrounded on studies, design, production and sales to ensure a better-quality improvement in product and services and to gain customer trust (Lodgaard, Gamme, & Aasland, 2012). The Deming Cycle which also called PDCA Cycle is a continuous apprehended and improved model that capture 4 repetitive cycles; Plan, Do, Check (Study) and Act (iSixSigma, 2018). It is founded that PDCA often practices by organisation around the world to enhance their main competitive advantageous and endless issues on solving methods (Gidey et al., 2014). Indeed, to be able to capture competitive advantageous organisation first must exceed the customers’ demands and specification. In order to do so companies try to compete with one another to establish latest research and innovation (Katz, 2004). Undoubtedly, customers will not prefer to buy waste products and services as neither value and benefit bring give advantage to them (Gidey et al., 2014). Hence, organisation should devise a method to ensure there is unnecessary processes include and try their best to enhance the additional value to obtain better quality products and services. This is where the Deming Cycle play important role. The solution eliminates or minimal the amount of original wastes and errors (Marrs & Mundt, 2007). Conforming this situation, Cole (2002) discuss the activities of Deming Cycle as the main key to attract the customer attention. Below the Table 1 shows the content of Deming Cycle (PDCA Cycle).

Root Cause Analysis (RCA)

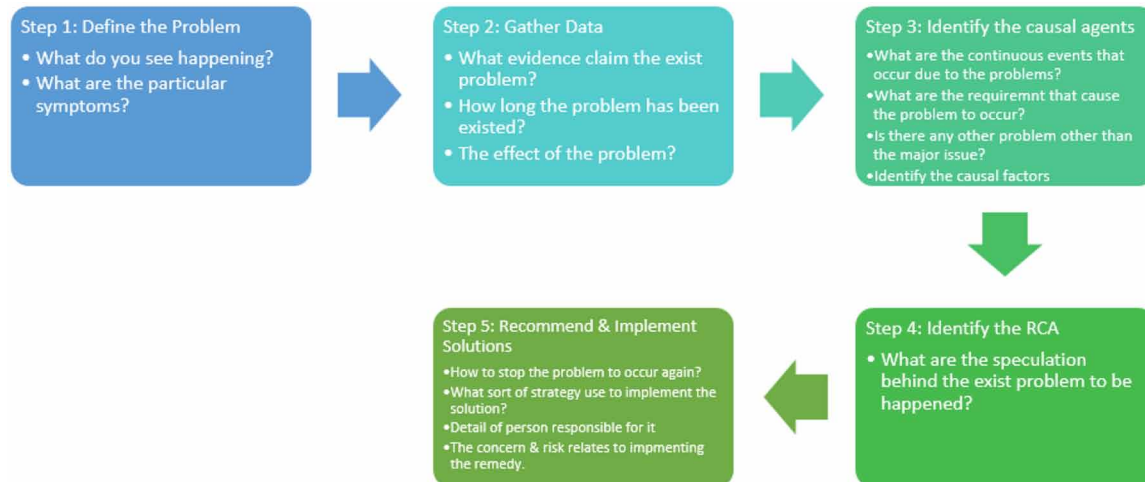
When a negative event occurs, Root Cause Analysis (RCA) will be used to identify the causal agents (Senders, 2004). RCA is considered as a guide to correct the roots causes by focusing on the symptoms of the problem (Vliet, 2010). Basically, RCA reflected in the ‘new moment’ as compare to Failure Mode and Effect Analysis (FMEA) in solving the problems or issues. In order to take a corrective measure 5 identifiable steps are being used in the process (MindTools, 2018). As being illustrate in Figure 1, 5 steps are significant in finding the cause of the problem.

Table 1. Significant characters of 4 stages in PDCA cycle

<p>1. Plan</p> <ul style="list-style-type: none"> ● Gather suitable team members ● Collect all available data ● Explore customers’ needs & demands ● Identify the process circulate the queries/problems ● Find out the cause of the root ● Design an action plan ● Develop the plan 	<p>2. Do</p> <ul style="list-style-type: none"> ● Execute the improvement ● Gather suitable & valid data ● Measure the progress ● Documented the result
<p>3. Check/Study</p> <ul style="list-style-type: none"> ● Write the summary & analyse the data ● Evaluate the result relates to target & compare ● Review if there are only errors/issues ● Documented the lesson learned ● Define any existing issues/unintended costs/abnormal cost 	<p>4. Act</p> <ul style="list-style-type: none"> ● Standardise the required improvement ● Formulate the best approach ● Communicate the result broadly & efficiently ● Find out the next improvement (if necessarily)

(Adapted from Cole, 2012)

Figure 1. 5 steps in RCA
(Adapted from MindTools, 2018)



Nevertheless, there are better RCA technique that can be used to search for the root cause of the problem (Mulder, 2012). One of the technique will be using the 5 Why Analysis developed by Sakichi Toyoda (Vliet, 2014). By using 5 Whys Analysis, it may help to avoid people to focus only on the common assumption and classic cause of the problems (Mulder, 2012). The common assumption of the problems may consist of lack of time, not appealing and shortage of workforce. Although these factors might be considered as causes however 5 Whys help to determine the particular origins that may be responsible behind the problem. An example of RCA using F Whys will be discussed in the case scenario later to enhance further understanding on this topic.

METHODOLOGY

In nature, this study contains element of exploratory research and use secondary data to support the degree of Facebook act as marketing tools for organisations. To analyse the utilisation of marketing tool, the researchers decides to choose Facebook as the area of the study. Prior to recent research Facebook is selected due to its strong presence and engagement of organisations especially the companies in exploiting Facebook as part of their marketing efforts. As being highlighted on the first section, Facebook is a dominant SNS that surpass billions of active users (Facebook, 2018). The study focuses on executing mostly base on secondary data to help with the research.

DISCUSSION

As web 2.0 acts as catalyst for customers to seek authenticity and sense of belonging, organisations try to capture these customers attention. It is important to take note that customer involvement is a key towards marketing approach (Park et al., 2007). In this case marketers need to take notes on the *customer reviews*

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and their *recommendations* in the Facebook. After discussing these two parts, a following section on how Facebook is being used as marketing tool, case scenario on PDCA and RCA and the benefits of using Facebook marketing will be further deliberate.

Customer Reviews

Nambisan (2002) mentioned that for organisation to be appear visible in social media, a customer review is substantial. Organisation must encourage their customers to give them rating and reviews through social media (Bronner & De Hoog, 2010) One of the good example will be a local company in Brunei named Escape Square Brunei. Escape Square Brunei is one of the problem-solving game where customers (players) need to find a way to escape and solve the puzzle (Escape Square Brunei, 2018). The company instigate their customers to give them review through Facebook ad Instagram in exchange the customers will obtain certain amount of discount before they play the game. By doing so, it encourages customers to give review and recommendations for the company products and services. Thus, attracting more potential customers. These views are supported by Ridings and Gefen (2004) that potential customers are more likely attracted towards other users' reviews and recommendations. Eventually the interaction in social media help to gain the customers trust and reduce the risk for the customers to encounter frauds and danger as they rely on the genuine reviews and recommendations from their friends.

Recommendations From Other Users

Based on the relevant literature reviews, online social communities and SNS provides social supports to other users (Ballantine & Stephenson, 2011). For instance, by using Facebook users can simply search the name of products or company that individual intended to seek for. The Facebook search then direct the users to *the post, pages, group/communities, rating and recommendation* relates to the search. In a research made by Hajli (2014), the advancement of the web 2.0 along with social media have created tremendous impact to the customers. In this circumstance, customers act as support value in the social media platform as they volunteer to share the online content about the company's products and services in Facebook. Consequently, attract new potential clients and establish trust amongst the users as users are willing to share with the public about their purchase experiences.

Dominant Facebook Tools to Support Marketing Tools

Based on the Table 2 shown below, the Facebook method are adapted from the previous scholar articles on 'The implication of Facebook Marketing for Organisation' from Central Queensland University. The TABLE is an improve proposed version that may help to assist the marketers in achieving their target in using Facebook marketing.

Concerns and Risks Allied With Marketing in Facebook

Indeed, trust issue is often associate with social media such as Facebook. A sense of fear that Facebook may reveals the users' peculiarity and intervene their privacy whenever they share online information amongst their friends and larger community might endanger these anxious users (Eley & Tilley, 2009). It remains questionable on how much Facebook able to gather information about the users and tailor the

Table 2. Step to achieve marketing target in Facebook

Common Facebook Tools	How to Attract the Customers?
1. Facebook Profile	Well develop profile of organisation can create authentic & project audience the organisation vision/mission statement clearly
2. Facebook Group	To retain/attract more customers, the name of the group, topic of interest and image is vitally important (Ramsaran-Fowdar, & Fowdar, 2013).
3. Facebook Business Page	A great approach to grow the brand identity and product (Marrs, 2013).
4. Organise Events	By using Facebook, organisations able to promote their upcoming events, articles, blogs, etc.
5. Sponsored ads and Stories	Capitalise the Word-of-Mouth by promoting advertisement and stories that link to the users' behaviour or friend's like.
6. Facebook Live	<ul style="list-style-type: none"> • A new latest trend of Facebook towards customer engagement & sharing (Dudharejia, 2017) • Provide a sneak peek to customer in several ways: <ul style="list-style-type: none"> o Hosting events o Customer post purchase experience o Sneak peek on latest product or services
7. Chatbots	Organisation use chatbots to interact with their customers through Facebook messenger (Dudharejia, 2017).

advertisement to their taste and preferences (Poh, 2018). Nevertheless, certain studies suggest users that own social media are perceived risk compare to those who do not have one (Fogel & Nehmad, 2009). They fully aware of the risk associate with social media but they consider themselves as risk takers. Even though Facebook might share their information with the third parties such as organisations, but they feel comfortable to have their common interest share with others.

Nonetheless, bot many Facebook users use their Facebook to check sponsored stories or advertisement. A study conducted by Palmer and Koenig-Lewis (2009) revealed that people use Facebook to socialise and tend to ignore the ads whenever they log into the Facebook. Although it is not surprise that Facebook may help to reduce the marketing cost incur in every month for organisation. But the question is, is it worthy to invest in Facebook to increase the organisation profit? If yes, is there any proper technique that may help fix a problem for marketers and help them plan ahead to make marketing efforts. In this situation we will be exploring two scenarios by using PDCA and RCA to help the marketers.

Scenario I: Applying PDCA on Viral Marketing

How to dissect the consumers' minds seems to be the main concern for marketers these days. Therefore, by using Deming Cycle, the study will intend to use the Rayport Virus Marketing and further divided them into 4 steps in achieving viral marketing in Facebook.

Step 1: Plan

First step to understand the problems face by the organisation when using the viral marketing. One of the way is to collect the data through obtaining response and feedbacks from the customers who use

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the Facebook. Since reactions and response to online sharing in Facebook grow faster compare to using traditional marketing approach, it helps the organisation to comprehend the patterns and behaviours of their consumer quickly than before. For example, a company want to find out the most “Viral Post” or type of popular food brand that engage successfully with their customers through Facebook. So, the plan should be;

What are the most popular and friendly post about food brands found in Facebook? How they able to capture/engage with customers? How did they response to their customers post on Facebook Page/Business?

Hence, the data will be gathered from the dominant users of food sectors or industry in Facebook and in this stage plans and strategy will be set up in order to successfully viral the products/ services and rise the brand of the organisation.

Step 2: Do

A being stated by Rayport (1996), “What’s up-front is free; payment comes later”. In other words, if you want to be profitable you must be willingly to invest certain amount of money and effort to your company first before bearing those fruits. In this case, to pioneer the viral marketing, marketers need to execute the plan that can help their organisation to promote in Facebook Page/Business. For instance, the organisation decides to use ‘Facebook Live’ to provide sneak peek on the latest promotion of its products. By executing this plan, the marketer can monitor the result and find out how *many reviews, like and share* the company able to obtain by using the Facebook Live. For the second step, the question ask for this scenario will be;

What type of promotional method can be used on our Facebook Page/Business? Would it be successful to have our customer involve more in our Facebook Page/Business?

Step 3: Check

After that, marketer need to let the user carry out the messages to online community posts. From here the customers evaluation will be observe and taken into account. Customer evaluation often bring either positive or negative impact on the brand evaluation (Chevalier & Goolsbee, 2002). By looking through the circumstances, marketer will check whether the plan he executes i.e. using Facebook Live will delivered a particular message intends for the current and potential customers. Therefore, the question applies for the third stage;

By using the XX promotional tool, does it create better impact to the brand and deliver specific messages? If yes, does the message deliver is well received by the customers?

Step 4: Act

If organisations want their customers to be committed to their brands, the organisations need to make customers feel welcome and make the brand be part of their identity (Duboff 1986; Plummer, 1985). Ki and Hon (2007) state people will be more appreciative towards organisations that maintain friendly

and reliable customer relationship strategies. This can be done by targeting different market segment with different strategies. By using the current scenario, if marketer products and services aim at different market segment (i.e. youngsters). Then particular technique must be use to reach the target market segment. Although capturing the attention of particular market segment can be tricky, but it may help to increase the number of potential customer if the technique use is the appropriate one. Hence in this situation, marketers need to understand:

Does the current method lead to enhancement of brand loyalty. Does it require another approach that may help to comprehend the requirement of the customers?

Scenario II: 5 Whys for Negative Image of Brand in the Social Media

In case of RCA analysis, we will explore a scenario of a recent establish company and use 5 Whys of RCA to find the origin of the problems and provide solution to minimal the issue in the future.

A company uses Facebook to generate campaign on its new latest release products and services. Since the company is a new establish business, the marketers aim to enhance their brand popularity in short amount of time. However, considering the company is quite new, the marketers and campaign managers are not acquaintance with digital marketing. In fact, in the company only the owner has previous experience in handling this matter. When the company first launch its products and brand, it is unsuccessful and the company gain a lot of critics by the Facebook users. Hence to solve these issues, 5 Whys will be used to identify the causes:

1. Why the problem occurs?

Reason: Fail to launch their first campaign successfully

2. Why?

Cause: Because the marketers and campaign manager lack of experience

3. Why?

Cause: Because the marketers and campaign manager are not familiar with digital marketing and no proper guidance given to them.

4. Why?

Cause: The company is recently established and the person who has the experience (owner) is not available to help them.

5. Why?

Root Cause: The owner is busy and do not give any specific guidance on how to do digital marketing though Facebook.

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To solve this situation, owner should appoint a person who is familiar with digital marketing especially a person that acquaintance with Facebook marketing. The owner need to ensure that the content of the campaign advertisement do not generate any negative impact to any users. Research and proper guidance must be done before launching any advertisement in Facebook. By identifying the cause of the problem, it helps the marketers to formulate better plan and try their best to make further improvement.

Advantages of Using Facebook Marketing

Facebook continue to dominant the world of social media and metamorphize into world number 1 sites to connect and share online (Marrs, 2013). Edelman (2007) claims that customers are moving towards social network and spend most of their time accompany with viral and online marketing. This is considered as 'win-win situation' for both customers and organisation. Customers regard the usage of social media as the current trend while organisation take this opportunity to cut their marketing expense as it is very costly to use traditional methods. Indeed, with the current volatile economic circumstance, organisations are trying to look for better opportunity to minimise their spending (Ramsaran-Fowdar, & Fowdar, 2013). They see the usage of SNS is one of the way to penetrate their business to the global market, in the same time reduce their costs of expenditure

Secondly, Facebook can be treated as one of the viral marketing method. Viral marketing refers to marketing approach that influence users to share the marketing messages to other sites/users, thus create exponential growth and influence the messages to be appear visible in SNS (Rouse & Kiwak, 2017). This viral marketing efforts can be treated a modern marketing of word of mouth. Trusov, Bucklin and Pauwels (2009) believed that word of mouth from family, friends and others have strong influence over customer purchase experience. . In addition, it is proven by recent studies that word of mouth is one of the crucial elements in influencing customers behaviours.

Thirdly, in accordance to Ramsaran-Fowdar and Fowdar, (2013), Facebook is an absolute epitome towards telemarketing and marketing research institute. This probably due to following reasons:

- People do not have to dial the call centres to seek for data and information
- No need to hire people to collect market survey data as the marketers able to do so by using Facebook analytics
- Facebook provides quick response and answer to any marketing enquiries within short-term frame.

CONCLUSION

The advantage for organisation to use the marketing tools can be seen from above, but Facebook users simply can ignore the advertisement and any flooding information share to them. The Facebook platform circulates on the trust and shares. Every organisation must learn not to violate the users' privacy and follows the rules regulate when doing marketing activities or else opt to be "unlike" or critics in the Facebook. It is not only learning on how to enhance brand popularity, organisation need to keep up to date with the current trends and tailor to customer taste. This is why marketers of the organisation need to understand, it is not all about the organisation only but how they able to deliver and interact the message clearly to these customers in Facebook. Yet, the sequel is barely unfolded, the journey is just the beginning. For organisation especially the marketers, understanding the approach towards utilising

marketing tool in Facebook is not restricted to social media only. Any particular strategy to ensure the flow of process within organisation is smooth and less error also need to be considered. Furthermore, relying on Facebook marketing is one of the good strategy but it requires skills and experience in using the tools in the same time understand who the customers are quite important. Finally, social media has helped to gain the customers trust and reduce the risk for the customers to encounter frauds and danger as they rely on the genuine reviews and recommendations from their friends.

REFERENCES

- Acar, A. S., & Polonsky, M. (2007). Online social networks and insights into marketing communications. *Journal of Internet Commerce*, 6(4), 55–72. doi:10.1080/15332860802086227
- Ahad, A. D., Anshari, M., & Razzaq, A. (2017). Domestication of Smartphones among Adolescents in Brunei Darussalam, *Journal of Cyber Behavior, Psychology and Learning*, 7(4), 26–39. doi:10.4018/IJCBPL.2017100103
- Allen, M. (2017). Web 2.0: An argument against convergence. In *Media Convergence and Deconvergence* (pp. 177–196). Cham: Palgrave Macmillan. doi:10.1007/978-3-319-51289-1_9
- Anshari, M., & Alas, Y. (2015). Smartphones Habits, Necessities, and Big Data Challenges. *Journal of High Technology Management Research*, 26(2), 177-185. DOI: . doi:10.1016/j.hitech.2015.09.005
- Anshari, M., Alas, Y., Hardaker, G., Jaidin, J. H., Smith, M., & Ahad, A. D. (2016). Smartphone habit and behaviour in Brunei: Personalization, gender, and generation gap. *Computers in Human Behavior*, 64, 719–727. doi:10.1016/j.chb.2016.07.063
- Anshari, M., & Lim, S. A. (2017). E-Government with Big Data Enabled through Smartphone for Public Services: Possibilities and Challenges. *International Journal of Public Administration*, 40(13), 1143–1158. doi:10.1080/01900692.2016.1242619
- Ballantine, P. W., & Stephenson, R. J. (2011). Help me, I'm fat! Social support in online weight loss networks. *Journal of Consumer Behaviour*, 10(6), 332–337. doi:10.1002/cb.374
- Buss, A., & Strauss, N. (2009). *Online communities handbook: Building your business and brand on the Web*. Berkeley, CA: New Riders.
- Boyd, D., & Ellison, N. (2010). Social network sites: Definition, history, and scholarship. *IEEE Engineering Management Review*, 3(38), 16–31. doi:10.1109/EMR.2010.5559139
- Bronner, F., & De Hoog, R. (2010). Consumer-generated versus marketer-generated websites in consumer decision making. *International Journal of Market Research*, 52(2), 231–248. doi:10.2501/S1470785309201193
- Casteleyn, J., Mottart, A., & Rutten, K. (2009). How to use data from Facebook in your market research. *International Journal of Market Research*, 51(4), 439–447. doi:10.2501/S1470785309200669
- Charnigo, L., & Barnett-Ellis, P. (2007). Checking out Facebook. com: The impact of a digital trend on academic libraries. *Information Technology and Libraries*, 26(1), 23. doi:10.6017/ital.v26i1.3286

Facebook as Marketing Tools for Organizations

- Chevalier, J., & Goolsbee, A. (2003). Measuring prices and price competition online: Amazon.com and BarnesandNoble.com. *Quantitative Marketing and Economics*, 1(2), 203–222. doi:10.1023/A:1024634613982
- Chen, Y., Fay, S., & Wang, Q. (2011). The role of marketing in social media: How online consumer reviews evolve. *Journal of Interactive Marketing*, 25(2), 85–94. doi:10.1016/j.intmar.2011.01.003
- Cole, R. E. (2002). From continuous improvement to continuous innovation. *Total Quality Management*, 13(8), 1051–1056. doi:10.1080/09544120200000001
- Doyle, S. (2007). The role of social networks in marketing. *Journal of Database Marketing & Customer Strategy Management*, 15(1), 60–64. doi:10.1057/palgrave.dbm.3250070
- Duboff, R. S. (1986). Brands, like people, have personalities. *Marketing News*, 20(1), 8.
- Dudharejia, M. (2017). *8 reasons Facebook will beat all other digital marketing channels this year*. Retrieved March 11, 2018, from <https://www.entrepreneur.com/article/286441>
- Edelman, D. C. (2007). From the periphery to the core: As online strategy becomes overall strategy, marketing organizations and agencies will never be the same. *Journal of Advertising Research*, 47(2), 130–134. doi:10.2501/S0021849907070146
- Eley, B., & Tilley, S. (2009). *Online marketing inside out*. Collingwood, Vic.: SitePoint.
- Facebook. (2018). *Facebook pages for marketing your business*. Retrieved February 9, 2018, from <https://www.facebook.com/business/products/pages#>
- Fogel, J., & Nehmad, E. (2009). Internet social network communities: Risk taking, trust, and privacy concerns. *Computers in Human Behavior*, 25(1), 153–160.
- Escape Square Brunei. (2018). *About Escape Square Brunei*. Retrieved March 11, 2018, from https://www.facebook.com/pg/escapesquarebn/about/?ref=page_internal
- Gidey, E., Jilcha, K., Beshah, B., & Kitaw, D. (2014). The plan-do-check-act cycle of value addition. *Industrial Engineering & Management*, 3(124), 2169–0316.
- Hajli, M. N. (2014). A study of the impact of social media on consumers. *International Journal of Market Research*, 56(3), 387–404. doi:10.2501/IJMR-2014-025
- Hiremath, B. K., & Kenchakkanavar, A. Y. (2016). An alteration of the web 1.0, web 2.0 and web 3.0: a comparative study. *Imperial Journal of Interdisciplinary Research*, 2(4).
- iSixSigma. (2018). *Deming Cycle, PDCA, iSixSigma*. Retrieved from <https://www.isixsigma.com/dictionary/deming-cycle-pdca/>
- Katz, R. (2004). *The human side of managing technological innovation: A collection of readings*. New York: Oxford University Press.
- Ki, E. J., & Hon, L. C. (2007). Testing the linkages among the organization–public relationship and attitude and behavioral intentions. *Journal of Public Relations Research*, 19(1), 1–23.

- Lai, L. S., & Turban, E. (2008). Groups formation and operations in the Web 2.0 environment and social networks. *Group Decision and Negotiation*, 17(5), 387–402. doi:10.1007/10726-008-9113-2
- Landicho, J. (2017). *Facebook marketing trends for 2018*. Retrieved from <https://learn.infusionsoft.com/marketing/social-media/2018-facebook-trends>
- Lodgaard, E., Gamme, I., & Aasland, K. E. (2012, September). Success factors for PDCA as continuous improvement method in product development. In *IFIP International Conference on Advances in Production Management Systems* (pp. 645-652). Springer.
- Maria, R. S., Urata, S., & Intal, J. P. S. (2017). *The ASEAN Economic Community Into 2025 and Beyond*. Academic Press.
- Marrs, F. O., & Mundt, B. M. (2007). Handbook of industrial engineering: Technology and operations management (3rd ed.). Academic Press. doi:10.1002/9780470172339.ch2
- Marrs, M. (2013, April 15). *7 ways to market your business on Facebook*. Retrieved March 11, 2018, from <https://www.wordstream.com/blog/ws/2013/04/15/facebook-marketing>
- Meadows-Klue, D. (2008). Opinion piece: Falling in Love 2.0: Relationship marketing for the Facebook generation. *Journal of Direct, Data and Digital Marketing Practice*, 9(3), 245–250. doi:10.1057/palgrave.ddmp.4350103
- Milne, G. R., Rohm, A., & Bahl, S. (2009). If It's Legal, Is It Acceptable? *Journal of Advertising*, 38(4), 107–122. doi:10.2753/JOA0091-3367380408
- MindTools. (2018). *Root Cause Analysis: Tracing a problem to its origins*. Retrieved March 12, 2018, from https://www.mindtools.com/pages/article/newTMC_80.htm
- Montalvo, R. E. (2016). Social media management. *International Journal of Management & Information Systems (Online)*, 20(2), 45.
- Mueller, J., Hutter, K., Fueller, J., & Matzler, K. (2011). Virtual worlds as knowledge management platform—a practice-perspective. *Information Systems Journal*, 21(6), 479–501. doi:10.1111/j.1365-2575.2010.00366.x
- Mulder, P. (2012). *5 Whys analysis*. Retrieved March 12, 2018, from ToolsHero: <https://www.toolshero.com/problem-solving/5-whys-analysis/>
- Nambisan, S. (2002). Designing virtual customer environments for new product development: Toward a theory. *Academy of Management Review*, 27(3), 392–413. doi:10.5465/amr.2002.7389914
- Noyes, D. (2018). *Top 20 Facebook statistics*. Retrieved February 9, 2018, from <https://zephoria.com/top-15-valuable-facebook-statistics/>
- Palmer, A., & Koenig-Lewis, N. (2009). An experiential, social network-based approach to direct marketing. *Direct Marketing: An International Journal*, 3(3), 162–176. doi:10.1108/17505930910985116
- Park, D. H., Lee, J., & Han, I. (2007). The effect of on-line consumer reviews on consumer purchasing intention: The moderating role of involvement. *International Journal of Electronic Commerce*, 11(4), 125–148. doi:10.2753/JEC1086-4415110405

Facebook as Marketing Tools for Organizations

- Plummer, J. T. (1985). How personality makes a difference. *Journal of Advertising Research*, 24(6), 27–31.
- Poh, M. (2018). *Facebook & your privacy: Why it matters*. Retrieved from <https://www.hongkiat.com/blog/facebook-privacy-matters/>
- Ramsaran-Fowdar, R. R., & Fowdar, S. (2013). The implications of Facebook marketing for organizations. *Contemporary Management Research*, 9(1), 73–84. doi:10.7903/cmr.9710
- Rayport, J. (1996). The virus of marketing. *Fast Company*, 6, 68.
- Ridings, C. M., & Gefen, D. (2004). Virtual community attraction: Why people hang out online. *Journal of Computer-Mediated Communication*, 10(1).
- Rouse, M., & Kiwak, K. (2017). *What is viral marketing?* Retrieved March 10, 2018, from <http://search-salesforce.techtarget.com/definition/viral-marketing>
- Sen, A., Attravar, A., & Jaiswal, R. (2016). *Internet: E-commerce in ASEAN-Taking Off*. Retrieved from <https://www.jefferies.com/CMSFiles/Jefferies.com/files/Insights/EcommerceinASEAN.pdf>
- Senders, J. W. (2004). FMEA and RCA: The mantras; of modern risk management. *BMJ Quality & Safety*, 13(4), 249–250. doi:10.1136/qshc.2004.010868 PMID:15289625
- Senecal, S., & Nantel, J. (2004). The influence of online product recommendations on consumers' online choices. *Journal of Retailing*, 80(2), 159–169. doi:10.1016/j.jretai.2004.04.001
- Stokes, R. (2010). Social media. In *EMarketing: The essential guide to online marketing* (p. 189). Washington, D.C.: Saylor Academy.
- Tiago, M. T. P. M. B., & Veríssimo, J. M. C. (2014). Digital marketing and social media: Why bother? *Business Horizons*, 57(6), 703–708. doi:10.1016/j.bushor.2014.07.002
- Treadaway, C., & Smith, M. (2010). *Facebook marketing: An hour a day*. Indianapolis, IN: Wiley Publishing Incorporation.
- Trusov, M., Bucklin, R. E., & Pauwels, K. (2009). Effects of word-of-mouth versus traditional marketing: Findings from an internet social networking site. *Journal of Marketing*, 73(5), 90–102. doi:10.1509/jmkg.73.5.90
- Vliet, V. V. (2010). *Root Cause Analysis (RCA)*. Retrieved March 12, 2018, from ToolsHero: <https://www.toolshero.com/problem-solving/root-cause-analysis-rca/>
- Vliet, V. V. (2014). *Sakichi Toyoda*. Retrieved March 12, 2018, from ToolsHero: <https://www.toolshero.com/toolsheroes/sakichi-toyoda/>
- White, C. M. (2016). *Social media, crisis communication, and emergency management: Leveraging Web 2.0 technologies*. CRC Press.

Chapter 8

Relationship Quality and Customer Demographics in Indian Retail

Ekta Duggal

University of Delhi, India

Harsh V. Verma

University of Delhi, India

ABSTRACT

Service industries are becoming highly contested markets in India. This has shifted the focus of players towards quality and relationship quality. Building lasting customer relationships is the only way to sustain in the long run. Accordingly, quality in different forms needs to be articulated and deconstructed. The complexity of services makes it difficult for firms to satisfy and retain customers. Relationship quality is driven by trust, commitment, and satisfaction. The chapter sought to validate the retail relationship quality scale in Indian context. The components defining relationship quality were investigated to determine their relative importance across different customer groups. It was found that satisfaction with the employees is the most valued aspect across select demographic groups. This reinforces the role of employees in producing outcomes that are likely to bind customers with the service firm. Operationally, it implies that employee-customer interaction is important in managing retail business.

INTRODUCTION

The retail market in India is unique in many ways compared to its Western counterparts. The industry is dominated by unorganized players which constitute more than 92% of total retail. Structurally these are family owned small mom and pop outlets and corner stores. Out of about 14 million total outlets, only less than 5% are of size more than 500sq.ft. (KPMG, 2014). The retail space is highly penetrated and products are available in close proximity of consumers. The poorly enforced municipal laws allow business activity in residential areas. Indian shopping is characterized by high shopping frequency, small buying size and unplanned shopping trips. The frequency of shopping encounters with neighborhood

DOI: 10.4018/978-1-5225-7095-0.ch008

stores allow for ties to develop between seller and buyers beyond economic value into psycho-social realm. The retail space has been undergoing a subtle transformation. Firstly, the players across the borders are moving with different formats and scale like Zara and Metro. Secondly, Indian organized players have joined the fray like Reliance and Future Group. And then there has been strong activity in Internet based retailing with big companies like Amazon and Flipkart and small niche operators like Grofers. Managing customers in an online environment is challenging (Verma et al., 2016). This new emergent retail scenario is characterized by not only direct competition from similar players but also across different formats. Sustaining in this turbulent environment is both challenging and difficult. This requires retailers to focus on their customers and forge lasting relationships.

The marketers are forced to shift their attention from customer attraction to customer retention as a strategy to survive in competitive environment (Reichheld & Sasser, 1990; Osarenkhoe & Benani, 2007). For a long period of time services remained insulated from competition but now they face same goods like high intense competitive rivalry. Firms seek to develop loyalty and relationship through customer satisfaction and happiness (Zhou et al., 2008). Evidence exists to support that marketing performance is directly influenced by customer satisfaction and retention (Sahay, 2003; Stefanou et al., 2003). The value and importance of customer relationship in generating mutually satisfying value is widely acknowledged and practiced (Gronroos, 1990; Gummesson, 1994; Donaldson and O'Toole, 2002; Sahay, 2003). Strong buyer seller relationship provides buffer and comes to rescue even in failures (Ha and Jang, 2009). Accordingly, relationship building has assumed central position between business partners (Cater & Cater, 2010; Marquadt, 2013; Vize, 2017). The focus on relationship building is engendered by excess supply of products and consequent reduction in switching barriers. Comprehension and administration of customer relationships is thus indispensable in marketing (Zhang et al., 2016). This study sought to explore the components of retail relationship quality and answer the question whether this varies across different demographic groups.

CUSTOMER RELATIONSHIP AND BUSINESS SUSTAINABILITY

Business organizations have been forced to embrace relationship orientation in response to environmental ambiguity and uncertainty (Day, 2000). Customers are now informed, sophisticated and unpredictable (Buttle, 1999). Most services have been localized, protected and hence have become less competitive. But now services are liberalized and have opened up to foreign participation. In India, service sectors like health care, air transportation, banking, insurance, education, and telecommunications have moved on to become highly competitive. The incidence of competition makes it imperative for firms to shift focus on customer retention as customer attraction becomes costly and ineffective (Christopher et al., 1991; Lehtinen, 1996). It is for these reasons that relationship building has become a widely-adopted philosophy (Noble & Phillips, 2004).

Customer loyalty cannot be an outcome of a random approach. This is especially true when markets are competitive and customers don't suffer from switching costs. Relationship is different from repeat buying. Loyalty is willful and is a voluntary commitment; it results from long-term healthy relationships with the customers (Kuhn & Mostert, 2018). The relationship building cost pays back by increased revenue and profits (Abdul-Rahman & Kamarulzamanb, 2012) and is a win-win situation for both the customer and the marketer (Estell, 2002; Barlow, 2000). However, the relationship strategy must be implemented deftly for it produces positive results (Noble & Phillips, 2004). For delivering better performance and

winning competitive battle, marketers need to understand relationship quality from the demographics' perspective (Moghadam, 2014). Demographic factors such as gender, age, education, income influence consumer behaviour (Juyal, 2013; Kumar, 2014; Laoviwat et al., 2014). Gender based differences in consumer behavior are critical to the development of desirable shopping experience and thereby establish relationship with the customer (Lakshmi et al., 2017).

Service environments play a crucial role in establishing relationships with customers (Babin et al., 2015). In services, especially where customer-provider interaction is essential to service creation and delivery, human aspect presents itself as both opportunity and threat. This is particularly true for services like including retail, healthcare and hospitality (Kandampully & Duddy, 1999). The importance of human element stems from service encounter in which service providers act as a critical link between the service organization and the customer. To a customer, the entire service organization is presented by the frontline service employees. In a service interface the value extends beyond functionality to encompass social and psychological dimensions. Service personnel enjoy unique position in extending the boundary of exchange from pure functional or economic utility to encompass social and psychological values. This can provide both richness and depth to customer relationship with a firm. Relationships do not make sense only for marketers from marketing and financial sense, healthy and mutually satisfying relationships are also desired by customers (Parasuraman et al., 1991).

RATIONALE

As discussed in the previous section, the inefficiencies of customer attraction strategy shift the focus on keeping the customer for life. The field of relationship marketing yields significant gains including customer satisfaction, loyalty, word of mouth, and increased share of purchases (Reynolds & Beatty, 1999; Caceres & Paparoidamis, 2007; Xie & Heung, 2012). However, crucial to the success of relationship based strategy is the understanding of relationship drivers and customer impacting competencies (Bejou et al., 1996). Central to relationship strategy is the construct of relationship quality (RQ) (Dwyer et al., 1987) and its quality determines the depth of bonding between the firm and its customers. The quality of relationship defines relationships between firm and customers. Relationship quality acts as antecedent to relationship and it can create or destroy opportunities for relationship building (Crosby et al., 1990).

The previous investigations in this area are marked by varying approaches and overlaps. Some have adopted the antecedent and consequence approach while the others have viewed it as consisting of elements. Many researchers have asserted that the concept of relationship quality is under-explored (Rosen & Suprenant, 1998; Naude & Buttle, 2000; Hennig-Thurau, 2000; Walter et al., 2003; Woo & Ennew, 2004; Huntley, 2006). Relationship quality does not enjoy a consensus based formal established definition. A critical review of the literature on the relationship quality led Athanasopoulou (2009) to conclude that studies have neglected the role of the environment. The cultural and environment are likely to play significant role in development of relationships. The relationship building at retail is often pursued by the companies like shooting in the dark (Ibrahim and Najjar 2008). The development of context specific scale is important for effective handling of customer relationships (Lages et al., 2005). It is against this background that the present study seeks to explore and apprehend the construct of relationship quality and develop and validate the relationship quality measure in the Indian retail context. It further aims to uncover the relative importance of relationship quality components for different demographic groups.

THEORETICAL FOUNDATIONS

Customer relationship has gained attention of researchers as well as practitioners (Christopher et al., 1991; Webster, 1992; Sheth & Parvatiyar, 1994). However, the relationship construct has not been comprehended effectively in the literature (Bagozzi, 1995). Relationship though is frequently mentioned in marketing literature but what it actually means to create a relationship is not understood (Fournier, 1998). Also, there is a dearth of studies on relationship composition and the manner in which the organizations implement relationship parameters (Barnes, 1997; Sheaves & Barnes, 1996). The conceptualization of relationship differs along specific aspects of interactions (Bendapudi & Berry, 1997). Relationships are formed as a result of a series of interactions.

Diverse opinions exist about the structure of relationship quality (Caceres & Paparoidamis, 2007). Relationship quality is contextualized as having relations that have both professional and social aspects (Gummesson, 1987). One perspective considers relationship quality (RQ) as a second order construct comprising of trust and satisfaction (Kim et al., 2006, Wray et al., 1994). Crosby et al. (1990) proposed that customer interest in continuing relationship can be defined as 'commitment' which depends upon level of relationship quality. The relationship quality is determined by frontline staff competence in fulfilling customer requirements (satisfaction) and attending to customers' concerns (trust). The constructs of 'Trust' and 'Satisfaction' have been found to affect consumer decisions significantly (Lagace et al., 1991; Kim & Han, 2008; Guenzi & Pelloni, 2004).

Relationship quality is made up of three components: perception of quality, trust and commitment (Hennig-Thurau & Klee, 1997). The excellence on these three parameters is likely to produce high relationship quality. Trust and commitment determine relationship strength (Bove & Johnson, 1999; Shemwell & Cronin, 1995). Relationship strength is core to relationship quality (Storbacka et al. 1994; Wu et al., 2007). Relationship strength influences consumer buying, word-of-mouth communication and repeat purchases (Storbacka et al., 1994). The intensity of connect with the customers influences relationship strength (Han et al., 1993). High relationship quality is indicative of deeper customer commitment (Wong & Sohal, 2002).

The construct of relationship quality is represented in consumer minds in the form of a schema (Kim et al., 2014). There are two broad ways in which relationship quality has been considered in marketing literature. In early conceptualizations, relationship quality was seen as consisting of two dimensions: satisfaction and trust (Crosby et al., 1990; Wray et al., 1994; Kim et al., 2006). Later this conceptualization was revisited and 'commitment' was added as the third dimension (Ivens & Pardo, 2007; De Canniere et al., 2010). Relationship quality is considered as a multidimensional construct consisting of satisfaction, trust, and commitment. But it is also conceptualized as a second order factor or construct which can be measured by first order observable or measured variables. In this scheme, trust, satisfaction and commitment become first order constructs (Vieira et al. 2008; Hsieh and Li, 2008) which provide a way to measure latent construct of relationship quality.

Trust

The word 'trust' implies faith, belief, confidence and reliance. It offers the foundation to relationship development (Berry, 1995) and it is impossible to sustain relationship without it (Wilson, 1995). But trust is interpreted differently in marketing literature (Wong & Sohal, 2002). Dependability and honesty provide assurance to customer (Moorman et al., 1992). Provider efficiency and reliability leads to trust

development (Schurr & Ozanne, 1995). Development of trust comes from one's belief or conviction in the other party (Anderson & Narus, 1990). Trust is an important marker and ingredient of relationship quality. Trust in retail context relates to customer developing a sense of faith and confidence on a store (Machintosh & Lockshin, 1997). The instrumentality of contact employees in retail must be acknowledged and their behavioral courtesy, helpfulness and knowledge are critical to customer trust building (Beatty et al., 1996, Wong & Sohal, 2006).

Relationship Satisfaction

Satisfaction refers to the extent to which customer expectations are met. As per disconfirmation paradigm, meeting of expectations lead to satisfaction. A positive disconfirmation results in delight and a negative disconfirmation results in outrage. In services, customer provider interactions drive satisfaction (Westbrook, 1981; Shamdasani & Balakrishnan, 2000). These interactions are evaluated on expectation parameters (Wilson, 1995). In low involvement situations, the interactional satisfaction primarily drives behavioral intentions and attitudes (Garbarino & Johnson, 1999). The focal point in services is satisfaction related to the process of delivery which is interactional in nature. In this regard, employee attitudes and behaviours assume critical importance and their delivery against the customer expectations determines relationship satisfaction.

Relationship Commitment

The synonyms of the word commitment include dedication, devotion, allegiance, and bonding. Relationship commitment is an indication of how dedicated parties are to a relationship. The committed customers believe that the organization would always work in their best interest (Garbarino & Johnson, 1999). Such commitment is advantageous for marketers (Gundlach et al., 1995). Diversity exists in definitions of commitment. It is seen by some as customer's desire to continue their association with an organization (Moorman et al. 1992). It signifies mutuality of interest of parties which cause them to work to make it successful (Dwyer et al., 1987). Commitment prevents customer attrition due to promotional lures. It is faithfulness and dedication which makes customers to stick to the relationship and prepares them to make monetary and non-monetary sacrifices (Mowday et al., 1982). Commitment is a good predictor of customer loyalty and behavioral intentions (Wong & Sohal, 2002; Kim et al., 2006). Commitment is related with brand preference, future purchase intentions and competitive advantage (Bettencourt, 1997; Zeithaml et al., 1996).

RESEARCH MODEL, HYPOTHESIS, AND OBJECTIVES

Relationship quality as discussed earlier is an overall assessment of strength of relationship between customer and service firm. The quality of relationship is a good predictor of customer's future patronage. Satisfaction is necessary but not sufficient for loyalty building. Loyalty can lead to dramatic increases in profitability (Reichheld & Sasser, 1990; Jone & Sasser, 1995; & Reichheld, 1996). The relationship quality construct, instead of satisfaction, is better positioned in this context. Our research model is presented in the Figure 1. It proposes that relationship quality is indicated by trust, relationship satisfaction and commitment. The overall relationship quality reveals itself through six latent constructs: employee trust,

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employee commitment, and employee satisfaction, and; store trust, store commitment, store satisfaction. These dimensions, in our study are assessed with the help of fourteen observed variables. Accordingly, the following hypothesis has been proposed:

H1: Relationship Quality (RQ) is a second order construct consisting of multiple dimensions.

In the backdrop of intensifying competition in retail, the customer relationship building through relationship quality assumes strategic importance. But something that cannot be measured cannot be effectively managed. Marketing constructs are not physical phenomena and hence do not lend themselves to objective measurements. The effective monitoring, control and management is impossible without an instrument that measures RQ. This study seeks to develop a valid and reliable measure of RQ. Previous studies have banked upon existing scales and adopted adaptation route to measure RQ in different contexts (Roberts et al 2003). The approach in this study was to develop India specific RQ measure by adopting the methodology proposed by Churchill (1979). Further, the study also aimed at finding out the relative importance of relationship quality dimensions. It is very likely that the drivers of RQ may vary in their contribution. The discovery of relative importance of these dimensions is essential for prioritizing marketing investments.

STUDY DESIGN AND PROCEDURE

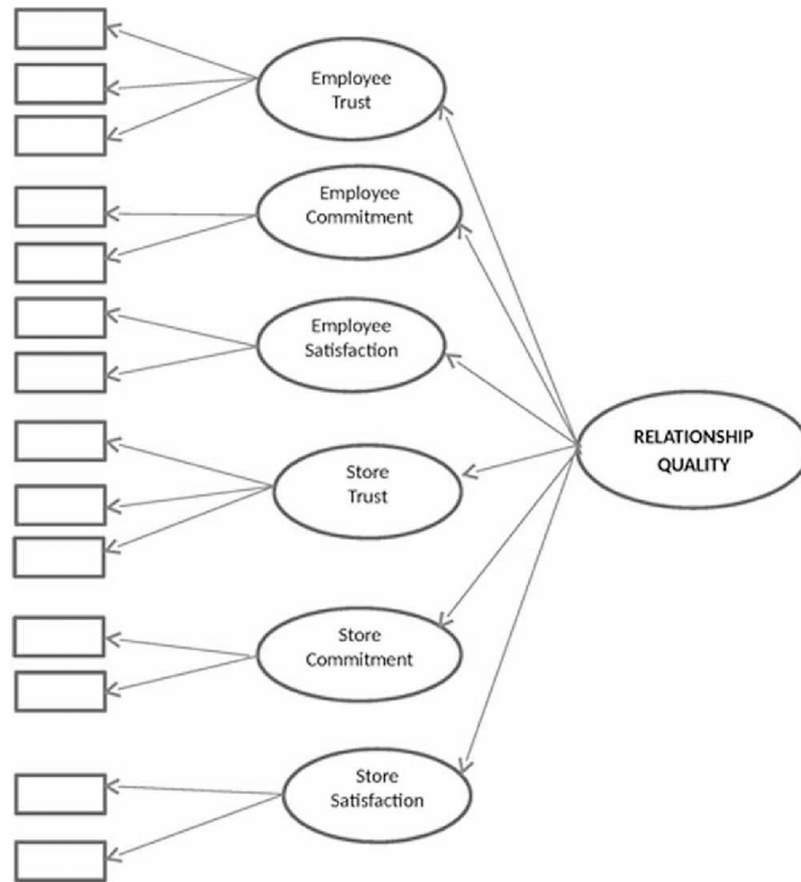
The study adopted a two-step process in operationalizing its objectives. The first phase of the research was exploratory which involved extensive review of literature to find how RQ has been articulated. It was found that RQ is multidimensional and there is an absence of consensus on its composition. But trust, satisfaction and commitment were found to be the most commonly used dimensions. This was coordinated with the scale dimension used in the scale proposed by Roberts et al. (2003). These dimensions were also verified through expert interviews and it was found that these best described RQ construct.

Once the scale was developed, it was tested for validity using confirmatory factor analysis and structural equation modeling. This exercise was done to validate the factor structure for relationship quality by testing the proposed hypothesis. The data was collected from the respondents at sites of department stores and hypermarkets. The survey was carried out in Delhi and National Capital Region. A structured questionnaire was administered to customers through mall-intercept technique. The data was collected from 400 customers out of which a total of 350 questionnaires were found to be complete and usable for the study. It gave us a response rate of 87.5%. The respondents were asked to give their responses on a 7-point Likert scale. The data was then encoded and prepared for statistical analysis which was carried out through SPSS and AMOS software.

ANALYSIS AND FINDINGS

The statistical analysis was carried out in two phases, in the first phase construct of relationship quality was validated and it was followed by finding out relative significance of its constituent dimensions.

Figure 1. Relationship quality as second-order construct



Testing the Measurement Model

Our measurement model assumed RQ as comprising of six dimensions which were gauged with fourteen measurement items and it was put to testing using AMOS. For this, the paths linking the measured variables with latent variable (RQ) were examined as shown in Figure 2. Model fit was estimated to determine the fitness of the measurement model. On the basis of magnitude of discrepancy between the sample and fitted covariance matrix, the normed chi square statistic (CMIN/DF) was found to be well below the threshold limit of 3.0 (Wheaton et al., 1977). CFI exceeded the recommended level of 0.95 (Hu & Bentler, 1999), RMSEA and SRMR values were also below the recommended value of 0.06 and 0.10 respectively (Hu & Bentler, 1999). This indicated that that the proposed model with the chosen parameters fits the population covariance matrix well on the basis of square root of difference of residuals of sample covariance matrix and hypothesized covariance model. The model fit with the data collected was established.

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The measurement model as shown in Figure 2 was also analyzed with respect to the factor loadings (standardized regression weights) and the critical ratios in order to assess whether the items proposed in the model are significant for the assessment of relationship quality in retail context. The standardized regression weights for the variables ranged from 0.816 to 0.987, and all were found to be greater than 0.5 (Hair et al., 06). The correlations between the relationship quality dimensions were all positive and the squared multiple correlations ranged from 0.700 to 0.974, all of them being well above the threshold limit of 0.25 (Hair et al., 06). The p values reflected that all regressions are statistically significant at 0.1% significance level.

An analysis of standardized regression weights conveyed that all the measured variables (indicators) proposed in the first order model of retail relationship quality pertaining to the six dimensions are important for assessing RQ. The strength of each of the links between the relationship quality dimensions is reflected by the squared multiple correlations. Thus, the 14 items for the six dimensions of relationship quality proposed in the model were found to be relevant in terms of the by significant relations of these observed variables with the dimensions. The implication that flows from this is that the variables included in the study could be used by retail managers for the assessment of retail relationship quality (RRQ).

Validating Retail Relationship Quality

After the model was found to be fit statistically, it was subjected to validity and reliability testing.

Unidimensionality

For assessing the unidimensionality, each of the dimensions pertaining to retail relationship quality were subjected to EFA individually. This process involved the performance of factor analysis on items of each of the dimensions to discover whether all these items converge on to their respective dimensions. The criterion used was that Eigen value of each of the dimensions should be greater than 1. This establishes that each of the dimensions accounted for a greater variance than what is contributed by any one of the variables included therein. The EFA extracted one principal component accounted for majority of total variance in the case of all components. This proved the unidimensionality of the dimensions.

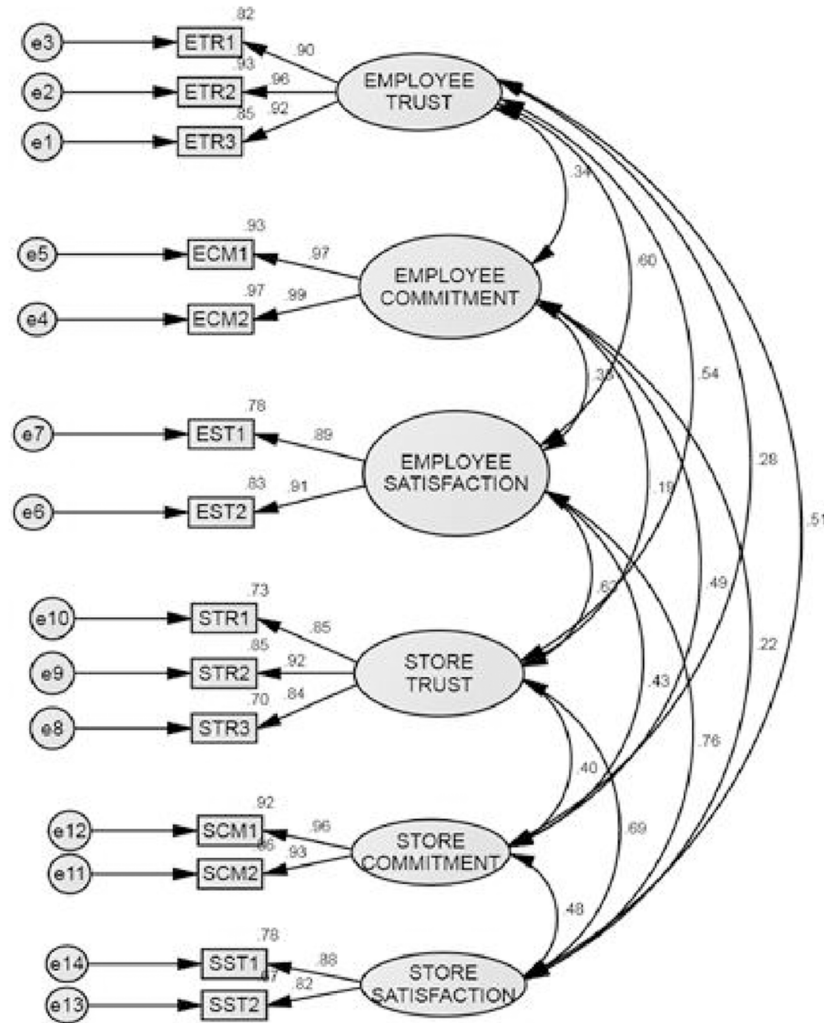
Reliability

Scale reliability estimates were generated with the measure of composite reliability. It indicates the degree to which indicators or items reflect the construct. According to the recommendations made by Hair et al (2006), the reliability estimates should be greater than or equal to the threshold limit of 0.7. As shown in the Table 1, all the dimensions exceeded the suggested threshold of 0.7. This suggests that the indicator items for the respective relationship quality dimensions reflect that dimension well. This established the composite reliability of the measure.

Validity

In the next step, validity of retail relationship quality scale was assessed.

Figure 2. Measurement model for retail relationship quality



Content Validity

Content validity was established through extensive literature review in which respective domains were explored and confirmed with the help of existing studies and review articles.

Convergent Validity

Convergent validity was checked to find out whether the items pertaining to each of the dimension converge on that dimension. This reflects the interconnectedness of the items. The absence of relatedness implies the lack of cohesiveness of the items. This convergence of items was confirmed with AVE's for all factors. All the factors had score of AVE greater than 0.5 threshold. Table 2 indicates that the indicator

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or observed variables of all the dimensions accounts for a high proportion of variance. This establishes the interrelatedness of items within a variable.

Discriminant Validity

This test of validity explores the dimension uniqueness. This was tested with square root of AVE score for each of the dimension which was related with correlation among the variables. The criterion adopted was that square root of AVE score for each variable should be greater than the correlation of that variable with other variables. The numbers highlighted along the diagonal in the Table 2 is the square root of AVE values for each of the factors and the other statistics is the correlation among the dimensions. A closer look reveals that all the square roots AVE are greater than the correlations. This established the discriminant validity of the scale. The six dimensions of retail relationship quality are different from each other.

Table 1. Retail relationship quality: Composite reliability estimates

Retail Relationship Quality Dimensions	Composite Reliability
Store Trust	0.904
Employee Trust	0.950
Employee Commitment	0.976
Employee Satisfaction	0.893
Store Commitment	0.941
Store Satisfaction	0.838

Table 2. Indicators of convergent and discriminant validity for retail relationship quality

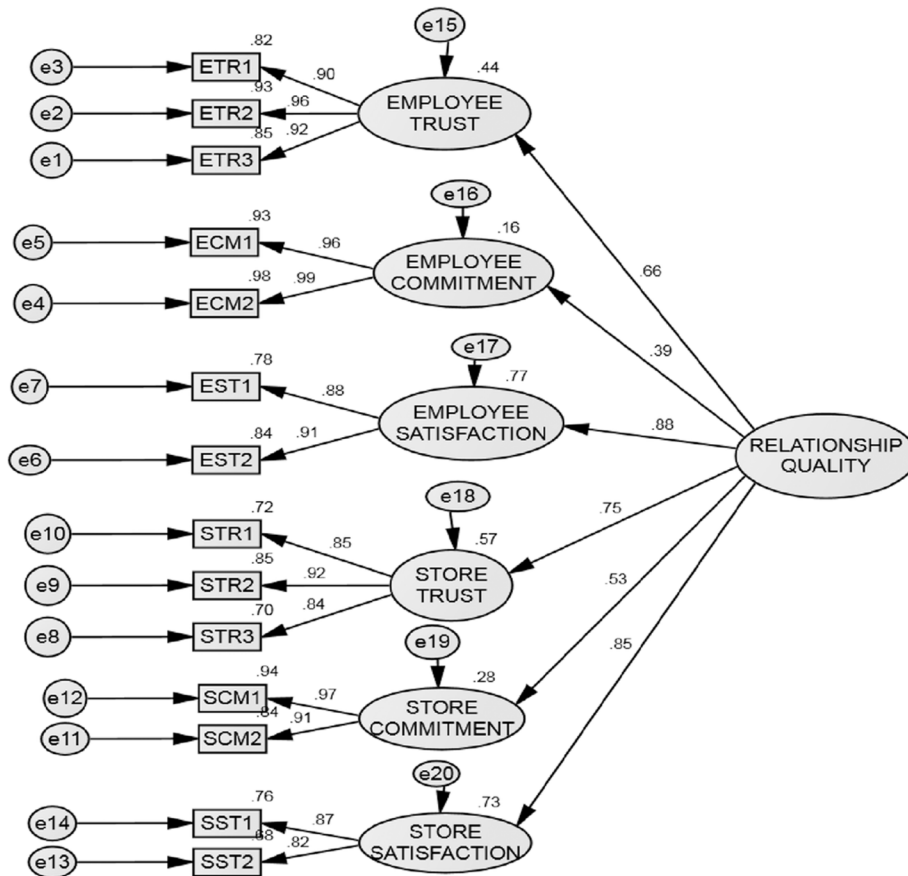
Retail Relationship Quality	AVE	Store Trust	Employee Trust	Employee Commitment	Employee Satisfaction	Store Commitment	Store Satisfaction
Dimensions							
Store Trust	0.759	0.871					
Employee Trust	0.865	0.541	0.930				
Employee Commitment	0.954	0.191	0.344	0.977			
Employee Satisfaction	0.807	0.634	0.605	0.381	0.898		
Store Commitment	0.889	0.396	0.277	0.487	0.435	0.943	
Store Satisfaction	0.721	0.686	0.508	0.221	0.762	0.476	0.849

Structural Model and Hypothesis Testing

At the second stage, the structural model was tested. This was done to establish that RQ is a second order construct consisting of six dimensions: employee trust, employee satisfaction, employee commitment, store trust, store commitment and store satisfaction. The model defining retail relationship quality as a second order construct fits the observed data well, as indicated by the fit indices. The normed chi square statistic (CMIN/DF) is well below the threshold limit of 3.0 (Wheaton et al., 77). CFI exceeded the recommended level of 0.95 (Hu & Bentler, 99), RMSEA and SRMR values falls below the recommended value of 0.06 and 0.10 respectively (Hu & Bentler, 99).

The second order model (figure 3) displayed all parameters to be significant. The second order loadings of retail relationship quality were 0.66 for employee trust, 0.394 for employee commitment, 0.87 for employee satisfaction, 0.75 for store trust, 0.53 for store commitment and 0.85 for store satisfaction. The two variables with the highest scores are employee satisfaction and store satisfaction. However, the highest coefficient was that of employee satisfaction, which explained retail relationship quality to the maximum possible extent. This demonstrates the power of people in retail businesses.

Figure 3. Structural model for retail relationship quality



Relationship Quality Across Demographic Groups

After having explored the inter-relationships through the structural model taking the sample as whole, we sought to investigate whether these relationships vary across different demographic groups. This was done to understand the relative importance of components of relationship quality at the segment level. There are differences in consumer attitudes and intentions with regard to demographics (Aluri & Palakurthi, 2011). Gender and age were found to be valuable differentiators of relationship marketing results (Fernandes et al., 2013). The statistics from the structural model for the different segments is presented in Table 3.

As can be seen in the Table 3, that, the relative importance of relationship quality dimensions across different groups does not differ. The findings at the segment level are similar to findings at the aggregate sample level. The ‘employee satisfaction’ is the most important component of relationship quality in all cases. However, some differences are observed in case of gender-based analysis. In case of women, ‘store satisfaction’ assume significance in terms of relationship quality whereas in case of men, it is ‘employee satisfaction’ that is perceived to be the most important dimension of relationship quality.

DISCUSSION AND IMPLICATIONS

The consumers are in the throes of a new retail experience (Taneja, 2007). The protected environment and availability of limited retail options has created a hostage like situation for customers. But now things are about to change with the opening up of retail to foreign players. With the arrival of multi-brand organized retailing, customer relationship will assume top priority. In this background, this study sought to explore the relationship quality phenomenon. Based on the extant review of literature, the relationship quality was proposed to be made up of three dimensions: trust, satisfaction and commitment at store and employee level. This is multi-dimensional conceptualization of RQ. This study explored

Table 3. Standardized estimates for demographic groups

Relationship	Male Respondents Standardized Estimate(C.R.)	Female Respondents Standardized Estimate(C.R.)	Young Respondents Standardized Estimate(C.R.)	Middle-Old age Respondents Standardized Estimate(C.R.)	Middle Income Group Respondents Standardized Estimate(C.R.)	High Income Group Respondents Standardized Estimate(C.R.)
Relationship quality → Employee trust	0.659*	0.699*	0.658*	0.680*	0.664*	0.676*
Relationship quality → Employee commitment	0.518(5.698)	0.284(3.497)	0.295(3.451)	0.498(5.766)	0.333(4.131)	0.486(5.194)
Relationship quality → Employee satisfaction	0.889 (7.958)	0.870(8.711)	0.910 (8.083)	0.845 (8.355)	0.916 (8.880)	0.819 (7.357)
Relationship quality → Store trust	0.684(6.634)	0.811(7.943)	0.761(7.222)	0.769(7.247)	0.742(7.621)	0.779(6.700)
Relationship quality → Store commitment	0.509(5.437)	0.543(5.805)	0.492(4.954)	0.584(6.362)	0.610(6.590)	0.424(4.321)
Relationship quality → Store satisfaction	0.787(6.730)	0.903 (8.380)	0.881(7.633)	0.827(7.319)	0.890(8.444)	0.810(6.298)

statistically whether these dimensions adequately define the construct of RQ by examining the validity and reliability. This is a necessary step for developing a valid and reliable relationship quality scale. The importance of such scale stems from the need to monitor and manage relationship quality such that customer relationships are managed effectively. The study also investigated whether any differences exist between the perceptions of different demographic groups so that the differences if any could be incorporated into the marketing strategies.

The multi-dimensionality signals that marketers wishing to create and sustain customer relationships must identify the relative importance of these dimensions. It is essential for prioritizing and structuring marketing investments. Two of the dimensions with the maximum influence on relationship quality were found to be employee satisfaction and store satisfaction. Satisfaction was found to be critical to relationship building in mobile service context (Liu et al., 2011).

The store satisfaction aspect is related to the rational side of retail establishment. It represents the 'what' or technical aspect of the store like merchandise, layout, location, return policy and assortment. The store dimensions assume significance because they form criteria for store performance evaluation. Previous studies differed in terms of which of the tangible or intangible elements is important (Kumar, 1995). The importance of intangible elements was highlighted by Kim et al (2006). Rahman and Ramli (2016) have defined the relationship quality factors as hard and soft factors

Satisfaction results when customer expectations on these dimensions are met. Store satisfaction is necessary but not sufficient. Satisfaction being the absence of dissatisfaction is a precursor to relationship building. The relationship building program must begin with ensuring store satisfaction at essential level. For instance, the modern retail store like *Spar* and *Big Bazaar* ensure customer store satisfaction by matching their assortment with customer consumption basket. They ensure quality availability, convenient hours, and liberal exchange and return policies at the base level. *Big Bazaar* provides its customers with 'Friendly Returns Policy' (Big Bazaar, 2016). A high amount of variance is accounted for by the technical dimension in our model. These represent concrete aspects; therefore, their outcomes can be evaluated objectively by consumers. For instance, merchandise assortment or store convenience can be compared with an ease without ambiguity between competitors. The concreteness of the technical aspects does not leave much scope for creating competitive differentiation because the competing stores can neutralize these by creating parity. For instance, department stores like *Shoppers Stop* and *Lifestyle* come very close to each other in terms of merchandise quality, location, pricing, availability, assortment, atmospherics and operating hours. Although store satisfaction is an important element for relationship building but it ceases to lose its validity as a discriminator when competitors achieve parity.

Relationship requires emotional content in interactions (Barnes, 2000). The second important aspect to relationship building is found to be satisfaction with employees. This represents the interpersonal side of retailing. The store satisfaction pertains to the inanimate aspects but employee satisfaction represents the human side. The customer-employee encounter adds a non-technical layer to retail experience. Employee behaviors can push a mere utility based problem solving episode to heart-touching happy experience. About 80% of the positive things that people remember are related to how they are treated by people in an organization (Brown, 1997). The research done by British Airways suggests that people play main role in creating goodwill. Human relations with customers are undoubtedly more important than the technical factors. The difficult to engineer aspects in a human interaction like care, courtesy, problem resolution and feeling of importance serve critical evaluative aspects which are instrumental in engendering happiness and contentment. The frontline employees by providing non-substitutable human touch can effectively ward off the challenges of commoditization (Bowen, 2016).

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Relationship is a human construct and is about identification, trust and liking. Customer facing store employees enjoy a unique position and opportunity for forging relational ties with customers. Modern stores like *Shoppers Stop* and *Lifestyle* invest in frontline staff which works on to giving customer delight by emotionally relating with customers by exhibiting behaviors which are sincere, caring, courteous, friendly, and personal. These interactions extend the retail transaction into the realm of a social event. *Shoppers Stop* uses specially designed training modules for its frontline employees and calls its employees as ‘customer care associates’. For instance, its new employees are given 21 days’ induction training followed by what is called “buddy training system” for 14 days (Sangameshwaran, 2004). They are trained to understand what customer wants, what customer likes and dislikes, make customer happy with purchase and empathize; these aspects are at the core of serving the customer (FreePress, 2015).

Goods marketers rely upon the process of humanizing their brands by way of investing human qualities in them or by brand anthropomorphization. A brand may forge relationship based on utilitarian or emotional connections (Fournier, 1998). When customer and service employees meet, the ‘spark’ between the two can transform skeptical customers into committed followers (Beaujean et al., 2006); it is at this point that the customer invests high amount of emotional energy in the outcome. The service employees who directly interact with customers are the entire service from customers’ perspective (Zeithaml et al., 2009). The retail firms that seek to leverage the power of customer relationship must invest in both technical and interpersonal training of their customer facing employees. Three things are of critical help: initiative orientation, positive outlook and making customer feel special because nobody wants to be treated like anybody (Sheldon, 1998). These employees enjoy unique positions and can push a mere utility transaction into higher levels of psycho-social level thereby opening new spaces for value creation. Two of the specific ways to achieve this is to invest in the development of employee skills in individualizing and personalizing customer encounter. Those firms which treat their customers like a faceless entity are unlikely to leverage power of customer relationships. Customers’ relationships are very unlikely accidental discoveries. They are outcomes of a planned strategy.

CONCLUSION

The retail scenario is undergoing a subtle but profound change in India. The liberalization of retail sector has opened up shores to foreign players. Indian retail which used to be entirely made up of small neighborhood stores is witnessing arrival of both domestic and foreign organized players. Indian players like Kishore Biyani’s Future Group, Ambani’s Reliance and Aditya Birla have launched their retail ventures modeled along the lines of Walmart, Tesco and Costco. At the same time, foreign multinational retail firms are also likely to join the highly lucrative retail market. The juxtaposition of the new with the old format is likely to unleash a competitive wave in a space which has remained protected and uncompetitive. In such a scenario, customer retention would assume significance and become critical focal point in retail marketing. It is against this background, this study sought to explore the meaning and constituent elements of relationship in retail context.

The study was conducted in two phases. First, extant literature was surveyed and constructs were apprehended. It was followed by a quantitative investigation. The relationship quality was identified as the second order construct which was linked with the three first order variables: trust, relationship satisfaction and relationship commitment. These variables were gauged with measurement variables and their relationship was tested with structural equation modeling. Two of the most significant determinants

of relationship quality were found to be store satisfaction and employee satisfaction. This implies that if retail firms seek to build long term customer relationships then they must ensure store satisfaction by focusing on store's technical aspects like availability, timing, assortment, and pricing. This is going to set essential base for relationship building and it is the human component of retail service encounter which must be leveraged to push this exchange on to a higher value psycho-social space to forge true bonds with customers.

REFERENCES

- Abdul-Rahmana, M., & Kamarulzamanb, Y. (2012). The influence of relationship quality and switching costs on customer Loyalty in the Malaysian Hotel Industry. *Procedia: Social and Behavioral Sciences*, 62, 1023–1027. doi:10.1016/j.sbspro.2012.09.174
- Aluri, A., & Palakurthi, R. (2011). The influence of demographic factors on consumer attitudes and intentions to use RFID technologies in the US hotel industry. *Journal of Hospitality and Tourism Technology*, 2(3), 188–203. doi:10.1108/17579881111173749
- Anderson, J. C., & Narus, J. A. (1990). A model of distributor firm & manufacturer firm working partnerships. *Journal of Marketing*, 54(1), 42–58. doi:10.2307/1252172
- Arora, R., & Stoner, C. (1996). The effect of perceived service quality & name familiarity on the service selection decision. *Journal of Services Marketing*, 10(1), 22–34. doi:10.1108/08876049610106699
- Athanasopoulou, P. (2009). Relationship quality: A critical literature review and research agenda. *European Journal of Marketing*, 43(5/6), 583–610. doi:10.1108/03090560910946945
- Babin, B. J., Boles, J. S., & Griffin, M. (2015). The Moderating Role of Service Environment on the Customer Share- Customer Commitment Relationship. In *New Meanings for Marketing in a New Millennium, Developments in Marketing Science: Proceedings of the Academy of Marketing Science*. Springer. 10.1007/978-3-319-11927-4_90
- Bagozzi, R. P. (1995). Reflections on Relationship Marketing in consumer markets. *Journal of the Academy of Marketing Science*, 23(4), 272–277. doi:10.1177/009207039502300406
- Barlow, R. G. (2000). Frequency marketing- What's next? *Direct Marketing*, 62(9), 2–4.
- Barnes, J. G. (1997). Closeness, Strength & Satisfaction: Examining the nature of relationships between providers of financial services & their retail customers. *Psychology and Marketing*, 14(8), 765–790. doi:10.1002/(SICI)1520-6793(199712)14:8<765::AID-MAR3>3.0.CO;2-C
- Barnes, J. G. (2000). *Secrets of customer relationship management*. New York: McGraw Hill.
- Beatty, S. E., Mayer, M. L., Coleman, J. E., Reynolds, K. E., & Lee, J. (1996). Customer-Sales associate retail relationships. *Journal of Retailing*, 72(Fall), 223–247. doi:10.1016/S0022-4359(96)90028-7
- Beaujean, M., Davidson, J., & Madge, S. (2006). The moment of truth in customer service. *The McKinsey Quarterly*, 1, 62–73.

Relationship Quality and Customer Demographics in Indian Retail

- Bejou, D., Wray, B., & Ingram, T. N. (1996). Determinants of relationship quality: An artificial neural network analysis. *Journal of Business Research*, 36(2), 137–143. doi:10.1016/0148-2963(95)00100-X
- Bendapudi, N., & Berry, L. L. (1997). Customers motivations for maintaining relationships with service providers. *Journal of Retailing*, 73(1), 15–37. doi:10.1016/S0022-4359(97)90013-0
- Berry, L. L. (1995). Relationship Marketing of Services – Growing interest, emerging perspectives. *Journal of the Academy of Marketing Science*, 23(4), 236–245. doi:10.1177/009207039502300402
- Bettencourt, I. (1997). Customer voluntary performance: Customer as partners in service delivery. *Journal of Retailing*, 73(3), 383–406. doi:10.1016/S0022-4359(97)90024-5
- BigBazaar. (2016). *Easy Returns*. Retrieved from <http://shop.bigbazaardirect.com/content/easy-returns>
- Bove, L. L., & Johnson, L. W. (1999). *Customer relationships with service personnel: do we measure closeness, quality or strength?* Paper presented at the International Services Marketing Conference, Brisbane, Australia.
- Bowen, D. E. (2016). The challenges roles of employees in service theory & practice: An interdisciplinary view. *Human Resource Management Review*, 26(1), 4–13. doi:10.1016/j.hrmr.2015.09.002
- Brown, S. A. (1997). *Breakthrough customer service*. New York: John Wiley.
- Buttle, F. (1999). The S.C.O.P.E. of Customer Relationship Management. *International Journal of Customer Relationship Management*, 1(4), 327–336.
- Caceres, R. C., & Paparoidamis, N. G. (2007). Service quality, relationship satisfaction, trust, commitment & business-to-business loyalty. *European Journal of Marketing*, 41(7/8), 836–867. doi:10.1108/03090560710752429
- Cater, T., & Cater, B. (2010). Product and relationship quality influence on customer commitment and loyalty in B2B manufacturing relationships. *Industrial Marketing Management*, 39(8), 1321–1333. doi:10.1016/j.indmarman.2010.02.006
- Christopher, M., Payne, A., & Ballantyne, D. (1991). *Relationship marketing*. Oxford, UK: Butterworth-Heinemann.
- Churchill, G. A. (1979). A paradigm for developing better measures of marketing constructs. *JMR, Journal of Marketing Research*, 16(1), 64–73. doi:10.2307/3150876
- Crosby, L. A., Evans, K. R., & Cowles, D. (1990). Relationship Quality in Services Selling: An interpersonal influence perspective. *Journal of Marketing*, 54(July), 68–81. doi:10.2307/1251817
- De Cannière, M. H., De Pelsmacker, P., & Geuens, M. (2010). Relationship Quality Purchase Intention & Behavior: The Moderating Impact of Relationship Strength. *Journal of Business and Psychology*, 25(1), 87–98. doi:10.1007/10869-009-9127-z
- Donaldson, B., & O’Toole, T. (2002). *Strategic Market Relationships: From Strategy to Implementation*. John Wiley & Sons Ltd.

- Dwyer, R. F., Schurr, P. H., & Oh, S. (1987). Developing buyer-seller relationship. *Journal of Marketing*, 51(April), 11–27. doi:10.2307/1251126
- Estell, L. (2002). Loyalty Lessons. *Incentive*, 176(11), 38–41.
- Fernandes, T., Proença, J., & Rambocas, M. (2013). Evaluating the impact of customer demographical characteristics on relationship outcomes. *Proceedings of the 22nd International Business Information Management Conference (IBIMA)*.
- Fournier, S. (1998). Consumers and Their Brands: Developing Relationship Theory in Consumer Research. *The Journal of Consumer Research*, 24(4), 343–373. doi:10.1086/209515
- FreePress. (2015). *Shoppers Stop: Back to Retail Basics*. Retrieved from www.freepressjournal.in/uber-retailer/shoppers/stop/back/to/retail/basics-2/567530
- Fournier, S. (1998). Consumers and their Brands: Developing Relationship Theory in Consumer Research. *The Journal of Consumer Research*, 24(4), 343–373. doi:10.1086/209515
- Garbarino, E., & Johnson, M. S. (1999). The different roles of satisfaction, trust & commitment in customer relationships. *Journal of Marketing*, 63(2), 70–87. doi:10.2307/1251946
- Gronroos, C. (1990). Relationship approach to marketing in service contexts: The marketing & organizational behaviour interface. *Journal of Business Research*, 20(1), 3–11. doi:10.1016/0148-2963(90)90037-E
- Guenzi, P., & Pelloni, O. (2004). The Impact of Interpersonal Relationships on Customer Satisfaction & Loyalty to the Service Provider. *International Journal of Service Industry Management*, 15(4), 365–384. doi:10.1108/09564230410552059
- Gummesson, E. (1994). Making Relationship marketing operational. *International Journal of Service Industry Management*, 5(5), 5–20. doi:10.1108/09564239410074349
- Gundlach, G. T., Achrol, R. S., & Mentzer, J. T. (1995). The structure of Commitment in Exchange. *Journal of Marketing*, 59(1), 78–92. doi:10.2307/1252016
- Ha, J., & Jang, S. (2009). Perceived justice in service recovery and behavioral intentions: The role of relationship quality. *International Journal of Hospitality Management*, 28(3), 319–327. doi:10.1016/j.ijhm.2008.12.001
- Hair, J. F., Jr., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis* (6th ed.). Upper Saddle River, NJ: Prentice Hall.
- Han, S. L., Wilson, D. T., & Dant, S. (1993). Buyer-Seller relationships today. *Industrial Marketing Management*, 22(4), 331–338. doi:10.1016/0019-8501(93)90029-7
- Hennig-Thurau, T. (2000). Relationship quality & customer retention through strategic perspective. *Journal of the Academy of Marketing Science*, 16(1), 55–79.
- Hennig-Thurau, T., & Klee, A. (1997). The impact of customer satisfaction & relationship quality on customer retention: A critical reassessment & model development. *Psychology and Marketing*, 14(8), 737–764. doi:10.1002/(SICI)1520-6793(199712)14:8<737::AID-MAR2>3.0.CO;2-F

Relationship Quality and Customer Demographics in Indian Retail

- Hsieh, H. Y., & Li, S. H. (2008). *A Relative Influence of Service Quality & Relationship Quality on Customers' Loyalty for Restaurants*. Department of Food & Beverage Management, Far East University.
- Hu, L. T., & Bentler, P. M. (1999). Cut-off Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria versus New Alternatives. *Structural Equation Modeling*, 6(1), 1–55. doi:10.1080/10705519909540118
- Huntley, J. K. (2006). Conceptualization & measurement of relationship quality: Linking relationship quality to actual sale & recommendation intention. *Industrial Marketing Management*, 35(6), 703–714. doi:10.1016/j.indmarman.2005.05.011
- Ibrahim, H., & Najjar, F. (2008). Relationship Bonding Tactics, Personality Traits, Relationship Quality and Customer Loyalty: Behavioral Sequence in Retail Environment. *The ICFAI University Journal of Services Marketing*, 6(4), 6–37.
- Ivens, B. S., & Pardo, C. (2007). Are Key Account Relationships Different? Empirical Results on Supplier Strategies & Customer Reactions. *Industrial Marketing Management*, 36(4), 470–482. doi:10.1016/j.indmarman.2005.12.007
- Jones, T. O., & Sasser, E. J. (1995). Why satisfied customers defect? *Harvard Business Review*, (Nov-Dec): 88–99.
- Juyal, S. A. (2013). Effect of Demographic Factors on Consumer Buying Behaviour of Durable Goods. *Indian Journal of Marketing*, 43(12), 24. doi:10.17010/ijom/2013/v43/i12/80511
- Kandampully, J., & Duddy, R. (1999). Relationship marketing: A concept beyond the primary relationship. *Marketing Intelligence & Planning*, 17(7), 315–323. doi:10.1108/02634509910301124
- Kim, W., & Han, H. (2008). Determinants of restaurant customers' loyalty intentions: A mediating effect of relationship quality. *Journal of Quality Assurance in Hospitality & Tourism*, 9(4), 218–238.
- Kim, K., Park, J., & Kim, J. (2014). Consumer–brand relationship quality: When and how it helps brand extensions. *Journal of Business Research*, 67(4), 591–597. doi:10.1016/j.jbusres.2013.03.001
- Kim, W. G., Lee, Y., & Yoo, Y. (2006). Predictors of Relationship Quality & Relationship Outcomes in Luxury Restaurants. *Journal of Hospitality & Tourism Research (Washington, D.C.)*, 30(2), 143–169. doi:10.1177/1096348005285086
- KPMG. (2014). *BBG Retail*. Retrieved from <https://www.kpmg.com/IN/en/Issues&Insights/ArticlesPublications/Documents/BBG-Retail.pdf>
- Kuhn, S., & Mostert, P. (2018). Relationship intention and relationship quality as predictors of clothing retail customers' loyalty. *International Review of Retail, Distribution and Consumer Research*, 28(2), 206–230. doi:10.1080/09593969.2017.1380067
- Kumar, N., Scheer, L. K., & Steenkamp, J. E. M. (1995). The effects of perceived interdependence on dealer attitudes. *JMR, Journal of Marketing Research*, 32(3), 348–356. doi:10.2307/3151986

- Kumar, R. (2014). Impact of Demographic Factors on Consumer Behaviour - A Consumer Behaviour Survey in Himachal Pradesh. *Global Journal of Enterprise Informaion System*, 6(2). doi:10.18311/gjeis/2014/3084
- Lagace, R. R., Dahlstrom, R., & Gassenheimer, J. B. (1991). The relevance of ethical salesperson behaviour on relationship quality: The pharmaceutical industry. *Journal of Personal Selling & Sales Management*, 11(4), 39–47.
- Lages, C., Lages, C. R., & Lages, L. F. (2005). The RELQUAL scale: A measure of relationship quality in export market ventures. *Journal of Business Research*, 58(8), 1040–1048. doi:10.1016/j.jbusres.2004.03.001
- Laoviwat, P., Suppapanya, P., & Yousapronpaiboon, K. (2014). A Study of Demographics Influencing on Consumer Behavior and Attitude towards Brand Equity of Optical Business in Thailand. *International Journal of Trade, Economics and Finance*, 5(4), 347–350. doi:10.7763/IJTEF.2014.V5.395
- Lehtinen, U. (1996). Our present state of ignorance in Relationship Marketing. *Asia-Australia Marketing Journal*, 4(1), 43–51. doi:10.1016/S1320-1646(96)70268-X
- Lin, C.-P., & Ding, C. G. (2005). Opening the black box: Assessing the mediating mechanism of relationship quality & the moderating effects of prior experience in ISP service. *International Journal of Service Industry Management*, 16(1), 55–80. doi:10.1108/09564230510587159
- Liu, C.-T., Guob, Y. M., & Lee, C.-H. (2011). The effects of relationship quality and switching barriers on customer loyalty. *International Journal of Information Management*, 31(1), 71–79. doi:10.1016/j.ijinfomgt.2010.05.008
- Machintosh, G., & Lockshin, L. S. (1997). Retail Relationships & Store Loyalty: A multi-level perspective. *International Journal of Research in Marketing*, 5(5), 487–497. doi:10.1016/S0167-8116(97)00030-X
- Marquardt, A. J. (2013). Relationship quality as a resource to build industrial brand equity when products are uncertain and future-based. *Industrial Marketing Management*, 42(8), 1386–1397. doi:10.1016/j.indmarman.2013.07.017
- Moghadam, A. H. (2014). The effect of demographic characteristics of passengerson relationship quality in airline industry. *Interdisciplinary Journal of Contemporary Research in Business*, 5(11), 170–180.
- Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between providers users of market research: The dynamics of trust within & between organizations. *JMR, Journal of Marketing Research*, 29(3), 314–328. doi:10.2307/3172742
- Mowday, R., Porter, L., & Steers, R. (1982). *Organizational Linkages: The Psychology of Commitment, Absenteeism & Turnover*. New York, NY: Academic Press Inc.
- Naude, P., & Buttle, F. (2000). Assessing Relationship Quality. *Industrial Marketing Management*, 29(4), 351–361. doi:10.1016/S0019-8501(00)00112-7
- Noble, S. M., & Phillips, J. (2004). Relationship hindrance: Why would consumers not want a relationship with a retailer? *Journal of Retailing*, 80(4), 289–303. doi:jretai.2004.10.005 doi:10.1016/j

Relationship Quality and Customer Demographics in Indian Retail

- Osarenkhoe, A., & Benani, A.-E. (2007). An exploratory study of implementation of customer relationship management strategy. *Business Process Management*, 13(1), 139–164. doi:10.1108/14637150710721177
- Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Refinement & reassessment of the SERVQUAL scale. *Journal of Retailing*, 67(4), 420–450.
- Rahman, M. A., & Ramli, M. F. (2016). The Influence of Relationship Quality on Customer Loyalty in the Dual Banking System in the Northern States of Penninsular Malaysia. *Procedia: Social and Behavioral Sciences*, 219, 606–613. doi:10.1016/j.sbspro.2016.05.040
- Reichheld, F. F. (1996). Learning from customer defections. *Harvard Business Review*, 74(2), 56.
- Reichheld, F. F., & Sasser, W. E. Jr. (1990). Zero Defections: Quality Comes to Services. *Harvard Business Review*, 68(5), 105. PMID:10107082
- Reynolds, K. E., & Beatty, S. E. (1999). Customer benefits & company consequences of customer-salesperson relationships in retailing. *Journal of Retailing*, 75(1), 11–32. doi:10.1016/S0022-4359(99)80002-5
- Roberts, K., Varki, S., & Brodie, R. (2003). Measuring the quality of relationships in consumer services: An empirical study. *European Journal of Marketing*, 37(1/2), 169–196. doi:10.1108/03090560310454037
- Rosen, D. E., & Surprenant, C. (1998). Evaluating relationships: Are satisfaction & quality enough? *International Journal of Service Industry Management*, 9(2), 103–125. doi:10.1108/09564239810210451
- Sahay, B. B. (2003). Understanding trust in supply chain relationships. *Industrial Management & Data Systems*, 103(8), 553–563. doi:10.1108/02635570310497602
- Sangameshwaran. (2004, September). Shoppers' Hard Sell. *Business Standard*.
- Schlenker, B. R., Helm, B., & Tedeschi, J. T. (1973). The Effects of Personality & Situational Variables on Behavioral Trust. *Journal of Personality and Social Psychology*, 25(3), 419–427. doi:10.1037/h0034088
- Schurr, P. H., & Ozanne, J. L. (1985). Influence on exchange processes: Buyers preconceptions of a sellers trustworthiness & bargaining toughness. *The Journal of Consumer Research*, 11(4), 939–953. doi:10.1086/209028
- Shamdasani, P. N., & Balakrishnan, A. A. (2000). Determinants of relationship quality loyalty in personalized services. *Asia Pacific Journal of Management*, 17(3), 399–422. doi:10.1023/A:1015834214570
- Sharma, A., Tzokas, N., Saren, M., & Kyziridis, P. (1999). Antecedents & consequences of relationship marketing — Insights from business service salespeople. *Industrial Marketing Management*, 28(6), 601–611. doi:10.1016/S0019-8501(98)00034-0
- Sheaves, D. E., & Barnes, J. G. (1996). The Fundamentals of Relationships: An exploration of the concept to guide marketing implementation. In T. A. Swartz, D. E. Bowen, & S. Brown (Eds.), *Advances in Services Marketing & Management* (pp. 215–245). Greenwich, CT: JAI Press Inc.
- Sheldon, K. (1998). *Best of Class: Building a customer service organization*. Executive Excellence Publishing.

- Shemwell, D. J. Jr., & Cronin, J. J. Jr. (1995). Trust & commitment in customer/service provider relationships: An analysis of differences across service types & between sexes. *Journal of Customer Service in Marketing & Management*, 1(2), 65–75. doi:10.1300/J127v01n02_07
- Sheth, J. N., & Parvatiyar, A. (1994). *Relationship Marketing: Theory, Methods & Applications*. Atlanta: Centre for Relationship marketing, Emory University.
- Stefanou, C. J., Sarmaniotis, C., & Stafyla, A. (2003). CRM & customer-centric knowledge management: An empirical research. *Business Process Management Journal*, 9(5), 617–634. doi:10.1108/14637150310496721
- Storbacka, K., Strandvik, T., & Gronroos, C. (1994). Managing customer relationships for profits: The dynamics of relationship quality. *International Journal of Service Industry Management*, 5(5), 21–38. doi:10.1108/09564239410074358
- Taneja, A. (2007). *India Retail Report*. New Delhi: Images Multimedia.
- Verma, V., Sharma, D., & Sheth, J. (2016). Does relationship marketing matter in online retailing? A meta-analytic approach. *Journal of the Academy of Marketing Science*, 44(2), 206–217. doi:10.1007/11747-015-0429-6
- Vieira, A. L., Winklhofer, H., & Ennew, C. T. (2008). Relationship Quality: A literature review & research agenda. *Journal of Customer Behaviour*, 7(4), 269–291. doi:10.1362/147539208X386833
- Vijaya Lakshmi, V., Aparanjini Niharika, D., & Lahari, G. (2017). Impact of Gender on Consumer Purchasing Behaviour. *IOSR Journal of Business and Management*, 19(8), 33-36.
- Vize, R. (2017). Relationship quality: an online retail perspective. Paper Presented at QUIS 15, Porto, Portugal.
- Walter, A., Muller, T. A., Helfert, G., & Ritter, T. (2003). Functions of industrial supplier relationships & their impact on relationship quality. *Industrial Marketing Management*, 32(2), 159–169. doi:10.1016/S0019-8501(02)00230-4
- Webster, F. E. Jr. (1992). The Changing Role of Marketing in the Corporation. *Journal of Marketing*, 56(4), 1–7. doi:10.2307/1251983
- Westbrook, R. A. (1981). Sources of consumer satisfaction with retail outlets. *Journal of Retailing*, 57(3), 68–85.
- Wheaton, B., Muthen, B., Alwin, D. F., & Summers, G. (1977). Assessing Reliability & Stability in Panel Models. *Sociological Methodology*, 8(1), 84–136. doi:10.2307/270754
- Wilson, D. T. (1995). An integrated model of buyer-seller relationships. *Journal of the Academy of Marketing Science*, 23(4), 335–345. doi:10.1177/009207039502300414
- Wong, A., & Sohal, A. (2002a). Customers perspectives on service quality & relationship quality in retail encounters. *Managing Service Quality*, 12(6), 424–433. doi:10.1108/09604520210451902

Relationship Quality and Customer Demographics in Indian Retail

Wong, A., & Sohal, A. (2002b). An examination of the relationship between trust, commitment & relationship quality. *International Journal of Retail & Distribution Management*, 30(1), 34–50. doi:10.1108/09590550210415248

Wong, A., & Sohal, A. (2006). Understanding the quality of relationships in consumer services: A study in a retail environment. *International Journal of Quality & Reliability Management*, 23(3), 244–264. doi:10.1108/02656710610648215

Woo, K.-S., & Ennew, C. T. (2004). Business-to-business relationship quality: An IMP interaction-based conceptualization & measurement. *European Journal of Marketing*, 38(9/10), 12–52. doi:10.1108/03090560410548960

Wray, B., Palmer, A., & Bejou, D. (1994). Using neutral network analysis to evaluate buyer-seller relationships. *European Journal of Marketing*, 28(10), 32–48. doi:10.1108/03090569410075777

Wu, J.M., Yang, D.J., & Huang, J.Y. (2007). *The research development & prospects of relationship quality in relationship marketing*. I-Shou University.

Xie, D., & Heung, V. C. S. (2012). The effects of brand relationship quality on responses to service failure of hotel consumers. *International Journal of Hospitality Management*, 31(3), 735–744. doi:10.1016/j.ijhm.2011.09.010

Zeithaml, V., Bitner, M., & Gremler, D. (2009). *Services Marketing*. Boston: McGraw-Hill/Irwin.

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing*, 60(2), 31–46. doi:10.2307/1251929

Zhang, J. Z., Watson, G. F. IV, Palmatier, R. W., & Dant, R. P. (2016). Dynamic Relationship Marketing. *Journal of Marketing*, 80(5), 53–75. doi:10.1509/jm.15.0066

Zhou, K. Z., Li, J. J., Zhou, N., & Su, C. (2008). Market orientation, job satisfaction, product quality & firm performance: Evidence from China. *Strategic Management Journal*, 29(5), 985–1000. doi:10.1002/mj.700

Chapter 9

An Empirical Note on Comparative Perceptions of Indian Patients and Physicians in Direct-to-Consumer Promotion of Pharmaceutical Products

Jaya Rani Pandey
Sikkim Manipal University, India

Samrat Kumar Mukherjee
Sikkim Manipal University, India

Ajeya Jha
Sikkim Manipal University, India

Saibal Kumar Saha
Sikkim Manipal University, India

ABSTRACT

Direct promotion of pharmaceutical products to patients is not legal in India. Internet healthcare websites, however, have rendered this law moot. Patients today increasingly flock to websites to find health-related information. With the help of a survey involving 400 patients and 200 physicians, this chapter attempts to identify the differences in the perception of physicians and patients. The results indicate that major differences exist in the beliefs held by physicians and patients vis-à-vis merits and demerits of DTC-promotion through health-related websites. As patients and physicians operate as a team while health-solutions are made available to the patients, such major differences in their beliefs regarding the merits and demerits of DTC-promotion may result in emergence of fault lines in their relationship. An exploratory factor analysis has been conducted to confirm if the underlying variables measure the latent factors or not. Regression model has been developed to measure the impact of information perception on patient-physician relationship.

DOI: 10.4018/978-1-5225-7095-0.ch009

INTRODUCTION

Marketing of pharmaceutical products has remained under firm hold of ethical and legal norms. Direct advertising or any other forms of direct promotion of pharmaceutical products have been illegal in any or every country including India¹. These advertisements can only be sent to a registered medical practitioner by name or to a wholesale or retail chemist, the address of such registered medical practitioner or wholesale or retail chemist being given and such document should bear at the top, printed in indelible ink in a conspicuous manner, the words “For the use only of registered medical practitioners or a hospital or a laboratory”.

Further in India medicines need to be sold strictly against prescriptions issued by registered medical practitioners only not by other health care practitioners such as nurses, pharmacists or clinical psychologists.

Direct promotional efforts to patients are still limited to over-the-counter drugs which treat common symptoms such as fever, aches, cough and cold etc. With the revolution in the field of information technology, internet has become a great source of information. In the process the legal provisions banning direct-to-consumer promotions of medicines have been rendered mere paper feasts. Today patients have direct access to every possible detail of their ailment and their treatment as various web-sites of pharmaceutical companies provide all relevant and perhaps irrelevant information also to the patients. This direct promotional effort of the pharmaceutical companies, for the promotion of pharmaceutical products is known as DTC or direct to consumer marketing. Internet based DTC advertisement mainly concentrates towards patient’s not related healthcare professionals.

How do patients and physicians view such a development? Is there a significant difference in their perception on the efficacy, benefits, disadvantages and problems associated with this newly emerging phenomenon? This is an important issue as differences in perception may result in newer conflict-points between patients and physicians. This paper is comprehensively addresses the issue.

REVIEW OF LITERATURE

There is a great discussion that direct marketing of the prescription drugs can be both harmful as well as beneficial for the customers. Many studies have been conducted in this regard. At one side many researchers in USA consider it as a valuable source of information but there are many who argue that it is potentially harmful for the customers. Auton (2004) argue that DTC advertising enriches customers by providing information about health problems, treatment options and medical advances. *Peyrotetal (1998) and O’Brien Anne (2008) found that branded DTC ads which clearly address the patient’s need are very few.* He also argues that patients are more involved in DTC and are willing to discuss it with physicians. Robinson et.al (2004) stated that advertisement for a pharmaceutical product raises serious ethical concerns. They underrate risk, target the emotions of the patients and it is also adversely affecting the patient – physician relationship. *Scott Ehrlich found that Caduet, Crestor and Lipitor were among the few that used an on-screen personality to deliver the risk information. Scott analyzed that a closer look at broadcast DTC ads reveals that marketers are taking very different approaches to presenting details on risks and benefits.* Christopher M. Schroeder(2010) outlined that Consumers are taking charge of their healthcare like never before. They are doing more research before a doctor visit, more closely monitoring their doctor’s recommendations and consulting with friends and family to validate their decisions. Jha (2005) suggested that DTC is an important variable in pharmaceutical marketing in Indian

perspective. Taking care of patients is necessary for better patient-physician relationship (PPR). Many factors included like interpersonal features, clinical care expectations, and aspects of communication (Kurlander et.al., 2017).

The pharmaceutical industry has increased their investment three times more on Direct-to-Consumer Advertising (DTCA). This method of advertising has improved the interaction between patients and their physicians but it may be effecting this relationship in a negative way by using it for promotion purposes and higher profits. Patients are becoming more influenced from pharmaceutical advertising and they are becoming persuasive, physician resisting this type of persuasion are also increasing; the reason may be an intention to resist this marketing strategy by prescribing generic drugs. Physicians from different specialties and years of practice are interviewed in order to determine their perceptions and intentions towards the pharmaceutical industry. Responses are examined by checking physician resistance to persuasive messages and correlating the number of encounters to persuasive messages (patients requesting specific drugs) with intent to prescribe generic drugs. The relationship is not balanced if physicians keep their view about the pharmaceutical companies negative (Craig, 2004).

To describe how the race/ethnicity and gender of patients and physicians are associated with physicians' participatory decision-making (PDM) styles. African American patients rate their visits with physicians as less participatory than whites. However, patients consulting physicians of their own race rate their physicians' decision-making styles as more participatory. To improve cross-cultural communication between primary care physicians and patients and providing patients with access to a diverse group of physicians may lead to more patient involvement in care, higher levels of patient satisfaction, and better health outcomes (Patrick et.al., 1999)

The patient's role in taking medical decision that is many times counted as a conflict between the values of the patient and the values of the physician. To reduce the physician dominance, many have suggested of more patient control. Another thing is it fails to identify the potentially not balanced nature of this communication when one party is ill and searching for security, and when judgments comes with the interpretation of technical information. Still many are trying to improve the mutual relationship. This entire problem creates the expectations of physicians and patients as well as the ethical and legal standards for the physician's duties, informed consent, and medical malpractice. (Ezekiel et.al, 1992)

Patient-physician communication plays an important role in a different types of patient outcomes; however, it is difficult to implement positive patient-physician communication accordingly. There are semantic similarity of the patient's and physician's language in a medical interaction as a measure of patient-physician communication. Physicians varied in the semantic similarity between their language and that of their patients, and these differences were related to physician ethnicity and gender. Female patients can communicate easily with their physicians than male patients. Greater communication similarity was predicted by less patient trust in physicians prior to the interaction and greater patient trust after the interaction (Vrana et.al. 2017).

In direct-to-consumer (DTC) advertising use of social relationship as a promotional tool has received little attention although impacts on illnesses and evidence supporting social relationships' positive influence with some patients. The content analysis gives insight of use of social relationship appeals' in DTC magazine ads for different drug-class category. Now the concept of social anxiety appeals in the DTC advertising literature, which had previously focused more on fear appeals. Various social relationships represent the vary among many drug-class categories. The DTC advertisers more often appeal to the theoretical importance of relationships as an aid to improved health. It increases ethical issues

when neither the improvements in relationships nor decreased social tension have any direct effect of prescribed use of the advertised pharmaceutical (Good & Huhmann, 2018).

These early studies motivated many researchers globally to explore the positive and negative aspects of DTC by researching on patients as well as the physicians. Certain studies report that as per the perception of patients, DTCP has positive aspects (An, 2008, Bell, 1999, Bozic, 2007, Deshpande, 2004, Murray, 2004, Weissman, 2003, Bell, 1999, Burak, 1999, Choi, 2007, Datti, 2006, DeLorme, 2006, DeLorme, 2009, Herzenstein, 2004, Huh, 2005, Kon, 2008, Lee, 2007, Marinac, 2004, Menon, 2003, Joseph et. al. 2008, Turget 2010, Chintan H. Rajani 2012, Vats.S. 2014, Levy et.al. 2015, Reast 2008, Murray et.al. 2004, Liang 2011, Frosch et al. 2010, Sumpradit, N et al (2015); Prigge, J. K et al (2015); Bélisle-Pipon, J. C et al (2015); Ball, J. G et al (2015); Pechmann, C. et al (2016); and Adams, C. et al (2016), McRoy, L (2016), Kiani, S (2016), Chesnes, M. (2016), Mathur, M. B., (2016) Datta, A., (2017), Siddiqi A. A. (2017))

There are other studies which reflect that as per the patients DTCP has negative aspects also (Abel, 2009, Robinson, 2004, Bell, 1999, Burak, 2000, Choi, 2007, Datti, 2006, DeLorme, 2006, DeLorme, 2007, DeLorme, 2009, Huh, 2004, Kon, 2008, Marinac, 2004, Menon, 2003, Joseph et. al. 2008, Turget 2010, Chintan H. Rajani 2012, Vats.S. 2014., REAST 2008, Reast et.al. 2004, Woloshin et.al. 2001, Liang (2012), Aikin, K. J., (2016), McCarthy, M. (2015); Boush, D et al (2015); Sullivan, H. W et al (2015) Mackey, T. K. (2016); Dakubo, G. D. (2016); Carpentier, F. R. D. (2016))

Similarly studies on physicians' perception on DTCP bring out (a) positive outcomes, Morris, 2007, Parnes, 2009, Weissman, 2004, Kon, 2008, Parker, 2003, Reast 2008, Chintan H. Rajani 2012, Liang et.al., (2012) Bozic, 2007) (b) negative outcomes (Fortuna, 2008, Huh, 2007, Lipsky, 1997, Mintzes, 2003, Robinson, 2004, Kon, 2008, Parker, 2003, Reast 2008, Chintan H. Rajani 2012, (2012) Bozic, 2007) (c) influence on drug compliance (Choi 2007, Delorme 2006, Deshpande 2004, Lee 2007, Morris 2007, Murray 2004) and (d) influence on patient-physician relationship (Bozic, 2007, Bell 1997, Datti 2006, Delorme 2006, Huh 2007, Lipsky 1997, Menon 2003, Mintzes 2003)

These studies mostly are based on the relative merits or demerits of DTC promotion based on surveys. Nowhere differences in the perception of patients and physicians of these merits and demerits have been studied and hence this research work was taken up to focus upon this critical research gap.

Searching health information online is becoming very popular among patients. Experts are showing their concerns about the impact of online health information on their patient's relationship with their physicians. There are many factors affecting patients' going on about their online findings during consultations and implications for the patient-physician relationship. The patient-physician relationship can be improved by searching health information on Internet depending on whether the patient discusses the information with the physician and on their previous relationship. (Tan & Goonawardene, 2017). Men uses less Internet for health-related information than women. Differences in Gender in health-related information searching behavior affected by emotional, motivational, attitudinal as well as cognitive variables, situational involvement, and normative influences, and different personal involvement regarding health-related information searching. Women search the Internet for health-related information for social motives and enjoyment (Bidmon & Terlutter, 2015). Patient uses internet to get health-related information is increasing. There have been resulting changes in patient-physician dynamics, online information gathering has the potential to motivate greater patient engagement in health maintenance and care. (Iverson et.al. 2008)

METHODOLOGY AND DATA

The current exploratory study empirically examines the impact of web-based internet promotion on patient-physician perception differences existing for allopathic medicinal system in India. The study uses the survey data² collected through physicians practicing allopathic medicinal system and patients taking recourse in allopath. Research design within conclusive framework employs descriptive approach. Null hypothesis of the study is no significant differences exist in the perception of patient and physician vis-à-vis merits and demerits of DTC promotion through online-health related websites. Various indicators for the hypothesis were developed based on an exploratory study whereby physicians and patients were interviewed for their opinion on DTC trends. As both negative and positive impacts emerged from this exploratory study, they were further asked to provide specific reasons for considering it positive or negative. These indicators were included in the present study and accordingly hypotheses Ho1 to Ho5 have been formulated to capture perceptual differences of patient and physician:

Ho1: There are no significant differences in the belief on positive aspects of DTC amongst physicians and Patients.

Ho2: There are no significant differences in the belief on negative aspects of DTC amongst physicians and Patients.

It is expected that physicians will hold greater negative views on DTCP as they are in a better position to appreciate the negative outcomes and to which patients understandably are oblivious.

Ho3: There are no significant differences amongst physicians and Patients in their belief on influence of DTCP on compliance.

Patients are expected to reflect more positivity vis-a-vis DTCP because of their natural enthusiasm for it. Physicians perhaps may wait for greater evidence in this respect before committing themselves to this eventuality.

Ho4: There are no significant differences amongst physicians and Patients in their belief on influence of DTCP on physician-patient relationship.

As it is physicians who stand to lose because of negative consequences (such as argumentative and less obedient patients; possibility of ineffective therapy and so on) perhaps they may be more alive to the possibility of negative impact of DTCP on patient-physician relationship.

Ho5: There are no significant differences amongst physicians and Patients in their belief on extent of need to regulate DTCP.

The sample respondents of this research consist of physician's currently practicing allopathic medication in India and patients taking recourse to allopathy. In all 400 patients and 200 physicians were approached for the survey. Responses submitted by 22 patients and 4 physicians were found to be invalid and hence final sample size comprises of 378 patients and 196 physicians.

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Random sampling methods were used for the research. List of physicians for a city was obtained and names of physicians were selected on random basis. Patients, on the other hand, were approached in hospitals. Patients were also screened on their familiarity and use of with internet and health-based web-sites. Only those patients who declared that they visit health-related web-sites regularly were included in the survey.

The tool is developed using a continuous scale having a range of 1 to 10 with 1 representing lowest agreement to the statement and 10 highest. As stated earlier the statements were developed based on an exploratory study conducted by interviewing physicians and patients. The respondents were contacted personally by the researchers and after general introduction the tool was handed over to them. The confidentiality of the information obtained from the respondents was guaranteed. The filled questionnaires were collected the same day and on a few occasions after few days. In all, the tool contains 22 statements.

Reliability analysis was conducted using Cronbach's alpha on significance of 22 statements in the questionnaire measured on scale interval. The estimated Cronbach's alpha value was found to be 0.818 which statistically is considered a good reliability which is greater than .6 and hence the statements of the questionnaire are presumed to be reliable.

All empirical estimation was conducted using SPSS (V 16.0). The test statistics was checked and found to follow normal distribution (Skewness and kurtosis were within 1 in most cases and within 2 in all cases). For the hypothesis testing the confidence limit is set at 95%. Independent sample t - test was used to determine the significance of variations in the beliefs held by patients and physicians. At 95% confidence limit for t - test is considered significant if its Z value is beyond ± 1.96 and corresponding significance less than 0.05.

RESULT AND DISCUSSION

Ho1: There are no significant differences in the belief on positive aspects of DTC amongst physicians and Patients.

In this part of the study the differences in the belief held by physicians and patients over the negative fallouts of DTCP. We feel that physicians will associate less positivity with DTCP than the patients and according the null hypothesis in this respect is that *there are no differences in the belief on positive aspects of DTC amongst physicians and Patients*. The result has been displayed in the table.

- **Online Information is Most Often Credible:** From the table-(i), we find that the mean response for patients' is 6.74 (with Standard deviation (SD) 1.325) whereas for the physicians it is 3.21. It may, therefore may be interpreted that patients generally believe more in the credibility of online information than the physicians. This difference is significant may be arrived at by the t-value which is 21.19 – far higher than the tabulated value. The same conclusion may is confirmed by the corresponding significance value which is zero – much below 0.05. Thus, whereas patients believe that online information is believable the physicians think it to be otherwise. This reflects a major crack in the relationship shared by patients and physicians and which needs to be dealt appropriately.

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Table 1. Perceptual differences on positive (patient physician)

S.N	Statement	Patient		Physician		T-value	Sig	Null Hypotheses
		Mean	S.D.	Mean	S.D.			
1	Online information is most often Credible	6.74	1.325	3.21	1.212	21.19	0	Rejected
2	Online information is most often Authentic	6.66	1.276	4.21	1.48	14.4	0	Rejected
3	Online information is most often Correct	5.82	1.266	4.23	1.275	9.9	0	Rejected
4	Online information is most often Complete (side-effects)	7.55	1.098	3.41	1.116	29.8	0	Rejected
5	Online information is most often Silent on negative information	4.22	1.397	8.4	0.911	27.368	0	Rejected
6	Online information is most often Simple	6.67	1.225	5.76	1.412	5.6	0	Rejected
7	Online information is most often easy to understand	7.49	0.998	4.26	1.579	21	0	Rejected
8	Online information enhances disease awareness	7.47	0.948	6.14	0.985	11.04	0	Rejected
9	Online information Motivates patients to visit physicians	7.53	1.003	5.11	0.911	19.595	0	Rejected
10	Online information is enhancing health-consciousness	7.47	0.948	5.71	1.295	13.04	0	Rejected
11	Online information is most often Complete (adverse-effects)	6.75	1.18	4.33	1.005	17.107	0	Rejected

- Online Information is Most Often Authentic:** In the table, we can see that mean of the response of patients' is 6.66 (SD: 1.276). But for the physicians it is 4.21. We may interpret it that patients have more trust on the authenticity of the health information available online. This is further confirmed by t-value which is 14.4 far more than 1.972. The significant value is 0.00 so we reject the null hypothesis. Authenticity of online health-based information is held at a higher level by the patients than their physician counter-parts.

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- **Online Information is Most Often Correct:** According to the table, again we can see that mean response of patients' is higher than that of Physicians. The mean response of patients' is 5.82 with standard deviation 12.66 where as physicians mean value is 4.23. The trust of patients' on online health information is higher than physicians. This is further confirmed by the value of t is 9.9, and which is greater than 1.972. The null hypothesis therefore is rejected and the alternate one accepted. This is further confirmed by the level of significance is 0.000, which is well below 0.05. As in case of point 1 and 2 we once again find that correctness of information available on healthcare websites is held at a higher level by patients than the physicians.
- **Online Information is Most Often Complete (side-effects):** The belief of the patients' can be seen in the mean response which is 7.55 with Standard Deviation 1.098. For the physicians it is 3.41. We may interpret that patients' believe that online information provide complete information regarding side effect also. The t value is far high which is 29.8. It is further conformed by significant value which is zero. Thus we reject the null hypothesis. Most websites do mention side-effects of medication and perhaps patients consider such information to be complete. It is quite possible that physicians' are aware of side-effects other than those mentioned in the website and hence this difference in their expressed beliefs.
- **Online Information is Most Often Silent on Negative Information:** In the table, we can see that mean response of the patient is 4.22 with Standard Deviation 1.397. Whereas mean response of physicians is 8.4 which is much higher than patients' response. So we can interpret that physicians believe more that online information is generally silent on negative information. The t- value is 27.368 which is higher than 1.972 hence we reject the null hypothesis. It is further confirmed by level of significance which is 0.000. Once again physicians', by virtue of their knowledge and training, are better placed to understand vital gaps on the negative information provided in the health-care websites. They perhaps also understand the commercial reasons for this "silence" and hence they overwhelmingly hold stronger belief than the patients on this issue.
- **Online Information is Most Often Simple:** In the table, we can see that mean response of patients' is 6.67 and Standard Deviation is 1.225 for the same statement physicians mean is 5.76. The t-value is 5.6 which is higher than 1.972. So we may interpret that both believe that online information is simple. It is further confirmed by level of significance which is 0.000. Information available on internet is perhaps designed purposely to be simpler than medical information provided else-where. This, because such web-sites essentially target the patients and not health-care practitioners (who are conversant with medical information and terminologies). Yet in the opinion of physicians this information is not as simple as is believed by the patients'. Needless to add that such a false belief (if true) may lead to unhealthy consequences. Yet in general even physicians believe that information provided in web-sites is simpler than perhaps as given in medical literature.
- **Online Information is Most Often Easy to Understand:** In table, the mean value of patients' is 7.49 and with Standard Deviation 0.998 and mean value of physicians is 4.26. Hence it may be interpreted that both believe online information to be easy to understand. We reject the null hypothesis and accept the alternative. It is confirmed by t- value which is 21, much higher than 1.972. It is further confirmed by value of significance which is 0.00. This point is similar to point 6. Patients may not realize that even if they feel they understand the information provided in such web-sites, they may possibly misunderstand, misinterpret or misconstrue some of it. Physicians' perhaps realize that information provided in the net is not easily understood by the patients be-

cause of lack of sufficient knowledge. Yet physicians too realize that information in health-care web-sites is easier to understand by the patients than their own medical literature.

- **Online Information Enhances Disease Awareness:** In the table, we can see that Patients' mean response 7.47 with Standard Deviation 0.948 and physicians mean response is 6.14. It may, therefore may be interpreted that patients and physicians both believe that online information enhances disease awareness. The difference can be seen by t value which is 11.04 which is much more than 1.972. It is further confirmed by level of significance which is 0.00. Both patients and physicians agree that websites help in enhancing patients awareness of the disease. This could be important as it may lead to quicker and definitive pro-active action (such as visiting a physician) by the patient. Yet it is patients who believe more strongly than the physicians that online information facilitates enhancement of disease awareness. Perhaps physicians realize that at times this disease awareness on part of the patients is not proper or accurate.
- **Online Information Motivates Patients to Visit Physicians:** In the table, we can find that at one side the mean response of patients' is 7.53 and Standard Deviation is 1.003 and on other side mean response of physicians is 5.11. So we may interpret that patients' believe more on the statement, "online information motivates patients to visit physicians". From the result it appears that both patients and physicians consider online information a reasonable factor for motivating patients to visit physicians which otherwise they would have ignored or disregarded. Yet significant difference persists between the strength of their respective beliefs.
- **Online Information is Enhancing Health-Consciousness:** The table shows that the mean response of patients' on the statement is 7.47 with Standard Deviation 0.948 and Physicians mean response is 5.71. The t value is 13.04 which is higher than 1.972. We reject the null hypothesis. It may further be confirmed by level of significance which is 0.00 which is less than 0.05. Significant differences exist in the personal beliefs expressed by physicians and patients in this respect. It is important to raise levels of health-consciousness to enhance the over-all well-being of people in our society. Online-information appears to be achieving precisely such an objective, though, physicians do not appear to be as enthusiastic about the same as their patient counterparts do.
- **Online Information is Most Often Complete (adverse-effects):** In the given table, the mean of patients' response is 6.75 and Standard Deviation is 1.18. The physicians mean value 4.33. Once again patients have strong belief on online information. The t value is 17.107 which is much higher than 1.972. We reject the null hypothesis. It is further confirmed by level of significance which is 0.00. Is online information complete with respect to the adverse effects of the medication? Patients generally believe this to be true although the physicians are not so sure about it as is reflected in the difference in their beliefs. Websites do mention possible adverse-effects of the medication which perhaps the patients (unlike physicians) consider to be correct and complete. One physician, however, explains this to be deceptive, if not outright dishonest by mentioning that web-sites exist for relatively newer medications also for which no information exists on their adverse-effects. In his view for this reason, new medication should not be allowed to be promoted on-line for a period of about seven years – the time required to grow awareness of the possible adverse-effects of the medicine. Further, he suggests that India should develop more structured mechanism to collect information on adverse-effects of medication, which hardly exists now.

DISCUSSION

Does DTC promotion have positive impacts? Literature, as we have seen is full of positive aspects of DTC promotion. It is however important to measure the differences in the belief held by patients and physicians. From our study we come to an unambiguous conclusion that null hypothesis (There are no differences in the belief on positive aspects of DTCP amongst physicians and Patients) stands rejected as in all the 11 variables we have taken within this indicator (positive aspects) patients consistently allot higher belief-values to DTCP than their physician counterparts. In five instances the t-value is higher than 15, does implying that the differences in fact are huge. Obviously this results in greater enthusiasm and reliance on part of patients on DTCP and a discomfort on part of the physicians. Other researchers have also reported similar views. Chintan H Rajani *et al* (2012) reports patients display much greater belief in the consequence of DTCP on under diagnosed conditions than the physicians. Reast Jon *et al* (2008) also report that patients are significantly more positive about the ethics of branded DTCA than are physicians. Low perception on the positivity of DTCP has been reported by various other researchers (Lowery, 2003; Reast and Carson, 2000; Reast, Palihawadana, and Spickett-Jones, 2004). Bozic KJ (2007) reports that 44% patients believed DTCP to be educative as against just 32% physicians. Murray *et. al* (2003) and Murray *et. al.* (2004) also find that 55% of physicians and 69% of patients consider DTCA to encourage patients to seek treatment which they otherwise would have overlooked or neglected.

Is geography important in this respect? Or is the view on positivity of DTCP similar across the countries? Mitika (2003) reports that DTC is viewed more positively by Physicians in US than in UK. Such an observation justifies undertaking such a study in the context of India.

What could be the possible impact of this perceptual difference? It is suggested that physicians believe that DTCP may result in increasing their work load and make their demanding job all the more difficult (Reast Jon *et al* (2008). Physicians also seriously feel that consumers do not possess right tools to interpret promotional material and make informed judgments (Reast Jon *et al* (2008). We also feel that such a difference in perception may lead to a misunderstandings between the physicians and patients on one hand as also put patients to risk as they may misinterpret atleast some of the involved issues because of lack of adequate and proper knowledge.

Another emerging issue in this regard is that online promotional information is persuasive (Kincey, J., & Saltmore, S. (2018). Patients may not realize it and may, therefore, be manipulated by the contents and tone of DTCP.

PERCEPTUAL DIFFERENCES ON NEGATIVE ASPECTS OF DTC

Ho2: There are no significant differences in the belief on negative aspects of DTC amongst physicians and Patients.

Under this the perceptual differences in the belief held by physicians and patients over the negative fallouts of DTCP. We feel that physicians will associate greater negativity with DTCP than the patients and according the null hypothesis in this respect is that *there are no differences in the belief on negative aspects of DTC amongst physicians and Patients*. The result has been displayed in the table.

Table 2. Perceptual differences on negative (patient physician)

S.N	Statement	Patient		Physician		T-value	Sig	Null Hypotheses
		Mean	S.D.	Mean	S.D.			
1	Online information is most often Silent on negative information	4.22	1.397	8.4	0.721	27.368	0	Rejected
2	Disease websites are generally supported by neutral promoters	7.55	0.997	1.94	0.783	47.945	0	Rejected
3	Online information promotes self-medication	6.67	1.275	7.56	0.964	5.966	0	Rejected
4	Online information Fosters physician-patient conflict	2.97	1.34	6.75	1.062	23.954	0	Rejected
5	Online information is most often biased	6.7	1.148	8.36	0.999	11.988	0	Rejected

INTERPRETATION OF THE TABLE CONTENT IS AS FOLLOWS

Online Information is Most Often Silent on Negative Information

In the table 2, we can see that mean response of the patient is 4.22 with Standard Deviation 1.397. Whereas mean response of physicians is 8.4 which is much higher than patients’ response. So we can interpret that physicians believe more that online information is generally silent on negative information. The t- value is 27.368 which is higher than 1.972 hence we reject the null hypothesis. It is further confirmed by level of significance which is 0.000. Once again physicians’, by virtue of their knowledge and training, are better placed to understand vital gaps on the negative information provided in the health-care websites. They perhaps also understand the commercial reasons for this “silence” and hence they overwhelmingly hold stronger belief than the patients on this issue.

Disease Websites are Generally Supported by Neutral Promoters

The table shows that the mean response of patients’ is 7.55 with Standard Deviation 0.997. The mean response of physicians is 1.94. It may, therefore may be interpreted that patients generally believe more in the statement than the physicians. This difference is significant may be arrived at by the t-value which is 47.945 – far higher than 1.972. The same conclusion may be confirmed by the corresponding significance value which is zero – much below 0.05. The t-value is extremely high indicating a major schism between the beliefs of physician and patients in this respect. Many of the disease websites that appear neutral are supported by pharmaceutical companies – a fact that physicians are generally aware and patients are not. This is not to imply that all such websites are biased in favor of the sponsoring company.

Online Information Promotes Self-Medication

From the table, we find that the means response of patients’ is 6.67 and the Standard Deviation is 7.56. So we may interpret that physicians believe more in the statement. The t value is 5.966 which is higher than 1.972. We reject the null hypothesis; it may further be confirmed by level of significance that is

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0.00 - less than laid down 0.05. Self-medication by patients is considered an unhealthy habit because of inherent possibilities of major errors in it. Despite a significant difference in the extent of such a belief, both physicians and patients believe that online information encourages self-medication. It is quite possible that whereas physicians are alarmed by such a possibility the patients find it safe or even beneficial. (Such a hypothesis, though, needs confirmation.)

Online Information Fosters Physician-Patient Conflict

The table shows that the mean response of patients believe is 2.93 and Standard Deviation is 1.34 whereas physicians mean response is 6.75, which shows that physicians believe more that online information fosters physician-patient conflict. It is confirmed by t-value that is 23.954 much higher than 1.972. It is further confirmed by level of significance which is 0.00, lower than 0.05. So we reject the null hypothesis. Patients discard any such possibility, physicians, however, are in agreement with such a hypothesis. It is possible that patients are not even aware that they have become less compliant or more confrontational while discussing their health with the physicians. This could lead to serious rupture of sacred trust that binds patient and physician which in turn may lead to unwholesome consequences.

Online Information is Most Often Biased

In the table, it is given that the mean response of patients' is 6.7 with Standard Deviation 1.148 and mean response of physicians is 8.36. It can further be interpreted that both believe that online information is biased. The t value is 11.988, so we reject the null hypothesis. It is further conformed by level of significance which is 0.00. Both the groups of respondents are in agreement that online information is often biased. This reflects a healthy realism on part of the patients. Yet a significant difference is to be noted in the gravity with which they hold such a belief. The difference, once again, may be the result of knowledge and expertise that physicians possess unlike the patients. Promoting right awareness of biased information that is promoted online needs to be undertaken.

DISCUSSION

We find that physicians display greater sensitivity to the negativity of DTCP by consistently rating its negativity higher than their patient-counterparts. We, therefore, reject the hypothesis that *there are no differences in the belief on negative aspects of DTC between physicians' and Patients'*. Our findings are corroborated by similar studies by other researchers (Chintan H Rajani *et al* (2012) and Reast Jon *et al* (2008). This could be because of inherent misgiving that physicians have for DTCP or may be the physicians' doubts are rooted in perhaps a better insight into the ill-effects of too much trust on this information and its impact which patients are not able to judge to the full extent.

What could be the possible impact of these differences? DTCP has been perceived as misleading (Parker RS, 2003; Robinson AR (2004) and Young HN (2005). This may result in misunderstanding as well as informational conflicts. Physicians report wasting time during patient visit to clarify the misunderstandings that patients acquire through DTCP (Morris AW (2007); Bozic KJ (2007))

The positive and negative aspects of DTCP do not reflect any error. Rather they portray a natural contradiction which we find with almost all human developments. Both physicians and patients generally agree that DTCP has positive as well as negative issues associated with it, Bonaccorso SN et al (2002) and Vilae PH (2003).

PERCEPTUAL DIFFERENCES ON COMPLIANCE

Ho3: There are no significant differences amongst physicians and Patients in their belief on influence of DTCP on compliance.

As compliance in itself is a positive phenomenon it was thought that the patients and physicians will differ in their belief related to impact of DTCA on compliance and accordingly our hypothesis in this respect is that there are no differences amongst physicians and Patients in their belief on impact on compliance due to DTCP. Our results in this respect have been shown in table.

- **Online Information Promotes Drug-Compliance:** In the Table 3, we see that the mean value of patients' response is 7.5 (Standard Deviation 0.982) and physicians' response is 5.91. It may be interpreted that both believe on the statement but patients' have more believe on the statement. The t value is 12.853 which is much higher than 1.972. Even the level of significance is 0.00 so we reject the null hypothesis. Once again significant differences are seen in the respective beliefs held by physicians and patients, however, both the groups generally are in agreement with such a supposition. Drug compliance is considered a positive behaviour and needs to be encouraged. Perhaps physicians may use this practice of searching online information by the patients to ensure greater drug- compliance.
- **Online Information Promotes Diet-Compliance:** From the table, we find that the mean response of patients is 7.33 (Standard Deviation 1.021) and mean response of physicians is 5.85. Here again we can interpret that patients believe more on the statement. Looking at the t- value which is 11.817 much higher than 1.972 we reject the null hypothesis. It may further be confirmed by level of significance that is 0.00, lower than 0.05. Similar to the previous point both the groups of respondents generally agree that online information encourages patients to strictly follow the

Table 3. Perceptual differences on compliance (patient physician)

S.N	Statement	Patient		Physician		T-value	Sig	Null Hypotheses
		Mean	S.D.	Mean	S.D.			
1	Online information promotes drug-compliance	7.5	0.982	5.91	1.001	12.853	0	Rejected
2	Online information promotes diet-compliance	7.33	1.021	5.85	0.945	11.817	0	Rejected
3	Online information promotes exercise-compliance	6.66	1.2	4.22	1.496	14.825	0	Rejected
4	Online information promotes non-drug-therapy	6.61	1.059	6.73	1.106	0.872	0.38	Accepted

therapeutic diet. This also is considered a healthy behaviour. The respective views of patients and physicians, however, differ significantly. Patients appear to weigh this impact much more than their physician counterparts.

- **Online Information Promotes Exercise-Compliance:** From the table, we can see that the mean value of patients' response is 6.66 with Standard Deviation 1.2 and mean of physicians' response is 4.22. This may be interpreted that patients 'believe more on the statement. The t- value is 14.825. It is much higher than 1.972. We reject the null hypothesis and accept the alternative. It may be confirmed by the level of significance which is 0.00, less than 0.05. Supplementary exercise is an important ingredient in the recovery overall well being of the patient. Like the previous two points, both patients and physicians consider online information as a critical factor to encourage such a behaviour. Yet physicians find such a belief to be significantly less profound than the patients.
- **Online Information Promotes Non-Drug-Therapy:** In the table, we find that the mean value of patients' response is 6.61 and mean value of physicians' response is 6.73. Here we can see that the t- value is 0.872 which is less than 1.972 so we accept the null hypothesis. It may further be confirmed by level of significance which is 0.38 higher than 0.05. Online information encourages non-drug therapy appears to be the belief held by both – the patients as well as the physicians. Though their beliefs do not differ significantly yet perhaps patients view recourse to non-drug therapy positively and physicians consider it disapprovingly and hence there actually is a much greater difference in the respective beliefs that has been reported. Such a hypothesis, however, needs to be corroborated through a separate research.

DISCUSSION

In general, we find that both patients and physicians believe that DTCP has a positive impact on compliance yet differences in their belief regarding the extent of this impact do persist. Patients consistently believe (more than the physicians) that DTCP enhances compliance. Yet we find these differences are less than the differences we noted with other positive aspects of DTCP.

Studies conducted separately on patients (Holmer AF (1999) and Bonaccorso SN (2002)) and physicians (Lipsky MS (1997); Murray E, (2004), Morris AW (2006) and Parker RS (2003)) on their belief regarding impact of DTCP on drug compliance show that a positive correlation between the two. We did not come across any study that compares the opinion of patients and physicians in this respect and hence our conclusion cannot be corroborated or contradicted.

What could be the possible impact of the visible positive relationship between DTCP and compliance? We have already said that this understanding is welcome and could be one platform to justify DTCP on one hand and consolidate on the other.

PERCEPTUAL DIFFERENCES ON PATIENT-PHYSICIAN RELATIONSHIP

Ho4: There are no significant differences amongst physicians and Patients in their belief on influence of DTCP on physician-patient relationship.

Patient-Physician relationship is critical in the context of healthcare and hence any negative impact of DTCP and perceptual differences of patients and physicians in this respect need careful investigation. Our null hypothesis in this regard once again is that *there are no differences amongst physicians and Patients in their belief on impact of DTCP on physician-patient relationship*. The results have been shown in table.

- Online Information Fosters Physician-Patient Conflict:** The Table 4 shows that the mean response of patients' believe is 2.97 and Standard Deviation is 1.34 whereas physicians mean response is 6.75, which shows that physicians believe more that online information fosters physician-patient conflict. It is confirmed by t –value that is 23.954 much higher than 1.972. It is further confirmed by level of significance which is 0.00, lower than 0.05. So we reject the null hypothesis. Patients discard any such possibility, physicians, however, are in agreement with such a hypothesis. It is possible that patients are not even aware that they have become less compliant or more confrontational while discussing their health with the physicians. This could lead to serious rupture of sacred trust that binds patient and physician which in turn may lead to unwholesome consequences.
- Online Information Results in Medical Complications Arising From Misunderstanding Given Information:** In the table, we can see that the mean response of the patients' towards the statement is 5.12 and Standard Deviation is 0.972. Whereas physicians mean response is 7.59. So it may be interpreted that physicians have strong believe that misunderstanding of online information results in medical complications. Thus we reject the null hypothesis and accept the alternative. It is confirmed by t- value which is 20.62 which is much higher than 1.972. It is further confirmed by value of significance which is zero – far below 0.05 the standard value. Both physicians and patients appear to be alive to the possibility of complications arising from misunderstanding the information provided in health-care websites. The physicians, nevertheless, consider it a far greater possibility and consequently a far greater risk than the patients. Perhaps a more robust dialogue between the physicians and the patients should be prescribed to discount harmful consequences of medical complications as well as the difference in the beliefs held by both the group of respondents in this respect.

DISCUSSION

Adverse patient-physician relationship is a negative phenomenon and hence it was assumed that patients will be less inclined to judge the impact of DTCP on poor patient-physician relationship as high com-

Table 4. Perceptual differences on patient-physician relationship (patient physician)

S.N	Statement	Patient		Physician		T-value	Sig	Null Hypotheses
		Mean	S.D.	Mean	S.D.			
1	Online information Fosters physician-patient conflict	2.97	1.34	6.75	1.062	23.954	0	Rejected
2	Online information results in medical complications arising from misunderstanding due to given information	5.12	0.972	7.59	0.917	20.62	0	Rejected

pare to their physician counter-parts. Our results corroborate this and our null hypothesis that there are no differences amongst physicians and Patients in their belief on impact of DTCP on physician-patient relationship is rejected. Our findings echo the conclusions arrived at by other researchers also ((Chintan H Rajani *et al* (2012) and Reast Jon *et al* (2008)). Chintan H Rajani *et al* (2012) for example report patient mean as 2.58 against physician mean of 3.12 (on a scale of 5) on extent of damage of DTCP on doctor-patient relationship. Reast Jon *et al* (2008) similarly reports patient mean as 3.69 as in contradiction to the physician mean of 2.58 in response to DTCP causing conflict between patients and doctors.

What could be the impact of this perceptual divide on impact of DTCP on patient physician relationship? It is felt that it may diminish the effectiveness of physicians leading frustration on part of physicians and disappointment on part of the patients.

DTCP originally was meant to provide update information on recent advances and treatment options to the healthcare professionals. Lately, however, it has leaned towards aggressive marketing strategies to increase the profit margins of the promoters. The initial sacred goal of commitment to patient care, in the process has been lost (Jacob, N. T. (2018)).

PERCEPTUAL DIFFERENCES ON NEED FOR REGULATING DTCP

Ho5: There are no significant differences amongst physicians and Patients in their belief on extent of need to regulate DTCP.

We have already indicated that the debate on DTCP is no longer around whether or not it should be allowed (Though it remains illegal throughout the world with just two notable exceptions). It is more on its positive and negative character and impact. The debate therefore is on the extent of regulation that it should be subjected to. We started with the assumption that physicians opine a greater extent of regulation for DTCP than the patients and accordingly our hypothesis in this respect has been that there are no differences amongst physicians and Patients in their belief on extent of need to regulate DTCP. Our finding in this respect has been shown in the table.

- Online Information Needs Firm Regulation:** In the Table 5, we can see that patients' means response is 8.54 with Standard Deviation is 0.821 and physicians mean response is 8.51. But the t- value is 0.386 which is less than 1.972. So we accept the null hypothesis. It is further confirmed by level of significance which is 0.7 higher than 0.05. It may be interpreted that both patients and physicians realize that online information are delicate and may have significant consequences and hence require firm regulation. Both patients and physicians feel extremely strongly that online healthcare information needs to be regulated firmly by the health-care authorities. Furthermore,

Table 5. Perceptual differences on need for regulating DTCP (patient physician)

S.N	Statement	Patient		Physician		T-value	Sig	Null Hypotheses
		Mean	S.D.	Mean	S.D.			
1	Online information needs firm regulation	8.54	0.821	8.51	0.81	0.386	0.7	Accepted

their respective beliefs do not even differ significantly. It is an encouraging sign that despite high prevalence of consulting health-care websites the patients in general are alive and sensitive to the possibility of wrong or misleading information in such sites and which may result in disastrous consequences. Physicians perhaps may step in to further consolidate such a belief held by the patients.

DISCUSSION

We find that contrary to our assumption that patient and physicians will differ considerably on the extent of regulating DTCP. This assumption is based on fundamental understanding that patients are more positive and less negative (than physicians) on the nature and impact of DTCP on their healthcare outcomes. They, therefore naturally may feel that it does require much regulation. Our results however categorically accept the null hypothesis (there are no differences amongst physicians and Patients in their belief on extent of need to regulate DTCP. What possible reasons may explain acceptance of the null hypothesis. It is believed that though patients in general feel informed and empowered by DTCP to a great extent and do not consider its negativity as of much consequence, yet being the vulnerable stake holders they have heightened sensitivity to the possible risks and hence they believe accountability and responsibility resulting from better regulation is required to be imbibed in policies. They are perhaps also aware that DTCP has high manipulative capacity.

Impact of DTCP information perception on patient-physician conflicts: It is hypothesized that information perceptions are not correlated with patient-physician conflicts. To test this hypothesis, the entire data was subjected to Exploratory factor analysis.

To further explore this phenomenon factor analysis was conducted and the results have been shown in table. The reliability statistics (Chronbach alpha) for this data (seven variables) is found to be 0.935 and which is considered good. Values of chronbach alpha ranges between 0 and 1 with 1 signifying absolute reliability. For humanities based studies value above 0.6 is considered acceptable although at times certain researchers accept values as low as 0.5 also. Values above 0.7 are considered better than fair.

KMO measure is 0.914 and which confirms that sample size is adequate and also indicates that a factor analysis may be useful with this data. Values of KMO above 0.6 are considered acceptable. Chi-square values for Bartlett's test of sphericity is extremely high at 12553. Corresponding p-value is near zero, signifying again that a factor analysis may be useful in this instance.

For exploratory factor analysis researcher relied upon principal component technique for extraction and Varimax for rotation. Four components (having Eigen value more than 1) have been obtained and together these explain 72.33% of the variance.

Table 6. KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.914
Bartlett's Test of Sphericity	Approx. Chi-Square	12553.460
	Sig.	0.000

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Out of seven variables of information perception five fall in the same component and these five together have been considered a factor for further analysis. Of the two components of patient-physician conflict both fall within same component and again both together have been considered a factor for further analysis.

Factor scores for both were created using Thompson’s method and thereafter these were subjected for regression modelling with Patient-Physician conflict being the dependent variable and Information perception being the independent variable.

We find that a negative correlation of quantum 0.677 is found to exist between information perception and patient-Physician conflict and which is highly significant. Our null hypothesis that no correlation exists between two variables therefore stands rejected. The corresponding R2 and adjusted R2 values are 0.459 and 0.458 respectively. This implies that 45.9% variations can be explained using these values which are below 60% but are still significant. Other variables leading this conflict can be identified by future researchers. It is appropriate that adjusted R2 should have a value less than R2 but the difference must not be beyond 0.05. We find that in this case the difference is 0.001 and which again implies a highly reliable model

To test the fitness of the model levels of variability within a regression model are determined using ANOVA. If the calculated F-value is found to be less than the tabulated F-value (as indicated by p-value less than 0.05) the model is said to be fit. In this case F-value is 486 and which suggests a strong fitness of the developed model and which in turn is confirmed by a p-value that is near zero.

It is also important to measure the collinearity of variables. In this instance we find VIF value to be 1 and which is much lower than 10, implying that model does not reflect collinearity. In fact VIF values below 5 are considered good.

Finally we arrive at the model coefficients which, as is shown in the table are 18.195 (constant) and -0.282 (information perception). The regression equation therefore is given as

$$\text{Patient-physician conflict} = 18.195 + (-0.282 * \text{information perception})$$

It is to be noted that constant and information perception have t-values far above 1.96 and which implies these are strongly significant. It therefore may be concluded that patient-physician conflict due to DTCP can be explained to a substantial extent by the information perception they hold vis-à-vis DTCP.

Table 7. Model summary

Model Summary						
Model	R	R Square	Adjusted R Square	Durbin-Watson	F-value	P-value
1	-0.677	.459	.458	1.755	486	0

Table 8. Model coefficients

Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
B	Std. Error	Beta			Tolerance	VIF
18.195	.377		48.261	.000		
-.282	.013	-.677	22.049	.000	1.000	1.000

CONCLUSION, RECOMMENDATIONS, AND IMPLICATIONS

Such major differences in their beliefs regarding the merits and demerits of DTC-promotion, that has become inevitable because of numerous health-care web-sites operating on-line, may result in emergence of fault-lines in their relationship. Such an eventuality can drastically affect the vital relationship which in turn can have unpleasant consequences for the entire health-care systems. In the absence of such a study the health-care practitioners and policy-makers were not even aware of such massive differences in the beliefs and, therefore, no effort was available to address the issue.

This study therefore is important as it brings forth the existence of major differences in the beliefs in this respect, held by patients and physicians. It also, therefore, provides a justification for an intervention by relevant authorities. Such interventions will help patients and physicians to understand each-other better and also help in bridging-up the gap between their respectively held beliefs vis-à-vis DTC-promotion through online-health related websites.

As patients and physicians operate as a team while health-solutions are made available to the patients. Such major differences in their beliefs regarding the merits and demerits of DTC-promotion, that has become inevitable because of numerous health-care web-sites operating on-line, may result in emergence of fault-lines in their relationship. Such an eventuality can drastically affect the vital relationship which in turn can have unpleasant consequences for the entire health-care systems. In the absence of such a study the health-care practitioners and policy-makers were not even aware of such massive differences in the beliefs and, therefore, no effort was available to address the issue. This study therefore is important as it brings forth the existence of major differences in the beliefs in this respect, held by patients and physicians. It also, therefore, provides a justification for an intervention by relevant authorities. Such interventions will help patients and physicians to understand each-other better and also help in bridging-up the gap between their respectively held beliefs vis-à-vis DTC-promotion through online-health related websites.

What could be the possible implications of this study for the stake-holders? The marketers (promoters of DTCP) must take into account the lack of positivity on part of the physicians and on one hand accept the responsibility to convince the physicians on the genuine benefits of DTCP as also modify their promotional materials by taking into account the genuine misgivings of physicians. They may perhaps adopt a policy to always state emphatically in every promotion that the physicians 'judgment should remain final. The marketers must view DTCP as an opportunity to improve health care and not to enhance sale of their drugs. Such an approach will go a long way to enhance acceptance of DTCP to the policy makers. In contrast researchers report that DTC ads which clearly address the patient's need are very few (Peytrot et al (1998) O'Brien Anne (2008)). They will do well to avoid aggressive advertising strategies of current DTCA markets Reast Jon *et al* (2008) and address the serious ethical concerns of their promotional strategies (Robinson et.al (2004). To make DTCP more rewarding the companies have no option but to come up with more responsible strategies.

The Indian pharma industry is growing slowly currently due to the new pricing policy and other regulatory challenges. However, making a slight change in the way of doing business now can render the impact in the long run. Henceforth, both the Indian and foreign companies who are operating in India will have to devise suitable strategies in order to be in the top. Upcoming technologies called SMAC: social networking, mobile computing, analytics and cloud computing, are likely to play an important role in addressing these challenges, improving operational efficiencies and boost the performance of the pharmaceuticals companies. Each of these technologies has a unique impact, they also complement each other in order to business to transformation. These technologies jointly will boost innovation, customer

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service and interaction. A typical value chain of pharma companies starts from sourcing of raw material and it ends to post market surveillance. Social media synchronizes all these stages and results into sustainable advantage of to customers.

Policy makers must acknowledge that enthusiasm on part of patients for DTCP reflects a massive need for health-based information without which the patients feel disempowered. They must recognize this need and focus on appropriate regulation of such an information rather than keeping it illegal. There are suggestions for Governments themselves (as neutral entity) to provide this kind of information (Conney 2002).

Patients, the third major stake holders in this respect must also learn to add caution to their enthusiasm vis-a-vis DTCP. They must learn to appreciate that they have limited ability to understand the information as also the possibility of misinformation (including suppression of negative information) in the promotional material. They must learn to appreciate the different beliefs held by the patients as also on the merit of a certain belief held by the physicians in general or even in specific instances. A physician is only as good as the faith that a patient has on him/her. Any damage to this faith because of DTCP will have serious repercussions for all the stake-holders.

REFERENCES

- Rajani. (2012). A Study To Explore Scope Of Direct To Consumer Advertisement (DTCA) Of Prescription Drugs In India, *International Journal Of Marketing And. Human Resource Management*, 3(1), 19–28.
- Adams, C. (2016). Direct-to-consumer advertising of prescription drugs can inform the public and improve health. *JAMA Oncology*, 2(11), 1395–1396. doi:10.1001/jamaoncol.2016.2443 PMID:27532690
- Aikin, K. J., O'Donoghue, A. C. M., Squire, C., Sullivan, H. W., & Betts, K. R. (2016). An Empirical Examination of the FDAAA-Mandated Toll-Free Statement for Consumer Reporting of Side Effects in Direct-to-Consumer Television Advertisements. *Journal of Public Policy & Marketing*, 35(1), 108–123. doi:10.1509/jppm.14.077
- An, S. (2008). Antidepressant direct-to-consumer advertising and social perception of the prevalence of depression: Application of the availability heuristic. *Health Communication*, 23(6), 499–505. doi:10.1080/10410230802342127 PMID:19089697
- Auton, F. (2004). The Advertising of Pharmaceuticals Direct to Consumers: A Critical Review of the Literature and Debate. *International Journal of Advertising*, 23(1), 5–52. doi:10.1080/02650487.2004.11072871
- Bell, R. A., Kravitz, R. L., & Wilkes, M. S. (1999). Direct-to-consumer prescription drug advertising and the public. *Journal of General Internal Medicine*, 14(11), 651–657. doi:10.1046/j.1525-1497.1999.01049.x PMID:10571712
- Bell, R. A., Kravitz, R. L., & Wilkes, M. S. (1999). Direct-to-consumer prescription drug advertising and the public. *Journal of General Internal Medicine*, 14(11), 651–657. doi:10.1046/j.1525-1497.1999.01049.x PMID:10571712

An Empirical Note on Comparative Perceptions of Indian Patients and Physicians

- Bhutada, N. S., & Rollins, B. L. (2015). Disease-specific direct-to-consumer advertising for reminding consumers to take medications. *Journal of the American Pharmacists Association: JAPhA*, 55(4), 434–437. doi:10.1331/JAPhA.2015.14234 PMID:26161486
- Bidmon, S., & Terlutter, R. (2015). *Gender Differences in Searching for Health Information on the Internet and the Virtual Patient-Physician Relationship in Germany: Exploratory Results on How Men and Women Differ and Why*. Academic Press.
- Bonaccorso, S. N., & Sturchio, J. L. (2002). Direct to consumer advertising is medicalising normal human experience. *British Medical Journal*, 324(7342), 910–911. doi:10.1136/bmj.324.7342.910 PMID:11950746
- Boush, D., Madrigal, R., & Xie, G. X. (2015). *Disentangling the Effects of Perceived Deception and Anticipated Harm on Consumer Responses to Deceptive Advertising*. Academic Press.
- Bowman, D., Heilman, C. M., & Seetharaman, P. B. (2004). Determinants of Product-use Compliance Behavior. *JMR, Journal of Marketing Research*, 41(3), 324–338. doi:10.1509/jmkr.41.3.324.35987
- Bozic, K. J., Smith, A. R., & Hariri, S. (2007). The ABJS Marshall Urist Award - The impact of direct-to-consumer advertising in orthopaedics. *Clinical Orthopaedics and Related Research*, 202–219. PMID:17353799
- Burak, L., & Damico, A. (1999). Effects Of DTCA Of Pharmaceutical Products On College Students, Health Marketing. *Quarterly*, 17(2), 19–29.
- Carpentier, F. R. D. (2016). Considering the Future of Pharmaceutical Promotions in Social Media: Comment on Trouble Spots in Online Direct-to-Consumer Prescription Drug Promotion: A Content Analysis of FDA Warning Letters. *International Journal of Health Policy and Management*, 5(4), 283–285. doi:10.15171/ijhpm.2016.15 PMID:27239874
- Chesnes, M., & Jin, G. Z. (2016). *Direct-to-consumer advertising and online search (No. w22582)*. National Bureau of Economic Research. doi:10.3386/w22582
- Choi, S. M., & Lee, W. N. (2007). Understanding the impact of direct-to-consumer (DTC) pharmaceutical advertising on patient-physician interactions - Adding the web to the mix. *Journal of Advertising*, 36(3), 137–149. doi:10.2753/JOA0091-3367360311
- Coney, S. (2002, October 28). Some Think DTCA Ads Bad for Health; Others Contend Effects Hard to Prove. *Marketing News*.
- Craig, A. (2004). *Posters-at-the-Capitol, Effects of Direct to Consumer Advertising on Physician Prescription Intention*. University of Kentucky
- Dahl, S., Dahl, S., Eagle, L., & Eagle, L. (2016). Empowering or misleading? Online health information provision challenges. *Marketing Intelligence & Planning*, 34(7), 1000–1020. doi:10.1108/MIP-07-2015-0127
- Dakubo, G. D. (2016). Ethical Considerations in Biomarker Development. In *Cancer Biomarkers in Body Fluids* (pp. 285-299). Springer International Publishing. doi:10.1007/978-3-319-01580-4_11

An Empirical Note on Comparative Perceptions of Indian Patients and Physicians

Datta, A., & Dave, D. (2017). Effects of Physician-directed Pharmaceutical Promotion on Prescription Behaviors: Longitudinal Evidence. *Health Economics*, 26(4), 450–468. doi:10.1002/hec.3323 PMID:26893065

Datti, B., & Carter, M. W. (2006). The effect of direct-to-consumer advertising on prescription drug use by older adults. *Drugs & Aging*, 23(1), 71–81. doi:10.2165/00002512-200623010-00007 PMID:16492071

DeLorme, D. E., & Huh, J. (2009). Seniors' uncertainty management of direct-to-consumer prescription drug advertising usefulness. *Health Communication*, 24(6), 494–503. doi:10.1080/10410230903104277 PMID:19735027

DeLorme, D. E., Huh, J., & Reid, L. N. (2006). Age differences in how consumers behave following exposure to DTC advertising. *Health Communication*, 20(3), 255–265. doi:10.1207/15327027hc2003_5 PMID:17137417

Deshpande, A., Menon, A., Perri, M. III, & Zinkhan, G. (2004). Direct-to-consumer advertising and its utility in health care decision making: A consumer perspective. *Journal of Health Communication*, 9(6), 499–513. doi:10.1080/10810730490523197 PMID:15764449

Donohue, J., Berndt, E., Rosenthal, M., Epstein, A., & Frank, R. (2004). Effects of Pharmaceutical promotion on adherence to the treatment guidelines for depression. *Medical Care*, 42(12), 1176–1185. doi:10.1097/00005650-200412000-00004 PMID:15550797

Elif. (2010). *Online health information seeking habits of middle aged and older people: A case study* (Master's Thesis).

Emanuel, E. J., & Emanuel, L. L. (1992). Four Models of the Physician-Patient Relationship. *Journal of the American Medical Association*, 267(16), 2221–2226. doi:10.1001/jama.1992.03480160079038 PMID:1556799

Fortuna, R. J., Ross-Degnan, D., Finkelstein, J., Zhang, F., Campion, F. X., & Simon, S. R. (2008). Clinician attitudes towards prescribing and implications for interventions in a multi-specialty group practice. *Journal of Evaluation in Clinical Practice*, 14(6), 969–973. doi:10.1111/j.1365-2753.2007.00913.x PMID:18462286

Good & Huhmann. (2018). *Social relationships and social anxiety appeals in direct-to-consumer advertising*. Academic Press.

Hansen, R. A., Chen, S.-Y., Gaynes, B. N., & Maciejewski, M. L. (2010). Relationship of Pharmaceutical Promotion to Antidepressant Switching and Adherence: A Retrospective Cohort Study. *Psychiatric Services (Washington, D.C.)*, 61(12), 1232–1238. doi:10.1176/ps.2010.61.12.1232 PMID:21123408

Herzenstein, M., Misra, S., & Posavac, S. S. (2004). How consumers' attitudes toward direct-to-consumer advertising of prescription drugs influences and effectiveness, and consumer and physician behavior. *Marketing Letters*, 15(4), 201–212. doi:10.1007/11002-005-0458-x

Hoffman, J.R., & Wilkes, M. (1999). *Direct to consumer advertising of prescription drugs*. Academic Press.

An Empirical Note on Comparative Perceptions of Indian Patients and Physicians

Huh, J., DeLorme, D. E., & Reid, L. N. (2005). Factors affecting trust in on-line prescription drug information and impact of trust on behavior following exposure to DTC advertising. *Journal of Health Communication, 10*(8), 711–731. doi:10.1080/10810730500326716 PMID:16316935

Huh, J., & Langteau, R. (2007). Presumed influence of direct-to-consumer (DTC) prescription drug advertising on patients - The physician's perspective. *Journal of Advertising, 36*(3), 151–172. doi:10.2753/JOA0091-3367360312

Iverson, S.A., Howard, K.B., & Penney, B.K. (2008). Impact of internet use on health-related behaviors and the patient-physician relationship: a survey-based study and review. *J Am Osteopath Assoc., 108*(12), 699-711.

Jacob, N. T. (2018). Drug Promotion Practices: A review. *British Journal of Clinical Pharmacology*. doi:10.1111/bcp.13513 PMID:29349812

Jha, A. (2005). *A Study on the Role of Information Technology in Marketing Pharmaceutical products*. Unpublished Doctoral Thesis.

Jon, R., Palihawadana, D., & Shabbir, H. (2008). The Ethical Aspects of Direct to Consumer Advertising of Prescription Drugs in the United Kingdom: Physician versus Consumer Views. *Journal of Advertising Research.*

Joseph, J. (1999). Race, Gender, and Partnership in the Patient-Physician Relationship. *Journal of the American Medical Association, 282*(6), 583–589. doi:10.1001/jama.282.6.583 PMID:10450723

Joseph, M., Spake, D. F., & And Godwin, D. M. (2008). Aging consumers and drug marketing: Senior citizens' views on DTC advertising, the medicare prescription drug programme and pharmaceutical retailing. *Journal of Medical Marketing, 8*(3), 221–228. doi:10.1057/jmm.2008.4

Kiani, S., Kiani, S., Kurian, D., Kurian, D., & Henkin, S. (2016). Direct to consumer advertising of robotic heart bypass surgery: Effectiveness, patient satisfaction and clinical outcomes. *International Journal of Pharmaceutical and Healthcare Marketing, 10*(4), 358–375. doi:10.1108/IJPHM-05-2015-0016 PMID:28331538

Kincey, J., & Saltmore, S. (2018). Key questions to ask when evaluating medicines-related promotional data. *Stroke, 13*, 57.

Kon, R. H., Russo, M. W., Ory, B., Mendys, P., & Simpson, R. J. Jr. (2008). Misperception among physicians and patients regarding the risks and benefits of statin treatment: The potential role of direct-to-consumer advertising. *Journal of Clinical Lipidology, 2*(1), 51–57. doi:10.1016/j.jacl.2008.01.002 PMID:21291715

Kurlander, Chey, Morris, Hu, Padival, Bangdiwala, ... Drossman. (2017). *Development and validation of the Patient-Physician Relationship Scale among patients with irritable bowel syndrome*. Academic Press.

Lee, B., Salmon, C. T., & Paek, H. J. (2007). The effects of information sources on consumer reactions to direct-to-consumer (DTC) prescription drug advertising - A consumer socialization approach. *Journal of Advertising, 36*(1), 107–119. doi:10.2753/JOA0091-3367360108

An Empirical Note on Comparative Perceptions of Indian Patients and Physicians

- Lee. (2011). Direct-to-consumer pharmaceutical advertising: therapeutic or toxic? *Pharmacy and Therapeutics*, 36(10), 669.
- Liang, B. A., & Mackey, T. (2011). Direct-to-consumer advertising with interactive Internet media. Global regulation and public health issues. *Journal of the American Medical Association*, 305(8), 824–825. doi:10.1001/jama.2011.203 PMID:21343583
- Lipsky, M. S., & Taylor, C. A. (1997). The opinions and experiences of family physicians regarding direct-to-consumer advertising. *The Journal of Family Practice*, 45, 495–499. PMID:9420585
- Lowery, S. (2003). Mobilising the Patient Squadrons— Direct to Consumer Communications. *BHBIA Journal*, 7, 3–7.
- Mackey, T. K. (2016). Digital Direct-to-Consumer Advertising: A Perfect Storm of Rapid Evolution and Stagnant Regulation: Comment on Trouble Spots in Online Direct-to-Consumer Prescription Drug Promotion: A Content Analysis of FDA Warning Letters. *International Journal of Health Policy and Management*, 5(4), 271–274. doi:10.15171/ijhpm.2016.11 PMID:27239871
- Marinac, J. S., Godfrey, L. A., Buchinger, C., Sun, C., Wooten, J., & Willsie, S. K. (2004). Attitudes of older Americans toward direct-to-consumer advertising: Predictors of impact. *Drug Information Journal*, 38(3), 301–311. doi:10.1177/009286150403800310
- Mathur, M. B., Gould, M., & Khazeni, N. (2016). Direct-to-consumer drug advertisements can paradoxically increase intentions to adopt lifestyle changes. *Frontiers in Psychology*, 7. PMID:27752251
- McCarthy, M. (2015). US physician group calls for ban on direct to consumer drug advertising. *BMJ (Clinical Research Ed.)*, 351, h6230. PMID:26582786
- McMullen, Safford, Bosworth, Phansalkar, Leong, Fagan, ... Vandermeer. (2015). *Centers for Education and Research on Therapeutics Patient-Centered Medication Management Workshop Working Group*. doi:10.1016/j.pec.2014.09.015
- McRoy, L., Weech-Maldonado, R., Bradford, W. D., Menachemi, N., Morrissey, M., & Kilgore, M. (2016). The effects of direct-to-consumer advertising on medication use among Medicaid children with asthma. *Health Marketing Quarterly*, 33(3), 195–205. doi:10.1080/07359683.2016.1199205 PMID:27440407
- Menon, A. M., Deshpande, A. D., Perri, M. III, & Zinkhan, G. M. (2003). Consumers' attention to the brief summary in print direct-to-consumer advertisements: Perceived usefulness in patient-physicians discussions. *Journal of Public Policy & Marketing*, 22(2), 181–191. doi:10.1509/jppm.22.2.181.17636
- Mintzes, B. (2002). Direct to consumer advertising in medicalising normal human experience: For, For and against. *BMJ (Clinical Research Ed.)*, 324(7342), 908–909. doi:10.1136/bmj.324.7342.908 PMID:11950745
- Mitka, M. (2003). Survey Suggesting That Prescription Drug Ads Help Public Is Met with Skepticism. *JAMA*, 289(7), 827.
- Morris, A. W., Gadson, S. L., & Burroughs, V. (2007). For the good of the patient: Survey of the physicians of the National Medical Association regarding perceptions of DTC advertising, Part II", 2006. *Journal of the National Medical Association*, 99(3), 287–293. PMID:17393955

An Empirical Note on Comparative Perceptions of Indian Patients and Physicians

- Mukherji, J., & Mukherji, A. (2014). Attitudes toward Pharmaceutical Direct-to-Consumer Advertising: The Role of Culture. *Competition Forum*, 12(2), 40-44.
- Mukherji, P., Janakiraman, R., Dutta, S., & Rajiv, S. (2016). How Direct-to-Consumer Advertising for Prescription Drugs Affects Consumers' Welfare. *Journal of Advertising Research*.
- Murray, E., Lo, B., Pollack, L., Donelan, K., & Lee, K. (2003). Direct-to-consumer advertising: Physicians' views of its effects on quality of care and the doctor-patient relationship. *The Journal of the American Board of Family Practice*, 16(6), 513–524. doi:10.3122/jabfm.16.6.513 PMID:14963078
- Murray, E., Lo, B., Pollack, L., Donelan, K., & Lee, K. (2004). Direct-to-consumer advertising: Public perceptions of its effects on health behaviors, health care, and the doctor-patient relationship. *The Journal of the American Board of Family Practice*, 17(1), 6–18. doi:10.3122/jabfm.17.1.6 PMID:15014047
- Parker, R. S., & Pettijohn, C. E. (2003). Ethical considerations in the use of direct-to-consumer advertising and pharmaceutical promotions: The impact on pharmaceutical sales and physicians. *Journal of Business Ethics*, 48(3), 279–290. doi:10.1023/B:BUSI.0000005783.58142.6e
- Parnes, B., Smith, P. C., Gilroy, C., Quintela, J., Emsermann, C. B., Dickinson, L. M., & Westfall, J. M. (2009). Lack of impact of direct-to-consumer advertising on the physician–patient encounter in primary care: A SNOCAP report. *Annals of Family Medicine*, 7(1), 41–46. doi:10.1370/afm.870 PMID:19139448
- Peyrot, M., Alperstein, N. M., Van Doren, D., & And, L. G. Poli. (1998). Direct-to-Consumer Ads Can Influence Behavior. *Marketing Health Services*, 18(2), 26–32. PMID:10180332
- Reast, J., Paliwadana, D., & Spickett-Jones, G. (2004). UK Physicians' Attitudes towards Direct-to-Consumer Advertising of Prescription Drugs: An Extension and Review. *International Journal of Advertising*, 23(2), 229–251. doi:10.1080/02650487.2004.11072881
- Reast, J. D., & Carson, A. M. (2000). UK Physicians' Attitudes towards Direct-to-Consumer Advertising of Prescription Drugs: An Exploratory Analysis. *International Journal of Advertising*, 19(3), 397–415. doi:10.1080/02650487.2000.11104808
- Robinson, A. R., Hohmann, K. B., Rifkin, J. I., Topp, D., Gilroy, C. M., Pickard, J. A., & Anderson, R. J. (2004). Direct-to-consumer pharmaceutical advertising - physician and public opinion and potential effects on the physician-patient relationship. *Archives of Internal Medicine*, 164(4), 427–432. doi:10.1001/archinte.164.4.427 PMID:14980994
- Schnipper, L. E., & Abel, G. A. (2016). Direct-to-Consumer Drug Advertising in Oncology Is Not Beneficial to Patients or Public Health. *JAMA Oncology*, 2(11), 1397–1398. doi:10.1001/jamaoncol.2016.2463 PMID:27532895
- Schroeder. (2010). The Era of the Empowered Patient. *DTC Perspectives*, 21-23.
- Shetty & Modi. (2013). *Changing landscape of the Indian pharma industry*. Retrieved from <https://www.pwc.in/assets/pdfs/publications/2013/changing-landscape-of-the-indian-pharma-industry.pdf>
- Siddiqi, A. A., Siddiqi, A. A., Shah, S. Z. A., & Shah, S. Z. A. (2017). Physicians' attitude towards direct to consumer advertising of pharmaceutical drugs. *International Journal of Pharmaceutical and Healthcare Marketing*, 11(1), 37–48. doi:10.1108/IJPHM-10-2015-0049

An Empirical Note on Comparative Perceptions of Indian Patients and Physicians

- Sullivan, H. W., & Campbell, M. (2015). Do Prescription Drug Ads Tell Consumers Enough About Benefits and Side Effects? Results From the Health Information National Trends Survey, Fourth Administration. *Journal of Health Communication*, 20(12), 1391–1396. doi:10.1080/10810730.2015.1018635 PMID:26120940
- Tan, S. S.-L., & Goonawardene, N. (2017). Internet Health Information Seeking and the Patient-Physician Relationship. *Systematic Reviews*. PMID:28104579
- Vats, S. (2014). Impact of Direct to Consumer Advertising Through Interactive Internet Media on Working Youth. *International Journal of Business and Administration Research Review*, 1(2), 88-99.
- Viale, P. H. (2003). What nurse practitioners should know about direct-to-consumer advertising of prescription medications. *Journal of the American Academy of Nurse Practitioners*, 15(7), 297–304. doi:10.1111/j.1745-7599.2003.tb01312.x PMID:12929250
- Weissman, J. S. (2004). Physicians report on patient encounters involving direct-to-consumer advertising. *Health Affairs*, W4 – 219 – 33.
- Woloshin, S., Schwartz, L. M., Tremmel, J., & Welch, H. G. (2001). Direct-to-consumer advertisements for prescription drugs: What are Americans being sold? *Lancet*, 358(9288), 1141–1146. doi:10.1016/S0140-6736(01)06254-7 PMID:11597668
- Wosinska, M. (2005). Direct-to-Consumer Advertising and Drug Therapy Compliance. *JMR, Journal of Marketing Research*, 42(3), 323–332. doi:10.1509/jmkr.2005.42.3.323
- Young, H. N., Paterniti, D. A., Bell, R. A., & Kravitz, R. L. (2005). Do prescription drug advertisements educate the public? The consumer answers. *Drug Information Journal*, 39(1), 25–33. doi:10.1177/009286150503900104

ENDNOTES

- ¹ The Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954 prohibits promotion of diagnosis, cure, mitigation, treatment or prevention of any disease, disorder or condition specified in the Schedule, or any other disease, disorder or condition (by whatsoever name called) which may be specified in the rules made under this Act to general public. Violation of such an act is considered a cognizable crime in case of a first conviction invites imprisonment which may extend to six months, or with fine, or with both. In case of subsequent conviction, the imprisonment may extend to one year.
- ² Detailed questionnaire used for data collection in the survey is intentionally not reported here and available on request from the interested users. Survey collects data on the belief expressed by physicians and patients on merits and de-merits of direct-to-consumer promotion of diseases and drugs.

Chapter 10

Determinants of Financial Literacy Among Indian Youth

Jehangir Pheroze Bharucha
Lincoln University College, Malaysia

ABSTRACT

The purpose of this study is to examine which factors actually determine the level of personal financial literacy among the youth in India's financial capital city. A total of 650 completed and returned questionnaires have been used for the purpose of this study. The data analysis uses descriptive statistics and multivariate analysis. The explanatory variables are gender, district of residence, educational level, father's educational level, employment, marital status, and parenthood. Findings of the study depict that having children is the most positively correlated (+0.327) with financial literacy. Education (+0.245) and employment (+0.140) are positively correlated with financial literacy. It is also concluded that females are less likely to have a high level of financial literacy (-0.271) compared to males.

INTRODUCTION

The contribution of governments and employers in managing investments on behalf of individuals has reduced considerably in recent times. This has added to the individuals' role in managing their own finances. In the last few years researchers all over the world, have started to study and explore whether individuals are well-equipped to make financial decisions and how to bridge the knowledge gap in financial education and wellbeing. Although the focus of this research varies in terms of the concerns and the context, it is worthwhile to know that the research shows that a large percentage of the population does not have a good enough financial understanding to ensure long-term financial stability for themselves and their family. Also, the instability of the global marketplace is leading to a very high level of complexity in financial decisions. One of its main implications include rising costs of goods and services that push people to be able to make well-informed financial decisions (Lusardi & Mitchell, 2011). Given the increasing need for individuals to manage their own retirement savings and pensions, resulting mainly from the trend of switching to defined-contribution from defined-benefit pension plans, this indicates that the need for high levels of financial literacy is rising (Morgan and Trinh, 2017). Exposing

DOI: 10.4018/978-1-5225-7095-0.ch010

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the youth to all this is particularly important as they are at a vulnerable age. Evidence from around the world presents a frightening picture; and recognizing the importance of financial literacy, a growing number of countries have developed and implemented national strategies for financial education in order to improve the financial literacy of their populations in general, often with a particular focus on younger generations (Grifoni & Messy, 2012).

Financial literacy refers to understanding finance and the capability to utilize it to make sound personal financial decision. (Hogarth and Hilgert, 2002). More specifically, it refers to the set of skills and knowledge that allow an individual to make informed and effective decisions through their understanding of finances. (Norman 2010). According to Remund (2010), financial literacy is a person's ability to understand and use financial matters. Financial ignorance carries significant costs and it is clear that billions of people are unprepared to deal with rapid changes in the financial landscape (Klapper *et al.*, 2015). A basic knowledge of financial concepts, and the ability to apply numeracy skills in a financial context, ensures that consumers can manage their financial affairs independently and respond appropriately to news and events that may have implications for their financial well-being (Morgan and Trinh, 2017). Financial literacy is considered an important adjunct for promoting financial inclusion, financial development and ultimately financial stability (Ramakrishnan, 2011). In addition, financially savvy investors are more likely to diversify risk by spreading funds across several ventures (Abreu and Mendes, 2010). According to Mahdzan and Tabiani (2013) increasing financial literacy and capability promotes better financial decision-making, thus, enabling better planning and management of life events such as education, housing purchase, or retirement. This is particularly relevant for the India as the country has the competitive advantage of its demographic dividend which is waiting to be exploited. The study investigates the socio-demographic variables that influence the financial knowledge of the youth in India. A financially aware youth workforce would be a great asset for India. How parents handle and spend their money would have a direct bearing on the youth as the youth would by default are most likely to have expenditure patterns comparable to their family. So the extent of financial literacy of the family would have an impact on the youth from an early age. Also the youth would want to be financially literate depending on their attitude towards money and to what extent they deem it as important.

GREATER NEED FOR FINANCIAL LITERACY IN INDIA

Financial literacy is of particular relevance to emerging economies. As these economies try to accelerate growth rates, improvement in financial literacy would help enhance the financial well-being of the people. Before the financial sector reforms commenced in the early 1990s, the Indian monetary system basically catered to the needs of planned development. Customers had little choice in financial investments. The underdeveloped financial markets ensured that exposure to risk was also very little. In such a situation, customers could use their basic skills to invest in simple financial products with returns that were assured and were not bothered at all about risks. The relevance of financial education was limited and not needed.

Due to the process of globalization, India has undergone a significant transformation. The economy has become more diversified with new avenues of growth. Thus the financial sector has also become more modernized and diversified. In an environment where the range and complexity of financial products are widening the scope of entire market, it is becoming crucial that individuals should develop a thorough understanding of the world of finance so as to make better choices that are most appropriate

to their financial goals and needs (Kumar & Anees, 2013). The country's central banker, the Reserve Bank of India has been pushing forward programmes of financial literacy, ably supported by several commercial banks in the country. In a country like India, there is, of course, there is an even stronger case for promoting financial education in the context of all the various programmes initiated to achieve inclusive growth. This would reduce deprivation and vulnerability and expand opportunities for the poor.

REVIEW OF LITERATURE

A significant aspect related to the issue of financial literacy is the identification of its relationship with socioeconomic and demographic variables. Several studies have sought to identify these relationships. The review of available literature shows that the studies pertain to countries other than India and this appears to be a somewhat neglected area by Indian researchers and policy makers. Having said this, research from around the world on financial literacy raises serious concerns about the ability of individuals to secure their financial well-being (Agarwalla *et al.*, 2014). There is evidence that individuals tend to under-save, fail to invest wisely and are often indebted (Mitchell 2011, Poterba *et al.*, 2007). Many recent empirical studies using panel data on household portfolios find that low level of financial sophistication is associated with poor risk diversification, inefficient portfolio allocations, and low wealth accumulation. (Jappelli & Padula, 2013). Xu and Zia (2012) have provided a good summary of findings of various financial literacy studies across the world. Two comprehensive reviews of recent research on financial literacy are Lusardi and Mitchell (2014) and Fernandes, Lynch, and Netemeyer (2014).

A financial literacy survey of the general population in United Kingdom by Schagen and Lines (1996) indicated that most participants were confident in their financial dealings, the notable exceptions being single parents and students. Beal and Delpachitra (2002) carried out a comprehensive financial literacy survey of Australian youth and showed that students with higher financial literacy scores were more likely to be male, have greater work experience, have a higher income and have a lower aggregate risk preference. Financial literacy is strongly related to sociodemographic characteristics and family financial sophistication. (Lusardi *et al.*, 2010). Cude (2010) showed that individuals with a high degree of financial literacy are highly successful in their professional as well as personal life; and higher levels of education, risk appetite, higher age, more work experience, family income, parental occupation and attending in training classes will increase financial literacy (Cude, 2010). It is generally observed that on an average, women perform worse than men in the tests of financial knowledge and have less confidence in their financial skills (OECD, 2013)

Ansong and Gyensare (2012) made a study in Ghana which concluded age and work experience are positively related to financial literacy but level of study, work location, father's education and access to media are not significantly correlated with financial literacy. A study in Iran by Taft *et al.* (2013) concluded that age and education are positively correlated with financial literacy and married men are more financially literate. The spending habit and year of study have a significant positive relationship with the financial literacy, whereby the age and gender are negatively associated with financial literacy concluded Shaari *et al.* (2013) after studying financial literacy among 384 university students in Malaysia. Nidar and Bestari (2012) on the basis of a study of 400 students in Indonesia observed that level of education, faculty, personal income, knowledge from parents, parents' income, and ownership of insurance factors have significant impact on personal financial literacy. Heenkenda (2014) in Sri Lanka found a strong association between socio-economic-demographic characteristics and the level of financial literacy. A

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study by Mwangi (2012) found that financial literacy is low in Kenya. Households' access to financial services is not based on levels of financial literacy but rather on factors such as income levels, distance from banks, age, marital status, gender, household size and level of education (Mwangi, 2012). Financial literacy is highly correlated with other factors and, among them, higher education might be the key (Thaler, 2013). Brown and Graf (2013) found that married individuals have a significant propensity to higher financial literacy levels than those who are single. A similar conclusion had been reached by Research (2003). In Mauritius, most students had a medium level of knowledge and skills in financial literacy and in savings and borrowings and there was no significant difference in the financial literacy level based on gender, age, language, race and income levels (Ramasamwy et al, 2013). Almost an identical result was discovered by Fatoki (2014) for South Africa. Lusardi and Mitchell (2014) provide an extensive review of the literature on factors related to financial literacy. Potrich et al (2015) on the basis of a survey of 1,400 individuals in Rio Grande do Sul, Brazil showed a statistically significant dependence between financial literacy and gender, having dependent family members, occupation, educational level, mother's educational level, individual income, and family income. A study in Tunisia by Mouna and Anis (2016) showed that the financial literacy level is found to be affected by age, education level, and the annual income. Research from Croatia show that age, level of education and income levels have statistically significantly influence on financial literacy (Bujan et al., 2016). Research by Morgan and Trinh (2017) covering two relatively low-income Asian economies Cambodia and Vietnam identified the main determinants of financial literacy as educational level, income, age, and occupational status. The results of a study by Isomidinova and Singh (2017) revealed that financial education has the highest influence on financial literacy of students in Uzbekistan.

People grown up in families with the higher financial knowledge and well-being are less depressed, show less aggressive and anti-social behavior and have more self-confidence (Fox et al., 2005). People with low financial literacy are more likely to have problems with debt (Lusardi & Tufano, 2009). An individual's attitude towards money depends on various factors such as such as individual's childhood experiences, education, financial and social status (Taneja, 2012). Atkinson and Messy (2012) detected that financial literacy is usually lower among young and elderly individuals and tends to be higher among adults in the middle of their life cycle. Lusardi and Mitchell (2014) conclude that the interventions to increase financial literacy are barely successful. Fernandes et al. (2014) draw attention to the significant association between measured financial literacy and financial behavior. Surveys have consistently been showing that the level of financial literacy is relatively low even in advanced economies (OECD/INFE 2016).

SETTING OF THE STUDY

Research Methodology

Logistics multiple regression models have been used to examine the relationship between the levels of financial literacy and different demographic characteristics. Initially, a pilot study was carried out to get more precise insight into the various aspects of the determinants of financial literacy. This helped the researcher to outline the research problem more clearly. For the final study, a structured questionnaire was distributed to 1125 respondents using the technique of stratified random sampling. Given the huge socio-economic disparities in Mumbai, the sample was drawn almost equally from Mumbai city district,

western suburbs and the central suburbs. After preliminary analysis of the data, the usable sample was reduced to 650. The percentage of usable responses is worked out at 59.55%. Out of the 650 usable responses, 46.78% were female and 53.22% were male. All the respondents were in the 18-30 years age group with 35.84% being in the age range of 23- 26 years. Frequency, percentage, mean and standard deviation have been used. Scores converted into percentages were tested using ANOVA. The level of financial literacy is then used in the logistic multiple regression model as the dependent variable, which is explained by the seven independent variables. The explanatory variables included gender, district of residence, educational level, father's educational level, employment marital status and parenthood.

Limitations of the Study

- The sample was drawn from Mumbai. The findings may not be applicable to the rural areas and further studies taking a wide sample from the whole of India may be warranted.
- This study does not make an attempt to compare financial literacy levels of students from different disciplines. It may be valuable to make comparisons against several disciplines and years of study.
- Furthermore, there has been no attempt in the current research to explicitly link financial literacy with financial behaviour. It is possible that though a person may have a low score in certain aspects of financial literacy, he may demonstrate high financial success.
- The conclusions of this study apply to the youth population of Mumbai. But the regional profile in India is diversified. Also, there exists a wide divergence in literacy levels across States. In several States and union territories, the literacy rates are well above the national average. Thus the financial literacy rates would also differ between different age categories of the population, between states, between rural and urban areas and across regions.

DATA ANALYSIS AND INTERPRETATION

Financial Literacy Scores

It is found that financial literacy is low. The overall financial literacy score as a whole is calculated as 60.4%. This figure has partially been swollen because of the good scores achieved in the field of debit cards/credit cards and insurance. In any case, the low correct response rates, particularly to certain questions indicated that many young people lack knowledge of basic financial concepts. Not a single respondent could correctly answer all questions; however 52 respondents (8%) of our total respondents could answer 48 out of the 50 questions correctly. Thus, our findings show that lack of financial knowledge is widespread among the young. Only 27% percent of the respondents could correctly answer the question on call money and only 20% correctly answered the question on compound interest. A good 64% correctly answered various questions pertaining to mutual funds. Only about one-third of the youth of Mumbai possess basic knowledge of interest rates and risk diversification. Only 34% of people in the age group 18 to 30 years possess basic knowledge of interest rates and risk diversification.

The highest mean score is obtained in the field of knowledge of debit cards and credit Cards with a mean score of 75.06%. This is followed in the second rank by knowledge of insurance with a mean score of 67.96%. The mean score in the realm of basic knowledge of the Indian financial system is seen to be 62.56%. It is unfortunate that the respondents have very low financial literacy scores in the field

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of basic money management (47.96%) and savings and investment know-how (48.10%). The findings overall generally show that knowledge of money management and investment know-how is lower than their knowledge of debit cards/ credit cards and insurance. The youth covered in the survey only knew general not specific facts on money management topics that explained their low levels of knowledge in overall financial management areas.

Statistical Summary of Variables

In this section the relationship between the respondent's level of financial literacy and the respondent's gender, education, father's education, marital status, employment and whether the respondent has offspring is examined. Table 1 represents the means, standard deviations and the number of observations of the independent variables.

While the overall level of financial knowledge was low among the respondents there were significant differences according to gender, marital status, education, employment status and whether the respondent had offspring.

Table 1. Statistical summary of variables

	Mean	Standard deviation	N
Basic money management: Correct Responses	0.48	0.53	650
Savings and investment know how:Correct Responses	0.48	0.50	650
Debit cards/credit cards/ ATM:Correct Responses	0.75	0.46	650
Insurance:Correct Responses	0.68	0.18	650
Basic knowledge of Indian financial system: Correct Responses	0.63	0.29	650
Youth population: Mumbai City	0.55	0.36	262
Youth population Western Mumbai	0.63	0.31	245
Youth population: Central Mumbai	0.53	0.42	143
Male	0.68	0.47	346
Female	0.52	0.50	304
Unmarried Undergraduate students and not working	0.16	0.47	124
Unmarried Undergraduate students and working	0.48	0.43	152
Unmarried Post graduate students and not working	0.37	0.49	043
Unmarried Post graduate students and working	0.50	0.48	118
Working married having no children	0.57	0.38	102
Working married having children	0.69	0.50	111
Father's education: less than HSC	0.62	0.34	103
Father's education: Graduate	0.38	0.50	360
Father's education: post graduate/doctoral	0.13	0.46	187

All statistics calculated using sample weights.

The following table tabulates the differences in means between different subgroups of our sample using t-tests. The significance of these differences is also indicated in the table.

RESULTS AND CONCLUSIONS OF MULTIVARIATE ANALYSIS

A multivariate analysis has been done to understand which factors were really linked to financial literacy after controlling for many other characteristics. Three different specifications were examined. Specification I considered only basic socio-demographic characteristics. Specification II included socio-demographic characteristics as well as family characteristics. Specification III included socio-demographic characteristics, family characteristics, employment status, marital status, and whether the respondent had off springs.

Several important conclusions emerge from the multivariate analysis. Even after consideration of many socio-demographic variables, family background, educational attainments, employment status, marital status and other variables, females still are substantially less financially literate than their male counterparts. This result showed that sex is a strong predictor of financial literacy, even after accounting for many other characteristics, and the differences are statistically significant. District of residence in Mumbai is another predictor of financial literacy, with the respondents in suburban Mumbai displaying a lower knowledge on certain indicators. However, the differences are not statistically significant after

Table 2. Differences in means (%)

	Basic money management	Savings and investment know how	Debit cards/credit cards/ ATM	Insurance	Basic knowledge of Indian financial system
Gender Male vs. female	12.3***	8.5***	10.2***	9.8***	12.4***
Place of residence: Mumbai City vs. Western Mumbai	5.7***	6.8***	4.6***	7.3***	7.1***
Western Mumbai vs. Central Mumbai	3.2***	4.1***	5.8**	4.3***	6.5***
Mumbai City vs. Central Mumbai	7.4***	6.7***	5.3***	8.0***	10.2***
Education: graduate vs. HSC or lower	14.8***	10.7***	3.9***	9.9***	10.5***
Education postgraduate vs. graduate	13.2***	6.1**	2.8***	8.3***	7.8***
Family background characteristics Father's education: graduate vs. less than HSC	11.7***	5.8***	6.1***	7.6**	10.9***
Father's education: post graduate vs. graduate	4.7***	6.8**	9.5*	17.2***	5.9***

N=650

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

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accounting for all the other variables taken in Model III. There is a strong positive relationship between educational attainment and financial literacy, in particular for those who are graduates and post graduates. Estimates from Model III indicate they are more likely to answer certain questions correctly compared to the other respondents. Thus, educational attainment is clearly a strong determinant of financial literacy and the relationship is nonlinear. Family characteristics are also important determinants of financial literacy. In particular, father's education is a strong predictor of financial literacy: Those whose fathers were post graduates and settled in high level occupations are more likely rightly answer several questions correctly in Specification II. However, this effect did not exist when controlling for other specifications like employment status, marital status and whether the respondent had children. The low pseudo R-squared value in the regressions indicates that some of the variation is unaccounted for, given the many factors are likely to influence the accumulation of financial knowledge.

In order to understand the predictive power of gender, district of residence, educational attainment, family characteristics, employment status, and marital status and whether the respondents had off springs, multiple regression analysis was carried out. The regression model was constructed to understand which among the independent variables are related more to the dependent variable, and to explore the forms of these relationships. The regression analysis estimates the conditional expectation of the dependent variable i.e. the level of financial literacy of the respondents given the independent variables i.e. gender, district of residence, educational attainment, family characteristics, employment status, marital status and whether the respondents had offsprings.

The equation that describes how the dependent variable y i.e. level of financial literacy is related to independent variables like $x_1, x_2, x_3, \dots, x_7$ i.e. gender, district of residence, education, family characteristics, employment status, marital status, offsprings and an error term ϵ is the multiple regression model.

The regression model is as follows:

$$Y = \beta_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + \epsilon$$

Where,

β_0 = Beta coefficient (constant)

b_1 = Coefficient of Gender

b_2 = Coefficient of district of residence

b_3 = Coefficient of education

b_4 = Coefficient of education background of father

b_5 = Coefficient of Employment status

b_6 = Coefficient of Marital status

b_7 = coefficient of whether the respondent has children

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Y = coefficient of financial literacy

€ = error term

In this model b_0, b_1, b_2 are the parameters and ϵ the Greek letter epsilon is a random variable. Y (financial literacy) is a linear function of x_1, x_2, \dots (The $\beta_0 + b_1x_1 + b_2x_2$ part) plus an error term ϵ . The error term ϵ the Greek letter epsilon accounts for the variability in y that is not explained by the linear effect of the independent variables.

The estimated result of the multiple regression line can be written as below:

$$Y = 0.956 - 0.217x_1 - 0.054x_2 + 0.245x_3 - 0.189x_4 + 0.140x_5 + 0.117x_6 + 0.327x_7 + \epsilon$$

Thus it is seen from our model among all the variables having children is the most positively correlated (+0.327) with financial literacy. This shows that as people shift to the later stages of the family life cycle and have offspring's, they have to shoulder more responsibilities and hence give more importance to managing their finances. It is also concluded that females are less likely to have a high level of financial literacy (-0.271). However education (+0.245) and employment (+0.140) are positively correlated with financial literacy.

It appears from this study that there is some amount of gender differences in financial literacy in India. Overall, men had better understanding of financial matters than women. Young women know much less than do young men about basic financial concepts. Differences between women and men persisted continuously throughout Mumbai City, Western Mumbai and Central Mumbai. The analysis of variance further confirms that gender significantly affected overall financial literacy. Individual ANOVA run for each dimension however revealed that there were significant gender differences for savings and

Table 3. Model summary

R	0.7309 ^a
R square	0.5342
Adjusted R square	0.5292
Std error of the estimate	0.7810
No of observations	650

a. Predictors: (Constant) gender, district of residence, education, father's education, employment, marital status, has offspring's.

b. Dependent variable: financial literacy

Table 4. ANOVA

	Sum of Squares	Df	Mean Square	F	Sig
Regression	2.128	9.0009	4.5005	21.357	0.0010
Residual	7.633	1.4751	02107		
Total	9.861	10.476			

a. Predictors: (Constant) gender, district of residence, education, father's education, employment, marital status, has offspring's.

b. Dependant variable: Financial Literacy

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investments know-how only. Thus it may be important to develop programmes targeted specifically to women, since they display much lower financial knowledge. Overall, the youth in Mumbai city appear less confident when it comes to managing money, reflecting their relative lack of experience. However, they appear to be reasonably well informed about plastic money and about insurance. They appear keen to learn more.

It is discovered in this survey that financial literacy is influenced by parents. A weak but statistically relevant correlation was noticed between those who got a good score and they had highly qualified parents who were into high-level professions. There is a correlation seen between the employment status of the respondents and their level of financial literacy. Yet, the individual analysis of variance reports statistically significant age group difference among personal finance, borrowings savings and debit/credit cards themes only. The parenthood of the respondents was positively related to his /her level of financial knowledge at 1% significance level. This implies that as people have offspring's, there is a corresponding improvement in his/her financial literacy level. The ANOVA findings confirmed that marital status affected the individual's financial knowledge as a whole. However, marital status significantly impacted on personal savings and debit/credit cards only. There was a positive correlation coefficient (0.48) indicating that there was a statistically significant ($p < .001$) linear positive relationship between marital status and financial literacy.

Putting these findings together indicates that the financial literacy differential relates to differences in gender, marital status, employment status, having children and to some extent in educational attainment. Research is needed to help understand this so that remedial action can be undertaken. While all the youth are in need of and deserve to learn financial survivorship skills, this is particularly important for the youth residing in Western and Central Mumbai.

FINAL REMARKS

Conclusion

Money is an important issue for people, not only as a utilitarian commodity but also as an emotional representation of worth or through symbolic meanings (Engelberg & Sjoberg, 2006). Financial literacy is a vital component for a successful adult life and undoubtedly plays an indispensable role in shaping responsible attitudes and behaviors with regard to personal finances. Thus, this research adds to the scant literature in India on the influence of socioeconomic and demographic variables on financial literacy levels. This study is almost a pioneer in the Indian context and identifies the socioeconomic and demographic variables that lead to a low or high financial literacy level so that programmes may be initiated for groups which are the most likely to be financially illiterate and indicates the direction for educational activity.

The financial preparedness of a nation's youth is essential to its well-being and of vital importance to a country's economic future. A person having the right financial knowledge and understanding will be able to successfully steer through tough situations and difficult times and would not be adversely affected by global depressions and problems. This positive attitude will help them to practice proper personal financial management as working adults (Dahlia, Rabitah & Zuraidah, 2009). It is the need of

the hour today, to increase financial literacy and awareness especially among the youth. Many of the females did not have a firm grasp particularly over questions on money management and on the Indian financial system. It may be important to develop programs targeted specifically to women, since they display much lower financial knowledge. Knowledge of money management and investment know-how is lower than their knowledge of debit cards credit cards ATMs and insurance.

The respondents who reside in Mumbai City are more likely than those who reside in Mumbai suburban regions to answer most of the categories of financial literacy questions correctly. There are differences in financial literacy according to educational levels with post graduate students who were also working scoring better than the others and the differences are statistically significant. Family characteristics are also important determinants of financial literacy. Correct response rates increase substantially for higher levels of educational attainment. The low pseudo R-squared values in our regressions indicate that some of the variation is unaccounted for, given the many factors are likely to influence the accumulation of financial knowledge. The model shows that among all the variables having children is positively correlated (+0.327) with financial literacy. This shows that as people shift to the later stages of the family life cycle and have off springs, they have to shoulder more responsibilities and hence give more importance to managing their finances. Education (+0.245) and employment (+0.249) are positively correlated with financial planning. Although the youth in Mumbai city appear less confident when it comes to managing money, reflecting their relative lack of experience, they appear keen to learn more.

The influence of gender on financial literacy is similar to the influence recorded for India by Agarwalla (2013). In terms of age, this study supports De Clercq et al., (2009) and Thapa and Nepal (2015) while it refutes their findings in case of gender and the findings related to gender is consistent with Ramaswamy et al (2013). Findings of education level are pretty similar to earlier studies such as Hilgert et al (2003), Shaari et al (2013) and Fatoki (2014).

Recommendations of the Study

Understanding financial literacy among young people is thus of critical importance for policymakers in several areas; it can aid those who wish to devise effective financial education programs targeted at young people as well as those writing legislation to protect younger consumers. (Lusardi et al 2010). A financially illiterate society can create several problems in the economy of the country (Arrondel, et al., 2013). Perhaps most importantly from a macroeconomic perspective, while improving general education levels is important, additional rewards can be obtained by developing financial education programs that directly affect financial literacy. A research review by a team of World Bank experts found that targeted financial literacy programs that are focused on specific behaviors and populations can lead to smarter financial decisions (Miller et al., 2014). Promoting financial literacy, in particular, needs to become a high national priority in India. The government should consider making financial literacy a pre-requisite for all graduates and post-graduates and all must get at least qualifying grades before they are awarded their degree by the respective universities.

It is important to ensure that financial literacy programmes are delivered in a comprehensible manner and in a way and at a time when the user needs it. Also, financial literacy and life skill products and services must be both entertaining and educational if they are going to be effective in today's media driven environment. The youth would have to understand that even having a high level of financial lit-

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eracy is not enough rather it is the matters, but what is most important is practical application of such knowledge to real-life situations. It is crucial for the young to develop a disciplined habit of managing their money. This study would like to recommend that from the family to educational institutions to the workplace, each of the institutions can play a greater role in helping the youth learn how to make sound financial decisions that will help them throughout their lives. However, the task of imparting financial knowledge and competency requires the support of all stakeholders in the private, public and NGO sectors. All stakeholders concerned should promote coordinated financial education.

REFERENCES

- Abreu, M., & Mendes, V. (2010). Financial Literacy and Portfolio Diversification. *Quantitative Finance*, 10(5), 515–528. doi:10.1080/14697680902878105
- Agarwalla, S. K., Barua, S. K., Jacob, J., & Varma, R. (2013). *Financial Literacy among Working Young in Urban India. W.P. No. 2013-10-02, October 2013, Indian Institute of Management*. Ahmedabad: India Research & Publications.
- Amari, M., & Anis, J. (2016). Financial literacy in Tunisia: Its determinants and its implications on investment behavior. *Ekonomski Pregled*, 67(3).
- Ansong, A., & Gyensare, M. (2012). Determinants of University Working-Students' Financial Literacy at the University of Cape Coast, Ghana. *International Journal of Business and Management*, 7(9), 126–135. doi:10.5539/ijbm.v7n9p126
- Arrondel, L., Debbich, M., & Savignac, F. (2013). Financial Literacy and Financial Planning in France. *Advancing Education in Quantitative Literacy*, 6(2), 2013.
- Atkinson, A., & Messy, F. (2012). *Measuring financial literacy: results of the OECD / International Network on Financial Education (INFE) Pilot Study* [Working Paper n. 15]. . doi:10.1787/5k9csfs90fr4-en
- Beal, D. J., & Delpachitra, S. B. (2003). Financial literacy among Australian university students. *Economic Papers*, 22(1), 65–78. doi:10.1111/j.1759-3441.2003.tb00337.x
- Brown, M., & Graf, R. (2013). Financial literacy and retirement planning in Switzerland. *Numeracy*, 6(2). Retrieved from <http://scholarcommons.usf.edu/numeracy/vol6/iss2/art6>
- Bujan, I. L., Cerović, N., & Dukić, S. (2016). Socio Demographic Determinants of Financial Literacy of the Citizens of the Republic of Croatia. *Ekonomski Pregled*, 67(3), 206–226.
- Dahlia, I., Rabitah, H., & Zuraidah, M. (2010). A Study on Financial Literacy of Malaysian Degree Students. *Cross-Cultural Communication*, 5(4), 51–59.
- Gulnoza, I., & Singh, J. (2017). Determinants of financial literacy: A quantitative study among young students in Tashkent, Uzbekistan. *Electronic Journal of Business and Management*, 2(1), 61–75.
- Heenkenda, S. (2014). *Inequalities in the Financial Inclusion in Sri Lanka: An Assessment of the Functional Financial Literacy*. MPRA Paper No. 54419.

Hogarth, J. M., & Hilgert, M. A. (2002). Financial knowledge, experience and learning preferences: Preliminary results from a new survey on financial literacy. *Consumer Interest Annual*, 48(1), 1–7.

Jappelli, T., & Padula, M. (2013). *Investment in financial literacy, social security and portfolio choice*. CFS Working Paper, No. 2013/12. Frankfurt: Center for Financial Studies.

Klapper, L., Lusardi, A., & Von Oudheusden, P. (2015). *Financial Literacy Around the World: Insights from the Standard & Poor's Ratings Services Global Financial Literacy Survey*. McGraw Hill Financial.

Lusardi, A., & Mitchell, O. (2009). *How Ordinary People make Complex Economic Decisions: Financial Literacy and Retirement Readiness*. NBER Working paper, 15350. Cambridge, UK: National Bureau of Economic Research.

Lusardi, A., & Mitchell, O. (2016). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature*, 52(1), 5–44. doi:10.1257/jel.52.1.5 PMID:28579637

Lusardi, A., Mitchell, O., & Curto, V. (2010). Financial Literacy Among The Young. *The Journal of Consumer Affairs*, 44(2), 358–380. doi:10.1111/j.1745-6606.2010.01173.x

Miller, M., Reichelstein, J., Salas, C., & Zia, B. (2014). *Can You Help Someone Become Financially Capable? A Meta-Analysis of the Literature*. World Bank Policy Research Working Paper 6745.

Mitchell, O. S. (2011). *Managing risks in defined contribution plans: What does the future hold?* Insurance and Risk Management Working Paper WP 2011-05. Philadelphia: University of Pennsylvania

Morgan, P. J., & Trinh, L. Q. (2017). *Determinants and Impacts of Financial Literacy in Cambodia and Viet Nam*. ADBI Working Paper 754. Tokyo: Asian Development Bank Institute. Available <https://www.adb.org/publications/determinants-and-impacts-financial-literacy-cambodia-and-viet-nam>

Nidar, S. R., & Bestari, S. (2012). Personal Financial Literacy among University Students: Case Study at Padjadjaran University Students, Bandung, Indonesia, *World Journal of Social Sciences*, 2(4), 162–171.

Norman, A. S. (2010). Importance of financial education in making informed decision on spending. *Journal of Economics and International Finance*, 2(10), 199–207.

Poterba, J., Venti, S., & Wise, D. A. (2007). *The changing landscape of pensions in the United States*. Technical report, no. w13381. Cambridge, UK: National Bureau of Economic Research. doi:10.3386/w13381

Potrich, A. C., Grigion, V., Kelmara, M., & Kirch, G. (2015). Determinants of Financial Literacy: Analysis of the Influence of Socioeconomic and Demographic Variables. *Revista Contabilidade & Finanças*, 26(69), 362–377. doi:10.1590/1808-057x201501040

Ramakrishnan, D. (2011). *Financial Literacy- The Demand Side of Financial Inclusion*. doi:10.2139/ssrn.1958417

Ramasawmy, D., Thapermall, S., Dowlut, S. A., & Ramen, M. (2013). A Study of the Level of Awareness of Financial Literacy among Management Undergraduates. In *Proceedings of 3rd Asia-Pacific Business Research Conference*. Kuala Lumpur: Asia-Pacific Business Research Conference.

Determinants of Financial Literacy Among Indian Youth

Remund, D. L. (2010). Financial Literacy Explicated: The Case for a Clearer Definition in an Increasingly Complex Economy. *The Journal of Consumer Affairs*, 44(2), 276–295. doi:10.1111/j.1745-6606.2010.01169.x

Research, R. M. (2003). *Survey of adult financial literacy in Australia*. ANZ Banking Group. Retrieved from http://www.anz.com/Documents/AU/Aboutanz/AN_5654

Schagen, S., & Lines, A. (1996). *Financial Literacy in Adult Life: A Report to the NatWest Group Charitable Trust*. Slough, UK: National Foundation for Educational Research 3rd Report.

Shaari, N. A., Hasan, N. A., Mohamed, R. K. M., & Sabri, M. A. (2013). Financial Literacy: A Study Among the University Students. *Interdisciplinary Journal of Contemporary Research in Business*, 5(2), 279–299.

Taft, M. K., Hosein, Z. Z., Mehrizi, S. M. T., & Roshan, A. (2013). The Relation between Financial Literacy, Financial Wellbeing and Financial Concerns. *International Journal of Business and Management*, 8(11), 463–475. doi:10.5539/ijbm.v8n11p63

Taneja, R. M. (2012). Money attitude – an abridgement. *Journal of Arts. Science & Commerce*, 3(3), 94–98.

Thaler, R. H. (2013 October 5). Financial literacy, beyond the classroom. *The New York Times*. Retrieved from <http://www.nytimes.com/2013/10/06/business/financial-literacy-beyond-theclassroom.html?r=3&>

Thapa, B. S., & Nepal, S. R. (2015). Financial Literacy in Nepal: A Survey Analysis from College Students. In *2nd International Conference on Economics and Finance*. Kathmandu, Nepal: Nepal Rastra Bank.

Xu, L., & Bilal, Z. (2012). *Financial Literacy around the World*. World Bank.

Chapter 11

Expats in India: Perspectives on Difficulties of Doing Business in India and Its Implications of Having Born Global Firms From India

Som Sekhar Bhattacharyya

National Institute of Industrial Engineering, India

ABSTRACT

Born global firms are coming up mostly from the developed world (read Uber, Facebook, Airbnb, and such others). In this chapter, the author attempts to find out why born global firms (BGFs) are not originating from India. The author undertakes an exploratory study to answer the research questions. Seventeen expats working in India were interviewed by in-depth personally administered semi-structured open-ended questionnaire. The 17 expert expats provided insights on the difficulties of doing business in India. These insights helped the author to analyze and synthesize how these insights would be indicative of the difficulties in the development of born global firms from India. The data was content analyzed by thematic content analysis. The findings indicate that there are challenges for BGFs to sprout from India in the near future.

INTRODUCTION

In India, it is natural that residents have an India centric view of the world (Dixit, 2001; Jaffrelot, 2003). Indians generally are occupied with questions like how difficult it for Indian firms is to internationalize into foreign shores (Elango & Pattnaik, 2007). Literature from India is replete with studies on how difficult Indian domestic market is (Bhattacharyya, 2011), and so firms moving beyond Indian market context and internationalizing is much more challenging (Gaur & Kumar, 2009). Internationalization questions has been also on the mode of internationalizing (that is equity, non-equity, Joint venture or acquisition) (Johanson & Vahlne, 1990). Further, debate has also been on what goals should Indian firms seek by internationalizing namely strategic resources, market, brand name or just international experience (Elango & Pattnaik, 2007; Gaur & Kumar, 2009). In this study, the author takes a step aside and ponders

DOI: 10.4018/978-1-5225-7095-0.ch011

on what difficulties foreign managers' faces while doing business in India. In the present-day world of increasing globalization it is desired that domestic firms are aware about international markets (Oviatt & McDougall, 2005). It is also worthwhile to reflect on the nature of being of foreign firms in India. Self-reflections would be enriching for Indian managers to better comprehend the internationalization of Indian firms. Subsequently, the author moves on to ponder given the light on the difficulties of doing business in India, what challenging context for Indian firms that intend to aggressively internationalize and become Born Global firms (BGFs) would confront.

Internationalization of business firms has become a dominant theme of growth of business firms (Hill & Jain, 2009). Indian government since the year 1991 has followed the policies of Liberalization, Privatization and Globalization (LPG) (Das, 2000; Dutta & Sundaram, 2004). Indian private sector firms were allowed to do business without the erstwhile requirements of permissions regarding manufacturing production licenses or restrictive distribution regulations (Jalan, 2004; Dutta & Sundaram, 2004). Further, foreign players entered more aggressively into the Indian domestic market by early 1990s (Srivastava, 2003; Wei, 2005). Post 1991, Indian business landscape became more vibrant. One can argue that with the coming up of foreign business in India, a large number of US, British, European, Japanese and Korean expats started working in India . Further, Indian firms that were interested to globalize, hired expats so that their top management team could have the expertise to be successful in international endeavors. Tata Group (one of the most well-known Indian conglomerate) for internationalization hired an expert Mr. Alan Roskin to lead the push for internationalization at the board level (Tata, 2004). Over the next two decades some of the Indian firms became more internationalized (Gaur & Kumar, 2009; Elango & Pattnaik, 2007). Indian firms were interested in securing substantial part of revenue and profit from international operations (Chittoor & Ray, 2007). But these internationalization initiatives of Indian firms were mostly based upon slow incremental growth (Elango & Pattnaik, 2007). This was in accordance to Uppsala model (Johanson & Vahlne, 2006;2009) or Alain Verbeke's (2013) framework of internationalization. Thus, in classical system (similar to the tenets of Uppsala model) internationalization of Indian firms were carried out in a slow step by step manner (Johanson & Vahlne, 2006; 2009).

In the mid-1990s, internet and web based technologies started to make its impact in the economy. The advent of this technology altered many classical business models and new technology driven business models got established (Thiel and Masters, 2014). By the mid-2000s certain firms were born global (Moen & Servais, 2002). This meant that from the very inception, these firms started targeting both the domestic market as well as an array of international (foreign) markets as the intended market for operations (Weerawardena et al, 2007). These firms are called as born global firms (Rennie, 1993; Bella, McNaughton & Young, 2001). However, one can observe that most born global firms have been from the developed countries (Persinger, Civi & Vostina, 2007).

In this research, the author attempts to understand why born global firms are not coming up from the emerging economy of India. The author gathers the perspective of expatriates to comprehend why born global firms are difficult to come from India. The author is interested to get the perspective of expats (and not Indian managers emphasis added) because, expats can provide a more unbiased and objective view (Song, 2015) on Indian business landscape. In the subsequent sections, the author discusses the literature review, research methodology, data collection and analysis, findings, discussion, conclusions, scope and theoretical implications.

LITERATURE REVIEW

The literature review section was based upon the search on born global firms from developing countries on Emerald insight, Inderscience, Interscience, Wiley, Ebsco, Jstor, Sage, Blackwell and Taylor and Francis journals database. The search result didn't indicate a single paper on the mentioned topic. The author then conducted separate string searches on 'Born global' and 'Difficulties of doing business emerging economies'. The author did this to know research which contemplates on difficulties of coming up of the BGFs from emerging economies (Persinger, Civi & Vostina, 2007). The author, thus provides the literature review on Born Global firms (BGFs). Thus, the author presents the literature review in the next paragraph.

Firm internationalization has been a key avenue of obtaining strategic growth (Peng, 2003; 2007). Firms all over the developed world (from the 1950s) USA, Japan, UK, Germany, France and Sweden had expanded strongly to overseas market after satisfying their domestic market up to certain level (Verbeke, 2011). The developed country firms initially explored other developed country markets. Japanese firms expanded to USA and Canada and Western Europe (Johanson & Vahlne, 2006; 2009). The expansion into foreign markets of developed countries were primarily because in developed world institutional voids were less than the developing world (Khanna, Palepu and Sinha, 2005). There were lower probabilities of corruption, intellectual property violations and piracy (Khanna, Palepu and Sinha, 2005). In 1970s-1980s there was also rise in nationalist thinking across Egypt to India (Mondol, 2003). Foreign properties (business interests) were force to be relinquished or even being confiscated (Khattab, Anchor, Davies, 2007). Given this uncertainties and associated risks the developed country firms focused on expanding to other developed countries (Dicken, 2007). The developed countries also were witnessing economic optimism and provided scope to secure higher margins for firms (Yamakawa, Peng and Deeds, 2008). Thus, one could argue that the story of international business was mostly a developed country to developed country notion till the 1970s.

The onset of the 1990s, altered the global economic landscape. A set of countries which were loosely following centrally planned socialist regimes embraced capitalist driven economic systems like in Central and Eastern Europe (CEE) (Meyer and Gelbuda, 2006; Kozminski, Yip and Schuh, 2000; Meyer & Estrin, 2001; Gelbuda, Meyer, Delios, 2008). During the 1980s and 1990s economies like China and India also arrived in global economy (Das, 2000). The first true substantial engagement of Indian firms with the developed economies was based on the skilled cheap Information Technology (IT) related industries (Balakrishnan, 2006).

Over the next decade, both India and China developed a substantial middle class (Das, 2000; Jalan, 2004). This was fueled by the result of the increased income of the employees were working in Chinese and Indian firms (Jalan, 2004; Das, 2000). These economies with the new found substantial riches in modern history aspired for western goods and services (Dicken, 2007). Chinese, Russian and Indian economies also opened up in the 1990s (Srivastava, 2003; Wei, 2005). For the first time in the modern history developed country firms entered into Russia, China and India (Dicken, 2007; Das, 2000). China and India received Foreign Direct Investment (FDI) as these economies became centers of production and services respectively (Srivastava, 2003; Wei, 2005). Thus, foreign business were being set up in India (Dicken, 2007). India received foreign investments to become centers for production and service centers. Some of these were to cater to the domestic market as well as the export market from India. India and China also with its substantial middle class became attractive markets for consumer products

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and services (Das, 2000; Jalan, 2004). Developed countries also suffered stagnation in these economies which also pressed developed countries to seek demand market in countries like India (Dicken, 2007).

In a nut shell, foreign firms from developed countries entered India. Ghemawat (2001) had advised firms that when considering internationalization distance mattered. Distance was not just geographic distance but economic, cultural and administrative as well (Ghemawat, 2001). Geographic distance is related with connectivity in a physical sense (Ghemawat, 2001) like India physically located far from developed countries, China being physically close to Japan, Mexico being physically close to USA and Russia being physically close to Western Europe. India has large coastal line and this provides India with a number of ports that can fuel and facilitate sea based transport. Administrative distance reflects on the government executive process and government systems (Ghemawat, 2001). India is close to most of the developed countries in this dimension. USA & UK like India has common law system (Chittoor & Ray, 2007). This also helps foreign firms from these countries to expand to India (Dicken, 2007). Indian economic policies post 1991 have become business friendly as India started following Privatization, Globalization and Liberalization (Das, 2000; Jalan, 2004). India promoted a conducive atmosphere for foreign firms to enter in India (Das, 2000; Jalan, 2004), thus, the economic distance between India and the developed countries started reducing. Huntington (1993), Ronen & Shankar (1985) and globe studies (House, Javidan, Hanges, & Dorfman, 2002) all pointed out that India is distinct from all other cultures. India even in Hofstede's study of cultures using the dimension of power distance, long term orientation, risk uncertainty avoidance, Individualism and collectivism, indulgence, masculinity and femininity found India to be unique (Hofstede, 2011). Thus the expansion of foreign firms eventually in India is uniquely challenging. India also has high level of corruption and piracy (Khanna, Palepu and Sinha, 2005; Peng, Wang & Jiang, 2008). Given this it becomes very challenging for foreign firm to expand in India (Bennett, 2006; Gingrich, 1999). Thus, it is important to understand the extent and nature of difficulties' of doing business in India by foreign firms.

Born global firms are those firms that right from the inception of the firm target international markets (Moen and Servais, 2002). In classical business, firms internationalize in a slow incremental manner (Johanson & Vahlne, 2006; 2009). The Uppsala model (Johanson & Vahlne, 2006; 2009) or Alain Verbeke's (2011) framework indicates that in domestic market the home country firm possess locational advantages. Because of the presence of these locational advantages the home country firm is able to harness home based location bound advantages (Verbeke, 2013). Once a firm is able to capture the home market through substantial profit/revenue generation then the firm develops slack resources (Verbeke, 2011). The firm then based upon these slack resources could initiate efforts to gain further market (beyond domestic market) (Verbeke, 2013). This internationalization efforts involve internationalization of transferable firm specific resources and capabilities driving organizational routines and processes (Verbeke, 2011). Home country firm, thus transfers these non-location bound firm resources and capabilities to foreign markets (Verbeke, 2011; 2013). This process is slow and incremental. This is because as mentioned, Ghemawat (2001) indicated that internationalization is difficult because of Cultural, Administrative, Geographic and Economic distances. This is also because Hofstede, (1994) indicated that culture is one of the most challenging aspect of international business. Research have indicated that most foreign business initiatives fail because of cultural clashes between the home country management styles with host country employees (Hofstede, 1994). In the context of emerging economies like India, the notion of institutional voids has also been emphasized (Peng, Wang & Jiang, 2008; Khanna, Palepu & Sinha, 2005). It was also advocated that emerging markets require separate business models for success (Gingrich, 1999). Again the work of Verbeke (2011) sheds light on the means of adaptation required in the various host

countries through reconfigurations of home country firm transferable resources and capabilities as well as by seeking complementary resource and capabilities from the host countries (Peng, 2001; Verbeke, 2013). Thus, internationalization has been a slow incremental growth for home country firms.

The advent of internet, personal computing devices, web 2.0 and mobile communication devices made many of the brick & mortar business models redundant in the click economy (Thiel and Masters, 2014). In the information, communication driven technology world, the old world rules of international business expansion has been altered (Dicken, 2007).

Born Global firms (BGFs) have business models that are primarily based upon technology (Harveston, Kedia, Davis, 2000; Weerawardena, Mort, Liesh and Knight, 2007; Persinger, Civi & Vostina, 2007; Oviatt & McDougall, 2005; Moen and Servais, 2002; Chetty and Campbell-Hunt, 2004). Be it firms like Uber, Facebook, Amazon and such others, these firms differentiate themselves apart from others because of firm technology deployed as the core feature of its business model (Harveston, Kedia, Davis, 2000; Weerawardena, Mort, Liesh and Knight, 2007; Persinger, Civi & Vostina, 2007; Oviatt & McDougall, 2005; Moen and Servais, 2002; Chetty and Campbell-Hunt, 2004). Industrial organization theory proclaims that the environment of a firm matter for its growth (Porter, 1980; 1985). According to IOT the external environment consist of factors such as political context, technological base, market conditions and competitive positioning of firms in an industry (Porter, 1980; 1985). In a globalized world, the scope of market is expanding (Dicken, 2007). The rapid pace of technological progress have equipped firms to reach markets at far larger geographical distances but in shorter horizon of time (Harveston, Kedia, Davis, 2000; Weerawardena, Mort, Liesh and Knight, 2007; Persinger, Civi & Vostina, 2007; Oviatt & McDougall, 2005; Moen and Servais, 2002; Chetty and Campbell-Hunt, 2004). This has increased the frontier of firm market boundary (Harveston, Kedia, Davis, 2000; Weerawardena, Mort, Liesh and Knight, 2007; Persinger, Civi & Vostina, 2007; Oviatt & McDougall, 2005; Moen and Servais, 2002; Chetty and Campbell-Hunt, 2004). It is important for firm managers to understand whether the firm can cater to expanding markets (Harveston, Kedia, Davis, 2000; Weerawardena, Mort, Liesh and Knight, 2007; Persinger, Civi & Vostina, 2007; Oviatt & McDougall, 2005; Moen and Servais, 2002; Chetty and Campbell-Hunt, 2004). BGFs can thus reach global markets. Resource based view of firm advocates that a firm achieves superior performance if its resource, capabilities and competencies are better than its competitors in an expanding market scenario (Wernerfelt, 1984). Hence, it is important for firm managers to define the scope of market reach based on the extant resource base and stretch the ability of resources and capabilities that can be deployed by firms to target markets (Wernerfelt, 1984). This, is even true for BGFs.

The entrepreneurs who start BGFs are typically technology entrepreneurs (Harveston, Kedia, Davis, 2000; Weerawardena, Mort, Liesh and Knight, 2007; Persinger, Civi & Vostina, 2007; Oviatt & McDougall, 2005; Moen and Servais, 2002; Chetty and Campbell-Hunt, 2004). It means that teams that starts a BGF (the entrepreneurial venture) majority of the members have deep technical knowledge as well as especially the key inception members are from technology background (Harveston, Kedia, Davis, 2000; Weerawardena, Mort, Liesh and Knight, 2007; Persinger, Civi & Vostina, 2007; Oviatt & McDougall, 2005; Moen and Servais, 2002; Chetty and Campbell-Hunt, 2004). Though technology based solutions are not totally culture agnostic but technology based solutions are very heedless to cultural variations (Ghemawat, 2001). Thus, technology ventures can cater to a large variety of countries (foreign markets) without much trouble in accounting for differences in language, religion, behavioral patterns, food habits and such others (Harveston, Kedia, Davis, 2000; Weerawardena, Mort, Liesh and Knight, 2007; Persinger, Civi & Vostina, 2007; Oviatt & McDougall, 2005; Moen and Servais, 2002; Chetty and Campbell-Hunt,

2004). Given this technology entrepreneurs attain economy of scale from the very beginning and thus they target global markets (or a wide array of international markets) (Moen and Servais, 2002; Weerawardena, Mort, Liesh and Knight, 2007). Being technology driven also help these firms to be able to ride administrative, geographic and economic distances (Ghemawat, 2001). In internet or web based business models relating to technology space in present day, a large number of global born firms are thriving. Technology crumbles distances (as electrons travel as the speed of light) for BGFs (Harveston, Kedia, Davis, 2000; Weerawardena, Mort, Liesh and Knight, 2007; Persinger, Civi & Vostina, 2007; Oviatt & McDougall, 2005; Moen and Servais, 2002; Chetty and Campbell-Hunt, 2004). Thus, for born global firms, CAGE distances are not significant barriers provided they have sufficient financial capital (venture capital funding or institutional funding) (Chetty & Campbell-Hunt, 2004; Oviatt & McDougall, 2005; Moen and Servais, 2002). Given this scenario, it has generally been witnessed that most born global firms are originating from the developed countries (Moen & Servais, 2002; Chetty & Campbell-Hunt, 2004). There have been very few born global firms from emerging economies like India. The world is increasingly witnessing higher levels of globalization and globalization is bringing in new challenges as well as new opportunities (Ghemawat, 2001). Emerging market firms are tasting both success as well as defeat in this increasingly globalized world. In India, customers are enjoying benefits of an Uber ride whereas the Indian competitors in the same space are tasting the difficulties in competing with Uber where Uber is a born global company (Stone, 2017). An important question to answer and figure out is that can there be born global Indian firm? There is a need to understand why the extant situation is that there are none from India. The author thus have the following research objectives for the study.

RESEARCH GAPS, OBJECTIVES, AND METHODOLOGY

There is scarcity of literature that delves on how expats working in emerging reflect on the difficulties of doing business in emerging economies. This is specially so for the context of the emerging economy of India. Expats understandings are unbiased and thus are close to objective reality. For the author thus the first research question is:

- **Research Question 1:** What are the challenges doing business in India for foreign firms?

Further, there is limited literature reflecting the lack of 'Born Global Firms' from emerging economies specially like from India. Thus, subsequently the author attempted to comprehend why there is this dearth of BGFs from India.

Thus, the second and third research questions are:

- **Research Question 2:** What are the characteristics of a successful born global firms?
- **Research Question 3:** Why born global firm coming from India is a difficult proposition?

This research study is an exploratory study. As prescribed by Maxwell (1996), for this research qualitative research as has been applied. In this exploratory research, the researcher is concerned to pursue solutions to comprehend what actors (expat business managers) have experienced and believe in and this qualifies the study apt for using qualitative research method (Denzin, 1989). Also, the author is attentive to look for answers regarding how the actors (read expat business managers) in India are finding dif-

difficulties of doing business in India and the difficulties of coming up of Indian BGFs firms. This further justifies the claim for undertaking qualitative research (Maxwell, 1996; Denzin, 1989). The application of qualitative research methodology in this research background rationalizes the exhaustive study of the phenomenon of difficulties of doing business in India and thus the difficulties of coming up with Indian BGFs firms in international business with global expansion (Dana and Dumez, 2015; Dana and Dana, 2005). The positivist qualitative data for this was collected by in- depth personal interviews with 17 expat business managers working in India since last 3 years. In-depth positivist qualitative interview of expat expert is a very compelling means in carrying out exploratory qualitative studies (Rubin and Rubin, 2005; Roulston, 2010; Roulston, 2011). Experts have deep knowledge and this knowledge base reflects social reality (which in this case is regarding finding the perspective on difficulties of doing business in India and the difficulties of coming up of Indian BGFs firms) (Rubin and Rubin, 2005; Roulston, 2010; Roulston, 2011; Dana and Dumez, 2015; Dana and Dana, 2005). In-depth personal interview is centered and suitable to understand the rich know-hows of experts. Further, for the study the research data collection instrument used was a semi structured open ended questionnaire (Rubin and Rubin, 2005; Roulston, 2010). The collected research data was content analysed by thematic content analysis (Weber, 1990; Popping, 2000; Holsti, 1969).

DATA COLLECTION AND DATA ANALYSIS

Snowball sampling method was applied to recognize expat experts on Indian business landscape. The author used qualitative in- depth personal interviews to collect data. For this study based on inputs from extant literature the semi structured open ended questionnaire was developed. The author steered the In-depth personally organized interviews with 17 expat experts. The author stopped data collection after attainment of thematic saturation (Maxwell, 1996), which happened post 17 interviews completion. The expat experts in India, were business experts who had executive experience in management of foreign firms' with a minimum of 10 years of work experience representing different sectors and 3 years of work experience in India. The personal interviews were each of about 45 minute's duration. The questionnaire captured data on both –

- The challenges faced by foreign firms in India
- How these challenges inhibits and prohibits the genesis of BGFs from India

Researchers (Dana and Dumez, 2015; Dana and Dana, 2005; Maxwell, (1996) had advocated that for exploratory research studies it is appropriate to apply semi- structured open ended In-depth personal interviews. The data collected through the interviews was thematic and relational content analyzed (Weber, 1990; Popping, 2000; Holsti, 1969) in quest to seek answers to the research queries. The data was transcribed and content analysed by content analysis for thematic analysis (Holsti, 1969; Krippendorff, 2004; Neuendorf, 2016; Weber, 1990). The findings of the study has been presented in the subsequent section. The study intra-coder reliability value (Holsti, 1969; Urbina, 1981) was 90%. For this the author utilized input from another academic expert for carrying out the coding application. The research study inter-coder reliability value (Urbina, 1981; Holsti, 1969;) was 93%. The author reconsidered the entire coding procedure after a gap of three weeks. The author would like to report that both the inter-coder and intra-coder reliability values were well within accepted values (Holsti, 1969; Urbina, 1981).

FINDINGS AND DISCUSSION

The author for this research undertook an exploratory study. This is because there has been not much literature on the understanding of the expats regarding the difficulties of doing business in India. Further, there is paucity of research on the dearth on the possibility of BGFs from India. The results of the in-depth qualitative semi structured open ended questionnaire has been content analyzed for both thematic presence and intensity analysis (Weber, 1990; Popping, 2000; Holsti, 1969). Thematic presence analysis indicated the presence or absence of themes (Weber, 1990; Popping, 2000; Holsti, 1969). Intensity analysis digs into the aspect of how critical the challenge has been (Weber, 1990; Popping, 2000; Holsti, 1969). A very critical challenge has been marked as red, while a mild challenge has been marked as yellow. The challenges of doing business by foreign firms in India has been tabulated in table – 1.

The author then delved in to what are the success characteristics of born global firms. This has been tabulated in Table 2.

Finally, the author analyses why born global firms have not generally come from emerging economies like India. A very critical challenge has been marked as red, while a mild challenge has been marked as yellow. This has been tabulated in Table 3.

One can note the over whelming presence of ‘red’ colored challenges in Table 1 and Table 3. One can also note the big list of characteristics required for success of a BGF in Table 2. The works of Peng, Wang & Jiang, (2008) and Khanna, Palepu and Sinha, (2005) indicated the presence of institutional voids in developing countries. Indian market has also not been an exception as found in this study. In India though legal structure has been present, nonetheless it has been slow. India have poor intellectual property regime and high level of piracy (Peng, Wang & Jiang, 2008; Khanna, Palepu and Sinha, 2005). The western and developed economy firms face this as a challenge in India as established even in this study. Developed country managers believe that in India higher level of innovation in both products and process is difficult to achieve. Experts opined that India could be a very good service or manufacturing base for routine process which involves cheap skilled labor. Innovating in India is difficult as innovation could be leaked as there is poor IPR protection regime as echoed by researcher (Chittoor & Ray, 2007). Further the legal redressal mechanism though present, is so weak that it can be difficult to bank on. Foreign managers though value the spirit and utility of ‘Juggaad Innovation’ as indicated by the work of Krishnan (2010).

Another major challenge in India is that the time to set up business in India is very high . As per this research, foreign managers while dealing with any Greenfield venture confront this challenge. Literature also points out to this. If India need a global footprint in the world economy the ease of setting up business in India has to considerably go down. Experts felt China is much ahead of India in this regard.

Expat experts opined that India is also very high in corruption level. Often foreign firms find the multiple levels at which corruption is present. Corruption creates a negative impression causes, higher cost of doing business and consumes more time of doing business.

Expat experts felt that foreign managers often think of India as one monolith. Foreign manager often are blind to the fact that India has multiple cultures interwoven like a tapestry. Foreign managers are often ignorant about the nuance of South Indian market (shaped by Dravidian culture) with respect to north Indian culture (shaped by Aryan culture).What works in south India might not work in East India.

Foreign firms in Indian also need to understand the language understood by customers. Educating customers through promotion campaigns is a very important aspect to be covered for increasing market reach in India. This is because in India often the customers (especially semi-urban, pan urban

Table 1. Challenges of doing business in India (CDBI)

Table 1. Challenges of doing business in India (CDBI)		
S.No	Challenges of doing business in India	Color code
CDBI 1	In India ease of doing business is low.	
CDBI 2	Enforcement of contract law is weak.	
CDBI 3	IPR protection is weak.	
CDBI 4	Retrospective taxation is often perceived as a threat.	
CDBI 5	Setting of business is perceived to consume more time and require more transactional efforts.	
CDBI 6	In India credit rates are high, funding availability is low and funding process cumbersome.	
CDBI 7	In India protection of minority investors is perceived as weak.	
CDBI 8	In India utility (like power) is costly as well as of poor quality and insufficient quantity.	
CDBI 9	In India labour laws are getting tougher.	
CDBI 10	In India corruption is very high.	
CDBI 11	In India there is varied nature of taxes and often with dual and retrospective taxation.	
CDBI 12	In India there is no availability of single window clearance for foreign firms.	
CDBI 13	India has varied culture across with different languages and religions which creates difficulties for foreign managers to operate as well as to understand market.	
CDBI 14	In India the legal process is weak. The legal process is also slow. Different state in addition to the center has different legal system.	
CDBI 15	India has poor rail, road and port infrastructure.	
CDBI 16	Indians have low per capita purchasing power.	
CDBI 17	Indians have poor work ethic with a "CHALTA HAI" work attitude.	
CDBI 18	India is a price sensitive market.	
CDBI 19	Indian human resource base is educated but not skilled thus, initial training cost of employees are high.	
CDBI 20	India has lot of bureaucratic procedures involved in doing business.	
CDBI 21	Indian government is protectionist.	
CDBI 22	India lacks natural resources like oil.	
CDBI 23	India has large number of stake holders thus, for a foreign firms to operate in such diverse stake holder environment is often challenging.	
CDBI 24	Indian government changes policy frequently and arbitration regarding this is often slow and difficult.	
CDBI 25	India has threats of terrorism thus, security related costs add to costs of doing business in India.	
CDBI 26	The Indian currency is very fluid thus, long term revenue and costs projections are difficult.	
CDBI 27	In India, political adherence matters because the state government and the central government are run by different political parties and foreign firms have to accommodate different political ideologies.	
CDBI 28	In India purchase of land is extremely difficult.	
CDBI 29	In India getting environmental clearance is often a very slow and difficult to comprehend process.	
CDBI 30	In India rules for protection of FDI is weak.	
CDBI 31	In India there is a trend towards retraction of manufacturing investments.	
CDBI 32	In India the services sector is of low technology base relatively as compared to developed countries.	
CDBI 33	In India there is generally firm level technology for manufacturing as well as services sector in high technology sectors like robotics, space technology and artificial intelligence is relatively of low level as compared to developed countries..	
CDBI 34	In India for MSME's support industry as well as specialized industries in the cluster are weak.	

and rural areas) are unaware of the developed country products. Thus, connecting with the customers in vernacular languages is of paramount importance. This is often very challenging to comprehend for foreign managers. Developed country firms also often overestimate the power of their brands (Pralhad and Lieberthal, 2003). Expat experts opined that in India customers seek value for money. Thus, just possessing foreign brand name has not much value unless there is associated tangible utility associated with it. Foreign managers have to comprehend this dimension of their brands. The price points thus has to accommodate a true value of utility. It is also important to note that India also is home to substantial base of luxury high end customers. India thus is home to all the luxury products from France, Italy and Switzerland. In India the BOP (Verma and Bhattacharyya, 2016) as well as the luxury market both exist simultaneously Indian market growth opportunities are high in both these markets.

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Table 2. What are the success characteristics (SC) of Born Global Firms (BGF)

S.No	Success Characteristics of Born Global Firms
SCBGF1	Business model is technology driven.
SCBGF 2	Business model is asset light
SCBGF 3	Business model is more of a double sided aggregation platform
SCBGF 4	Business model is converting non- customers to customers
SCBGF 5	Business model is price sensitive thus cost conscious
SCBGF 6	Business model adapts to local conditions
SCBGF 7	Business head quarter is located in a geographic region that has robust contract laws.
SCBGF 8	Business head quarter is located in a geographic region that has IPR protection.
SCBGF 9	Business head quarter is located in a geographic region that has robust capital raising scope.
SCBGF 10	Business head quarter is located in a geographic region that has tax exemption facility for early enterprise life.
SCBGF 11	Business investments are relatively kept low as ownership of value creating asset is with the providers.
SCBGF 12	BGF team has a complementary combination of technology entrepreneurs and business managers
SCBGF 13	Customer needs has been turned from emotional to rational purchase decision
SCBGF 14	The scaling for customer has become indifferent to various cultural milieu

Table 3. The reasons for born global firms are not coming up from emerging economies like India

S.No	Why there are no Indian BGFs	Colour code
1	Lack of IPR protection	Red
2	Weak enforcement of contract law	Red
3	Setting up of new business is time and transactional efforts consuming.	Red
4	Availability of venture capital is low compared to developed countries	Yellow
5	Cost of capital is also expensive.	Yellow
6	Poor physical infrastructure (like rail, road, power and port)	Red
7	Big domestic market so entrepreneurs don't have strong desire and motive to think global	Yellow
8	Indian society is not as integrated socially to foreign countries as the developed countries, thus indigenous Indian new ventures set up by Indians have not much idea of dynamics of foreign markets let alone the entire landscape of global markets.	Yellow
9	In India the legal arbitration process for business conflicts redressal is slow.	Red
10	Lack of access to latest technology that can be utilized by BGFs.	Red
11	Lack of availability of highly skilled human resources.	Yellow
12	Tax shield during initial years is weak	Yellow

In India labor is available in plenty but often it is not appropriately skilled as pointed out by the experts. Thus, these labor force has to be trained in-house in the plants by the firm. Thus, manufacturing firms operating plants and IT firms running services in India requires considerable training expenses (Bhattacharyya, 2014). Once employees are trained, often these employees might leave the organization for higher remuneration in a competing firm. Thus, the developed country firms had to create a lock in mechanism for the trained employee's retention (Bhattacharyya, 2014). India also suffers from terrorism related attacks thus security costs add on to the cost of doing business in India. This has to be considered as a factor in at the beginning by foreign firms.

According to the experts, Indian market growth and economic size have ballooned significantly in the last couple of decades but infrastructure investments have not been matching. India suffers from poor road and port infrastructure. Rail infrastructure though is present but very archaic in terms of technology. Most Indian cities face tremendous infrastructure related challenges. Indian government both central and state are now focusing on improving infrastructure level. As of now infrastructure is a major concern for both Indian and foreign firms.

Indian education system could also be a factor in business factor input market. Indian education has been a mix of both indigenous Indian and British systems (Rawat, 1970). Sen (1971) had wrote there has been a lot crisis in Indian education system. Gayathri & Meenakshi, (2012) had wrote that Indian education system was building technical skills mostly but not emotional intelligence or empathy. In India, students are groomed to be job seekers as employees of public sector firms and large private business organization, or emigrate in the developed West and there are strong family pressures that the young students finally become doctors and engineers as professionals (Khadria, 2002; Oommen, 1989; Krishna & Brihmadessam, 2006; Fuller & Narasimhan, 2006). One can thus argue that, Indian education system doesn't encouraging innovation, entrepreneurs and allowing the students to experiment different technology or studies. But these qualities are very important for business managers who are looking forward to work in international context. Further, Jha & Bhattacharyya, (2013) had emphasised that students need to focus on learning orientation than on short term performance orientation as unfortunately in India, the education system is majorly focussing on performance enhancement. Jagadeesh, (2000) had discussed that Indian management education was lacking in quality in many institutions and there was a need for improving it. This is specially important for the developing business leaders who can develop born global firms. Raichaudhur, (2005) had stressed the need for developing entrepreneurship education system in India. Increased focus on this would help in create g a manpower who can contribute in creating born global firms in India. Venkatachalam & Waqif, (2005) had also advocated the need for creating an integrating entrepreneurship in management education in India which the author also found in the research.

In India cost of capital is on the higher side this is also a challenge for raising fund in India. India also has an array of direct and indirect taxes levied across different state thus taxation for foreign firms is a challenge. According to the experts, sometimes often with change in political regime Indian policy changes. Comprehending the direction and the rate of this change can also be very challenging to foreign firms as they might be very rapid and unpredictable. This also gets compounded with added bureaucratic hurdles. The absence of single window clearance for foreign firms also throws in new difficulties for foreign managers. Firms have to deal with multiple agencies and multiple stakeholders and this is often costly, draining and time consuming for foreign firm managements. Foreign firm managers find it extremely difficult to interact with local communities for land intensive projects. Environmental laws also lack clarity thus adding to confusion. Thus, the challenges of foreign firm managers are diverse and voluminous.

CONCLUSION, IMPLICATIONS AND SCOPE

Indian managers when expanding their operations in foreign countries studiously note the challenges that they confront abroad. In similar vein, foreign managers also face difficulties while doing business in India. Indian managers while interacting with foreign managers comprehend these challenges. In this study, the author based upon in-depth interview explored this topic. The topic data collected by semi structured open ended questionnaire on expat experts' outlines the various difficulties encountered by foreign firms. The data was content analyzed. The difficulties range from difficulties of setting up of business to understanding customers in various regions of India. Further, these insights were used to comprehend why having a BGF from India is difficult.

Foreign firms can't afford to ignore the Indian market. However, Indian market is challenging. Foreign manager can learn from inputs and insights from this study to devise their own initiative to accommodate challenges in India and thrive. This study was based in India. In future researchers could undertake studies in other emerging economies like China, Brazil and Russia. Researchers could also undertake a comparative analysis of all BRIC country challenges for foreign firms. Theoretically this study contributes to the distance literature of international business expansion (Ghemawat, 2001). This study thus makes towards the literature on the challenges of business internalization literature. Contribution is also made on international business strategy literature and strategy as a process perspective through this study which delves into domain of how questions. This study address a very appropriate, relevant and important aspect of challenges of foreign firm managers in India. This study is such regards in this very novel. Also in this study the perspective of both expats as well as Indian international business managers has been considered in a single study which is a rich contribution.

This study would help expat managers to understand what the challenges of doing business in India are and thus in what agendas expat managers need to focus on so that the challenges can be addressed. Indian technology entrepreneurs need to understand that they can ride on the path of becoming BGFs.

In the present day world, globalization is becoming a day to day reality. In a globalized world firms have to compete with international competitors. This is because in an open world highly competitive foreign firms operate in host markets which is challenging for the domestic country firms. Some firms are born global. This study made contribution towards the challenges that BGF (possibly from emerging economies from India) would confront. Thus, this study contributes to BGF literature.

Born global firm's right from their inception not only compete in their domestic market but targets the world at an international level. In this study the author undertook qualitative interviews of 17 expat experts and explored the possibility of a born global firm from India. It could be concluded that, in the near future it is difficult to have born global firms from India. This is because there are tremendous challenges of doing business in India itself as viewed by expats. However in the long run Indian firms that can become born global firms would be:-

- Technology based firms wherein the business model is heavily dependent upon the extent and profundity of technology resource base of the firm. Technology resources of the firm as well as the ability of the firm to utilize technology resources would be the key.

- Born global firm from India should be asset light. Asset heaviness would require substantial up-front investment in fixed irreversible specific resources. This would be risky for a firm and to spread globally, this would require heavy investments. Indian born global companies whereas could with low investment and maintenance of low level of assets could target a bigger global market.
- Born global firms from India can come up if it is able to implement its strategies in foreign countries fast thus, born global companies have to be strategically agile.

This work also contributes to theory on international business strategy on why born global firms from emerging economies are difficult to transpire.

REFERENCES

- Balakrishnan, P. (2006). Benign Neglect or Strategic Intent? Contested Lineage of Indian Software Industry. *Economic and Political Weekly*, 41(36), 3865-3872.
- Bella, J., McNaughton, R., & Young, S. (2001). "Born-again global" firms: An extension to the "born global" phenomenon. *Journal of International Management*, 7(3), 173-189.
- Bennett, R. (2006). *International Business (2nd ed.)*. New Delhi Pearson Publication.
- Bhattacharyya, S. S. (2011). Reflections on strategic insights for winning in the complex emerging market of India. *International Journal of Business Excellence*, 4(1), 15-43.
- Bhattacharyya, S. S. (2014). Real Options perspectives on business firm human resource factor sourcing and poverty alleviation. *International Journal of Indian Culture and Business Management*, 8(2), 237-252. doi:10.1504/IJICBM.2014.059212
- Chetty, S., & Campbell-Hunt, C. (2004). A Strategic Approach to Internationalization: A Traditional Versus a "Born-Global" Approach. *Journal of International Marketing*, 12(1), 57-81. doi:10.1509/jimk.12.1.57.25651
- Chittoor, R., & Ray, S. (2007). Internationalization paths of Indian pharmaceutical firms—A strategic group analysis. *Journal of International Management*, 13(3), 338-355. doi:10.1016/j.intman.2007.05.008
- Dana, L.P., & Dana, T.E. (2005). Expanding the scope of methodologies used in entrepreneurship research. *International Journal of Entrepreneurship and Small Business*, 2(1), 79-88.
- Dana, L.-P., & Dumez, H. (2015). Qualitative research revisited: Epistemology of a comprehensive approach. *International Journal of Entrepreneurship and Small Business*, 26(2), 154-170. doi:10.1504/IJESB.2015.071822
- Das, G. (2000). *India Unbound*. New Delhi: Penguin.

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- Dicken, P. (2007). *Global shift: Mapping the changing contours of the world economy*. London: Sage.
- Dixit, J. N. (2001). *India's Foreign Policy And Its Neighbours*. New Delhi: Gyan Books.
- Dutta, R., & Sundaram, K. P. M. (2004). *Indian Economy*. New Delhi: S Chand.
- Elango, B., & Pattnaik, C. (2007). Building capabilities for international operations through networks: A study of Indian firms. *Journal of International Business Studies*, 38(4), 541–555. doi:10.1057/palgrave.jibs.8400280
- Fuller, C. J., & Narasimhan, H. (2006). Engineering Colleges, 'Exposure' and Information Technology: Professionals in Tamil Nadu. *Economic and Political Weekly*, 258–288.
- Gaur, A. S., & Kumar, V. (2009). International diversification, business group affiliation and firm performance: Empirical evidence from India. *British Journal of Management*, 20(2), 172–186. doi:10.1111/j.1467-8551.2007.00558.x
- Gayathri, N., & Meenakshi, K. (2012). Indian Education System and Emotional Intelligence. *Indian Journal of Higher Education*, 3(1).
- Gelbuda, M., Meyer, K. E., & Delios, A. (2008, March). International business and institutional development in Central and Eastern Europe. *Journal of International Management*, 14(1), 1–11. doi:10.1016/j.intman.2007.05.011
- Ghemawat, P. (2001). Distance still matters. *Harvard Business Review*, 79(8), 137–147. PMID:11550630
- Ghoshal, S., & Bartlett, C. A. (1990). The multinational corporation as an interorganizational network. *Academy of Management Review*, 15(4), 603–626. doi:10.5465/amr.1990.4310825
- Gingrich J A (1999). Five Rules for wining in Emerging Market Consumers. *Strategy and Business*, Q2, 9-13.
- Harveston, P. D., Kedia, B., & Davis, P. S. (2000). Internationalization of born global and gradual globalizing firms: The impact of the manager. *Advances in Competitiveness Research*, 8(1), 92-99.
- Hill, C. W. L., & Jain, A. (2009). *International Business (6th ed.)*. New Delhi: McGraw Hill.
- Hofstede, G. (1994). The business of international business is culture. *International Business Review*, 3(1), 1–14. doi:10.1016/0969-5931(94)90011-6
- Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture*, 2(1), 8. doi:10.9707/2307-0919.1014
- Holsti, O. R. (1969). *Content analysis for the social sciences and humanities*. Academic Press.
- House, R., Javidan, M., Hanges, P., & Dorfman, P. (2002). Understanding cultures and implicit leadership theories across the globe: An introduction to project GLOBE. *Journal of World Business*, 37(1), 3–10. doi:10.1016/S1090-9516(01)00069-4
- Huntington, S. P. (1993). The clash of civilizations? *Foreign Affairs*, 72(3), 22–49. doi:10.2307/20045621
- Jaffrelot C (2003). India's look east policy: an Asianist strategy in perspective. *India Review*, 2(2), 35-68.

- Jagadeesh, R. (2000). Assuring quality in management education: The Indian context. *Quality Assurance in Education*, 8(3), 110–119. doi:10.1108/09684880010372707
- Jalan, B. (2004). *The Indian Economy: Problems and Prospects Paperback*. New Delhi: Penguin.
- Jha, S., & Bhattacharyya, S. S. (2013). Learning orientation and performance orientation: Scale development and its relationship with performance. *Global Business Review*, 14(1), 43–54. doi:10.1177/0972150912466443
- Johanson, J., & Vahlne, J. (1990). The Mechanism of Internationalisation. *International Marketing Review*, 7(4).
- Johanson, J., & Vahlne, J. E. (2006). Commitment and opportunity development in the internationalization process: A note on the Uppsala internationalization process model. *Management International Review*, 46(2), 165–178. doi:10.1007/s11575-006-0043-4
- Johanson, J., & Vahlne, J. E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9), 1411–1431. doi:10.1057/jibs.2009.24
- Khadria, B. (2002). *Skilled labour migration from developing countries: Study on India*. ILO.
- Khanna, T., Palepu, K.G., & Sinha, J. (2005, June). Strategies that fit emerging markets. *Harvard Business Review*.
- Khattab, A. A., Anchor, J., & Davies, E. (2007). Managerial perceptions of political risk in international projects. *International Journal of Project Management*, 25(7), 734–743.
- Kozminski, A., Yip, G., & Schuh, A. (2000). *Strategies for Central and Eastern Europe*. New York.
- Krishna, A., & Brihmadessam, V. (2006). What does it take to become a software professional? *Economic and Political Weekly*, 3307–3314.
- Krishnan, R. T. (2010). *From jugaad to systematic innovation: The challenge for India*. Bangalore: Utpreksha Foundation.
- Maxwell, J. A. (1996). *Qualitative Research Design: An Interactive Approach*. Thousand Oaks, CA: Sage.
- Meyer, K. E., & Gelbuda, M. (2006). Process perspectives in international business research in CEE. *Management International Review*, 46(2), 143–164. doi:10.1007/11575-006-0042-5
- Meyer, K. E., & Estrin, S. (2001). Brownfield entry in emerging markets. *Journal of International Business Studies*, 32(3), 575–584. doi:10.1057/palgrave.jibs.8490985
- Øystein, M., & Per, S. (2002, Fall). Born Global or Gradual Global? Examining the Export Behavior of Small and Medium-Sized Enterprises. *Journal of International Marketing*, 10(3), 49–72. doi:10.1509/jimk.10.3.49.19540
- Mondol, A. A. (2003). *Nationalism and Post-Colonial Identity: Culture and Ideology in India and Egypt*. New York: RoutledgeCurzon.

Expats in India

- Oommen, T. K. (1989). India: 'Brain drain' or the migration of talent? *International Migration (Geneva, Switzerland)*, 27(3), 411–425. doi:10.1111/j.1468-2435.1989.tb00355.x PMID:12282407
- Oviatt, B. M., & McDougall, P. P. (2005). Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship Theory and Practice*, 29(5), 537–554. doi:10.1111/j.1540-6520.2005.00097.x
- Peng, M. (2003). *International Strategic Management*. New Delhi: Cengage.
- Peng, M. (2007). *International Business*. New Delhi: Cengage.
- Peng, M. W. (2001). The resource-based view and international business. *Journal of Management*, 27(6), 803–829. doi:10.1177/014920630102700611
- Peng, M. W., Wang, D. Y., & Jiang, Y. (2008). An institution-based view of international business strategy: A focus on emerging economies. *Journal of International Business Studies*, 39(5), 920–936. doi:10.1057/palgrave.jibs.8400377
- Persinger, E. S., Civi, E., & Vostina, S. W. (2007). The born global entrepreneur in emerging economies. *International Business and Economics Research Journal*, 6(3), 73–82.
- Popping, R. (2000). *Computer-assisted text analysis*. Lanham, MD: University Press of America. doi:10.4135/9781849208741
- Porter, M. E. (1980). Industry structure and competitive strategy: Keys to profitability. *Financial Analysts Journal*, 36(4), 30–41. doi:10.2469/faj.v36.n4.30
- Porter, M. E. (1985). *Competitive advantage: creating and sustaining superior performance*. 1985. New York: FreePress.
- Prahalad, C.K., & Lieberthal, K. (2003). The End of Corporate Imperialism. *Harvard Business Review*, 81(8), 109-17.
- Raichaudhur, A. (2005). Issues in Entrepreneurship Education. *Decision*, 32(2).
- Rawat, P. L. (1970). *History of Indian Education*. Agra: Ram Prasad.
- Rennie, M. W. (1993). Born global. *The McKinsey Quarterly*, (4): 45–53.
- Ricart, J. E., Enright, M. J., Ghemawat, P., Hart, S. L., & Khanna, T. (2004). New frontiers in international strategy. *Journal of International Business Studies*, 35(3), 175–200. doi:10.1057/palgrave.jibs.8400080
- Ronen, S., & Shenkar, O. (1985). Clustering countries on attitudinal dimensions: A review and synthesis. *Academy of Management Review*, 10(3), 435–454. doi:10.5465/amr.1985.4278955
- Roulston, K. (2010). Considering quality in qualitative interviewing. *Qualitative Research*, 10(2), 199–228. doi:10.1177/1468794109356739
- Roulston, K. (2011). Working through challenges in doing interview research. *International Journal of Qualitative Methods*, 10(4), 348–366. doi:10.1177/160940691101000404

- Rubin, H. J., & Rubin, I. S. (2011). *Qualitative interviewing: The art of hearing data*. Sage (Atlanta, Ga.).
- Sen, A. (1971). *Crisis in Indian education*. Hyderabad: Institute of Public Enterprise. [India]
- Song, L. (2015). The transfer of expats' managerial positions to Chinese executives. *Management International*, 19(Special Issue), 50–65.
- Srivastava, S. (2003). What Is the True Level of FDI Flows to India? *Economic and Political Weekly*, 38(7), 608–610.
- Stone, B. (2017). *The Upstarts*. London: Penguin.
- Tata. (2004). *Alan Rosling joins the board of Tata International*. Retrieved from <http://www.tata.com/article/inside/rre3q2rMZ9A=/TLYVr3YPkMU=>
- Thiel, P., & Masters, B. (2014). *Zero to One*. Crown Business.
- Venkatachalam, V. B., & Waqif, A. (2005). Outlook on Integrating Entrepreneurship in Management Education in India. *Decision*, 32(2).
- Verbeke, A. (2011). *International Business Strategy* (2nd ed.). New Delhi: Cambridge University Press.
- Verbeke, A. (2013). *International business strategy*. Cambridge University Press. doi:10.1017/CBO9781139227162
- Verma, S., & Bhattacharyya, S. S. (2016). Micro-foundation strategies of IOT, BDA, Cloud Computing: Do they really matter in bottom of pyramid? *Strategic Direction*, 32(Issue: 8), 36–38. doi:10.1108/SD-06-2015-0093
- Weber, R. P. (1990). *Basic Content Analysis* (2nd ed.). Newbury Park, CA: Sage. doi:10.4135/9781412983488
- Weerawardena, J., Mort, G. S., Liesh, P. W., & Knight, G. (2007). Conceptualizing accelerated internationalization in the born global firm: A dynamic capabilities perspective. *Journal of World Business*, 42, 294–306.
- Wei, W. (2005). China and India: Any difference in their FDI performances? *Journal of Asian Economics*, 16(4), 719–736.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180. doi:10.1002/mj.4250050207
- Yamakawa, Y., Peng, M. W., & Deeds, D. L. (2008). What Drives New Ventures to Internationalize from Emerging to Developed Economies? *Entrepreneurship, Theory and Practice*, 32(1), 59–82.

Chapter 12

The Performance Evaluation of Entrepreneurship Education in Chinese Universities

Chusheng Chen

Huaqiao University, China

Yenchun Jim Wu

National Taiwan Normal University, Taiwan

Luanyan Du

Huaqiao University, China

ABSTRACT

The quality of entrepreneurship education at the collegiate level is correlated with its sustainability. Existing studies have focused on the construction and method selection of evaluation systems for entrepreneurship education but have lacked concrete analyses of individual effectiveness. Through a micro-perspective, this study conducted a data envelopment analysis to assess the efficiency of entrepreneurship education in eight higher learning institutions. The input criteria comprised the number of courses and available funding, whereas the output criteria consisted of the number of awards won in two major intercollegiate contests and the initial employment rate. In addition, this study further investigated the most efficient schools to find students' opinions on course content and entrepreneurial needs. The findings in this study may serve as a reference for optimizing collegiate-level entrepreneurship education resources, clarifying developmental goals, and improving resource efficiency.

INTRODUCTION

Collegiate-level entrepreneurship education (also known as enterprise education) provides students with guidance and skills, delivered through courses and funding, to encourage current or future entrepreneurial success. It is intended to mitigate unemployment. Entrepreneurship education originated in the Western world in 1940s, and the mature development of entrepreneurship education in these countries alleviated

DOI: 10.4018/978-1-5225-7095-0.ch012

the employment pressure led by the 2008 financial crisis to a certain extent. In China, higher education enrollment has continuously expanded in the past 10 years, and the number of college graduates has exceeded 7 million since 2014, adding considerable job-seeking pressure. In light of this, the Ministry of Education (MOE) proposed a country-wide implementation of entrepreneurship education in 2009 (when the number of college graduates in China exceeded 5 million) to encourage college students to start their own businesses. In a populous country such as China, entrepreneurship education is one solution to encourage social innovation and mitigate long-term unemployment.

Entrepreneurship education was introduced in China in 1998 and has drawn country-wide attention in recent years. Consequently, the high participation rates from college students and the government's commitment have led to the rapid growth of entrepreneurship education. However, according to the data from McScott, compared with the case where less than one percent of college students started their business in 2009, there have been some changes in recent years. By 2014, the proportion of "self-employed" college students has increased to 2.9%, indicating that entrepreneurship education is a certain degree. The effectiveness. In the United States, this proportion is far higher than China's 23%-25% (Shi, 2009; Zhu, 2013; Mai, 2016). Many have questioned the discrepancy between the commitment to entrepreneurship education and the outcomes and noticed the phenomenon of "haste makes waste" in collegiate entrepreneurship education (Yu, 2010). Both Chinese students and experts have expressed pessimistic reviews on this topic related to entrepreneurship and entrepreneurship education (Gao, Yan, & Liu, 2013). But some foreign scholars put forward the opposite view that the positive effects of entrepreneurship education are marked when previous entrepreneurial exposure has been weak or inexistent (Fayolle, 2015). Meanwhile, Piperopoulos (2015) argued that the nature of the entrepreneurship course—whether theoretically or practically oriented—creates a distinct motivational frame for entrepreneurship in promotion or prevention terms. So is the entrepreneurship education effective? There is a lack of empirical research on the efficiency of entrepreneurship education in universities, and a lack of comparative analysis. From this perspective, more attention should be paid to the effectiveness of education input and output, Therefore, an effective evaluation of college entrepreneurship education is not only the responses but also the practice and exploration of evaluate ability. The most basic evaluation of the effectiveness of entrepreneurship education is the efficiency of input and output. These are is the starting point and the focus of this study.

This study attempted to determine the following: a) the efficiency of entrepreneurship education at the collegiate level, b) Chinese college students' opinions of entrepreneurship education, c) the future development of entrepreneurship education, and d) how entrepreneurship education meets college students' entrepreneurial needs. Existing studies on entrepreneurship education have mostly focused on aspects such as curricula, education model, and evaluation systems rather than effectiveness. Particularly, these studies have lacked empirical evidence of the efficiency between the investment in entrepreneurship education and the output, which are the fundamental. Therefore, it is imperative to compare the investment and output of entrepreneurship education among higher learning institutions and analyze college students' specific entrepreneurial needs.

THEORETICAL BASIS AND RESEARCH REVIEW ON ENTREPRENEURSHIP EDUCATION

Theoretical Basis of Entrepreneurship Education

The theoretical basis on entrepreneurship education mainly revolves four perspectives.

1. **Theory of Planned Behavior (TPB):** Human behavior does not depend entirely on personality but on intention and motivation. People's intentions and motivation are mainly determined by people's attitude and environment (Ajzen, 1991). Innovation and entrepreneurial behavior are not inherent. Education is one of the main factors that can affect attitudes. Therefore, entrepreneurship education can plan, intervene, and control these behaviors. This theory affirms the role of education in the cultivation of innovation and entrepreneurship and also provides a theoretical basis for it. In practical terms, Fayolle and Gailly (2006) developed a framework for joint evaluation of entrepreneurship education programs based on TPB theory. Proven measurements are considered as a specific framework for evaluating entrepreneurship education programs. However, most researches on intentions and motivations focus on the near-end behavior rather than the long-term goal. Therefore, Shaper proposed the "Entrepreneurial Event Model" to solve this problem (Fayolle, Gailly, & Lassas-Clerc, 2006).
2. **Entrepreneurial Event Model (EEM):** It is believed that the entrepreneurial willingness is affected by the combination of expectation perception, behavioral tendency and feasibility perception. The conversion of entrepreneurial willingness to entrepreneurial behavior requires a "catalytic event" to accelerate the conversion process (Krueger, & Carsrud, 1993). Shapero emphasizes the importance of cognition, entrepreneurship, personal perception of contextual elements, expectations and behavioral trends (Scott, & Twomey, 1988). Entrepreneurship education not only imparts entrepreneurial knowledge, ideas, and skills, but also links innovative ideas with current and practical events through the industrial-academic connection, thereby inspiring entrepreneurial responsibilities and generating entrepreneurial behaviors. Specifically, model businesses succeeding through innovation and entrepreneurship can serve as an example for college students.

Scherer et al. adopt self-efficacy, an individual's confidence, successfully act the role of an entrepreneur and realize the goal of starting a business in their 1989 study on entrepreneurial behavior (Krueger, & Brazeal, 2009). Learning experience is conducive to stimulate high-performance. It can also improve individual's sense of efficacy and have better performance in dealing with threats and adversities (Soberer, & Adams, 1989). For these reasons, entrepreneurship education plays an important role in enhancing entrepreneurial efficacy and promoting entrepreneurial behavior.

In 2001, Frazier and Niehm argued that occupational socialization affects students' perception of entrepreneurship. Entrepreneurship education can provide students with social experiences that affect their perception of employment (Bandura, & Prentice, 1986). Their views directly support the importance of school entrepreneurship education, which influence the concept of self-efficacy about entrepreneurial feasibility. Although entrepreneurial opportunities are attractive to students, they are not sure if they have enough knowledge to start a business (Frazier, & Niehm, 2001). The degree of acceptance of entrepreneurial education affects people's choice of their initial career. Practical examples have been introduced

in entrepreneurship education to allow students feel stay in, which helps to cultivate students' sense of identity in the workplace and make full preparations for entry.

Literature Review of Entrepreneurship Education

Scholars continue to explore the validity of the entrepreneurship education widely established. In reviewing related literature, it's found that current study mainly focuses on the content of evaluation and evaluation methods.

As the content of evaluation indicators, Charney and Libecap (2000) collect graduate entrepreneurial data to evaluate Berger's entrepreneurial plan, including the number of graduates, seminars, training programs, and entrepreneurship. Oosterbeek et al. (2008) using an instrumental variables approach in a difference-in-differences framework to measure entrepreneurial competitiveness and goal orientation, which concluded that entrepreneurial education programs have less impact on student self-perceived entrepreneurial skills. Karimi (2016) Investigating Iranian Undergraduate Entrepreneurial Intention and Attitude toward Entrepreneurship to understand entrepreneurship education programs (EEPs) effectiveness. Ghina(2017)select the School of Business and Management at the Bandung Institute of Technology (SBM-ITB) in Indonesia as the case study, which applied an embedded design by using multiple levels of analysis, focusing on three levels, namely: senior management of the study program staff members, students and graduates. The research using a systematic framework designed to reveal the learning process's effectiveness, most aspects of the framework were confirmed. Xie Z.Y. (2010) proposed a general evaluation system for the quality of entrepreneurship education, including five secondary indicators and 19 tertiary indicators. Ge L. (2014) and Gao G. (2016) made a comprehensive assessment of the background, input, process and results in the evaluation of educational policies and corresponding indicator system has been established. Background factors including environment, knowledge, and technical foundation; input factors including investment, funding, and organizational security; process factors including courses, projects, and practice platforms; outcome factors include literacy promotion, social effects, and entrepreneurial effectiveness. However, due to the lack of statistical data for some indicators, the evaluation system is difficult to apply. Chang Y, Shi S.Y. (2017) innovate entrepreneurship education research based on the AHP-FCE model. Zhu Z.W. (2013) used the DEA method to evaluate the service quality of the teaching units of 2 local universities in Northern Jiangsu Province. The input indicators including the courses, the environment, the teachers, and teaching methods; output indicators including the students, career choice, entrepreneurial ability.

b)From the evaluation method, Duval-Couetil (2013) puts forward a consensus on the achievement of learning achievement in the evaluation of entrepreneurship education, and uses a stakeholder driven approach to set the evaluation priority. TJ Bae(2014) using either a longitudinal or a cross-sectional approach,they divided the studies into two groups, a longitudinal group and a cross-sectional group, according to the learning quality and entrepreneurship education practice indicators.Walter et al.(2016) employed hierarchical linear modeling,trying to discuss the effects of country-level variables (institutions) on individual-level relationships (the participation of entrepreneurship education and entrepreneurial activity).G Nabi (2017) systematically reviews the impact of entrepreneurial education (EE) on entrepreneurial outcomes in higher education and finds that EE's impact studies are still mainly focused on evaluating and measuring short-term and subjective outcomes and tend to clarify ongoing. The actual teaching method is effective. Chinese scholars mainly adopt evaluation methods mainly including analytic hierarchy process, fuzzy analysis, evaluation methods, etc. These studies tried to be comprehensive and

established a relatively complex evaluation system, however, due to the complexity of the indicators, it leads to poor comparability and lack of practical application. Although there are many different evaluation indicators and methods, the evaluation system still existing lack of empirical applications. By contrast, DEA method is a simple and effective method for efficiency evaluation and unit comparison in many fields. By selecting the main input and output indicators for analysis, the efficiency of each unit can be accurately calculated. Based on this, the paper selects the DEA analysis method to compare input-output indicators to derive the scale income, and then analyzes the effectiveness of the college entrepreneurship education.

SELECTION CRITERIA

Based on the theories and different methods, Integrate the relevant evaluation indicators of foreign and modest to refine the common parts of the indicators. Foreign studies on entrepreneurship education have employed the criteria used by renowned ranking institutions (e.g., *US News & World Report*, *Quacquarelli Symonds*, *Times Higher Education*, and the Shanghai Ranking Consultancy) and the Entrepreneurial and Innovative University Index in Turkey. The common criteria in these rankings include the number of courses available, the value of venture capital investment, the number of awards won in innovation contests, and the industrial influence of alumni. The 2012 Survey of Entrepreneurship in Higher Education in Europe encompassed the input, processes, and output of entrepreneurship education. The input criteria included courses and budget allocation, whereas the output criteria included student participation in business design contests and alumni reputation. In the present study, the input criteria consisted of a number of entrepreneurship courses and funding, and the output criteria comprised the number of awards won in contests and undergraduate students' initial employment rate.

To further verify the rationality of the selected criteria, this study constructed a questionnaire on the methods of and actual participation in collegiate entrepreneurship education. The questionnaire comprised two items to understand the entrepreneurial activities and counseling services offered and to identify the helpful content of entrepreneurship education favoring current or future business opportunities. A total of 104 questionnaires were distributed to Undergraduate student. The results revealed that 77.9% of respondents had participated in business planning contests, 41.4% had participated in entrepreneurship courses, and 27.9% had participated in innovation and entrepreneurship programs. In terms of content validity, 97.5% of respondents identified the effectiveness of skill training, seminars, case discussions, experience sharing, and participation in business activities. By contrast, 67.5% of respondents expressed that participating in contests favored independent entrepreneurship, whereas merely 30% identified the effectiveness of lectures, group discussion, and video clips. Therefore, in addition to the knowledge imparted in lectures, college students generally agree that the most effective activities include writing business proposals, case studies, seminars with entrepreneurs, research projects, and business activities. Writing a business proposal can help evaluate an entrepreneur's strengths and weaknesses and facilitate in-depth market analyses to find or create uncontested market space. Case studies can sharpen students' analytical skills and reflect the advantages and disadvantages of independent entrepreneurship. Through seminars, pioneering entrepreneurs can reduce students' future roadblocks by directly solving some recurring problems and focusing resources and attention on key obstacles. Research projects enable students to analyze a specific case thoroughly, identify its problems, and solve them innovatively to

gain favorable outcomes. Through business activities, students identify practical problems and conduct problem solving to elevate their viability.

These results reveal the relevance of the types and number of entrepreneurship courses or activities influencing college students' entrepreneurial performance during and after their college careers, and confirmed the validity of the criteria selected in this study. The input and output criteria for collegiate entrepreneurship education are described as follows.

Number of Available Courses

Offering courses in higher learning institutions is fundamental to entrepreneurship education. In 2004, the MOE appointed nine higher learning institutions as pilot schools and stated that the teaching content of entrepreneurship education in regular colleges and universities should focus on imparting entrepreneurial knowledge, cultivating entrepreneurial skills, and cultivating entrepreneurial spirit. Subsequently, in 2010, the MOE implemented nationwide entrepreneurship education in all Chinese higher learning institutions and listed both entrepreneurship management and innovation management as required courses. In 2013, the MOE proposed that higher learning institutions should actively hire business people, entrepreneurs, and experts as part-time instructors of entrepreneurship education. As the course content of entrepreneurship education has become increasingly rich, the number of courses available resembles the resource investment of the participating schools. Under this criterion, this study compiled the number of courses with the keywords *innovation* and *entrepreneurship* in course titles (e.g., Entrepreneurship and Financing, Entrepreneurship, Entrepreneurship Management, Innovation and Entrepreneurship, Innovative Business Models, Marketing for Start-up Companies, Venture Capital, and Capital Markets). In addition, to account for leadership and teamwork development, this study included the following courses and extracurricular activities as entrepreneurship courses: leadership training programs, lectures given by businesspeople, entrepreneurship forums, and seminars on introductory entrepreneurship.

Funding

The development of entrepreneurship education is associated with monetary investment from multiple sources such as governments at all levels, the school itself, and the business sector. However, because statistical data of the invested budgets from schools and business sectors were unavailable, this study considered the funding criterion largely through central government funding. Generally, the more funding a school receives from the central government, the more funding it receives from both subdivisions of the government and business sectors. Since 2006, the Chinese government has funded several pilot schools for entrepreneurship education. During the period of Eleventh Five-Year Plan, the Chinese government directly sponsored 18,234 categories and 53,360 college students. In 2009, the topic of "innovative experiment" in the government-sponsored College Entrepreneurship Plan was divided into three categories: innovation training, entrepreneurship training, and entrepreneurship in practice. In 2013, the MOE implemented a nationwide entrepreneurship training program and sponsored a total of 23,305 projects.

Number of Awards Won in Challenge Cup

Entrepreneurship education accelerates the cultivation of college students' entrepreneurship awareness. The model of entrepreneurial events states that intercollegiate contests where students attempt to real-

ize their innovative ideas catalyze students' immediate or future entrepreneurship. The Challenge Cup, known as the collegiate-level "Olympic" event for scientific and technological innovation, is the most iconic extracurricular activity demonstrating entrepreneurship education in higher learning institutions. The Challenge Cup comprises two contest categories, —entrepreneurship, and science and technology. The competition has been held biannually since 1989, and currently has three levels of competition (intra-collegiate, provincial, and national) with a participation of approximately 2 million college students from approximately 1,000 higher learning institutions. As of 2013, the Challenge Cup has held 13 science and technology contests and 8 entrepreneurship contests. The latter, also known as the business proposal contest, is a prestigious competition popular among higher learning institutions across several countries. The contestants form teams to construct thoughtful business proposals that cover a technology, product, or service. To persuade venture capitalists to invest in them, the contestants must demonstrate comprehensive entrepreneurship qualities such as leadership, judgment, and interpersonal skills, and the process is equivalent to the activities involved in the fledging phase of a start-up business. Therefore, the number of awards won in the two categories of the Challenge Cup prior to 2013 is a rational criterion of entrepreneurship education outcomes.

Initial Employment Rate

Because the start-up market environment in China is not well developed for college students, the selection criteria for entrepreneurship education should disregard indirect variables such as social environment. In addition, entrepreneurship education exhibits an uncertain lag effect on how long it takes college students to start up their businesses, making it difficult to obtain accurate statistics. Therefore, the outcomes cannot be simply measured by the proportion of students who become entrepreneurs during or after their college careers. College entrepreneurship education is intended to encourage entrepreneurship, realize self-employment, and elevate the employment rate. However, statistical data suggests that for college students lacking experience and resources, the success rate of their entrepreneurship is extremely low and almost nonexistent. Therefore, some have argued that the government should not encourage college students to become entrepreneurs, because the outcomes of entrepreneurship education should be measured by students' improved employability and competence rather than the number of start-up companies created during or after college careers.

Occupational socialization theory argues that entrepreneurship education prepares students for employment because it favors the development of organizational commitment by incorporating case studies and putting knowledge into practice. The direct effect of entrepreneurship education is to strengthen the employability of students by giving them a grasp of entrepreneurial knowledge. In the *Opinions on Promoting Entrepreneurship Education and Entrepreneurship at the Collegiate Level* (2010), the MOE proposed that entrepreneurship education should be a process combining professional training and talent cultivation for all college students in China, and that entrepreneurship education involves a broad-spectrum innovative education system integrating in-class and extracurricular activities. The MOE's statement demonstrates that the connotation of entrepreneurship education exceeds "start-up business education" and emphasizes the wider development of students' business awareness, skills, and enthusiasm. Therefore, college students' employability and competence are the basic footholds of entrepreneurship education. Assessing the outcomes of entrepreneurship education simply by the proportion of start-up companies created during and after college careers is misleading. By contrast, the initial employment rate of college students is a rational criterion of entrepreneurship education outcomes.

EFFICIENCY ANALYSIS

This study investigated the entire student body of each higher learning institution selected. As far as possible, we have chosen a wide range of universities in different levels and regions. To account for the data availability of established entrepreneurship education, seven universities sponsored by Projects 211 and 985 were selected. One university not sponsored by either project was additionally selected to compare the varying effectiveness of entrepreneurship education against the project-sponsored counterparts. A variable-returns-to-scale model and an output-oriented DEA model were employed to calculate the technical efficiency (TE), pure technical efficiency (PTE), scale efficiency (SE), return to scale, output slack, and input slack among the eight universities (Table 1).

Technical Efficiency

The DEA revealed considerable variance in the technical efficiency among the eight sampled schools. Units 1, 3, and 8 achieved technical efficiency (TE = 1) and scored zero on all four criteria of input and output slack; therefore, these three schools exhibited the most effective input–output efficiency. By contrast, Units 2 and 4–7 scored lower than the mean for technical efficiency (TE = 0.768) among the eight sampled schools (i.e., 62.5% of the schools were technically inefficient). Unit 7 had the lowest TE (0.464) among the eight sampled schools, <50% of the highest TE.

Pure Technical Efficiency and Scale Efficiency

Units 2 and 4–7 scored <0 in both PTE and SE, exhibited output slack, and had decreasing returns to scale. Both Units 2 and 7 had output slack exceeding 10 units in the “awards” criterion and scored 0 in the initial employment rate criterion, indicating that entrepreneurship education effectively improved college students’ employment rate. Both Units 2 and 6 exhibited input slack, indicating the inefficient investment and non-adaptive output scale in these two schools.

Table 1. Efficiency of entrepreneurship education in various samples

Unit	Efficiency				Output slack		Input slack	
	TE	PTE	SE	Return to scale	Number of awards	Initial employment rate	Number of courses	Funding
1	1.000	1.000	1.000	-	0.000	0.000	0.000	0.000
2	0.682	0.938	0.727	Drs	11.154	0.000	0.000	4.000
3	1.000	1.000	1.000	-	0.000	0.000	0.000	0.000
4	0.708	0.867	0.817	Drs	2.842	0.000	0.000	0.000
5	0.616	0.839	0.735	Drs	6.608	0.000	0.000	0.000
6	0.673	0.819	0.821	Drs	2.643	0.000	0.000	4.000
7	0.464	0.825	0.562	Drs	16.020	0.000	0.000	0.000
8	1.000	1.000	1.000	-	0.000	0.000	0.000	0.000

Note: “drs” denotes decreasing returns to scale, and “-“ denotes unchanged scale efficiency

Correlation Between Efficiency and School Type

Although Unit 8 was the only non-project-sponsored school in this study, its TE, PTE, and SE were all 1, as shown in the DEA results. Therefore, the efficiency of entrepreneurship education resources is correlated with a school's own management rather than being sponsored by Projects 211 or 985. Unit 8 was a model of input–output efficiency, and both the content of the entrepreneurship education and the students' entrepreneurial needs in Unit 8 warrant further analysis.

Input–Scale Balance

Among the numerous technical efficiency factors, resource input and funding are the two major ones. The effect of resource usage varies by school, which may serve as a reference for future resource allotment. Units 2 and 4–7 had decreasing returns to scale while both Units 2 and 6 exhibited input slack. This explains that while insufficient funding is not a concern, university officials should address the efficient usage and distribution of limited entrepreneurship education resources. For input-efficient schools (such as Units 1, 3, and 8), additional funding can be granted to support their successful entrepreneurship education. For colleges and universities with diminishing returns to scale, reduce investment as much as possible in order to reduce the scale and reduce unnecessary waste, so that it will change to scale returns and return to effective DEA.

The input-output efficiency among the eight colleges are quite different. In particular, the units 2 and 7 are far behind in the number of awards. Therefore, the output assessment of entrepreneurship education should be increased and base on the output of the previous year to make appropriate allocation of funds to increase input and output levels. In terms of funding, it should not allocate too much to the 211/985 colleges. On the contrary, general colleges also need more funding. The efficiency of entrepreneurship education depends more on factors other than economic input, such as school management and the use of existing entrepreneurial resources.

ENTREPRENEURSHIP EDUCATION IN THE MOST EFFICIENT UNIVERSITIES

The current state of entrepreneurship education in the most efficient universities can serve as a reference for other types of higher learning institutions. This study developed a three-item questionnaire for students in the most efficient universities, which addressed content demand, specific support, and future improvements. A total of 241 copies were returned for statistical analysis.

Content

The results reveal that 65.8% of respondents wanted to learn about finding business opportunities and organizational management methods (e.g., human resource management, finance, and related laws); moreover, 60.9% wanted to learn about fundraising methods, 46.3% about methods of technical realization, and 12.2% about business registration software. Finding business opportunities is a prerequisite for entrepreneurship and favors the inspiration of innovative ideas, whereas the other three aspects are common obstacles for start-up business owners. By contrast, the need to learn business registration software is low because it is not needed until after project selection, business proposals, and team build-

ing have been completed. Therefore, business registration software should be taught in later rather than earlier stages; in addition, instruction should be systematically segmented into steps according to the actual entrepreneurial process.

Support

The results reveal that 70.7% of respondents wanted instructor guidance, 68.3% the school's support to incubate the proposed projects; and 58.5% to exchange experiences with seniors. Instructor guidance is the most critical support activity for college students. When instructors are available for counseling throughout the course, the students receive systematically effective entrepreneurship education. The questionnaire also revealed that the current faculty ratio is insufficient to support the students. Therefore, higher learning institutions should promote a corporate mentor system, hiring experienced entrepreneurs as instructors to share their experience and guide student projects. In addition, the respondents generally agreed about the importance of project incubation, indicating the lack of resource input among universities.

Future Improvement

The results revealed that 68.3% of respondents sought start-up capital support from their school, 70% wished that entrepreneurship education were incorporated into the existing curriculum rather than offered as separate focused innovation and entrepreneurship courses, 46.3% wanted their school to increase the promotion of entrepreneurship education and create an entrepreneurial atmosphere, and 41.5% expressed the need for improved entrepreneurial services such as business incubation. The findings demonstrated that in typical universities, a certain gap exists between the supply and demand for start-up capital. College students demand additional financial support because capital is required from the preparation and developmental to the eventual incubating stages to support their project. However, in addition to higher learning institutions, the source of funds should include other sectors such as the government and angel investors. Therefore, entrepreneurship education needs to be linked with various sectors at all levels to support student entrepreneurship. In addition, college students would prefer that entrepreneurship education were integrated into common courses as a part of the core curriculum. To popularize the basic entrepreneurial knowledge, schools can use specific courses to cultivate students' innovative ideas and necessary professional knowledge to start a business. Subsequently, the schools can open advanced entrepreneurship courses to maximize efficiency. In addition to systematic entrepreneurial activities, schools should strengthen the exposure of entrepreneurship education so that more students can participate in these activities and take advantage of the opportunities.

RESEARCH LIMITATIONS AND CONTRIBUTIONS

Limitation

This study exhibited two major limitations. First, only four criteria were selected to account for data availability, and the oversimplified model may not comprehensively reflect the efficiency of collegiate entrepreneurship education. Future research may elect to incorporate a wider range of criteria than this study did. Second, despite being a university not sponsored by Projects 211 or 985, Unit 8 in this study

exhibited excellent technical efficiency. However, whether the economic prosperity in the Quanzhou area (i.e., external environment) is correlated to the efficiency of entrepreneurship education requires further exploration.

Contribution

This study addressed the research gap of lacking empirical evidence to evaluate the efficiency of collegiate entrepreneurship education through an objective dataset and four simple yet feasible criteria. The questionnaire developed in this study provided an in-depth analysis of the developing trends of entrepreneurship education in efficient universities. The findings in this study may inform future improvements to entrepreneurship education. Through the investigation and analysis, the educational resources of different Universities have a large deviation, the investment in the venture capital is unevenly distributed, and the entrepreneurial environment has a lot of space to improve. It should be designed as soon as possible, and a perfect service system of creation is set up to improve students' entrepreneurship. The overall entrepreneurial preparation ability of students is of practical significance to alleviate the pressure of College Students' employment and promote the reform and development of entrepreneurship education.

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. doi:10.1016/0749-5978(91)90020-T
- Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A meta-analytic review. *Entrepreneurship Theory and Practice*, 38(2), 217–254. doi:10.1111/etap.12095
- Bandura, A., & Prentice, H. (1986). Social foundation of thought and action: A cognitive theory. *The Journal of Applied Psychology*, 12(1), 169.
- Challenge Cup Official Website. (n.d.). Retrieved from <http://www.tiaozhanbei.net/tzb>
- Chao, D. H. (2012). Job seeking ability and professional competence: The end result of entrepreneurship education. *Jiangsu Higher Education*, 10(6), 104–106.
- Charney, A., Libecap, G. D., & Center, K. E. (2000). *The impact of entrepreneurship education: An evaluation of the Berger entrepreneurship program at the University of Arizona*. University of Arizona.
- Chen, H. K. (2007). Research on quality evaluation index system of entrepreneurship education. *Science and Technology Higher Education Research*, 8(5), 67–70.
- Duval-Couetil, N. (2013). Assessing the Impact of Entrepreneurship Education Programs: Challenges and Approaches. *Journal of Small Business Management*, 51(3), 394–409. doi:10.1111/jsbm.12024
- Fang, Y. F., & Tong, X. L. (2013). Research on Evaluation of innovation and entrepreneurship education in Universities Based on fuzzy analytic hierarchy process. *Journal of North China Electric Power University*, 13(2), 137–140.

- Fayolle, A., & Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. *Journal of Small Business Management*, 53(1), 75–93. doi:10.1111/jsbm.12065
- Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programmes: A new methodology. *Journal of European Industrial Training*, 30(9), 701–720. doi:10.1108/03090590610715022
- Frazier, B., & Niehm, L. S. (2001). Students' entrepreneurial readiness in the United Arab Emirates: An empirical inquiry of related factors. *International Journal of Business and Globalisation*, 18(4), 63–77.
- Frazier, B., & Niehm, L. S. (2008). FCS Students' Attitudes and Intentions toward Entrepreneurial Careers. *Journal of Family and Consumer Sciences*, 100, 17–24.
- Gao, G. J., Yan, S., & Liu, D. (2013). Common problems and relevant countermeasures of entrepreneurship education in Universities Based on questionnaires from different types of universities in Shanghai. *Journal of China Geosciences University*, 13(3), 146–156.
- Gao, L. J., & Li, L. H. (2016). Study on the Evaluation and Promotion Strategy of the Effectiveness of University's Entrepreneurship Education. *Journal of East China Normal University*, 34(2), 22–29.
- Ge, L., & Liu, Z. Y. (2014). Study on Evaluation Index System of Entrepreneurship Education Ability in Colleges and Universities Based on CIPP. *Journal of Northeastern University*, 16(4), 377–382.
- Ghina, A., Simatupang, T. M., & Gustomo, A. (2017). The relevancy of graduates' competencies to the effectiveness of entrepreneurship education: A case study at sbm itb-indonesia. *Journal of Entrepreneurship Education*, 20(1), 1–24.
- Karimi, S., Biemans, H. J. A., Lans, T., Chizari, M., & Mulder, M. (2016). The Impact of entrepreneurship education: A study of Iranian students' entrepreneurial intentions and opportunity identification. *Journal of Small Business Management*, 54(1), 187–209. doi:10.1111/jsbm.12137
- Krueger, N. F., & Brazeal, D. V. (2009). *Entrepreneurial Potential and Potential Entrepreneurs*. Social Science Electronic Publishing.
- Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: Applying the theory of planned behavior. *Entrepreneurship and Regional Development*, 5(3), 315–330. doi:10.1080/08985629300000020
- Leuven, E., & Oosterbeek, H. (2008). An alternative approach to estimate the wage returns to private-sector training. *Journal of Applied Econometrics*, 23(4), 423–434. doi:10.1002/jae.1005
- Mai, K. (2016). *Saying "Two Conferences" - College Students' Innovation and Entrepreneurship*. Occupation.
- Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning & Education*, 16(2), 277–299. doi:10.5465/amle.2015.0026

The Performance Evaluation of Entrepreneurship Education in Chinese Universities

- Piperopoulos, P., & Dimov, D. (2015). Burst bubbles or build steam? Entrepreneurship education, entrepreneurial self-efficacy, and entrepreneurial intentions. *Journal of Small Business Management*, 53(4), 970–985. doi:10.1111/jsbm.12116
- Scott, M. Q., & Twomey, D. F. (1988). The long-term supply of entrepreneurs: students' career Aspirations in relation to entrepreneurship. *Journal of Small Business Management*, 26(4), 5–13.
- Shi, J. X. (2009). *What are the reasons for the large gap in the proportion of entrepreneurship?* Retrieved from <http://shijianxun.blog.sohu.com/112562862.html>,3-19
- Soberer, R. F., & Adams, J. S. (1989). Role model Performance effects on development of entrepreneurial career preference. *Entrepreneurship Theory and Practice*, 13(1), 53–71.
- Tao, D., & Chen, D. H. (2010). Research on quality evaluation index system of entrepreneurship education in Chinese university. *Management of Science and Technology*, 9(5), 84–87.
- Walter, S. G., & Block, J. H. (2016). Outcomes of entrepreneurship education: An institutional perspective. *Journal of Business Venturing*, 31(2), 216–233. doi:10.1016/j.jbusvent.2015.10.003
- Xie, Z. Y. (2010). Quantitative research on performance evaluation system of entrepreneurship education in Colleges and universities. *Innovation and Entrepreneurship Education*, 4(6), 3–10.
- Yu, S. G. (2010). Innovative research on entrepreneurship education in Higher Vocational Colleges. *China's Education After School*, 3(22), 136-137.
- Zeng, Y. Q. (2006). A study on the evaluation methods of university education quality. *Journal of Higher Education Research*, 6(2), 27–30.
- Zhu, L. (2013). Is the College Students Pioneer Park “catalyst” or “sleeping pill”?. *People's Daily*, 12-16.
- Zhu, Z.W., & Gu, R. (2013). Research on Evaluation of Service Quality of Entrepreneurship Education in Local Colleges Based on DEA. *Journal of Yangzhou University*, (2), 37-42.

Chapter 13

Impact of Manipulative Character of Direct-to-Consumer Promotion

Jaya Rani Pandey

Sikkim Manipal University, India

Ajeya Jha

Sikkim Manipal University, India

Saibal Kumar Saha

Sikkim Manipal University, India

ABSTRACT

Marketing of pharmaceutical products has remained under firm hold of ethical and legal norms. Direct advertising or any other form of direct promotion has been illegal in any or every country. Arrival of information technology, however, has ensured patients now have direct access to every possible detail of their ailments and their treatment through direct-to-consumer promotion (DTCP). Certain studies have shown that physicians consider DTCP to have manipulative character and are designed by pharmaceutical companies with ulterior motives. The aim is to explore relationship between manipulative character on self-medication propensity, negative perception, and poor patient-physician relationship as per the perception of physicians. With data from 218 physicians, insights into perceived manipulative character, self-medication propensity, negative perception, and poor patient-physician relationship have been achieved. The finding has important implications for regulatory bodies, pharmaceutical companies, and healthcare sector stakeholders.

INTRODUCTION

Marketing of pharmaceutical products has remained under firm hold of ethical and legal norms. Direct advertising or any other form of direct promotion has been illegal in any or every country. India is not an exception to this. In fact, in all over Asia there is no country which has given Direct to Consumer

DOI: 10.4018/978-1-5225-7095-0.ch013

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Promotion DTCP a legal status in the pharmaceutical industry. In India the Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954 prohibits promotion of diagnosis, cure, mitigation, treatment or prevention of any disease, disorder or condition specified in the Schedule, or any other disease, disorder or condition (by whatsoever name called) which may be specified in the rules made under this Act to the general public. Violation of such an act is considered a cognizable crime and in case of a first conviction invites imprisonment which may extend to six months, or with fine, or with both. In case of subsequent conviction, the imprisonment may extend to one year. According to the act, advertisements can only be sent to a registered medical practitioner by name or to a wholesale or retail chemist, the address of such registered medical practitioner or wholesale or retail chemist being given and such document should bear at the top, printed in indelible ink in a conspicuous manner, the words. "For the use only of registered medical practitioners or a hospital or a laboratory". Further in India medicines need to be sold strictly against prescriptions. No other health care practitioners such as nurses, pharmacists, clinical psychologists can prescribe drugs.

Direct promotional efforts to patients till some time back have been limited to over-the-counter drugs which treat common symptoms such as fever, aches, cough and cold. Any promotional effort of prescription drugs, invites severe punishment by the judiciary and regulatory bodies. Thus, till the recent past, patients had very little information about the disease, its manifestation and its cure/prevention. In other words, patients were ignorant about their ailments and the society believed it was best for them to remain ignorant.

Arrival of Information Technology, particularly the internet, has, however, changed the scenario. Patients now have direct access to every possible detail of their ailments and their treatment. The Government finds it impossible to keep away the patients from the enormous information that is now available to the patients. Thus, DTCP is not just inevitable but is already happening.

Consequently, patients today are a knowledgeable lot. They not only seek information for the sake of curiosity, but actually debate with physicians about their treatment options. Many studies have confirmed this trend. Web-sites of major pharmaceutical companies have special sites for patient information. Many companies have successfully created channels of communication with patients through their corporate websites, disease websites and product (brand) websites (Jha, 2005).

How beneficial it will be, depends upon how it evolves in the future. Responsible behavior vis-à-vis DTC can usher in new possibilities in healthcare whereas irresponsibility in this respect will extract terrible consequences from humanity. (Kerber & Ross 2005)

Negative Aspects of DTCP

The opponents of DTCP, firmly put forward its negative consequences. They argue that it is a tool to provide inaccurate/insufficient/manipulative information to patients to generate unnecessary (and potentially harmful) demand for medicines. This results in increased healthcare costs, misuse/overuse of drugs and poor patient-physician relationship (Auton, 2006; DeLorme, Huh, Reid, and An 2011; Huh 2014). Indeed, studies indicate that a significant relationship exists between DTCP expenditure and overall sale of medicine (Dave and Saffer 2012; Law, Soumerai, Adams, and Majumdar 2009; Rosenthal et al. 2003). Economic aspects of DTCP, however, are not considered for this study and which mainly focuses upon the perceptual aspects of the phenomenon.

DTCP and Patient-Physician Relationship

Aikin et al. (2004) found that physicians have pressure of prescribing requested drugs. Robinson et al. (2004) reveals that 55.8% physicians believe that DTCP exposure affect patient - physician relationship negatively. 80.7% physicians believe that patients request for specific medicine after DTCP exposure. Murray et.al. (2003) in a study found that physicians believe that 56% of patient discuss about information collected through online search because they have specific request regarding prescribing medicine. 39% believed that DTCP negatively affects time effectiveness of visit. He, however, also reports that 33% physicians believe that DTCP has positive impact on physician – patient relationship. Aikin et.al. (2004) analyzed FDA survey of 2002 and found that 41% of the physicians believe that Patients exposed to DTCP have better discussion with them and they ask relevant questions. In other survey of FDA 70% of the physicians believe that DTCP confuse their patients (Aikin et.al. 2004).

DTCP Being Perceived as Manipulative/Unethical

Fears of DTCP being misleading, if not outright manipulative are being raised ever since it surfaced about three decades back. Our finding indicates that Indian physicians moderately perceive DTCP as manipulative. This finds resonance in findings of studies conducted elsewhere too. Weissman et.al. (2004) stated that Physicians believe that DTCP provide imbalance information by exaggerating the positives and suppressing the negatives. Robinson et al. (2004) also found that more than 90% physician believe that DTCAP hardly ever provide cost related information on alternative treatment. Rajani (2012) found that physicians opine that DTCP increase drug cost and discourage use of generic drugs. Physicians believe that DTCP rarely provides information on lifestyle changes that could be as important as the taking of medication (Sellers 2000).

Physicians instinctively feel that pharmaceutical companies are using DTCP with ulterior motive. It needs to be measured how logical their assessment is. What is the extent and with what impact is this happening? Implications could be that physicians may be required to be trained to identify unethical DTCP and report the same to regulatory bodies and caution the patients. In a study conducted by O'Donoghue, A. C. *et al* (2016) it is reported that US Food and Drug Administration's (FDA) launched a *bad ad* programme to educate healthcare professionals about misleading or phony DTCP. They found that less than 25% were aware of such a programme. Quite a few believed this to be a good initiative. The authors concluded that *Bad Ad program awareness is low, but opportunity exists to solicit assistance from health care professionals and to help health care professionals recognize false and misleading advertising.*

Jacob (2018) concludes that DTCP which was meant to enhance commitment to patient care and scientific development, unfortunately has become a tool of aggressive marketing strategy and even unethical practices. Another study from Pakistan reports that as many as 4.61% companies fail to state the basic therapeutic effects of the drugs, 76.15 companies are silent on side effects and adverse drug reactions, and as many as 70% companies do not state the precautions and contraindications to be observed with their medicines, (Hanif, and Amin 2017).

DTCP and Self Medication

It appears that physicians hold strong opinion that DTCP encourages self-medication to the extent that they act as brand ambassadors of certain brands. Further, self-medication includes the tendency to

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“prescribe” medications to others. In Indian context we know it is happening, to what extent it is due to DTCP needs to be carefully measured. This indeed is a dangerous trend. Rados (2004) found that physicians believe that DTCP may lead to self-medication. Rajani (2012) reveals that physicians believe that DTCP encourages self-medication. According to Abula & Worku (2017) patients try to either try to tolerate or self-medicate the symptoms and only a few are reported to physicians.

- **Methodology:** The objective of the study is to measure the impact of manipulative character on self-medication propensity, negative perception, and poor patient-physician relationship. Corresponding Hypotheses are as follows

Ho1: Self-medication propensity of DTCP is not a function of perceived manipulation through DTCP.

Literature survey has clearly established that physicians believe that DTCP is manipulative and leads to self—medication. But is there any correlation between the two? This is an important question. It is assumed that DTCP is designed to increase the revenue and one way for this to happen is by indirectly promoting self-medication by the patients. Many studies have confirmed that self-medication of prescription drug is relatively a common practice in India. Physicians concern regarding DTCP may be because it may be manipulative as well as may promote self-medication with negative consequences for the patient’s health as well as for the healthcare providers. Considering this the hypothesis has been formulated for measuring the belief held by the physicians in this respect.

Ho2: Self-medication propensity does not lead to negative perception about DTCP.

Negative perception physicians hold for DTCP has already been reported by several researchers. Does it have any correlation with potential of self-medication? This is an important concern for physicians as self-medication may lead to medical-complications (over-dose, drug-drug contraindication, drug-food contraindication, unexpected side-effects) as well as interfere with the medication prescribed by the physician. If this assumption is correct then the possibility of self-medication may be an important cause for the negative perception held by the physicians. Keeping this possibility in mind we propose the hypothesis that self-medication resulting from DTCP may influence the perception of physicians’ negatively.

Ho3: Poor relationship is not a function of negative perception about DTCP.

Negative perception that physicians hold about healthcare websites, it is assumed, will have a direct bearing upon sacrosanct relationship that physician and patients need to share for a robust healthcare practice. This is because patients fed on probable wrong and biased information may not follow the physicians’ instruction in letter and spirit. This in turn may result in medical complications, including unnecessary suffering on part of the patients and which is expected to result in poor trust and poor relationship. Considering this the hypothesis proposed is negative perception about healthcare websites by physicians may be correlated to consequent poor relationship.

Ho4: Poor patient-physician relationship is not a function of perceived manipulation, resulting self-medication and negative perception about DTCP.

Our study so far has established that physicians strongly believe that that DTCP may be responsible for poor patient-physician relationship. Why do they hold such a view? Poor relationship may result because of the strong faith patients have in the information provided through DTCP and which the physicians do not share. Poor relationship could also be explained through the self-medication encouraged theoretically by DTCP because of its potential to interfere with medication as well as recovery of the patient. Negative impact of DTCP may also find explanation in negative perception physicians' display for it. This may again result in poor communication and consequent complications. It is therefore reasonable to assume that anticipated poor relationship vis-à-vis DTCP may be accounted for by the combined effect of perceived manipulation, self-medication and negative perception physicians display vis-à-vis DTCP.

Having studied the relevant literature, identifying the literature gap and formulating the hypotheses we next proceed to describe the methodology adopted to fulfill our objectives.

METHODOLOGY

In all, a sample size of 200 physician respondents was arrived at. This sample was considered statistically relevant for the study. In all 240 physicians were approached of which 22 declined to respond. The sample respondents of this research consisted of physicians currently practicing allopathic medication in India. Their breakup includes 87 female and 131 male physicians; 70 physicians in the age group of 25-40 years, 92 in the age group of 41-55 years, and 56 in 56 years and above age-group; 94 are general primary care-givers and 124 are specialists. Out of the entire population, the sample size selected was 218. The sampling method used was cluster based Random sampling method. In order to draw a representative sampling it was assumed that physicians belonging to different sized cities may have difference in beliefs and hence, we have drawn proportionate samples from metropolitan cities with population above 10 million (50), cities with population between 2-5 million and from cities having population below 2 million. That's why it is clustered sampling method. The cities have been decided upon judgmental sampling technique. The physicians have been chosen by using random sampling method.

The tool was developed using Likert scale in the range of 1 to 5 with 1, 2, 3, 4 and 5 corresponding to Strongly Disagree, Disagree, Neither agree Nor Disagree, Agree and Strongly Agree respectively. The physicians were contacted personally by the researcher and after a general introduction; the tool was handed over to them. The confidentiality of the information obtained from the respondents was guaranteed. The filled questionnaires were collected the same day and on a few occasions, after a few days. Reliability of data has been shown in Table 1.

The data of physician survey was subjected to factor analysis. Factor analysis (maximum likelihood ratio) with a varimax rotation resulted in a six-factor solution (Eigen value above 1) with 64 percent of variance explained. Explained variance over and above 60% is considered fairly acceptable in social-sciences (Hair et al, 1998). Kaiser-Meyer-Olkin measure of sampling adequacy was found to be 0.84 and which may be considered fairly good indicating that sample size is adequate for undertaking factor-analysis. Bartlett's Test of Sphericity resulted in a chi-square value of 6714 (exceptionally high) and a corresponding p-value below 0.01, confirming that overall data follows normal distribution.

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Table 1. Reliability analysis

S.N	Dimension	Variables	Chronback α
1	Negative perception of DTCP	7	0.543
2	Patient-physician relationship	5	0.777
3	Self-medication	5	0.824
4	Manipulative Character	5	0.873

The first factor corresponded to an Eigen value of 11.87 and explains 28.7 percent of variance. In all it contained 10 variables, five dimensions that appeared to be approximately visible through the obtained factors are Perceived manipulative character, Self-medication propensity, negative perception, poor patient-physician relationship and positive perception. Most factor-loadings were above 0.5 indicating a comparatively clean factor structure. Ratios of factored and un-factored indicator variables of the dimensions have been provided in Table 2.

Unfactored indicator variables were discarded to remove any corresponding noise to arrive at a meaningful regression model. Negative perception and poor relationship appeared in the same factor. And hence ideally should not be used together in a regression model. Yet it has been undertaken to arrive at an approximate mode.

The regression was performed on an index arrived at by the method proposed by Thompson.

Before testing the hypotheses correlation matrix was developed (Table 3) and the results have been shown on table. From the table we find that poor patient-physician relationship and negative perception reflect highest correlation (0.877) and this explains the reason for these factors appearing in the same factor. Interestingly all correlations are positive and significant and hence may be considered appropriate for regression analysis. Lowest regression is found to exist between manipulative character and negative perception (0.135) yet is found to be significant at 95% confidence limit. Hereafter, the hypotheses we undertook were tested.

Ho1: Self-medication propensity of DTCP is not a function of perceived manipulation through DTCP.

Perceived Manipulative Character of DTC Leads to Self-Medication

For hypothesis Ho 1, perceived manipulative character of DTCP was taken as an independent variable and the dependent variable for the hypothesis was Self-medication promoted by the perceived manipulative

Table 2. Variables of the dimensions

S.N.	Dimension	Ratio
1	Manipulative character	3/5
2	Self-medication	6/7
3	Negative perception	3/5
4	Poor patient-physician relationship	4/5
5	Positive perception	7/9

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Table 3. Correlations

		Self-medication	Negative perception	Poor relationship	Manipulation
Self-medication	Pearson Correlation	1	0.273	0.315	0.503
	Sig. (2-tailed)		0.000	0.000	0.000
Negative Perception	Pearson Correlation	0.273	1	0.877	0.135
	Sig. (2-tailed)	0.000		0.000	0.047
Poor Relationship	Pearson Correlation	0.315	0.877	1	0.181
	Sig. (2-tailed)	0.000	0.000		0.007
Manipulation	Pearson Correlation	0.503	0.135	0.181	1
	Sig. (2-tailed)	0.000	0.047	0.007	

character of DTC. The correlation between the two has been found to be 0.503, and which is fairly high for social science studies. From Table 4 we find that adjusted R², F-value and corresponding p-value are 0.249, 73.03 and near zero (below 0.05). We may therefore conclude that perceived manipulative character of DTC and self-medication are significantly related. The correlation is important between the two variables as standardized beta has a high value (0.503). Difference between the values of R square and adjusted R square is low, again indicating that model is acceptable. Null Hypothesis, that Self-medication is not a function of perceived manipulative character through DTCP, therefore stands rejected.

Ho2: Self-medication propensity does not lead to negative perception about DTCP

Self-Medication Propensity Leads to a Negative Perception of DTCP

For hypothesis Ho 32, Self-medication propensity of DTCP as per the physicians’ belief has been considered as an independent variable and negative perception of DTCP felt by the physicians has been taken as the dependent variable. The correlation between the two has been found to be 0.273, and which

Table 4. Correlation coefficient (manipulative character of DTC leads to self-medication)

R	R Square	Adjusted R Square
.503	.253	.249

Table 5. ANOVA (manipulative character of DTC leads to self-medication)

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	666.230	1	666.230	73.003	.000
	Residual	1971.222	216	9.126		
	Total	2637.451	217			

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Table-6. Coefficients (manipulative character of DTC leads to self-medication)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.622	.886		5.215	.000
	Man	.855	.100	.503	8.544	.000

is found to be significant. From table we find that adjusted R², F-value and corresponding p-value are 0.0066, 8.651 and near zero (below 0.05). We may therefore conclude that Self-medication propensity of DTCP as per the physicians' belief and negative perceptions of DTCP felt by the physicians are significantly related. The relationship is less significant (compare to the one between perceived manipulative character of DTC and self-medication) as standardized beta comparatively has a lower value (0.0275). Difference between the values of R square and adjusted R square is low, again indicating that model is acceptable. Null Hypothesis, that self-medication propensity does not lead to negative perception about DTCP, therefore stands rejected.

Ho3: Poor relationship is not a function of negative perception about DTCP.

Table 7. Correlation coefficient (Negative perception about DTCP results in self-medication)

Model	R	R Square	Adjusted R Square
1	0.273	0.074	0.066

Table 8. ANOVA (Negative perception about DTCP results in self-medication)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	50.394	2	25.197	8.651	.000
	Residual	626.231	215	2.913		
	Total	676.625	217			

Table 9. Coefficients (Negative perception about DTCP results in self-medication)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.085	.531		11.452	.000
	Man	-.003	.065	-.003	-.044	.965
	Sm	.139	.038	.275	3.618	.000

Negative Perception About DTCP Results in Poor Patient-Physician Relationship

For hypothesis Ho3, negative perception of DTCP felt by the physicians has been selected to be the independent variable and poor patient-physician relationship due to DTCP is kept as the dependent variable. The correlation between the two has been found to be 0.877, and which naturally is found to be highly significant. From table-10 we find that adjusted R², F-value and corresponding p-value are 0.768, 717 and near zero (below 0.05). We may therefore conclude that negative perception of DTCP felt by the physicians and poor patient-physician relationship due to DTCP are significantly related. The relationship is highly significant as is evident from very high standardized beta (0.877). Difference between the values of R square and adjusted R square is low, again indicating that model is acceptable. Null Hypothesis, that self-medication propensity does not lead to negative perception about DTCP, therefore stands rejected.

Ho4: Poor patient-physician relationship is not a function of perceived manipulation, resulting self-medication and negative perception about DTCP.

Table 10. Correlation coefficient (Negative perception about DTCP results in poor patient-physician relationship)

Model	R	R Square	Adjusted R Square
1	0.877	0.768	.767

Table 11. ANOVA (Negative perception about DTCP results in poor patient-physician relationship)

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1038.287	1	1038.287	716.989	.000
	Residual	312.794	216	1.448		
	Total	1351.082	217			

Table 12. Coefficients (Negative perception about DTCP results in poor patient-physician relationship)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.961	.367		5.348	.000
	Neg	1.239	.046	.877	26.777	.000

Poor Patient-Physician Relationship Results From Combined Impact of Negative Perception, Self-Medication, and Perceived Manipulative Character Related to DTCP

For hypothesis Ho4, we have three independent variables - negative perception of DTCP felt by the physicians, Self-medication propensity of DTCP and perceived manipulative character of DTCP. The independent variable is the poor patient-physician relationship. From the table-13 we find that adjusted R², F-value and corresponding p-value are 0.772, 246.38 and near zero (below 0.05). We may therefore conclude that negative poor patient-physician relationship due to DTCP is significantly a function of negative perception of DTCP felt by the physicians, Self-medication propensity of DTCP and perceived manipulative character of DTCP. Also from the respective standardized Beta we may infer that negative perception of DTCP felt by the physicians has far stronger an impact on poor perceived patient-physician relationship due to DTCP followed by Self-medication propensity of DTCP and then perceived manipulative character of DTCP. Difference between the values of R square and adjusted R square is low, again indicating that model is acceptable. Null Hypothesis, that Poor patient-physician relationship is not a function of perceived manipulation, resulting self-medication and negative perception about DTCP therefore stands rejected.

Proposed Model

On the basis of our finding we propose a model to explain the reasons for poor patient-physician relationship resulting from DTCP. It represents just a partial image of reality and there may be many other factors involved. We find that manipulative character of DTCP (perceived and real and perhaps to oversell medicines) results in self-medication on the part of patients apart from other possible negative impacts. This propensity of DTCP is one reason for the poor image physicians believe they harbor negative perception about DTCP. This perceptual gap between physicians (negative) and patients (positive) results in strained patient-physician relationship.

Table 13. Correlation coefficient (Negative perception about DTCP results in perceived manipulation)

Model	R	R Square	Adjusted R Square
1	0.881	0.775	0.772

- a. Predictors: (Constant), man, neg, sm
- b. Dependent Variable: pr

Table 14. ANOVA (Negative perception about DTCP results in perceived manipulation)

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	1047.738	3	349.246	246.383	.000
	Residual	303.344	214	1.417		
	Total	1351.082	217			

- a. Predictors: (Constant), man, neg, sm
- b. Dependent Variable: pr

Table 15. Coefficients (Negative perception about DTCP results perceived manipulation)

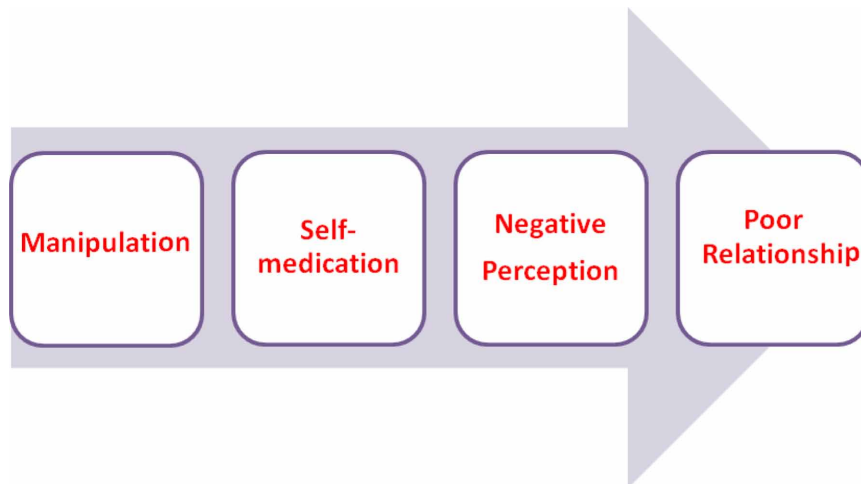
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.297	.470		2.757	.006
	Neg	1.207	.048	.854	25.379	.000
	Sm	.046	.028	.065	1.677	.095
	Man	.041	.046	.033	.894	.372

The future researchers may refine and validate the model. They may also integrate it with other factors to come up with a more complete model too.

CONCLUSION

In this part of the study it was attempted to find the factors leading to poor patient-physician relationship in the context of DTCP as per the expressed belief held by the physicians. This is important as physician-patient relationship is central for the favorable outcomes in healthcare sector. It is important to identify factors affecting it negatively and then come up with measures to minimize them. From the study it is apparent that Self-medication propensity of DTCP is a function of perceived manipulation through DTCP. Physicians therefore believe that DTCP is perhaps been misused or abused by the pharmaceutical marketers to induce self-medication practices amongst patients perhaps to enhance the sale of drugs. If true, this may result in far reaching negative consequences for the healthcare outcome. It needs to be explored if such views held by physicians have any truth ingrained into them. If yes, then what is the extent of such an inclination? Who are the marketers guilty of such an approach? Is it intended or

Figure 1.



Impact of Manipulative Character of Direct-to-Consumer Promotion

unintended on part of the marketers. Implications of this for the pharmaceutical marketers in this context are that it is their responsibility to ensure that such misadventurous strategies are curbed immediately as they stem from a fundamental disregard for the welfare of patients as well as the centrality of physicians in a healthcare system. They must put in place industry-specific mechanisms that can monitor, detect and curb such instances, identify the guilty and provide for necessary corrections. Failure on their part may result in severe retractions from the regulatory authorities and consumers and which in the long run will be self-defeating. Even if the perception of physicians is unfounded, it is the responsibility of pharmaceutical marketers to address it appropriately by taking the physicians into confidence and identifying the reasons for their perceptions. The regulatory authorities need to take note of such possibilities and evolve policies that can curb such an inclination. This will not be easy because of the complex nature of the issues. To begin with DTCP has no legal sanction. Yet, because of internet-based technologies DTCP now is inevitable. How best the regulatory-bodies address this contradiction will determine their success in evolving policies to regulate manipulative practices that encourage self-medication. This also highlights the issue of free access to prescription drugs in India. Though illegal, yet it is common over here. It is the responsibility of regulatory authorities that the legal ban on sale of medicines without proper prescription is enforced in letter and spirit. Implications for physicians in this respect are that rather than merely mistrusting the intentions of pharmaceutical marketers they begin a dialogue with them reporting specific instances of misuse or abuse of DTCP in this respect and appraising them about the negative consequences that may result from it.

We also conclude that the self-medication propensity of DTCP is distinctly a factor in the negative view that physicians express about it. Implications of this for the pharmaceutical marketers are that one important variable they must deal with to curb the negative image of DTCP is its potential to induce self-medication. Even if this is unintended they need to modify the DTCP strategies with proper advice to the patients to avoid self-medication practices. Implications for patients too are obvious. Patients must take into consideration the educational value of DTCP in the context of being better patients and by complying to the medication even while appreciating that this knowledge, even if correct, is not comprehensive enough to make them decision-makers. Decision finally must lie with their physicians who understand the medication in totality and are the best judges of disease state as well as the efficacy and risks of medication.

We also find that physicians believe that negative image they have (for what they feel are the justifiable reasons) results in poor patient-physician relationship perhaps as this negative image is not shared to the same extent by the patients who look upon DTCP as an empowering experience. The implications for the physicians are that they must come up with mechanism to have a better communication with the patients whereby the limitations of DTCP may be made clear to them even as the positive aspects of DTCP may be emphasized. This because we have already agreed that DTCP is here to stay – no amount of opposition will wish it away. The implications for patients are that patients must now evolve as better discriminators to DTCP sources as well as the contents and this requires close collaboration with their physicians as they cannot be expected to fully comprehend the complexity involved. They must learn that the empowerment rooted in their new-found information through DTCP must not lead to poor relationship with their respective physicians. Perhaps they are not even aware that their such a behaviour is straining their relationship with the physicians and hence awareness of this aspect should be undertaken by all the stake holders. The Marketers once again must appreciate that DTCP in the perception of physicians is resulting in poor patient-physician relationship. They must address the root-causes for the same and at all times must communicate through the DTCP that patient-physician relationship is vital and must be

preserved in the interest to expected healthcare outcomes. The policy-makers too should take this aspect into consideration and may come up with guidelines for the pharmaceutical marketers, physicians and patients and put unambiguous emphasis on the centrality of the patient-physician relationship.

We also find that poor relationship is an outcome of negative perception, self-medication propensity and perceived manipulative character of DTCP in that order. This implies that poor relationship may be minimized by addressing these three identified issues. Pharmaceutical marketers obviously must play a vital role in this respect by consciously eliminating the unethical practices and manipulative character, making all-out effort to reduce self-medication propensity of DTCP, strictly not dispensing medicines without prescriptions and always encouraging sound patient-physician relationship. They may additionally acquire the image of responsibility which perhaps has been dented by the unscrupulous members amidst them. Physicians must also evolve mechanisms to identify unethical and ill-informed DTCP campaigns and report it for necessary corrections or removal by the marketers themselves as well as the regulatory bodies. They may also address the unfounded reservations vis-à-vis DTCP, if any. Patients also need to develop their understanding regarding the complexity involved and their misplaced faith in their own decision-making in isolation or against the advice of physicians.

We find that manipulative character as perceived by physicians is moderately correlated with propensity of patients for self-medication; propensity of self-medication is one definite reason why physicians hold a negative view of DTCP; negative perception physicians' have for DTCP may be contributing to patient-physician relationship as strong correlation is found to exist between them and regression model finds three variables (self-medication and negative perception of physicians) to have significant impact on patient physician relationship.

REFERENCES

- Abula, T., & Worku, A. (2017). Self-medication in three towns of North West Ethiopia. *The Ethiopian Journal of Health Development*, 15(1). doi:10.4314/ejhd.v15i1.9893
- Aikin, K.J., Swasy, J.L., & Braman, A.C. (2004). *Patient and Physician Attitudes and Behaviors Associated With DTC Promotion of Prescription Drugs—Summary of FDA Survey Research Results*. Washington, DC: U.S. Department of Health and Human Services. Food and Drug Administration. Center for Drug Evaluation and Research.
- Auton, F. (2004). The Advertising of Pharmaceuticals Direct to Consumers: A Critical Review of the Literature and Debate. *International Journal of Advertising*, 23(1), 5–52. doi:10.1080/02650487.2004.11072871
- DeLorme, Huh, & Jisu. (2011). Advertising in Health Communication: Promoting Pharmaceuticals and Dietary Supplements to U.S. Consumers. In *The Routledge Handbook of Health Communication* (2nd ed.). New York, NY: Routledge.
- Hair, J., Anderson, R., Tatham, R., & Black, W. (1998). *Multivariate Data Analysis* (5th ed.). London: Prentice Hall International.
- Hanif, S. A., & Amin, F. (2017). Evaluation Of The Advertising Claims Made By Pharmaceutical Companies In Drug Promotional Materials In Pakistan. *Medical Channel*, 23(1).

Impact of Manipulative Character of Direct-to-Consumer Promotion

- Huh, J., Delorme, D. E., & Reid, L. N. (2004). The third-person effect and its influence on behavioral outcomes in a product advertising context: The case of direct-to-consumer prescription drug advertising. *Communication Research, 31*(5), 568–599. doi:10.1177/0093650204267934
- Jacob, N. T. (2018). Drug Promotion Practices: A review. *British Journal of Clinical Pharmacology*. doi:10.1111/bcp.13513 PMID:29349812
- Jha, A. (2005). *A Study on the Role of Information Technology in Marketing Pharmaceutical products*. Unpublished Doctoral Thesis.
- Kerber, R. (2005, April 18). Doctors Criticize Sleeping-Pill Ad (Lunesta from Sepracor Inc.). *Boston Globe*, p HS05.
- Law, M. R. (2009). Costs and Consequences of Direct-to-Consumer Advertising for Clopidogrel in Medicaid. *Archives of Internal Medicine, 169*(21), 1969–1974. doi:10.1001/archinternmed.2009.320 PMID:19933958
- Murray, E., Lo, B., Pollack, L., Donelan, K., & Lee, K. (2003). Direct-to-consumer advertising: Physicians' views of its effects on quality of care and the doctor-patient relationship. *The Journal of the American Board of Family Practice, 16*(6), 513–524. doi:10.3122/jabfm.16.6.513 PMID:14963078
- O'Donoghue, A. C., Sullivan, H. W., Aikin, K. J., Chowdhury, D., Moultrie, R. R., & Rupert, D. J. (2014). Presenting efficacy information in direct-to-consumer prescription drug advertisements. *Patient Education and Counseling, 95*(2), 271–280. doi:10.1016/j.pec.2013.12.010 PMID:24581929
- Rados, C. (2004). TRUTH in advertising: Rx drug ads come of age. (Cover story). *FDA Consumer, 38*, 20–27.
- Rajani Chintan, H. (2012). A Study To Explore Scope Of Direct To Consumer Advertisement (Dtca) Of Prescription Drugs In India. *International Journal of Marketing and Human Resource Management, 3*(1), 19–28.
- Robinson, A. R., Hohmann, K. B., Rifkin, J. I., Topp, D., Gilroy, C. M., Pickard, J. A., & Anderson, R. J. (2004). Direct-to-consumer pharmaceutical advertising - physician and public opinion and potential effects on the physician-patient relationship. *Archives of Internal Medicine, 164*(4), 427–432. doi:10.1001/archinte.164.4.427 PMID:14980994
- Rosenthal, M. B., Berndt, E. R., Donohue, J. M., Epstein, A. M., & Frank, R. G. (2003). Demand Effects of Recent Changes in Prescription Drug Promotion. *Forum for Health Economics & Policy, 6*(1), 1–26. doi:10.2202/1558-9544.1044
- Sellers, J. A. (2000). The two faces of direct- to -consumer advertising. *American Journal of Health-System Pharmacy, 57*, 1401. PMID:10938980
- Weissman, J. S. (2004). Physicians report on patient encounters involving direct-to- consumer advertising. *Health Affairs, W4* – 219 – 33.

Chapter 14

Ready, Set, Go!

The Study of Consumer Behavior of Online Hotel Booking in Jakarta

Adilla Anggraeni

Bina Nusantara University, Indonesia

Fedora Edlyn Wijaya

Bina Nusantara University, Indonesia

ABSTRACT

The aim of this research is to identify the factors that could influence customers' attitudes and intentions to continuing online purchases in reserving a hotel room by using the theory of perceived characteristics of innovating scale and the theory of reasoned action as the main theories. Multiple regression analysis was utilized to analyze the relationship between the independent variables and customer attitude and intentions as the dependent variables. The results concluded that all the variables in perceived characteristics of innovating scale had an influence on attitude, and the variables in the theory of reasoned action except online subjective norms had a negative influence on intention. Visibility had the strongest impact on customer attitude, and offline subjective norms also became the strongest influence on intention to continue online purchases.

INTRODUCTION

This research is a replication of a study conducted by Lynda Andrews and Constaza Bianchi with the title of 'Consumer Internet Purchasing Behavior in Chile' (2013).

The use of the internet leads a business's performance and improves efficiency in terms of financial management, market expansion, inventory and human resources management (Burns-Millyard, 2016). Asian countries have long seen strong opportunities to do business by using e-commerce to expand their target market and find other income sources (Bauer, Patel, & Veira, 2015).

DOI: 10.4018/978-1-5225-7095-0.ch014

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The advancement of technology has enabled various services in the tourism industry such as companies offering booking of hotel rooms, flights and travel packages to flourish (Bilgihan & Bujisic, 2014). The internet has become one of the most significant channels for hotel room distribution (Doolin, Burgess & Cooper, 2002; Lehto, Kim, & Morrison, 2006; Thakran & Verma, 2013). The adoption of e-booking in the tourism and hospitality industry began and grew rapidly because the nature of its services appeared to fit in well with information technology and its systems (Crnojevac, Gusic, & Karlovcan, 2010).

Despite the growing trend of e-commerce usage in the travel industry in Indonesia, very few studies have discussed the factors which lead to attitude and intention to conduct e-commerce transactions in the context of the travel industry. Tourism and hospitality scholars have also assessed the importance of purchase intention and its influencing factors in various contexts (Wang, Law, Guillet, Hung & Fong, 2015). Even though there has been significant innovation in the tourism industry, the success of new products or services is heavily dependent on the acceptance of and positive responses to these products by “innovative consumers” (Litvin, Kar, & Goldsmith, 2001), those who are more motivated to try something new and different within various product categories. Innovators are eager to try new products, and are open to diverse product options (Wang, 2014).

It is been acknowledged that studies on purchase intention could be used as sources of reference to understand the channel that customers use to make a purchase; however this does not lead to understanding of the psychological process of the channel choice decision (Morosan and Jeong, 2008). Previous studies have noted that even though customers may obtain information on hotels from other websites, they make reservations through the hotels’ official websites (Ling, Guo, & Yang, 2014), indicating that customers may have different preferences when it comes to online purchasing.

The study has several objectives. First, the study is conducted to investigate whether there is any positive influence between attitude and intention to continue purchasing a product using the internet and how other factors such as relative advantage, compatibility, ease of use, demonstrability and perceived risks will influence consumer attitudes to continue using the internet to make hotel booking purchases. In addition to that, the study is also aimed at investigating whether online and offline subjective norms positively influence consumer attitude towards continuing to use online system to conduct hotel booking.

LITERATURE REVIEW

There are two major theories utilized in this study. The first theory is the theory of reasoned action (TRA) first proposed by Ajzen and Fishbein (1980). Additionally, the theory of Perceived Characteristic of Innovating Scale (PCI) that was developed by Moore and Benbasat (1991) is used to explain some attributes of technological innovation that would influence attitudes for e-commerce adoption. Different personalities may lead to specific buying behavior, as the measured personality characteristics can have strong relevance to the reliability and validity of a research useful to marketers and academicians alike (Mowen, 1999).

Relative Advantages

Rogers (1962, p. 229) defined relative advantage as “the degree to which an innovation is perceived as being better than the idea it overtakes”. Relative advantages determine the customers’ attitudes to technology adoption, which in this study context is when the customers perceive that conducting online

hotel booking via the internet is more beneficial as compared with offline booking and other alternatives (Kozak & Kozak, 2013). Given the growing number of customers making e-bookings, hospitality businesses need to improve the way they conduct their online business operations (O'Connor & Frew, 2004) as a way to encourage even more customers to use online booking systems.

Compatibility

Compatibility refers to the degree of every customers' product or services preference selected based on their past experience, life style and habits (Sonnenwald, Maglaughlin, & Whitton, 2001). Customers usually purchase products that match with their criteria since they have remembered from past post-purchase experience such as the customer services and warranty service (Dunford, 2010). Customers who found that using online hotel booking systems matched their preferences and characteristics may have a stronger intention to continue using the online booking system. It has been noted that in several studies, the explanatory power of the relative advantage, complexity, and compatibility have been found to be relatively high (Kim, Lee, & Rha, 2017).

Perceived Ease of Use

Perceived ease of use is a widely used construct in tourism information systems research (Bilgihan, Barreda, Okumus, & Nusair, 2016). This construct is related to the users' evaluation of the effort involved in the progression of utilizing technology (Venkatesh, 2000). Taylor and Strutton (2010) have noted that the perceived of ease of use has direct correlation and effect upon attitude and intention to conduct online shopping behavior. The Technology Acceptance Model (TAM) also shows evidence that ease of use can affect the attitude toward usability and eventually intention to use (Guritno, 2013). This theory argues that perceived usefulness and perceived ease of use can influence user acceptance of an information technology (Davis, 1989). A technology is perceived to be easy to use when the users believe that it takes them little effort or difficulty to operate the system (Wu & Lin, 2017). It has been noted how individuals will be more willing to learn about its features and finally intend to continue using it should they find a system to be easy to use (Hamid, Razak, Bakar, & Abdullah, 2016). Perceived ease of use has been found to positively influence a technology usage in context such as tax reporting systems (Mustapha & Obid, 2015).

Result Demonstrability

Result demonstrability shows how a result of product or service usage can be assessed through how the product or service can be valuable to them and how an individual responds to the benefit. The results of demonstrability are basically concerned with the tangibility of using the innovation and it includes their observability and communicability (Yaacob & Yusoff, 2014). For example, customers may assess how long customer service quickly answer customer problems and how they could make the transaction process faster without waiting in line. A key aspect of innovation assessment refers to the effort required for effective use of an innovation. Individuals will only form positive attitudes toward an innovation if adoption is associated with reasonable effort (Venkatesh, Thong & Xu, 2003; 2012).

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Visibility

Visibility is the degree to which using the internet is easy to observe and is transparent to others (Moore & Benbasat, 1991). The results of an innovation faced by a person can be seen by other people will highly influence them to adopt it as well. The visible result directly affects the way of thinking, change perception and image toward something (Robinson, 2009). Hence, it can be hypothesized that:

H1-5: The higher the relative advantage, compatibility, ease of use, result demonstrability and visibility of using the online hotel booking system, the higher the intention to keep using the system will be.

Perceived Risk

Perceived risk can be defined as the phenomenon of consumer's belief on their assessment in making purchases from unsuitable decisions and possible negative outcome consequences (Ling, Daud, & Piew, 2011). There are many consequences of doing online purchase on the internet; customers may realize the risks that could happen after purchase decision that can lead to dissatisfaction. A previous study by Kim, Lee, and Rha (2007) has shown how perceived risk negatively influences customer attitudes and intention of conducting online purchases. In studies related to customer adoption, the construct of perceived risk is a result of the unexpected results of adoption and an outcome that may be different from expectation (Forsythe & Shi, 2003; Weber & Hsee, 1998). Therefore, it can be hypothesized that:

H6: Perceived risk negatively influences consumers' attitude toward continuing to purchase on the internet.

Attitude

A person's attitude which is shaped by culture and beliefs plays an important role in shaping customer behavior toward online purchasing (Abdelkader, 2015). Attitudes can change the way of thinking and it may shape their behavioral intention to the brand and services (Seock & Norton, 2007). An individual might change their attitudes after they evaluated positively. Those kinds of attitudes will directly influence behavioral intention and are connected with subjective norms and perceived behavior (Kashima, Gallois, & McCamish, 2011).

Online and Offline Subjective Norms

There are two main components of subjective norms; first are the normative beliefs - "a person's subjective probability that a particular normative referent...wants the person to perform a given behavior" (Ajzen, 2012, p. 441) and (ii) the motivation to comply with those referents. In the Theory of Reasoned Action (TRA), it was shown that both attitude and subjective norms influenced intention. Online social networks facilitate knowledge exchange and the existence of direct contact to other participants leads to stronger participation in information exchange (Chiu, Hsu, & Wang, 2006). Online networking is a platform for companies or sellers to build an indirect relationship with customers. Therefore, it can be hypothesized that:

H7-9: Attitude, offline and online subjective norms positively influence consumers' intention towards continuing to purchase on the internet.

RESEARCH METHODOLOGY

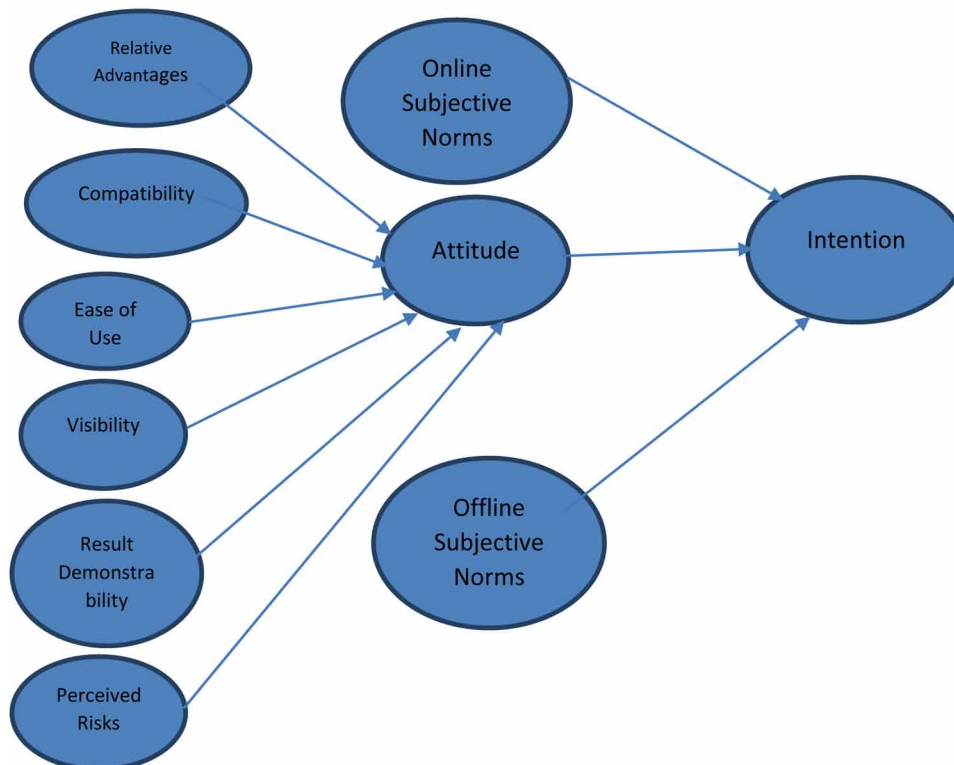
The unit analysis for this research was individuals who have prior experience of using online hotel booking services through websites on the internet. Variable measurements in this study were adopted from Andrews and Bianchi (2013), with the exception of attitude measurement which was adapted from Oliver and Bearden (1995). The data was further analyzed using multiple regression analyses by SPSS software.

RESULTS

In total there were 150 usable responses of this study, consisting of responses from 77 female and 73 male respondents.

Multiple regression analysis was conducted to test hypothesis 1 to hypothesis 6. The R square value was 0.263, which explained why there was 26.3% of the dependent variable (attitude) that could be explained by the independent variables (relative advantage, result demonstrability, compatibility, visibility, ease of use, perceived risks, online subjective norms, and offline subjective norms).

Figure 1. Research model



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Table 1. Operationalization of variables

No	Variables	Statements	Answer Opinion
1.	Relative Advantages Adapted from Andrews et al. (2013)	1. Using the internet is effective 2. Using the internet is more convenient 3. Using the internet give a greater control over time	Strongly disagree – Strongly agree
2.	Result Demonstrability Adapted from Andrews et al. (2013)	1. Using the internet is easy to explain to other people 2. The benefit of using the internet is apparent 3. Using the internet is easy to communicate to other people	Strongly disagree – Strongly agree
3.	Compatibility Adapted from Andrews et al. (2013)	1. Using the internet is compatible 2. Using the internet fits well with my shopping habits 3. Using the internet is compatible with my current situation	Strongly disagree – Strongly agree
4.	Ease of Use Adapted from Andrews et al. (2013)	1. Using the internet is easy to get the things that I want 2. Using the internet is difficult 3. Using the internet is often complicated	Strongly disagree – Strongly agree
5.	Visibility Adapted from Andrews et al. (2013)	1. I have not seen anyone using the internet to purchase 2. Using the internet is easy to observe people 3. I have seen what other people do when they use the internet to make purchases	Strongly disagree – Strongly agree
6.	Attitude Measure adapted from Oliver and Bearden (1995)	1. Using the internet is not useful / useful 2. Using the internet is expensive / not expensive 3. Using the internet is ineffective / effective	Strongly disagree – Strongly agree
7.	Intention Adapted from Andrews et al. (2013)	1. I plan to use the internet to make purchase(s) in the next six months 2. I will continue to use the internet to make purchase(s) in the next six months 3. I intend to use the internet in the next six months	Strongly disagree – Strongly agree
8.	Perceived Risk Adapted from Andrews et al. (2013)	1. I feel safe making purchases on the internet using a credit card 2. I feel safe giving personal information to online organizations 3. There is too much uncertainty associated with using the internet to make purchase(s)	Strongly disagree – Strongly agree
9.	Offline Subjective Norms Adapted from Andrews et al. (2013)	1. I believe that my husband, wife or partner can influence my belief using the internet to purchase 2. I believe that family can influence my belief using the internet to purchase 3. I believe that friends can influence my belief using the internet to purchase	Strongly disagree – Strongly agree
10.	Online Subjective Norms Adapted from Andrews et al. (2013)	1. I believe Facebook influences my beliefs using the internet to make purchase 2. I believe Twitter influences my beliefs using the internet to make purchase	Strongly disagree – Strongly agree

ease of use, and perceived risk). The remaining 73.7% were inconclusive. The regression equation for these hypotheses is:

$$Y \text{ Attitude} = 0.242 + (0.163 * \text{Relative Advantage}) + (0.266 * \text{Result Demonstrability}) + (0.154 * \text{Compability}) + (0.439 * \text{Ease of Use}) + (0.413 * \text{Visibility}) - (0.190 * \text{Perceived Risk}) \quad (1)$$

Table 2. Respondents overview

Profile	Respondent Number	Percentage
Gender		
Male	73	
Female	77	
Age		
16-21 years old	8	5.33%
22-28 years old	114	76%
29-35 years old	24	16%
>36 years old	4	2.67%
Last education		
Postgraduate	12	18%
Undergraduate	91	61%
High School	41	27%
Others	8	4%
Ownership of Facebook and Twitter account	100	100%
Occupation		
Employee		66%
Student		29%
Government employee		0%
Entrepreneur		4.70%
Others		0.3%
Travel Frequency		
1-3 times a year	2	2%
4-6 times	81	81%
7-9 times	17	17%
>9 times	0	0%

The second multiple regression analysis was conducted to test the relationship between attitude, on-line subjective norms, offline subjective norms as independent variables and intention as the dependent variable. The regression equation for this was as follows:

$$Y \text{ Intention} = 2.219 + (0.274 * \text{Attitude}) + (0.364 * \text{Offline Subjective Norms}) - (0.197 * \text{Online Subjective Norms}) \quad (2)$$

The regression analysis has shown that both attitude and offline subjective norms positively influenced the online hotel booking system; the online subjective norms were shown to negatively influence intention to use online hotel booking systems.

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Based on the findings, it was evident that relative advantage, result demonstrability, compatibility, and ease of use had a significant positive influence on attitude. Thus, the more people felt the benefits of using the travel company's website, the more positive the attitude would be. This finding was supported by Ntemana and Olatakun's study (2012), which showed that relative advantage could help predict user attitude and intention to use a new technology. Potential customers would use the website attributes to judge the potential benefits that they could get (Wang, Law, Guillet, Hung, & Fong, 2015). In that case, it means that the ease of use communicated through the design of the travel company's website would play an important role in influencing the purchase decision (Belanger, Hiller, & Smith, 2002).

A company offering a travel service needs to ensure that people can observe every detail step-by-step in creating an online reservation. Since the innovation can be observed easily, customers can learn the first step on how to find the website, input the date and length of stay, departure city and find the desired hotel accordingly. Observability could work as a tutorial for people who have never purchased online at all.

DISCUSSION

The positive influence of demonstrability on attitude would imply that the more able an individual is in expressing the advantage or disadvantage of using online hotel booking to other people, the more positive the individual's attitude toward the online hotel booking service will be. The more apparent the benefits offered, the higher the possibility of positive attitude formation. The benefits of this online travel service could be in the form of price discount, responsive customer service or other features not available for offline booking.

The promise of e-commerce and online hotel room reservation is determined by the website user interfaces and how the website can facilitate interaction (Griffith, Krampf, & Palmer, 2001; Hong, Thong, & Tam, 2004). Better website designs and easier navigations nurture shopping enjoyment (Floh & Madlberger, 2013).

Compatibility has a positive influence on attitude, which means that all the past experience, existing values and purchasing pattern of every individual's travel habits will influence them when using the online hotel booking system. The positive relationship between ease of use and attitude indicates that the more customers satisfied with the website's ease of use, the more likely they will have a positive attitude about the company's website.

On the other hand, the simplicity of using online hotel booking system was shown to influence customer's attitude positively. This suggests that the easier the process to do online hotel booking via the internet, the more positive the attitude towards using it will be. Companies should be aware and realize the preferences, design and website usability in order to make customers feel convenient using website and create ease in every step of the purchase. If the website layout is too complex, people will find it difficult to adopt the innovation. On the other hand, the simpler the website usage, the faster people can adopt to the changes of the booking system due to the innovation.

In terms of perceived risks, the potential customers may feel uncertain about the risks and consequences when transacting or visiting online websites (Seckler, Heinz, Forde, Tuch, & Opwis, 2015). This means that to provide assurance to the users, a travel service provider must offer some security systems which match the customer's expectation. For example, the website needs to be equipped with an encryption system to guarantee safe payment process as well as security certificates to safeguard the customers' interest.

Performance risk described as an uncertainty outcome of product that did not meet customer's expectation. Furthermore, it could be the product or service is not performing well as what is promised. Second, financial risk holds the possibility of financial loss. For example, the value of product is not matched with the price; it may be overpriced which makes the customer dissatisfied. The other reason is when people find out the other stores sell at a much lower price (Arslan, 2013).

The easier it is for the customers to undergo the internet purchase process, the more positive the attitude of the customers and the higher intention to use the internet to make a purchase. Online travel companies have to be aware of the kind of preference, design and website usability in order to improve convenience of using the website and make the purchase process easier. In order to determine people's attitudes regarding the easiness of website, it can be analyzed through how people understand every process on using the internet to purchase (Mohid, 2011). This includes the development of websites that are visually pleasing, easy to navigate, and informative (Cyr, 2013). In addition to that, to facilitate decision-making, the website needs to be easily found by using search engines (Liu & Zhang, 2014).

The findings of this study confirmed that offline subjective norms have a positive impact on customer intention to continue using online booking systems. This suggests that travel companies must find a suitable strategy that can influence people to give a suggestion to other people to use the internet when booking for travel services. Comments from and opinions of friends, partner and family could influence and motivate them to use online hotel booking systems through the internet. On the other hand, the individual may perceive that he/she should or should not perform certain behaviors with these expectations from others.

It is also interesting to note that online subjective norms have a negative influence on customer intention to continue using online hotel booking systems. This implies that negative information that somebody received from his or her family and important others may prevent them from using the hotel booking systems. It is advisable that travel companies should have a good system to response to negative feedback from users so that it may prevent them from complaining publicly to a third party or spreading negative word-of-mouth. In addition to that, the company can also provide a reliable channel for dissatisfied customers to complain and receive answer accordingly.

CONCLUSION

This study has shed some light on the importance of providing positive online experiences to customers of online booking system. To attract loyal customers, companies in the travel industry must offer benefits that match customer expectations. In using an online hotel booking website, customer will experience their purchasing process from the first reservation until payment process. The different touch-points will enable them to assess the company's performance to make sure that the company provided a good service. The findings have suggested that it is important to ensure that the website is reliable, easy to use and has reliable feedback system.

Future Research Recommendations

It is advisable that future studies are conducted with more respondents to increase the reliability of the research and increase additional factors such as timing and budget.

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In order to gain deeper knowledge and understanding regarding this topic, future research might use another variables related to the study. For example, the variables that might be suitable for further research related to this topic are company's reputation or company's relationship with customers.

ACKNOWLEDGMENT

The authors wish to thank the Research and Academic Development department of Bina Nusantara University and Mark Moloney of English Language Services for their help in preparing the manuscript.

REFERENCES

- Abdelkader, A. (2015). Impact of perceived risk and attitude on internet purchase intention. *International Journal of Marketing Studies*, 15, 13–24.
- Ajzen, I. (2012). Theory of Planned Behavior. In E. T. Higgins, A. W. Kruglanski, & P. A. M. V. Lange (Eds.), *Handbook of Theories of Social Psychology* (pp. 438–459). Los Angeles, CA: SAGE.
- Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, NJ: Prentice Hall.
- Andrews, L., & Bianchi, C. (2013). Consumer Internet Purchasing Behavior in Chile. *Journal of Business Research*, 66(10), 1791–1799. doi:10.1016/j.jbusres.2013.01.012
- Bauer, H., Patel, M., & Veira, J. (2015, October). *Internet of Things: Opportunities and Challenges for Semiconductor Companies*. McKinsey & Company. Retrieved from: <http://www.mckinsey.com/industries/semiconductors/our-insights/internet-of-things-opportunities-and-challenges-for-semiconductor-companies>
- Belanger, F., Hiller, J. S., & Smith, W. J. (2002). Trustworthiness in electronic commerce: The role of privacy, security, and site attributes. *The Journal of Strategic Information Systems*, 11(3-4), 245–270. doi:10.1016/S0963-8687(02)00018-5
- Bilgihan, A., & Bujisic, M. (2015). The effect of website features in online relationship marketing: A case of online hotel booking. *Electronic Commerce Research and Applications*, 14(4), 222–232. doi:10.1016/j.elerap.2014.09.001
- Bilgihan, A., Okumus, F., Nusair, K., & Kwun, D. (2011). Information technology applications and competitive advantage in hotel companies. *Journal of Hospitality and Tourism Technology*, 2(2), 139–154. doi:10.1108/17579881111154245
- Burns-Millyard, K. (2016). *Benefit for Businesses Using the Internet*. Retrieved from <http://smallbusiness.chron.com/benefits-businesses-using-internet-322.html>
- Chiu, C.-M., Hsu, M.-H., & Wang, E. T. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision Support Systems*, 42(3), 1872–1888. doi:10.1016/j.dss.2006.04.001

- Crnojevac, I. H., Gugic, J., & Karlovcan, S. (2010). eTourism: A comparison of online and offline bookings and the importance of hotel attributes. *Journal of Information and Organizational Sciences*, 34(1), 41–54.
- Cyr, D. (2013). Website design, trust and culture: An eight country investigation. *Electronic Commerce Research and Applications*, 12(6), 373–385. doi:10.1016/j.elerap.2013.03.007
- Davis, F. D. (1989). Perceived usefulness, Perceived ease of use, and user acceptance of information technology. *Management Information Systems Quarterly*, 13(3), 319–340. doi:10.2307/249008
- Doolin, B., Burgess, L., & Cooper, J. (2002). Evaluating the use of the Web for tourism marketing: A case study from New Zealand. *Tourism Management*, 23(5), 557–561. doi:10.1016/S0261-5177(02)00014-6
- Dunford, A. (2010, February 9). *Five Consideration when Marketing to Early Adopters*. Retrieved from, www.rocketwatcher.com/blog/2010/02/early-adopters-innovation-and-marketing.html
- Floh, A., & Madlberger, M. (2013). The role of atmospheric cues in online impulse-buying behavior. *Electronic Commerce Research and Applications*, 12(6), 425–439. doi:10.1016/j.elerap.2013.06.001
- Forsythe, S. M., & Shi, B. (2003). Consumer patronage and risk perception in internet shopping. *Journal of Business Research*, 56(11), 867–875. doi:10.1016/S0148-2963(01)00273-9
- Griffith, D. A., Krampf, R. F., & Palmer, J. W. (2001). The role of interface in electronic commerce: Consumer involvement with print versus online catalogs. *International Journal of Electronic Commerce*, 5(4), 135–154. doi:10.1080/10864415.2001.11044219
- Guritno, S. (2013). Perceived usefulness, ease of use, and attitude towards online shopping usefulness towards online airlines ticket purchase. *Procedia: Social and Behavioral Sciences*, 81(28), 212–216.
- Hamid, A. A., Razak, F. Z. A., Bakar, A. A., & Abdullah, W. S. W. (2016). The effects of perceived usefulness and perceived ease of use on continuance intention to use E-government. *Procedia Economics and Finance*, 35, 644–649. doi:10.1016/S2212-5671(16)00079-4
- Hong, W., Thong, J. Y., & Tam, K. Y. (2004). The effects of information format and shopping task on consumers' online shopping behavior: A cognitive fit perspective. *Journal of Management Information Systems*, 21(3), 149–184. doi:10.1080/07421222.2004.11045812
- Kashima, G., Gallois, C., & McCamish, M. (1993). The theory of reasoned action and cooperative behaviour: It takes two to use a condom. *British Journal of Social Psychology*, 32(3), 227–239. doi:10.1111/j.2044-8309.1993.tb00997.x PMID:8220941
- Kim, H., Lee, J.-M., & Rha, J.-Y. (2017). Understanding the role of user resistance on mobile learning usage among university students. *Computers & Education*, 113, 108–118. doi:10.1016/j.compedu.2017.05.015
- Kozak, M., & Kozak, N. N. (2013). *Aspect of Tourist Behavior*. Cambridge Scholars Publishing. Retrieved From, <http://www.cambridgescholars.com/download/sample/57900>
- Lehto, X. Y., Kim, D. Y., & Morrison, A. M. (2006). The effect of prior destination experience on online information search behavior. *Tourism and Hospitality Research*, 6(2), 160–178. doi:10.1057/palgrave.thr.6040053

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- Ling, K. C., Daud, D., Piew, T. H., Keoy, K. H., & Hassan, P. (2011). Perceived risk, perceived technology, online trust for the online purchase intention in Malaysia. *International Journal of Business and Management*, 6(6), 167–182.
- Ling, L., Guo, X., & Yang, C. (2014). Opening the online marketplace: An examination of hotel pricing and travel agency on-line distribution of rooms. *Tourism Management*, 45, 234–243. doi:10.1016/j.tourman.2014.05.003
- Litvin, S. W., Kar, G. H., & Goldsmith, R. E. (2001). Travel innovativeness and self-image congruity. *Journal of Travel & Tourism Marketing*, 10(4), 3345. doi:10.1300/J073v10n04_02
- Liu, J. N. K., & Zhang, E. Y. (2014). An investigation of factors affecting customer selection of online hotel booking channels. *International Journal of Hospitality Management*, 39, 71–83. doi:10.1016/j.ijhm.2014.01.011
- Mohid, N. (2011). Exploring the relationship between perceived usefulness, perceived ease of use, perceived enjoyment, attitude and subscriber's intention towards using 3G mobile services. *Journal of Information Technology Management*, 22, 1–7.
- Moore, G. C., & Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research*, 2(3), 192–222. doi:10.1287/isre.2.3.192
- Morosan, C., & Jeong, M. (2008). Users' perception of two types of hotel reservation web sites. *International Journal of Hospitality Management*, 27(2), 284–292. doi:10.1016/j.ijhm.2007.07.023
- Mowen, J. C. (1999). *The 3M Model of Motivation and Personality: Theory and Empirical Applications to Consumer Behavior*. Dordrecht: Kluwer Academic Publisher.
- Mustapha, B., & Obid, S. N. (2015). Tax service quality: The mediating effect of perceived ease of use of the online tax system. *Procedia: Social and Behavioral Sciences*, 172, 2–9. doi:10.1016/j.sbspro.2015.01.328
- Ntemana, T. J., & Olotakun, W. (2012). Analyzing the influence of diffusion of innovation attributes on lecturers' attitudes towards information and communication technologies. *Human Technology*, 8(2), 179–197. doi:10.17011/ht/urn.201211203034
- O'Connor, P., & Frew, A. J. (2004). An evaluation methodology for hotel electronic channels of distribution. *International Journal of Hospitality Management*, 23(2), 179–199. doi:10.1016/j.ijhm.2003.10.002
- Oliva, T. A., Oliver, R. L., & Bearden, W. O. (1995). The relationships among consumer satisfaction, involvement, and product performance: A catastrophe theory application. *Systems Research and Behavioral Science*, 40(2), 104–132. doi:10.1002/bs.3830400203
- Rogers, E. M. (1962). *Diffusion of innovations* (1st ed.). New York: Free Press.
- Seckler, M., Heinz, S., Forde, S., Tuch, A. N., & Opwis, K. (2015). Trust and distrust on the web: User experiences and website characteristics. *Computers in Human Behavior*, 45, 39–50. doi:10.1016/j.chb.2014.11.064

- Seock, Y.-K., & Norton, M. (2007). Attitude toward internet web sites, online information search, and channel choices for purchasing. *Journal of Fashion Marketing and Management: An International Journal*, 11(4), 571–586. doi:10.1108/13612020710824616
- Sonnenwald, Maglaughlin, & Whitton. (2001). Using innovation diffusion theory to guide collaboration technology evaluation: Work in progress. *Proceedings - 10th IEEE International Workshop on Enabling Technologies: Infrastructure for Collaborative Enterprises*, 114-119.
- Taylor, D. G., & Strutton, D. (2010). Has e-marketing come of age? Modeling historical influences on post-adoption era internet consumer behaviors. *Journal of Business Research*, 63(9-10), 950–956. doi:10.1016/j.jbusres.2009.01.018
- Thakran, K., & Verma, R. (2013). The emergence of hybrid online distribution channels in travel, tourism and hospitality. *Cornell Hospitality Quarterly*, 54(3), 240–247. doi:10.1177/1938965513492107
- Venkatesh, V. (2000). Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the technology acceptance model. *Information Systems Research*, 11(4), 342–365. doi:10.1287/isre.11.4.342.11872
- Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of Information Technology: Extending the unified theory of acceptance and use of technology. *Management Information Systems Quarterly*, 36(1), 157–178.
- Wang, L., Law, R., Guillet, B. D., Hung, K., & Fong, D. K. C. (2015). Impact of hotel website quality on online booking intentions: eTrust as a mediator. *International Journal of Hospitality Management*, 47, 108–115. doi:10.1016/j.ijhm.2015.03.012
- Wang, W. (2014). Hospitality Consumers' Innovativeness: A Qualitative Study. *Advances in Hospitality and Leisure*, 37-56.
- Wu, T.-Y., & Lin, C. A. (2017). Predicting the effects of eWOM and online brand messaging: Source trust, bandwagon effect and innovation adoption factors. *Telematics and Informatics*, 34(2), 470–480. doi:10.1016/j.tele.2016.08.001
- Yaacob, H. F., & Yusoff, M. Z. (2014). Comparing the relationship between perceived characteristics of innovation (PCI) and adoption of computer based training among trainer and trainees. *Procedia: Social and Behavioral Sciences*, 155, 69–74. doi:10.1016/j.sbspro.2014.10.258

Chapter 15

Determinants of Customers' Perceived Value in the Fast Food Industry for Global Brands in Malaysia

Jalal Rajeh Hanaysha

DRB-HICOM University of Automotive Malaysia, Malaysia

Haim Hilman

Universiti Utara Malaysia, Malaysia

Zahari Abu Bakar

DRB-HICOM University of Automotive Malaysia, Malaysia

Lee Khai Loon

Universiti Malaysia Pahang, Malaysia

ABSTRACT

The purpose of this research was to investigate the effect of food quality, customer service, physical environment, and price fairness on perceived value in the fast food industry. A survey method was used for the collection of desired information from the visitors of global fast food restaurants in the East Coast region of Malaysia. The returned questionnaires were analyzed by SPSS and structural equation modeling (PLS-SEM). Overall, the findings showed that the impact of food quality on perceived value is positive. The results also showed that the effect of customer service on perceived value is insignificant. The outcomes also proved that physical environment has a significant positive impact on perceived value. Finally, the findings indicated that price fairness has a positive effect on perceived value. These results enhance the understanding towards the significance of the selected factors in influencing customers' perceived value in the fast food industry.

DOI: 10.4018/978-1-5225-7095-0.ch015

INTRODUCTION

Due to the quick changes in global business markets, the needs of consumers have shifted in recent years towards seeking for products or services that deliver superior value for them (Ullakonoja, 2011). In the past, the added value was perceived as product-centric that can be controlled by organizations. However, currently, superior customer value has emerged as a concept that can be created by both an organization and its customers, and for this reason, customers presume that organizations should engage them by providing favorable experiences (Prahalad & Ramaswamy, 2013; Yusof, Musa, & Rahman, 2018). In prior literature, customer perceived value was regarded as a key factor that affects customer satisfaction (Mackevičiūtė, 2013; Mehmood & Hanaysha, 2015; Prebensen & Xie, 2017). Additionally, several researchers confirmed the significance of customer perceived value and reported that it can influence consumer's purchase intention (Chi, Yeh, & Tsai, 2011; Gan & Wang, 2017). Customer value can be defined in terms of the perceived preference, evaluation of product features, and the outcomes of using a product or service to fulfill certain needs (Woodruff, 1997).

Minnema, Bijmolt, Petersen, and Shulman, (2018) indicated that perceived value represents one of the foremost imperative factors in the purchasing decision of consumers. The authors added that consumers tend to buy from brands which provide them with superior values. Therefore, if consumers develop trustworthy relationships with a service provider as a result of perceived value in the consumption process of a particular product or service, it will lead to various advantages such as: positive brand image, higher customer loyalty, and increased profit (Abdullah, Abd Ghani, & Hanaysha, 2013). Moreover, perceived value is a key factor for differentiating a brand and building its competitiveness (Hou, Cheng, Hung, Chen, & Shen, 2017). Due to the benefits of perceived value for both firms and their customers, it has become essential to identify the drivers of perceived value. By observing the prior literature on perceived value, it can be noticed that the majority of the previous researches on this topic have focused on western countries, but few were done in the Asian markets. Additionally, the increasing rivalry among businesses requires organizations to distinguish themselves in order to attract and keep their profitable customers on the long term by focusing on tangible and intangible customer values.

Hu, Kandampully, and Juwaheer (2009) reported that firms should focus on delivering superior services for customers in order to influence their perceptions of brand value. Food quality and physical environment have also been considered to be important for influencing consumer behavior and value perception. In past literature, it was found that food quality (Haery & Badiezadeh, 2014) and physical environment (Liu & Jang, 2009; Nitiwanakul, 2018) had positive effects on customer perceived value. Moreover, Gunmmesson (2002) regarded price fairness and customer service key factors for determining perceived value and brand power. Despite the significance of food quality, customer service, and physical environment, there are few studies that examined their impact on perceived value (Ryu, Lee, & Kim, 2012). Therefore, this study is designed to minimize these gaps by examining whether food quality, customer service, physical environment, and price fairness have any positive effects on perceived value in the fast food industry. The following sections present the literature review for this chapter, followed by is the method of data collection and results. This chapter ends by discussion and conclusion in addition to the limitations and directions for future research.

LITERATURE REVIEW

Perceived Value

In prior literature, perceived value was defined in different ways. The most comprehensive definition of value can be described as the difference between the costs and benefits which stem from perceived quality and the price of a product or service. Auka (2012) states that value can be described through several indicators, such as purchase satisfaction, minimal price, perceived quality in comparison with the cost of purchase, and the perceived benefits for what is paid in exchange. Perceived value was also described by Payne, Frow, and Eggert (2017) as the psychological evaluation of customers towards the benefits of a product or service according to predetermined expectations. Generally, perceived value can be determined based on consumers' perceptions about the benefits of purchased products or services against what is given in return (Hanaysha, 2018). According to Dube and Renaghan (2000), an effective strategy that brands can adopt to develop loyal and satisfied customers is to provide superior value for them. Similarly, Piri and Lotfizadeh (2016) outlined that in order to enhance the satisfaction of customers and foster competitive strengths, it is vital to provide viable benefits for them.

As stated by Sheth et al. (1991), there are five value considerations that influence brand choice and purchase decision. These considerations include social value, conditional value, emotional value, epistemic value, and functional value. Social value includes the perceived benefits that consumers obtain when the purchased product is allied with a particular social group. Similarly, functional value is perceived according to the benefits obtained by fulfilling a key physiological need. Moreover, emotional value can be described as the perceived benefits that consumers acquire as a result of positive arousal of feelings in purchasing a product or service. Besides, perceived epistemic value is likely to be established based on the benefits that consumers obtain through satisfying a need for knowledge and uniqueness. It has been acknowledged in the literature that consumers are likely uphold a certain amount of stimulation in the purchasing process. Thus, if a brand cannot successfully provide an interesting experience to its customers, they may shift to other service providers taking into consideration that rival brands can grant them better emotions of novelty. Lastly, conditional value can be obtained based on the benefits which arise in certain situations.

Food Quality

Food quality was underlined in the literature as the key factor for satisfying or pleasing a restaurant's customers and increasing brand competitiveness; conversely, prior literature shows that it has been often overlooked in restaurant context (Namkung & Jang, 2007). Certain scholars indicated that in the restaurant industry, customers generally evaluate their experiences according to the quality of provided food, environmental features, and the services offered by restaurant's operators (Chow et al., 2007; Hanaysha et al., 2017; Namkung & Jang, 2008). Furthermore, Lu and Chi (2018) considered food quality as the foremost important factors for influencing the decision of customer towards dining at a restaurant. The argument was supported by Liu and Jang (2009) who established that food quality represents a pivotal feature to restaurants' success. More specifically, food safety, taste, variety of choices, and freshness of the food play important roles in affecting customer's choice. Thus, food quality is undoubtedly the key offering of a restaurant; and for this reason, restaurants should frequently focus on food quality by considering appropriate freshness, taste, temperature, and appealing presentation of product offerings.

A number of scholars found that food quality had a significant positive impact on perceived value (Erkmen & Hancer, 2018; Haery & Badiezadeh, 2014; Ryu, Lee, & Kim, 2012). It is evident that leading brands in the fast food industry focus on providing variety of food dishes in a clean and well-designed environment. Hanaysha, Loon, and Bakar (2017) stated that restaurants' managers should focus on providing and maintaining food quality, because it represents the most important criteria and experience for customers that can influence their preference and word of mouth. Nilforushan and Haeri (2015) also found that customers' perceived quality and perceived value of food products had significant effects on brand preference. In other words, positive perception of products quality results in favourable consumer's choice of a brand over another. This result was confirmed by Spais and Vasileiou (2011) who concluded that food quality had a positive relationship with brand preference. Similarly, Han, Nguyen, and Lee (2015) confirmed that food quality had a significant impact on brand reputation. With reference to the above arguments, the first hypothesis is proposed:

Hypothesis One: Food quality has a positive effect on perceived value.

Customer Service

Offering good customer service by focusing on satisfying customers' needs and expectations represents a key challenge for organizations as the number of competitors keeps increasing. Customer service was conceptualized in the literature a chain of activities undertaken in order to improve customer satisfaction by evoking positive feeling about a brand's offerings (Ako-Nai, 2011). Delivering excellent customer service requires employee to exhibit their readiness towards supporting customers through their delicate and personal skills, for instance by effective communication, willingness to listen to any queries, and the capability to create clear conversations with them (Ako-Nai, 2011). According to Canny (2014), the professional behavior of employees which can be revealed through the adequate knowledge and skills to support customers while providing the services for them is regarded as very important criteria for evaluating service providers. Lucas (2005) also acknowledged that customer service can be reflected through the abilities, knowledge, capabilities, and enthusiastic behaviour of employees in delivering products and services to customers and satisfying their needs. Moreover, Sokefun (2013) indicated that in order to foster greater customer service, business practitioners should focus on searching for the needs and expectations of targeted customers, and then work-out the action plans to fulfill them and provide them with favorable brand experience.

In the case of restaurant industry, emphasizing on only food is not enough, but also the delivery of customer service by employees is important (Canny, 2014). As such, customers set expectations towards the way that they should be treated by the service provider, particularly, they wanted to be respected and get kind support. Ako-Nai (2011) outlined that customers tend to have positive perceptions about the service providers who acquire adequate knowledge the offerings of a company, and show the willingness to answer their queries. For example, if the service provider of a restaurant delivers food or service to customers as promised and help them with any issues that they could face, and the customers are eventually pleased with that experience, this indicates that they receive good service. Moreover, a superior customer service can be developed when a company trains its staff who have direct contacts with customers in order to warrant them that they get the right product or service in shorter time. In other words, the speed of delivering customer service influences customers' evaluation toward a brand

(So, King, Hudson, & Meng, 2017). As a result, customers who gain an experience of an undesirable service offerings are likely to share it with others through various media channels.

Previous studies indicated that customer service had a positive impact on perceived value (Brady, Robertson, & Cronin, 2001; Hu, Kandampully, & Juwaheer, 2009; Moller, Rajala, & Westerlund, 2008). According to Iwarere (2009), a reliable service usually results in a greater value. These findings are consistent with the outcomes of Cronin, Brady, and Hult (2000) who confirmed that service quality had a positive association with perceived value in the fast food industry. Furthermore, Wu (2014) reported that enhancing the perceptions of customers towards the service quality of a brand can have a significant impact on their value satisfaction and evaluation of corporate image. Certain scholars also found that customer service had significant relationship with customers' loyalty and word of mouth (Markovic, Iglesias, Singh, & Sierra, 2018; Mukerjee, 2018). Prior literature also showed that perceived value has a positive impact on brand image and customer satisfaction (Lai, 2004; McDougall & Levesque, 2000). According to the preceding discussion, the second hypothesis for this research is suggested as follows:

Hypothesis Two: customer service has a positive effect on perceived value.

Physical Environment

Physical environment has broadly been considered to be an important aspect in the performance of any restaurant. Lee and Jeong (2012) revealed physical environment can be assessed based on the layout design, ambient conditions, level of lighting, aesthetics, and decoration. Past literature revealed that it is necessary for restaurant managers to differentiate their businesses through designing an attractive restaurant's physical environment to establish remarkable experiences for customers. The benefits of designing a pleasant physical environment appear in the ability to acquiring potential customers and retaining them on the long term. Canny (2014) specified that customers in the food industry prefer to dine at restaurants which have pleasing environment. The author added that developing the internal decoration, maintaining cleanness, and displaying appropriate colours and lights can reinforce the dining experiences of customers and proliferate their levels of satisfaction and post purchase behaviour. According to Azim, Shah, Mehmood, Mehmood, and Bagram (2014), to develop the physical environment of a restaurant, it is necessary to invest in spending on the interior design of decorations; cartons, floor and accessories. Ultimately, the amount invested will enhance the assets and attract larger number of customers to the restaurant.

The significance of constructing a pleasant physical environment in the fast food industry has gained noticeable attention from several scholars and managers because it represents a key determinant of customer satisfaction (Han & Ryu, 2009). For this reason, business practitioners should focus on the elements of physical environment for differentiating themselves from competitors and building favourable brand images in target markets (Chen & Hu, 2010; Hanaysha, 2016; Ryu et al., 2012). According to Liu and Jang (2009), physical environment had a significant impact on customers' perceived value recommendations. Bitner (1992) also confirmed that a restaurant's physical environment can establish a virtual metaphor for that restaurant. By creating an attractive physical environment, restaurants will be able to differentiate themselves from their rivals and create favourable brand images in the minds of consumers. Such views were shared by Joseph and Flynn (2015) who declared that in order to establish a distinct brand image, restaurant operators should focus on designing appealing layout and ambient environment as part of their brand building strategies.

Prior studies showed that the physical environment of a restaurant had a positive impact on customer perceived value (Liu & Jang, 2009; Nitiwanakul, 2018; Ryu, & Han, 2010). Furthermore, Choi et al. (2012) found that the physical environment attributes (surroundings, ambience, convenience, functionality, and aesthetics) had positive effects on the loyalty of customers towards the brand. Their findings were confirmed by Ryu et al. (2012) who concluded that the attractions of the physical environment of a restaurant was an important factor in determining perceived value and building brand image. Similarly, Koshki et al. (2014) found that the physical environment was a central factor for affecting the general evaluation of a restaurant. Han and Hwang (2017) also showed that physical environment had a significant role in inducing the post purchase behavior of consumers. Therefore, the perception of customers toward a service provider can be highly influenced by its physical environment. Based on the preceding arguments, the third hypothesis for this paper is presented:

Hypothesis Three: Physical environment has a positive effect on perceived value.

Price Fairness

Price is a key marketing mix element which has widely been considered to be important in shaping consumer behavior. As companies establish their branding strategies with reference to price settings, consumers have a tendency for searching about the products or services which provide them with the greatest value. In past studies, a number of researchers showed that consumers' perception of the price plays a main role in inducing their reactions towards the marketing activities of a brand (Ismail, 2017; Shulga & Tanford, 2018). According to Xia et al. (2004), price fairness can be expressed as the overall judgment of customers towards the perceived benefit of the product or service as compared to its price. The authors added that consumers tend to refer to a number of sources before making conclusions about price satisfaction. For instance, they usually estimate the cost of getting the product/ service, compare the current price with previous prices, and check the prices of competitors (Bolton et al., 2003). Based on the above definition, it can be said that the assessment of price fairness arises from making a comparison between the offered price with other sources of reference. Briesch et al. (1997) pointed out that customers tend to do the benchmarking by recalling previous purchase transactions, searching for competitors' prices and selling costs, as well as through finding information about the prices given to other consumers.

Prior studies showed that price fairness and perceived value are highly correlated (Chang & Wildt, 1994; Naylor & Frank, 2001; Li, Hardesty, & Craig, 2018). Anderson et al. (1994) added that price perceptions can have a significant impact on customers' levels of satisfaction, because they tend to rely on price for determining the value of purchasing a product or service. Furthermore, Campbell (1999) indicated that price fairness plays an essential role in influencing corporate image; and thus, the perception of unfair pricing could result in a switching behavior and negative word of mouth. Similar views were shared by Rothenberger (2015) who acknowledged that unfair price perceptions lead to undesirable consequences, for example, greater levels of dissatisfaction, minimal customer loyalty, increased complaints from customer, and unfavourable word of mouth. Further support can be seen by previous studies (Gunmmesson, 2002; Monroe, 2003) which established that perceived price fairness as a key determinant of customer perceived value. Consequently, the fourth hypothesis for this research is postulated as follows:

Hypothesis Four: Price fairness has a positive effect on perceived value.

Methodology

The present research was primarily conducted to test the direct effects of customer service, food quality, physical environment and price fairness on perceived value in the fast-food industry. The data were collected through a structured survey tool which was distributed on 384 visitors of international fast food restaurants in Malaysia. To ensure that the desired sample size is obtained, convenience sampling technique was employed. The advantages of convenience sampling appear in its cost effectiveness and less time consumption to collect the data. Moreover, convenience sampling was widely used by researchers in previous studies and it is a common approach for collecting consumer data. However, to measure the variables of this study, a survey instrument was developed based on previous studies. Particularly, food quality was measured using six items being taken from the paper of Gagić, Tešanović, and Jovičić (2013). Customer service was also measured with reference to previous research work by adopting and adapting five items developed by Canny (2014). Furthermore, to measure price fairness, this study included four items being adapted from Hassan, Hassan, Nawaz, and Aksel (2013); Namkung and Jang (2010). Similarly, physical environment was measured by five items been taken from Ryu and Han (2011). Finally, perceived value was measured through four items adopted and adapted from the previous researches of Ryu, Lee, and Kim (2012). The selected items were assessed on a five-point Likert scale ranging from 1 = “strongly disagree” to 5 = “strongly agree”. However, in order to ensure that the internal consistency exists among all items of the stated constructs, the Cronbach’s alpha was estimated in the pre-test step. The findings of pilot study revealed that the values of Cronbach’s alpha for all constructs are higher than the threshold value of 0.70, and this means that an acceptable reliability for each construct is established before distributing the questionnaire to the rest of respondents. The received responses were analyzed through PLS-SEM.

ANALYSIS OF RESULTS

A total of 384 structured questionnaires which were distributed on the visitors of international fast food restaurants in the part of East Coast Malaysia, however, only 293 responded. The demographic information about respondents were calculated using SPSS Version 19. The analysis of results as presented in Table 1 reveal that 97 (33.1%) of the respondents are male, whereas 196 (66.9%) are represented by female. Almost 19.4% of the participants represented the age group which ranged between 16 and 25 years old, 53.2% were in the age cluster of 26 to 35 years, 20.5% were aged between 36 and 45 years, while 6.9% were 46 years old or above. With regard to academic qualification, it was found that 79 (26.9%) had high school certificate, 69 (23.6%) had diploma certificate, 37.9% (111) had undergraduate certificate, while 34 (11.6%) had postgraduate certificate. Finally, 48 (16.3%) of the participants had a monthly income in the range of lower than RM500, but 6.8% received a monthly salary from RM500 to RM1000. But those whose average income was from RM1000 to RM3000 accounted for 21.2% of the total responses, while the majority (55.7%) had higher than RM3000.

Checking the normality of the collected data is an important step before starting the analysis. Based on the recommendations of certain scholars (Cain, Zhang, & Yuan, 2016; Hair, Hult, Ringle, & Sarstedt, 2017), PLS and WebPower were used for assessing the normality of data, by calculating the multivariate kurtosis and skewness. Overall, the findings showed that the collected data was not multivariate normal based on the Mardia’s multivariate kurtosis and Mardia’s multivariate skewness. Therefore, according

Table 1. Demographic profile

	Category	Frequency	Percent
Gender	Male	97	33.1
	Female	196	66.9
Age Group	From 16 to 25 years	57	19.4
	From 26 to 35 years	156	53.2
	From 36 to 45 years	60	20.5
	46 years or more	20	6.9
Level of Education	High School / SPM	79	26.9
	Diploma Degree	69	23.6
	Bachelor Degree	111	37.9
	Postgraduate Qualification	34	11.6
Average Income	Below RM500	48	16.3
	RM500 - RM1000	20	6.8
	RM1001 - RM3000	62	21.2
	Higher than RM3000	163	55.7

to these preliminary findings it was possible to rely on PLS-SEM further analysis. This is because PLS-SEM presumes that the data are not normally distributed, and it applies a nonparametric bootstrapping procedure. Furthermore, common method bias (CMB) was employed for testing the measurement items in this research through estimating the variance explained by measurement method instead of the variance explained by the constructs. The Harman's single factor analysis was conducted in order to test the CMB. CMB exists when one single factor accounts for more than 50 percent of total variance explained (Podsakoff & Organ, 1986). In general, the outcomes of Harman's single-factor test revealed that the highest covariance explained by one principal factor indicated that there is no domination for a single factor and the data is free from CMB problem.

Additionally, the reliability of measurement scales was calculated based on Cronbach's alpha. Based on the analysis using PLS-SEM, it was found that the values of Cronbach's alpha for selected constructs appeared in the range between 0.659 and 0.892. Specifically, food quality recorded a Cronbach's alpha value of 0.659, and customer service was reported at Cronbach's alpha value of 0.675. Similarly, the Cronbach's alpha value for physical environment was registered at 0.738. The findings also revealed that perceived value achieved a Cronbach's alpha value of 0.892. Last but not least, the Cronbach's alpha value of price fairness is registered at 0.840. These values are considered acceptable because they are higher than 0.60 as reported by Taber (2017). To support the Cronbach's alpha, the composite reliability was calculated for all constructs using PLS-SEM and the results indicated that all values are higher than 0.60. Consequently, it can be concluded that the reliability assumptions are fulfilled. Furthermore, discriminant validity was calculated using PLS-SEM. Fornell and Larcker (1981) specified that discriminant validity is established when the value of its square root of AVE exceeds the inter-correlation values of other constructs in the same column and row. As it can be observed in Table 2, the assumptions of discriminant validity among constructs are not violated.

Table 2. Discriminant validity

	Customer Service	Food Quality	Perceived Value	Physical Environment	Price Fairness
Customer Service	0.672				
Food Quality	0.491	0.712			
Perceived Value	0.347	0.478	0.867		
Physical Environment	0.392	0.551	0.429	0.697	
Price Fairness	0.467	0.405	0.446	0.344	0.821

After establishing the reliability and validity among constructs, confirmatory factor analysis was then executed through PLS-SEM. This step was possible after data screening which included replacing missing values and deleting unsatisfactory responses. The rationale for CFA analysis was ensure the convergent validity among items. Additionally, the main purpose of CFA is to eliminate the items with factor loading of below 0.50 in order to be able to proceed with hypothesis testing. Overall, the results depicted in Appendix A reveal that the factor loading values for the residual items ranged between 0.568 and 0.906. Therefore, the factor analysis for this study is satisfactory, and hence, convergent validity attained an adequate fit. To test the hypotheses, the structural model was estimated. This process was done by deleting items with factors loadings below 0.50 (see Figure 1). After that, the Bootstrapping procedure was used for generating the results.

As it can be seen in Table 4, the findings reveal that food quality has significant positive impact on perceived value ($\beta = 0.243$, $t\text{-value} = 2.186$, $p < 0.05$) hence, H1 is supported. Moreover, the findings indicated that the effect of customer service on perceived value is insignificant ($\beta = 0.021$, $t\text{-value} = 0.218$, $p > 0.05$), consequently, H2 is rejected. The outcomes of this study also revealed that physical environment has a significant positive effect on perceived value ($\beta = 0.209$, $t\text{-value} = 2.053$, $p < 0.05$), thus, H3 is accepted. Finally, the findings revealed that price fairness has a significant positive effect on perceived value ($\beta = 0.268$, $t\text{-value} = 2.899$, $p < 0.05$), thus, H4 is confirmed. Overall, findings reveal that food quality, customer service, physical environment and price fairness explain 33.5% of total variance in perceived value.

Discussion of Results

The purpose of this research was to determine whether food quality, customer service, physical environment, and price fairness have any significant effects on perceived value in the fast food industry. In line with prior studies (Haery & Badiezadeh, 2014; Ryu, Lee, & Kim, 2012), the findings revealed that food quality is a significant factor for improving perceived value. Hamid et al (2017) also specified that healthy food could exert a significant impact on customer's perception of dining experience with the restaurant. Certainly, food quality in a restaurant has widely been recognized as an important factor for building brand image in customer's mind and predicting consumption behavior (Lu & Chi, 2018). Additionally, restaurants which offer customers with healthy and nutritious food quality tend to have better brand evaluations and increase their overall value perception, which would resultantly lead to a higher degree of repurchase intention and positive word of mouth (Kim, Lee, Kim, & Ryu, 2011).

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Figure 1. Structural model

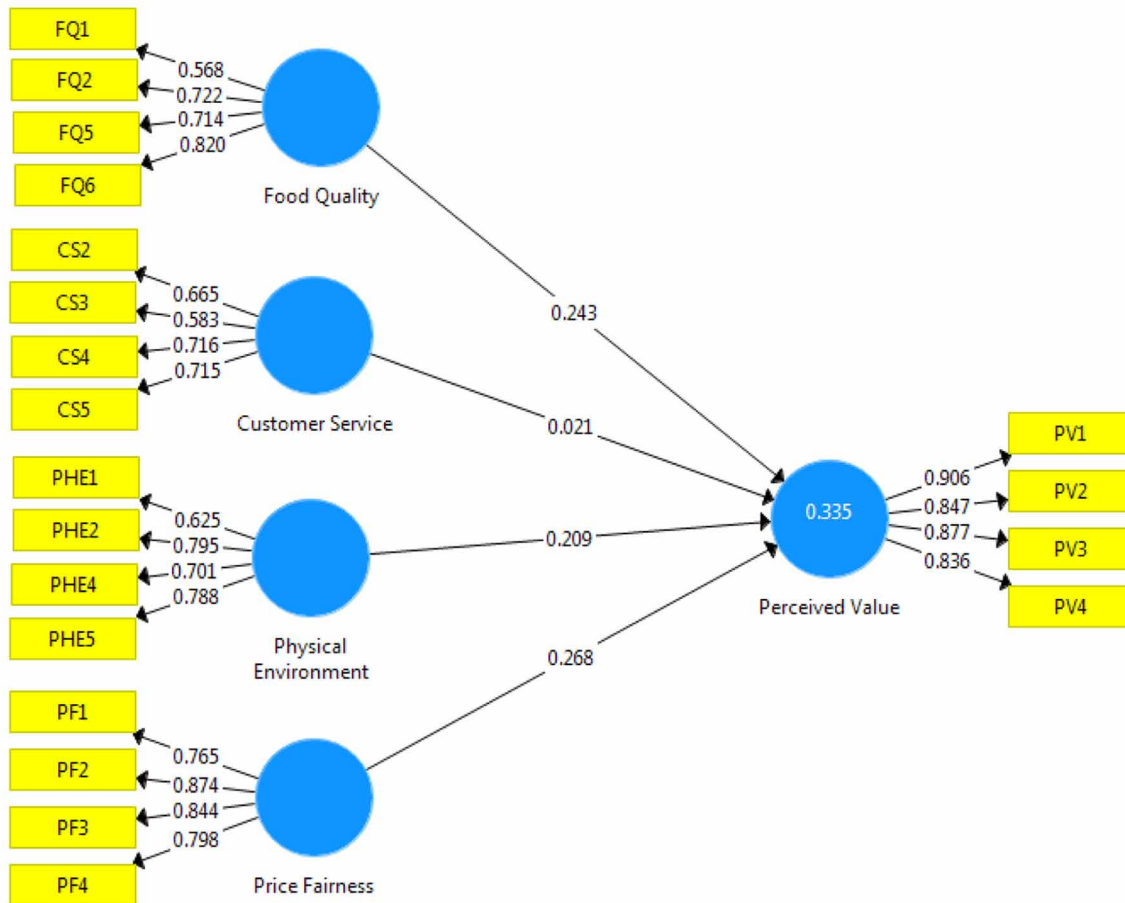


Table 3. Results of hypotheses

Hypotheses		Std. β	S.E.	t-value	P-Value
Food Quality	→ Perceived Value	0.243	0.238	2.186	0.029
Customer Service	→ Perceived Value	0.021	0.049	0.218	0.827
Physical Environment	→ Perceived Value	0.209	0.215	2.053	0.041
Price Fairness	→ Perceived Value	0.268	0.259	2.899	0.004

However, customer service was surprisingly found to be insignificant in determining customers' perceived value in the Malaysian fast food industry. This result is in line with Ryu et al. (2012) who concluded that the impact of customer service on perceived value was insignificant. This indicates that customers of the fast food restaurants in Malaysia tend to put less emphasis on service offerings for determining purchase value of fast-food products, instead they might be mainly deciding to dine at a restaurant because of the food quality and variety, physical environment, as well as low prices instead of employee service. Moreover, the results of this paper confirmed the third hypothesis which stated

that physical environment has a positive impact on perceived value. Greater support for this result was reported by past studies (Han & Hwang, 2017; Koshki, Esmailpour, & Ardestani, 2014; Liu & Jang, 2009; Ryu, & Han, 2010) which found that physical environment plays a big role in determining the perceived value of buyers. Han and Ryu (2009) also supported the positive linkages between the attributes of the restaurant environment (decoration and artifacts, ambient conditions, and spatial layout) and customers' perceived value.

Last but not least, the results of this research confirmed that price fairness has a positive impact on perceived value. It is demonstrated that price fairness represents the strongest predictor of customer perceived value, which may in turn leads to greater customer satisfaction, loyalty, and favorable behavioral intentions. Gunmnesson (2002) also outlined that customers' perception of price fairness influences their perceptions of product or service value and levels of satisfaction. These consequences form various emotions and behavioural responses by customers. Further, Monroe (2003) stated that price satisfaction usually depends on the consumers' perceived value of a brand's products and the perceived value of those sold by other competitors. Therefore, marketers should set their prices in relation to a product or service values, at the same time ensure that pricing strategies result in better performance outcomes (Ingenbleek, Frambach, & Verhallen, 2010). By setting fair prices, it will lead to favourable customer behavior and positive word of mouth (Li et al., 2018).

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

This study has some limitations that would open opportunities for future researches. First, this paper examined only four predictors (food quality, customer service, price fairness, and physical environment) on perceived value. Hence, future researches may investigate other predictors of perceived value to gain better understandings on its determinants. Second, the factors in this paper were examined in the service context that is fast food industry; therefore, the findings can be strengthened by considering other brand categories. The sample size selected to conduct this study may not be representative of total population to generalize the results. Thus, future studies in this area can be conducted in other regions and employ larger sample sizes in order to produce a robust validation and generalization of these findings. Finally, convenience sampling method was used during data collection; therefore, it is recommended for future researches to use the probability sampling techniques to ensure greater generalizability for the results.

CONCLUSION

Perceived value is an important positioning strategy than enable brands to strengthen their competitiveness in target markets and attract larger number of customers. The rationale of this research was to examine the antecedents of perceived value in the fast food industry for global brands in Malaysia. The outcomes revealed that food quality plays an important role in improving customers' perceptions of purchase value. Therefore, the practical implications for the management in fast food industry highlight that they should focus on maintaining and continuously improving food quality in an attempt to create a favorable brand image towards the and differentiate themselves from competitors. Besides that, it is vital for restaurant managers to offer their customers a tasty and nutritious food as well as presenting it attractively with same degree of quality. This is because introducing high quality of food will influence

customers' satisfaction and willingness to share their experiences with others. Overall, the finding suggests that incorporating healthier food attributes in restaurants' offerings would be a wise strategy for managers to build and maintain their competitiveness in global business markets.

Additionally, this study concluded that physical environment represents a key significant factor that could exert a positive impact on customer perceived value in the fast food industry. Thus, in order to satisfy and maintain customers, restaurant managers should focus on the competence of physical environment attributes, such as the interior design features, seat comfortability, furniture quality, appearance of service personnel, lighting, colour, temperature, and selected music. In addition, they should consider the physical aspects as a key strategy to attract and maintain their customers and improve the overall dining experience. However, the effect of customer service on customer perceived value is not significant which means that restaurant managers might be considering it as a part of total price which leads to negative perception of value offering. Finally, this research concluded that price fairness is an important determinant of perceived value and should be communicated to customers in order to maintain their relationships on the long term. Based on these results, it is proposed that the management in fast food industry should set fair pricing policies to keep their customers and successfully position themselves in global markets.

ACKNOWLEDGMENT

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

REFERENCES

- Abdullah, H. H., Abd Ghani, N. H., & Hanaysha, J. R. (2013). Relationship quality as a strategic tool in today's turbulent business world. *Australian Journal of Basic and Applied Sciences*, 7(14), 478–487.
- Ako-Nai, E. A. (2011). *Effect of customer service on customer satisfaction, a case study of Fidelity Bank, Adum, Kumasi* (Master's dissertation). Institute of Distance Learning, Kwame Nkrumah University of Science and Technology.
- Auka, D. O. (2012). Service quality, satisfaction, perceived value and loyalty among customers in commercial banking in Nakuru Municipality, Kenya. *African Journal of Marketing Management*, 4(5), 185–203.
- Azim, A., Shah, N. A., Mehmood, Z., Mehmood, S., & Bagram, M. M. M. (2014). Factors effecting the customers selection of restaurants in Pakistan. *International Review of Management and Business Research*, 3(2), 1003.
- Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *Journal of Marketing*, 56(2), 57–71. doi:10.2307/1252042
- Bolton, L. E., Warlop, L., & Alba, J. W. (2003). Consumer perceptions of price (un) fairness. *The Journal of Consumer Research*, 29(4), 474–491. doi:10.1086/346244

- Brady, M. K., Robertson, C. J., & Cronin, J. J. (2001). Managing behavioral intentions in diverse cultural environments: An investigation of service quality, service value, and satisfaction for American and Ecuadorian fast-food customers. *Journal of International Management*, 7(2), 129–149. doi:10.1016/S1075-4253(00)00041-7
- Briesch, R. A., Krishnamurthi, L., Mazumdar, T., & Raj, S. P. (1997). A comparative analysis of reference price models. *The Journal of Consumer Research*, 24(2), 202–214. doi:10.1086/209505
- Cain, M. K., Zhang, Z., & Yuan, K. H. (2017). Univariate and multivariate skewness and kurtosis for measuring nonnormality: Prevalence, influence and estimation. *Behavior Research Methods*, 49(5), 1716–1735. doi:10.3758/13428-016-0814-1 PMID:27752968
- Campbell, M. C. (1999). Perceptions of price unfairness: Antecedents and consequences. *JMR, Journal of Marketing Research*, 36(2), 187–199. doi:10.2307/3152092
- Canny, I. U. (2014). Measuring the mediating role of dining experience attributes on customer satisfaction and its impact on behavioral intentions of casual dining restaurant in Jakarta. *International Journal of Innovation, Management and Technology*, 5(1), 25–29. doi:10.7763/IJIMT.2014.V5.480
- Chen, P. T., & Hu, H. H. (2010). The effect of relational benefits on perceived value in relation to customer loyalty: An empirical study in the Australian coffee outlets industry. *International Journal of Hospitality Management*, 29(3), 405–412. doi:10.1016/j.ijhm.2009.09.006
- Chi, H., Yeh, H. R., & Tsai, Y. C. (2011). The influences of perceived value on consumer purchase intention: The moderating effect of advertising endorser. *Journal of International Management Studies*, 6(1), 1–6.
- Choi, W. S., Heo, J. S., & Kim, M. J. (2012). Effects of physical environment on brand loyalty and moderated effects of brand image. *International Proceedings of Economics Development and Research*, 56, 57–61.
- Chow, I. H. S., Lau, V. P., Lo, T. W. C., Sha, Z., & Yun, H. (2007). Service quality in restaurant operations in China: Decision-and experiential-oriented perspectives. *International Journal of Hospitality Management*, 26(3), 698–710. doi:10.1016/j.ijhm.2006.07.001
- Cronin, J. J. Jr, Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76(2), 193–218. doi:10.1016/S0022-4359(00)00028-2
- Dube, L., & Renaghan, L. (2000). Creating visible customer value. *The Cornell Hotel and Restaurant Administration Quarterly*, 41(1), 62–72. doi:10.1177/001088040004100124
- Erkmen, E., & Hancer, M. (2018). Creating value for restaurant customer: The role of other customers in dining experience. In *Tourist Behavior* (pp. 157–171). Cham: Springer. doi:10.1007/978-3-319-78553-0_11
- Gagić, S., Tešanović, D., & Jovičić, A. (2013). The vital components of restaurant quality that affect guest satisfaction. *Turizam*, 17(4), 166–176. doi:10.5937/Turizam1304166G

- Gan, C., & Wang, W. (2017). The influence of perceived value on purchase intention in social commerce context. *Internet Research*, 27(4), 772–785. doi:10.1108/IntR-06-2016-0164
- Gummesson, E. (2002). Relationship marketing in the new economy. *Journal of Relationship Marketing*, 1(1), 37–57. doi:10.1300/J366v01n01_04
- Haery, F. A., & Badiezadeh, M. (2014). Studying the effect of food quality dimensions (physical environment, food and services) on mental image of the restaurant and customers' satisfaction and intentions based on Kisang's Model. *International Journal of Academic Research in Business and Social Sciences*, 4(7), 415–424. doi:10.6007/IJARBSS/v4-i7/1032
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling* (2nd ed.). Thousand Oaks, CA: Sage.
- Hamid, N. R. A., Saaidin, M., Kamari, M. N., Rose, R. M., & Ahmad, S. N. B. (2017). Service Quality in Halal Restaurants: A Comparison between Muslim and non-Muslim consumers. *Advanced Science Letters*, 23(8), 7750–7753. doi:10.1166/asl.2017.9568
- Han, H., & Hwang, J. (2017). In-flight physical surroundings: Quality, satisfaction, and traveller loyalty in the emerging low-cost flight market. *Current Issues in Tourism*, 20(13), 1336–1354. doi:10.1080/13683500.2014.960371
- Han, H., & Ryu, K. (2009). The roles of the physical environment, price perception, and customer satisfaction in determining customer loyalty in the restaurant industry. *Journal of Hospitality & Tourism Research* (Washington, D.C.), 33(4), 487–510. doi:10.1177/1096348009344212
- Han, S. H., Nguyen, B., & Lee, T. J. (2015). Consumer-based chain restaurant brand equity, brand reputation, and brand trust. *International Journal of Hospitality Management*, 50, 84–93. doi:10.1016/j.ijhm.2015.06.010
- Hanaysha, J. (2016). Physical environment as a key success factor for building strong brand equity: A study on restaurant industry. *Journal of Research in Business, Economics and Management*, 5(5), 686–693.
- Hanaysha, J. R. (2018). Customer retention and the mediating role of perceived value in retail industry. *World Journal of Entrepreneurship, Management and Sustainable Development*, 14(1), 2–24. doi:10.1108/WJEMSD-06-2017-0035
- Hanaysha, J. R., Loon, L. K., & Bakar, Z. A. (2017). Food quality and price promotion as key success factors for building strong brand equity. *Advanced Science Letters*, 23(9), 8877–8881. doi:10.1166/asl.2017.9988
- Hassan, M., Hassan, S., Nawaz, M. S., & Aksel, I. (2013). Measuring customer satisfaction and loyalty through service fairness, service quality and price fairness perception: An empirical study of Pakistan Mobile telecommunication sector. *Science International*, 25(4), 971–980.

- Hou, C. E., Cheng, M. J., Hung, S. W., Chen, S. H., & Shen, M. Y. (2017). Where does customer value come from? An assessment of the global bicycle manufacturers industry's product attribute, technical capability, and brands. *Total Quality Management & Business Excellence*, 1–13. doi:10.1080/14783363.2017.1413935
- Hu, H. H., Kandampully, J., & Juwaheer, T. D. (2009). Relationships and impacts of service quality, perceived value, customer satisfaction, and image: An empirical study. *Service Industries Journal*, 29(2), 111–125. doi:10.1080/02642060802292932
- Ingenbleek, P., Frambach, R. T., & Verhallen, T. M. (2010). The role of value-informed pricing in market-oriented product innovation management. *Journal of Product Innovation Management*, 27(7), 1032–1046. doi:10.1111/j.1540-5885.2010.00769.x
- Ismail, A. R. (2017). The influence of perceived social media marketing activities on brand loyalty: The mediation effect of brand and value consciousness. *Asia Pacific Journal of Marketing and Logistics*, 29(1), 129–144. doi:10.1108/APJML-10-2015-0154
- Iwarere, H. T. (2009). *Competitive Management Accounting*. Bhoti International Publishing Limited.
- Joseph, S. M., & Flynn, L. R. (2015). Offline and Online Atmospheric: Toward a Typology of Online Environmental Cues. In *Marketing, Technology and Customer Commitment in the New Economy* (pp. 63–68). Cham: Springer. doi:10.1007/978-3-319-11779-9_31
- Kim, H. J., Lee, C. K., Kim, M. J., & Ryu, K. (2011). Restaurant healthy food quality, perceived value, and revisit intention: testing a moderating role of green customers in South Korea. In *International CHRIE Conference-Refereed Track* (pp. 1-11). Academic Press.
- Koshki, N., Esmaeilpour, H., & Ardestani, A. S. (2014). The study on the effects of environmental quality, food and restaurant services on mental image of the restaurant, customer perceived value, customer satisfaction and customer behavioral intentions: (Case study of Boroujerd's restaurants). *Kuwait Chapter of the Arabian Journal of Business and Management Review*, 3(10), 261–272. doi:10.12816/0018407
- Lai, T. L. (2004). Service quality and perceived value's impact on satisfaction, intention and usage of short message service (SMS). *Information Systems Frontiers*, 6(4), 353–368. doi:10.1023/B:ISFI.0000046377.32617.3d
- Lee, S., & Jeong, M. (2012). Effects of e-servicescape on consumers' flow experiences. *Journal of Hospitality and Tourism Technology*, 3(1), 47–59. doi:10.1108/17579881211206534
- Li, W., Hardesty, D. M., & Craig, A. W. (2018). The impact of dynamic bundling on price fairness perceptions. *Journal of Retailing and Consumer Services*, 40, 204–212. doi:10.1016/j.jretconser.2017.10.011
- Liu, Y., & Jang, S. S. (2009). Perceptions of Chinese restaurants in the US: What affects customer satisfaction and behavioral intentions? *International Journal of Hospitality Management*, 28(3), 338–348. doi:10.1016/j.ijhm.2008.10.008

Lu, L., & Chi, C. G. Q. (2018). Examining diners' decision-making of local food purchase: The role of menu stimuli and involvement. *International Journal of Hospitality Management*, 69, 113–123. doi:10.1016/j.ijhm.2017.10.012

Lucas, R. W. (2004). *Customer services: Building successful skills for the twenty-first century* (3rd ed.). Spain: Mc Graw-Hill Publishers.

Mackevičiūtė, E. (2013). *Customer perceived value impact on customer satisfaction and loyalty: case of bakery and confectionery B2B market in Lithuania* (Master's thesis). ISM University of Management and Economics.

Markovic, S., Iglesias, O., Singh, J. J., & Sierra, V. (2018). How does the perceived ethicality of corporate services brands influence loyalty and positive word-of-mouth? Analyzing the roles of empathy, affective commitment, and perceived quality. *Journal of Business Ethics*, 148(4), 721–740. doi:10.1007/10551-015-2985-6

McDougall, G. H., & Levesque, T. (2000). Customer satisfaction with services: Putting perceived value into the equation. *Journal of Services Marketing*, 14(5), 392–410. doi:10.1108/08876040010340937

Mehmood, K. K., & Hanaysha, J. (2015). The strategic role of hedonic value and utilitarian value in building brand loyalty: Mediating effect of customer satisfaction. *Pakistan Journal of Social Sciences*, 35(2), 1025–1036.

Minnema, A., Bijmolt, T. H., Petersen, J. A., & Shulman, J. D. (2018). Managing product returns within the customer value framework. In *Customer Engagement Marketing* (pp. 95–118). Cham: Palgrave Macmillan. doi:10.1007/978-3-319-61985-9_5

Möller, K., Rajala, R., & Westerlund, M. (2008). Service innovation myopia? A new recipe for client-provider value creation. *California Management Review*, 50(3), 31–48. doi:10.2307/41166444

Monroe, K. B. (2003). *Pricing: Making profitable decisions* (3rd ed.). New York: McGraw-Hill/Irwin.

Mukerjee, K. (2018). The impact of brand experience, service quality and perceived value on word of mouth of retail bank customers: Investigating the mediating effect of loyalty. *Journal of Financial Services Marketing*, 23(1), 12–24. doi:10.105741264-018-0039-8

Namkung, Y., & Jang, S. (2007). Does food quality really matter in restaurants? Its impact on customer satisfaction and behavioral intentions. *Journal of Hospitality & Tourism Research (Washington, D.C.)*, 31(3), 387–409. doi:10.1177/1096348007299924

Namkung, Y., & Jang, S. C. (2010). Effects of perceived service fairness on emotions, and behavioral intentions in restaurants. *European Journal of Marketing*, 44(9/10), 1233–1259. doi:10.1108/03090561011062826

Naylor, G., & Frank, K. E. (2001). The effect of price bundling on consumer perceptions of value. *Journal of Services Marketing*, 15(4), 270–281. doi:10.1108/EUM0000000005506

Determinants of Customers' Perceived Value in the Fast Food Industry for Global Brands in Malaysia

- Nilforushan, S., & Haeri, F. A. (2015). The effect of packaging design on customers' perception of food products' quality, value, and brand preference (Case study: Pegah pasteurized cheese, in Isfahan city). *WALIA Journal*, 31(S3), 127–132.
- Nitiwanakul, W. (2018). A Comparative study of customer perceived value as a driver for fine dining restaurant selection. *AU Journal of Management*, 12(1), 1–13.
- Piri, Z., & Lotfizadeh, F. (2016). Investigation of the influence of perceived quality, price and risk on perceived product value for mobile consumers. *Asian Social Science*, 12(1), 103–116. doi:10.5539/ass.v12n1p103
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management Information Systems*, 12(2), 531–544.
- Prahalad, C. K., & Ramaswamy, V. (2013). *The future of competition: Co-creating unique value with customers*. Harvard Business Press.
- Prebensen, N. K., & Xie, J. (2017). Efficacy of co-creation and mastering on perceived value and satisfaction in tourists' consumption. *Tourism Management*, 60, 166–176. doi:10.1016/j.tourman.2016.12.001
- Rothemberger, S. (2015). Fairness through Transparency: The Influence of Price Transparency on Consumer Perceptions of Price Fairness. *Working Papers CEB*, 15.
- Ryu, K., Lee, H. R., & Kim, W. G. (2012). The influence of the quality of the physical environment, food, and service on restaurant image, customer perceived value, customer satisfaction, and behavioral intentions. *International Journal of Contemporary Hospitality Management*, 24(2), 200–223. doi:10.1108/09596111211206141
- Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, 22(2), 159–170. doi:10.1016/0148-2963(91)90050-8
- Shulga, L., & Tanford, S. (2018). Measuring perceptions of fairness of loyalty program members. *Journal of Hospitality Marketing & Management*, 27(3), 346–365. doi:10.1080/19368623.2017.1359724
- So, K. K. F., King, C., Hudson, S., & Meng, F. (2017). The missing link in building customer brand identification: The role of brand attractiveness. *Tourism Management*, 59, 640–651. doi:10.1016/j.tourman.2016.09.013
- Sokefun, A. O. (2013). Customer service and its effect on the banking business in Nigeria. *Journal of Research in National Development*, 9(2), 359–365.
- Spais, G. S., & Vasileiou, K. (2011). Path modeling the antecedent factors to consumer repurchase intentions for advanced technological food products: Some correlations between selected factor variables. [JBCS]. *Journal of Business Case Studies*, 2(2), 45–72. doi:10.19030/jbcs.v2i2.4889
- Taber, K. S. (2017). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 1–24.

Ullakonoja, J. (2011). *The effects of retail design on customer perceived value* (Master's Thesis). Aalto University.

Woodruff, R. B. (1997). Customer value: The next source for competitive advantage. *Journal of the Academy of Marketing Science*, 25(2), 139–153. doi:10.1007/BF02894350

Wu, H. C. (2014). The effects of customer satisfaction, perceived value, corporate image and service quality on behavioral intentions in gaming establishments. *Asia Pacific Journal of Marketing and Logistics*, 26(4), 540–565. doi:10.1108/APJML-03-2014-0049

Xia, L., Monroe, K. B., & Cox, J. L. (2004). The price is unfair! A conceptual framework of price fairness perceptions. *Journal of Marketing*, 68(4), 1–15. doi:10.1509/jmkg.68.4.1.42733

Yusof, J. M., Musa, R., & Rahman, S. A. (2018). Role of shopping value on green image and store loyalty relationship. *Journal of ASIAN Behavioural Studies*, 3(6), 169–177. doi:10.21834/jabs.v3i6.249

ADDITIONAL READING

Ali, F., Amin, M., & Cobanoglu, C. (2016). An integrated model of service experience, emotions, satisfaction, and price acceptance: An empirical analysis in the Chinese hospitality industry. *Journal of Hospitality Marketing & Management*, 25(4), 449–475. doi:10.1080/19368623.2015.1019172

Ashton, A. S., Scott, N., Solnet, D., & Breakey, N. (2010). Hotel restaurant dining: The relationship between perceived value and intention to purchase. *Tourism and Hospitality Research*, 10(3), 206–218. doi:10.1057/thr.2010.5

Bujisic, M., Hutchinson, J., & Parsa, H. G. (2014). The effects of restaurant quality attributes on customer behavioral intentions. *International Journal of Contemporary Hospitality Management*, 26(8), 1270–1291. doi:10.1108/IJCHM-04-2013-0162

Kim, Y. H., Duncan, J., & Chung, B. W. (2015). Involvement, satisfaction, perceived value, and revisit intention: A case study of a food festival. *Journal of Culinary Science & Technology*, 13(2), 133–158. doi:10.1080/15428052.2014.952482

Lee, S. M., Jin, N., & Kim, H. S. (2018). The effect of healthy food knowledge on perceived healthy foods' value, degree of satisfaction, and behavioral intention: The moderating effect of gender. *Journal of Quality Assurance in Hospitality & Tourism*, 19(2), 151–171. doi:10.1080/1528008X.2016.1230036

Namin, A. (2017). Revisiting customers' perception of service quality in fast food restaurants. *Journal of Retailing and Consumer Services*, 34, 70–81. doi:10.1016/j.jretconser.2016.09.008

Ryu, K., & Lee, J. S. (2017). Examination of restaurant quality, relationship benefits, and customer reciprocity from the perspective of relationship marketing investments. *Journal of Hospitality & Tourism Research (Washington, D.C.)*, 41(1), 66–92. doi:10.1177/1096348013515919

Yan, X., Wang, J., & Chau, M. (2015). Customer revisit intention to restaurants: Evidence from online reviews. *Information Systems Frontiers*, 17(3), 645–657. doi:10.1007/10796-013-9446-5

KEY TERMS AND DEFINITIONS

Customer Service: The assistance and support of service providers to customers who buy or use their products or services.

Food Quality: The quality attributes of food that is acceptable by customers.

Perceived Value: The perception of customers about the benefits of purchased products or services against what is given in return.

Physical Environment: It refers to the layout design, ambient conditions, level of lighting, aesthetics, and decoration that aim to enhance customer's experience.

Price Fairness: The overall evaluation of customers towards the perceived benefit of the product or service as compared to its price.

APPENDIX 1

Table 4. Factor loadings of measurement scales

Construct/ Items	Factor Loadings
Food Quality	
The restaurant offers a variety of menu items.	0.568
The food is tasty.	0.722
The food is always served fresh.	0.714
The dishes in which the food is served are neat and clean.	0.820
Price Fairness	
This restaurant offers the best possible price plan that meets my needs.	0.765
The food price charged by this restaurant is reasonable.	0.874
The costs in this restaurant seem appropriate for what I get.	0.844
Overall, this restaurant provides superior pricing options compared to other service providers.	0.798
Physical Environment	
The interior design and decorations of the restaurant are visually appealing.	0.625
The furniture of the restaurant (e.g., dining table, chair) is clean.	0.795
The seating arrangements in the restaurant are comfortable and give me enough space.	0.701
The restaurant's lighting and colours create a sense of ambience.	0.788
Perceived Value	
This restaurant offered good value for the price	0.906
The restaurant experience was worth the money	0.847
This restaurant provides me great value as compared to others	0.877
Overall, this restaurant provides superior value to its customers	0.836
Customer Service	
The employees of the restaurant are always willing to help me.	0.665
The employees of this restaurant are professional when they deal with me.	0.583
The employees of this restaurant always appear neat and well dressed.	0.716
The employees of this restaurant allow me to replace food items if needed.	0.715

Chapter 16

A Study of Place Branding of Macao

Chi Fong Tang
University of Macau, Macau

MingHao Zhang
Waseda University, Japan

Jennifer H. Gao
Macao Polytechnic Institute, Macau

ABSTRACT

Macao is stereotyped as a gambling city and its unique cultural connotation is often ignored. Branding Macao effectively may deliver a concise but different image to the world. This research is a quantitative study that attempts to investigate Macao's city characteristics, to explore the importance of place branding, and to assess the influence of place branding on competitiveness and sustainable development. A theoretical framework is established to explain the relationships. Data were collected from 393 respondents in the greater China region. Reliability, correlations, and regressions are run to test various hypotheses. The research findings reveal that Macao is "Exquisite and Exalted," "Fantasy and Passionate," and "Calm and Relaxed." Place branding of Macao is essential to enrich cultural life of residents inside, and to promote good image outside. Moreover, place branding turns out to be the most significant predictor of competitiveness and sustainable development. Discussion, limitations, and implications are presented.

INTRODUCTION

Brand management is a hot topic among academics and marketing practitioners nowadays. Branding is an effective tool to gain competitive advantages for companies in the market which can create greater value for both the producer and customers (Browning, 2016). The brand's strategic power has led to a lot of studies in this area to explore and enrich understanding of branding by developing multiple concepts such as brand personality, brand identity and brand image (Peighambari et al., 2016). Besides

DOI: 10.4018/978-1-5225-7095-0.ch016

branding goods and services, pushing the borders of the product definition obviously leads to brand places, persons or ideologies (Hankinson, 2001). As nations and cities attempt to improve the quality of life, they compete for tourists, investors, entrepreneurs, and qualified labor (Anholt, 2010). Thus, place marketers are interested in building the place as a brand, and targeting different market segments. Cities, apart from their constructions, have a variety of features that include tradition, culture, art and heritages. These can be used to establish the unique brand images that different from competitors (Kemp et al., 2012). Cities worldwide increasingly engage in place branding efforts in order to create favorable images. Some examples of well branded cities are Paris, New York City and San Francisco. They marketed their history, lifestyle, place quality, culture, diversity, and cooperative partnerships to improve their infrastructure (Saraniemi, 2011).

Hong Kong, Macao's neighboring city has already had its own distinctive city brand for more than a decade. Place branding of Hong Kong was launched in 2001. A well-planned communication strategy was adopted to market Hong Kong's unique features around the world. The image of the flying dragon and the slogan: "Asia's world city" has become the symbols of Hong Kong (Chan & Marafa, 2016).

Comparing to Hong Kong and other foreign cities, Macao's image has not been changed fundamentally. This may lead to degradation or a total loss of advantages eventually. For a long time, Macao has been labelled as the "gambling city" and "Las Vegas of the East" (Sheng & Gu, 2018; Zhang, Song & Park, 2016). The quintessence of more than 400 years of both Chinese and western culture in Macao is somewhat overlooked and failed to be identified and appreciated by the outside world. In short, Macao lacks a positive, remarkable and civilized brand. It is necessary to brand Macao as a world center of tourism and leisure in target market through integrated strategies with attractive attributes (Wan & Li, 2011).

This study tries to identify the elements that are suitable for the construction of a new brand of Macao, and to enhance its competitiveness and sustainable development through this re-positioning process.

LITERATURE REVIEW

Place Branding

Usually, when people talk about a place, they mention the most representative symbol of it rather than its real name. Many place names are types of brands, and the value of brand may influence the whole society's operation. Besides, those place brands are often accompanied by visual identities just like the product brands own their logos for identification. When people talk about place branding, they often refer to something special and typical which symbolizes the place.

Place branding refers to branding and building brand equity in relation to national, regional or local identity. Brand equity is consisted of brand loyalty; name awareness; perceived quality; brand associations; perceived quality; and other proprietary brand assets – trademarks, channel relationships (Sarabia-sanchez & Cerda-bertomeu, 2017). Place branding can be used to organize value-adding partnerships and networks in both private and public sector to build a coherent product offering (which includes tourism, trade, and temporary employment and investment opportunities). Simply, a place branding is the representation of identity, and a favorable internal and external image. This may include: brand satisfaction and loyalty; name awareness; perceived quality; and other brand associations (Chan, Peters & Marafa, 2016).

A Study of Place Branding of Macao

From the late 19th century, branding has been developed from an early idea with consumer goods. AMA (American Marketing Association) defines brand as “a name, term, sign, symbol or design, or a combination of these intended to identify the goods and services of one seller or a group of sellers and to differentiate them from those of competitors” (Kotler & Gartner, 2002: 249). This definition focuses on the product side only. Later, ‘brand as company’ and ‘brand as policy’ are added to the branding concept other than consumer products. Thus, the expanded application of branding includes corporations, destinations and more recently, places, cities and nations. Place branding has appeared to be important nowadays because of the falling cost of international travel, rising consumer spending power, and the threat of place parity. Provoked by globalization, place branding becomes necessary which fuses ideas, culture, reputation, products, services and funds into a single community (Anholt, 2010). The key issue involved in branding of a nation, region, city or town is similar to the establishment of strategies in business. Globalization provides a more competitive environment. Now people can work and live almost anywhere they want. If resources are not sufficient, outward migration is inevitable. Residents hope for opportunity-filled places in order to exercise their individual skills and interests, and to have ‘pride of place’ (Kotler et al., 2004: 12). Residents, visitors and investors tend to seek harmony where economic development and political stability can satisfy individual and differentiated requirements.

The study of place branding extends across a wide range of academic areas. The primary focus is cities and towns which are often related with tourism marketing efforts (Hankinson, 2001). While a destination brand represents a single industry, a city, or a region, it also has the potential to serve as a coordinating symbol for a broad range of community developments which are outside the normal responsibility of tourism organizations. This supported the notion that place branding has transcended into a composite construct that not only encompasses tourism but also economic, socio-political and historical prospects (Chan, Peters & Marafa, 2016).

Kerr (2006) defines place branding as “the practice of applying brand strategy and other marketing techniques and disciplines to the economic, social, political and cultural developments of cities, regions and countries” (p.278) and proposes that holistic place branding encompasses everything a place wishes to sell. Tourism, business tourism, and culture can also be the forms of place branding. Branding is a necessary tool in marketing strategy. The need for ‘place branding’ can also be explained as an evolution from place marketing. Actually, places have been marketed through tourism, investment and export for a time long. There is widespread appreciation that a positive place image is a prerequisite for successful tourism, export or investment promotion. Place branding has been carried out in many cities, and positive effects have emerged.

In this research, place branding is measured by scales of ‘attitude toward the brand’ (Kemp et al., 2012); ‘perceived quality’ (Dodds et al., 1991); ‘uniqueness of the brand’ (Netemeyer et al., 2004); ‘self-brand connection’ (Escalas & Bettman, 2003); and ‘brand advocacy’ (Kim et al., 2001).

Brand Personality

Merriam Webster’s Dictionary defines personality as “the complex of characteristics that distinguishes an individual or a nation or group; especially the totality of an individual’s behavioral and emotional characteristics”. Personality describes how individuals react and interact with other people. It can also be used to define a non-human being’s features. Such an attribution is called anthropomorphism which is the transference of human features to non-human things. Some positive characteristics are often personified and integrated into products to increase consumers’ comfort and familiarity feeling, and reduce

risk feelings about them. Saeida et al. (2017) state that the extension of brand features is similar to that of human personality. Brands may have unique personality characteristics.

The origin of brand personality could date back to the symbolism theory (Hosany & Ekinci, 2006). The personality characteristics connected to a brand can facilitate consumer's actual or ideal self. Customers view their choice of product as an extension of their own personalities. Therefore, their purchase intention is somewhat determined by the symbolic meanings which can enhance their self-consistency and self-esteem. The self-concept theory interprets the reason why consumers are stimulated to make the purchase choice according to their symbolic value. Consumers estimate the similarity degree of the personality characteristics delivered by the product when choosing different products, and the personality they want to represent themselves (Banerjee, 2016). In short, brand personality could help to deliver distinctive and excellent connections with customer's mindset; make a great influence on brand preference and brand choice; link with the brand emotionally and then leads to loyalty and trust; increase competitive advantage and differentiated from competitors; and enrich brand equity (Harrison-Walker, 2012).

The key elements of brand loyalty and brand positioning are brand image and brand personality. The essence of brand personality include brand image and brand identity (Kaplan et al., 2010). Brand image represents the brand meaning based on consumers' experiences, impressions and understandings of the functional, emotional, and symbolic benefits that are connected with the product, while brand identity is a unique set of associations that the brand strategist aspires to create or maintain (Viot, 2011). Identity conceptualizes a summation concept which includes a number of intrinsic characteristics such as brand personality, user image, product features and consumer benefits. Brand image is associated with hard and soft features of the product. The hard features are tangible properties, and the soft are intangibles. Saeida et al. (2017) argue that brand personality is the soft associations to which the emotional side of brand image is referred.

Niu (2005) suggests in the book: "The Characters of Chinese Cities", a city is similar as a human-being, without its own unique characteristics, the city does not have its unique charm of soul. The book lists the top 20 charismatic cities in China: Beijing, the most generous city; Shanghai, the most luxury city; Guangzhou, the most indefinable city; Shenzhen, the most longingly city; Tianjin, the most humorous city; Chongqing, the hottest city; Nanjing, the most sentimental city; Chengdu, the most relaxed city; Wuhan, the most liquid city; Changsha, the most impulsive city; Suzhou, the most exquisite city; Hangzhou, the most feminine city; Kunming, the most beautiful city; and Xian, the most ancient city. In addition, Taiyuan is the grayest city, Zhengzhou is the most medial; Shenyang is the most forthright; Dalian, the most refreshing; and Harbin the most passionate.

Several personality traits could characterize a brand, and vice versa. Aaker (1997) develops a theoretical framework of brand personality to measure its five dimensions, namely: Sincerity, Excitement, Competence, Sophistication, and Ruggedness. Hosany et al. (2006) investigate the relationship between destination brand image and destination brand personality in tourism destinations, and identify three dimensions: (1) Excitement; (2) Sincerity; and (3) Conviviality.

d'Astous and Boujbel (2007) suggest a new perspective. They propose that the personality dimensions of a country could represent people's minds, like other objects such as brands and stores, because country is often presented in a human-like manner. Adopt the classical personality trait approach, they try to identify the personality characteristics of countries. A measure of six country personality dimensions (agreeableness, wickedness, assiduousness, snobbism, conformity, and unobtrusiveness) with 37 items has been developed and validated. Agreeableness refers pleasing to the mind or senses especially according well with one's tastes or needs. Wickedness refers to the fact of being morally very wrong or

bad. Snobbishness refers to associate with those of higher social status and who behaves condescendingly to others. Conformity refers to the behavior that follows the usual standards which are expected by a group or society. Assiduousness refers marked by careful unremitting attention or persistent application, and unobtrusiveness refers not attracting attention and therefore not likely to be noticed.

Place Branding and Brand Personality

Apart from focusing on brand personality of general products, the construction of brands for cities and nations has become a challenge in the marketing boundary. A brand with vivid personality could enrich its essence, and help to make a product successful, as well as a place, a city and a nation (Hosany et al., 2006). It is believed that all successful brands have their own personalities. Brand personality is an effective emotional bonding tool that links potential customers with the brand which could reflect their self-expressive value. In today's emerging era of tourism and hospitality, a sustainable uniqueness in brand personality helps to establish a positive image (Ahmad & Thyagaraj, 2014).

By examining Macao against the six personality dimensions, this study tries to explore people's perception toward Macao. The following hypotheses are thus formulated:

- H₁:** The more people perceive that Macao possesses the agreeableness trait, the more Macao can be branded as a livable and leisure city.
- H₂:** The more people perceive that Macao possesses the wickedness trait, the more Macao may be regarded as a sin city.
- H₃:** The more people perceive that Macao possesses the snobbishness trait, the more Macao may be regarded as a money-oriented city.
- H₄:** The more people perceived that Macao possesses the assiduousness trait, the more Macao can be branded as a city with development potential.
- H₅:** The more people perceive that Macao possesses the conformity trait, the more Macao can be branded as a cultural city.
- H₆:** The more people perceived that Macao possesses the unobtrusiveness trait, the more Macao may be regarded as a non-open city.

Competitiveness

Competitiveness is one of the most misunderstood concepts of the 1990s. Over the past 30 years, it has received substantial attention from the government and business communities. International competitiveness has been conceptualized in more depth progressively, and it has been explained in the literature in many different ways. It has been perceived as a cause, an outcome, and a means to achieving a given standard of living in a country (Liu, 2017).

In the beginning of the study of competitiveness, it has been viewed from two different perspectives: the micro (firm) perspective and the macro (nation) perspective. While the former refers to competition among the firms within a nation and its implications in international markets, the later refers to competition among nations. In the micro sense, the ultimate goal of competitiveness is to maintain and increase the real income of its citizens, usually reflected in the standard of living of the country. From this perspective, the competitiveness of a nation is not an end but a means to an end; its ultimate goal is to increase the standard of living of a nation under free and fair market conditions (through trade, production, and

investment). It refers to a country's ability to create, produce, distribute, and/or service products in international trade while earning rising returns on its resources. The macro sense owes its origin to the theory of comparative advantage and subsequent theories. The theory of comparative advantage was an antithesis to the viewpoints of the mercantilists who believed in exports, advocated strict government control of all economic activity, and preached economic nationalism (Liu, 2017).

Silander (1997) proposes that regional competitiveness factors should include: (1) business factors; (2) cost factors; (3) labor costs; (4) infrastructure; (5) RD environment; (6) living environment; and (7) grants and attitudes. Later, Ezeala (2005) reinstates that the level indexes of competitiveness should be constituted by two elements which are supportive institutional and infrastructural framework. Factors include: (1) the degree of internationalization (international orientation) of a country's economy; (2) the size of the country's public indebtedness, especially foreign debt; (3) the level of government borrowing or size of budget deficit; (4) the degree of diversification of export products and markets; (5) the level of protectionist trade barriers a country imposes or removes; (6) the country's financial sector viability (measured by its relative interest rate levels, exchange rate, corporate bond issues, price-earnings ratios, and level of confidence in its banks and financial institutions); and (7) the quality of public infrastructure and utilities.

Competitiveness has become a key public and private sector concern with the intensified scale and scope of cross-border economic transactions. Not only have many large firms restructured or formed external alliance networks to remain competitive, governments have also investigated how to improve their countries' economic performance, and to increase inward investment potential for enhancing competitiveness (Liu, 2017).

Apparently, the debate about definition and measurement of competitiveness is a result of different perspectives from different scholars. Some international organizations such as the World Economic Forum (WEF) and International Institute of Management Development (IMD) rate countries annually on the basis of various competitiveness indicators. Their list includes a large number of macro and micro variables. Their ratings have gained popularity and acceptance. In fact, they have very similar methodology for defining and measuring competitiveness. The World Economic Forum (WEF) assesses the competitiveness landscape of 144 economies, providing insight into their productivity and prosperity by the Global Competitiveness Index, and publishes that in their yearly Global Competitiveness Report (GCR). The index is a combination of data obtained from secondary sources and through primary survey on various macroeconomic and microeconomic dimensions of the economy. According to them, the eight factors that determine the competitiveness of a nation are openness, government, finance, infrastructure, technology, management, labor, and institutions.

The World Economic Forum (WEF), and the International Institute of Management Development (IMD) also rate the competitiveness of about 60 countries and publish their results in the World Competitiveness Yearbook (WCY). In the WCY study, the scoring or ranking of the countries is completed with the help of standardized normal scores based on 338 criteria measuring different facets of competitiveness (IMD, 2014). The criteria used to compute the rankings are grouped into 4 main factors, which again been divided into 20 sub-factors. They are: economic performance, government efficiency, business efficiency, and infrastructure. The WCY also uses both primary and secondary sources to measure the competitiveness score of the countries. The primary source refers to survey data (international/national sources) and the secondary source refers to statistical data (international/national sources). Survey data weigh about 1/3 of the total assessment, while hard statistical data weigh the other 2/3 (IMD, 2014).

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Factors and their measurement of aspects are presented in Table 1 (abstracted from GCR of the World Economic Forum).

In 1999, Macao returned back to mainland China, and becomes a special administrative region (SAR). In 2000, Macao was named “Asia’s economic development potential city” by British Financial Times. In 2005, Historic Centre of Macao was included in the “World Heritage List”, became China’s 31st world heritage. Macao has once again become the focus of world. In 2009, State Council convened an executive meeting, clearly pointed out that Macao should consolidate its position as a world tourism and leisure center.

Now, almost twenty years after the return of Macao SAR to mainland China, there are obvious achievements which have laid the foundation to enhance its international competitiveness, although threats and competition are also getting fierce (Greenwood & Dwyer, 2017).

Place Branding and Competitiveness

Place branding has many synonyms, such as city branding, urban branding, destination branding, nation branding, and place marketing, and so on. Many researchers indicate that there is a relationship between place branding and competitiveness.

Branding is the process of designing, planning and communicating the name and the identity of the product, service or organization in order to build or manage the reputation (Anholt, 2010). Branding is perhaps a powerful marketing weapon available to places to attract diverse visitors. Of course, branding places is different from branding products; it is not possible to approach these tasks in exactly the same way. While all products are affected by external change, places like cities are particularly vulnerable to international politics, economics, terrorism and environmental disasters. But today, one cannot deny

Table 1. Factors of competitiveness

Factor	Aspect of Measurement
Openness	Openness to foreign trade and investment, openness to foreign direct investment and financial flows, exchange rate policy and ease of exporting.
Government	The role of the state in the economy. This includes the overall burden of government expenditures, fiscal deficits, rates of public saving, marginal tax rates and overall competence of the civil service.
Finance	How efficiently the financial intermediaries channel savings into productive investment, the level of competition in financial markets, the perceived stability and solvency of key financial institutions, levels of national saving and investment, and credit ratings given by outside observers.
Infrastructure	The quality of roads, railways, ports, telecommunications, cost of air transportation and overall infrastructure investment.
Technology	Computer usage, the spread of new technologies, the ability of the economy to absorb new technologies and the level and quality of research and development.
Management	Overall management quality, marketing, staff training and motivation practices, efficiency of compensation schemes and the quality of internal financial control systems.
Labor	The efficiency and competitiveness of the domestic labor market. It combines a measure of the level of a country’s labor costs relative to international norms, together with measures of labor market efficiency (e.g. obstacles to hiring and firing of workers), the level of basic education and skills, and the extent of distortionary labor taxes.
Institutions	The extent of business competition, the quality of legal institutions and practices, the extent of corruption and vulnerability to organized crime.

that the methods and techniques of marketing in the business world are being applied to cities and nations. This development as a part of a wider tendency has been noticed and studied by many observers (Green et al. 2016).

In fact, research about the relationship between branding and regional competitiveness is quite rich in the literature. According to Raftowicz (2012), place branding is able to deliver long-term competitive advantage. It is believed that branding activities can positively contribute to enhance macro-competitiveness in the long run. In other words, one of the most important factors influencing competitiveness of a place is place branding. So, the more positive the brand of a destination, the greater the likelihood that the destination attracts more travelers than its competitors. It can be argued that effective destination branding improves destination positioning and competitiveness (Tsiotsou & Goldsmith, 2012). The theoretical notion becomes clear that place branding is an effective means to enhance cities' competitiveness, and many other related aspects. In addition to competitiveness, it also distinguishes cities through distinct image, positioning, and other dimensions.

A study by Xu (2010) reported that Guangzhou is the third largest city in China for a long time. Some potential rivals like Tianjin and Shenzhen may shake the status of Guangzhou in the foreseeable future. In 2010, the Guangzhou Asian Games perfectly integrated Guangzhou city's cultural connotation with the spirit of Asian games, and provided a platform for Guangzhou to enhance its city brand. It offers future opportunities for Guangzhou to compete for the host of future Olympic Games and World Expo. These activities enhance Guangzhou's competitiveness, and maintain Guangzhou as "The National Center City", and the possibility of becoming one of most prosperous cities in the world.

Therefore, it is hypothesized that:

H₇: The better place branding of Macao, the greater the competitiveness of Macao.

Sustainable Development

The World Commission on Environment and Development defines sustainable development as humanity's ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs. This definition is widely recognized and accepted, and is adopted in many textbooks of schools. This definition not only indicates the need of achievement of economic development, but also the consumption method of natural resources which relate to people's lives and future generations. The ecological environment needs to be protected, so that future generations can live in peace and enjoy resources that are sustained. Sertyesilisik & Sertyesilisik (2016) explain that sustainable development is an outcome of economic development and environmental protection. It is a novel development concept. It requires people to abandon old opinions and high-consumed, high-grown, high-wasted production approach.

There are three characteristics of the nature in sustainable development: fairness, persistence, and wholeness. Fairness refers to the fact that every member of the society can choose the development chance fairly. Persistence refers to economic development that always considers the environment protection. Wholeness refers to development and environment protection that is considered as an organic whole (Yi, 2003).

The concept of sustainable development is generated from a book titled "Silent Spring" (Carson, 2002). In 1972, the Rome Club published a book "Limits to Growth" which listed a number of environmental problems because of economic development. In the same year, the first Conference on the

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Human Environment was held in Stockholm, and the concept “world has only one planet” was raised. In 1980, the UN firstly appealed to the whole world that there was a novel concept which is sustainable development. In April 1987, the report “Our Common Future” advocated the principles of sustainable development for the first time. In 1992, “21st Century Agenda” by UN changed sustainable development from concept to identified behaviors. Sustainable development thus becomes a popular topic.

In China, on March 25th 1994, the 15th Executive Meeting of the State Council adopted *the China Agenda of 21st Century --- 21st Century White Paper on Population, Environment and Development*. This is a sustainable program of a big country which has 1.3 billion population, and it also is the world’s first “21st century agenda” issued by country. It indicates that China agrees to take the road of sustainable development. The core of sustainable development is development and it must be scientific. Therefore, China further presented the “Five Balance” report in the 3rd Plenary Session of the 16th Central Committee. The five balances are: the balance of urban and rural development, the balance of regional development, the balance of economic and social development, the balance of harmonious development between man and nature, and the balance of domestic development and opening-up to the outside world. This novel Scientific Outlook on Development also has significant implications to the development of tourism industry in Macao SAR.

Campbell (1996) concludes that “sustainable development” is a difficult concept to come true. There is a triangle which includes three terms: the development, the property, and the resource conflicts of conventional planning strategy. In the center of the triangle is the “sustainable development” which refers to economic growth, social harmony, employment and financial relief and environmental protection etc. He argues that sustainable development needs to meet the three goals at the same time, and that a system needs to be set to keep it effective and positive. As a result, there should be a whole package of redesigning for long-term development including economy and administration policies. For the side of local area development, he proposes that the “mega-event strategy” can be implemented to stimulate all of the local social aspects. For instance, the Olympic Games are the best choice for a city to implement this strategy. Successful examples are: Los Angeles (1984), Atlanta (1996) and Salt Lake City (2002). These cities all achieved a boom and direct benefits of the development included infrastructure, economy, policy etc. Besides, the mega-event brings an enhancement of the future economic growth of the area, and brings the successful building of brand image of the place. These lead to a number of sustainable developments.

However, Hankinson (2001) illustrates that place branding campaigns often get complex and uncertain results because of the limited or short-term funding and tangible resources. It limits the awareness and the differentiation of place branding including elements such as logos, symbols and strap-lines etc. The study argues that cities which can develop the positive brand image successfully, can attract the right resources including heritage and history, the spirit and sense of belief in local residents, associations with specific legacies and attractive place-specific facets.

Foroudi et al. (2016) construct a research framework to indicate the importance of positive brand image building. Brand image has led to the successful transformation of several post-industrial cities, such as New York, Amsterdam and Glasgow. These cities have successfully become vibrant leisure and business tourism destinations. The successes of these cities reflect sustainable development and continuous growth prospects.

Place Branding and Sustainable Development

However, research on the relationship between place branding and sustainable development is limited. Walker (2000) studies the economic development in Benoni, South Africa, and concluded that the creation of a positive brand image is complicated, and a long-term solution is required to deal with this issue. There is little evidence to prove that place brand and place marketing are essential drivers to sustainable development. In fact, there are just a few studies about how successful place branding programs could lead to sustainability. Pedersen (2004) reports that place branding can raise competitive advantage. The research of tourism development in New Zealand (Ryan & Zahra, 2004) and place brand strategies in the Republic of Armenia (Pant, 2005) prove the correlations between sustainability and competitive advantage. A recent study focuses on Liverpool in which Maheshwari et al. (2011) demonstrate that place branding plays an important role in sustainability development.

Although evidence of positive relationship between place branding and sustainable development is weak, sustainable development by itself, is considered to be a good approach to increase visitor numbers, investments, and to develop infrastructures. This research tries to confirm the relationship, and to understand how sustainable development may be affected by place branding.

According to “The Research Report of Beijing Olympic Games and Brand China” (Brand China Industry Union, 2010), the right to host 2008 Olympic Games has a significant meaning for the city brand development of Beijing. “National Capital”, “International City”, “Cultural City”, and “Livable City” are just a few names to re-adjust the position of this ancient city. In order to successfully hold the Olympic Games, the infrastructure, human environment, urban management, and quality of citizens have had significant improvement. As a result, development are sustained, and the reputation of Beijing city brand is greatly enhanced.

Therefore, the following hypothesis is established:

H₈: The better the place branding of Macao, the greater the sustainable development of Macao.

RESEARCH DESIGN AND METHODOLOGY

Based on the literature review in the previous sections, the research framework is developed. It tries to identify the relationships among brand personality, place branding, competitiveness and sustainable development. Hopefully, with an effective place branding strategy, Macao can gain competitive advantages by developing a favorable image in the marketplace. Economic development can be achieved in a balanced and stable way. In short, branding Macao may make a great contribution to build Macao as a world tourist and leisure center, and to ensure Macao to be stable and prosperous in the long run.

Respondents

Respondents were mainly from Macao, mainland China, and other Asia regions. There were altogether 393 (164 male, 229 female) valid responses aged between 18 and 65 years. As regards occupation, some were students and the majorities were fulltime employees in various industries. Among them, 56 had secondary school certificate, 316 had a bachelor’s degree, and 21 a master’s degree or higher. Their monthly income were between MOP10, 000 and MOP35, 000 (equivalent to USD1,280 to USD4,480).

Theoretical Framework

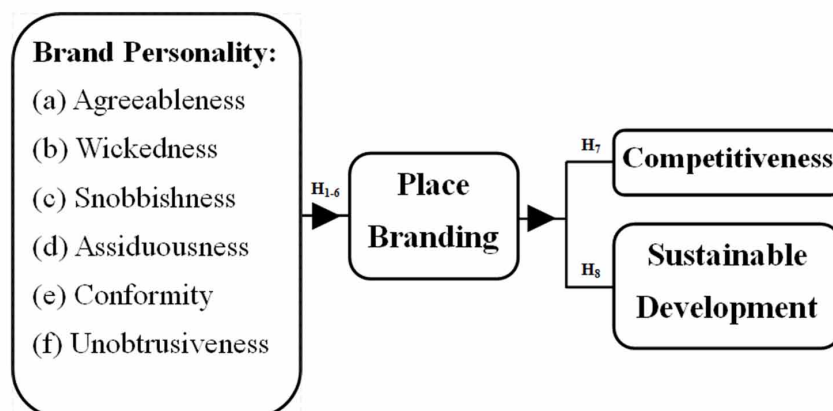
See Figure 1.

Questionnaire

A survey of self-administered questionnaire was used in the Greater China region. The questionnaire consists of 5 part.

1. **Demographics:** This part measures respondents' demographic information, such as gender, age, income and so on.
2. **Place Branding:** This part measures respondents' understanding of place branding in Macao. The scale is adapted from Kemp et al., (2012), Dodds et al., (1991), Netemeyer et al., (2004), Escalas and Bettman, (2003), and Kim et al. (2001). Respondents are asked: to what extent do you agree that these aspects are appropriate for describing the place branding of Macao? Examples are: "my overall attitude toward Macao's place branding efforts is good.", "the government should develop Macao's place branding in more efforts".
3. **Brand Personality:** This part measures respondent's perception of Macao City's personalities. The measure is abstracted from d'Astous and Boujbel (2007). Respondents are asked: to what extent do you agree that this adjective describes Macao? For example, "amusing", "flourishing".
4. **Competitiveness:** This part measures respondents' perception of competitive advantages of Macao. The measurement is introduced by Global Competitiveness Report 2000 of the World Economic Forum. Respondents are asked: to what extent do you agree that these aspects can help Macao gain more competitive advantages? For example, "good quality of overall competence of the civil service", and "high quality on ports".
5. **Sustainable Development:** This part measures respondents' recognition of sustainable development in Macao. The scale is adopted from Nicholas and Thapa (2010). Respondents are asked: to what extent do you agree that these aspects are good for sustainable development of Macao. For

Figure 1. Theoretical framework



example, “focus on big tourism development projects”, “emphasis on gambling to growth in tourism development.”

The questions in the questionnaire are measured by a five-point Likert Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree. The original scales were in English. Translation into Chinese, and a back translation into English were conducted by two bilingual professors at a language school. The professors proved that the two versions are equivalent.

Procedure

During a period of four weeks, 430 questionnaires were distributed in some urban districts in the Greater China region include Macao, mainland China and Taiwan. At the end, a total of 407 copies of questionnaire were collected, yielding a response rate of 94.7%. 393 valid completed questionnaires entered into data analysis. 14 copies were found to be invalid due to incompleteness of too many sections.

RESULTS

Scale Reliabilities

Cronbach’s alpha reliability scores were computed for each of the dimensions of Brand Personality, yielding .88 for Agreeableness, .86 for Wickedness, .81 for Snobbishness, .82 for Assiduousness, .71 for Conformity, and .79 for Unobtrusiveness. Besides, scale reliabilities for Place Branding and two outcome variables (Competitiveness and Sustainable Development) were .82, .95, and .84, respectively. Whereas all the reliability values exceeded the recommended .70 (Nunnally, 1978), all scales demonstrated very good reliabilities.

Correlations

Correlations of Place Branding with all the independent variables (6 dimensions of Brand Personality), and the two outcome variables (Competitiveness and Sustainable Development) were computed. Specifically, Place Branding was significantly and positively correlated with Agreeableness ($r = .41, p < .001$), lending strong support to H1. For Wickedness, Assiduousness and Unobtrusiveness, they had high and negative correlations with Place Branding, ($r = -.21$ to $-.41, ps < .001$), strongly support H2, H4, and H6. Snobbishness was significantly and negatively correlated with Place Branding ($r = -.12, p < .05$), lending negative support to H3. But for Conformity, the correlation was not significant, so H5 was not supported.

With regard to Place Branding and the two outcome variables, Competitiveness was positively and significantly correlated to Place Branding ($r = .53, p < .001$), lending strong support to H7. Likewise, Sustainable Development had significant and positive correlation with Place Branding ($r = .45, p < .001$), strongly support H8.

The correlations together with variable means, standard deviations, and Cronbach’s alpha reliabilities are shown in Table 2.

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Table 2. Means, SDs, Cronbach's Alpha reliabilities, and correlations for the place branding, brand personality (agreeableness, wickedness, snobbishness, assiduousness, conformity, and unobtrusiveness), and outcome variables (competitiveness and sustainable development) (N=393)

Variable	Mean	SD	1	2	3	4	5	6	7	8	9
1. Place branding	3.46	.67	(.82)								
2. Agreeableness	3.48	.66	.41****	(.88)							
3. Wickedness	2.56	.78	-.21****	-.14***	(.86)						
4. Snobbishness	2.85	.64	-.12*	-.07	.58****	(.81)					
5. Assiduousness	3.39	.58	-.41****	.47****	-.16***	-.07	(.82)				
6. Conformity	2.97	.59	.05	.16***	.21****	.21****	.23****	(.71)			
7. Unobtrusiveness	2.88	.65	-.22****	-.13**	.50****	.48****	-.22****	.27****	(.79)		
8. Competitiveness	3.44	.56	.53****	.41****	-.20****	-.09	.43****	.09	-.18****	(.95)	
9. Sustainable development	3.66	.64	.45****	.37****	-.13**	-.13*	.29****	-.02	-.17****	.54****	(.84)

Note: - Significance levels: * $p < .05$ ** $p < .01$ *** $p < .005$ **** $p < .001$

- Numbers in brackets are Cronbach's Alphas

Regressions

Three regressions were run to assess the relative strengths of the relationships between (a) brand personality and place branding, (b) place personality, place branding and competitiveness and (c) place personality, place branding and sustainable development. In each regression, the brand personality variables were entered first, while demographics were controlled.

For the Place Branding scale, a total of 24% of the variance was explained, with 17% explained by Agreeableness, 6% by Assiduousness, and the remaining 1% by Unobtrusiveness, $F(3, 392) = 42.18, p < .001$. The results of the regression lent additional support to H1, H4 and H6.

For Competitiveness, a total of 35% of the variance was explained, $F(3, 392) = 71.48, p < .001$. Place Branding accounted for 28%, while Agreeableness explained 2%, and Assiduousness explained 5%. These results lent further support to H7.

For Sustainable Development, a total of 24% of the variance was explained, $F(2, 392) = 61.27, p < .001$. Place Branding accounted for 20%, while Agreeableness explained 4%. These results lent further support to H8.

Results of the three regressions are shown in Table 3.

Discussions

According to the findings, Agreeableness, Assiduousness and Unobtrusiveness became significant predictors of Place Branding; Place Branding, Agreeableness and Assiduousness were significant predictors of Competitiveness; and Place Branding and Agreeableness were significant predictors of Sustainable Development. The livable, leisure and human touch elements should be further emphasized in the Macao city brand. In addition, it is clear that there is a big opportunity for Macao to explore its' potential connotations and spread the diversification elements in the future.

Table 3. Hierarchical multiple regressions for the place branding, competitiveness and sustainable development (n=393)

	Place Branding	Competitiveness	Sus. Development
Predictors	β ΔR^2	β ΔR^2	β ΔR^2
Agreeableness	.28**** .17	.16*** .02	.22**** .04
Wickedness	-.09	-.07	-.03
Snobbishness	-.02	-.02	-.07
Assiduousness	.25**** .06	.20**** .05	.06
Conformity	-.02	-.01	-.08
Unobtrusiveness	-.13*** .01	-.04	-.07
Place Branding	--- ---	.39**** .28	.36**** .20
Total R ²	.24	.35	.24
Final F	42.18****	71.48****	61.27****
(df)	(3,392)	(3,392)	(2,392)

Note: Betas are standardized values. The df do not always add to N-1 (392) due to listwise deletion of cases with missing data. * $p < .05$; ** $p < .01$; *** $p < .005$; **** $p < .001$.

Brand Personality

Brand personality is the set of personality traits associated with a brand. By interpreting the brand personality of Macao, customers may enhance their visual understanding and recognition of the core values of Macao.

As the research results show, Place Branding was significantly and positively correlated with the Agreeableness, significantly and negatively correlated with the Wickedness, Assiduousness and Unobtrusiveness. This indicates complicated and contradictory perceptions of city customers towards Macao’s personality. A positive and widely accepted Macao city brand may adjust the negative effects, and smooth the paces for future development. Personality of Macao is thus suggested to be strengthen in three aspects, including “Exquisite and Exalted”, “Fantastic and Passionate”, and “Calm and Relaxed”.

1. **Exquisite and Exalted:** The geographic area of Macao is very small. It is one of the world’s most densely populated areas. Its architecture, art, religion, and traditions reflect harmonious integration of the Chinese and Western, particularly the Portuguese cultures. Being a Portuguese colony for more than 400 years, the economy has had a rapid growth since its return to mainland China in 1999. Today, Macao is one of the fastest growing economies in Asia, and a world Top 5 in 2015. The vigorous development of its gambling industry, and a flow of investment in properties push GDP growth at 10 percent increase for five consecutive years (Wang et al., 2017). Therefore, Macao is, perhaps, the best place to show the essence of east meets west with a desired development prospects. Blended with both eastern and western elements, Macao should maintain “small but beautiful”, and to demonstrate its unique fascination.
2. **Fantastic and Passionate:** After the Portuguese found the small island about 400 years ago, Macao had served as an important port for cultural exchange. The ancient and modern features are together shaping the picturesque identity of Macao. On one hand, tourists may be impressed by the classical

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Euro-style buildings, narrow and winding streets, but on the other hand, the breathtakingly towers, luxury hotels, and extravagantly decorated gambling sites make them linger over.

3. **Calm and Relaxed:** Comparing to neighboring regions, no matter how fluctuate the external environment, Macao can find its own development paths to survive. Macao residents tend to be flexible and relaxed. Macao residents have a strong faith in the Macao SAR and the central government of China. Surveys show that they are satisfied with the “one country two systems” model, and express very high level of happiness (Statistics and Census Service of Macau, 2015). Macao’s political stability and fast economic growth have established harmonious atmosphere and hold together different cultural communities.

Place Branding

Indeed, it is difficult to describe the image of Macao in one or two phrases. In the course of 500 years, the unique historical process provides a lot of angles to describe Macao. “Far East Trade Center”, “Las Vegas of the East”, “Monte Carlo of the East”, “World Center of Tourism and Leisure” are some of the descriptions perceived by the public. Today, the most impressive are perhaps the luxury casinos and iconic buildings such as the Galaxy Resort Hotel, and the Ruins of St. Paul’s. Tourists take a photo in front of those buildings to represent a tour experience in a world-famous city, but seem to lack interest to discover and understand the connotations of Macao. This is probably the main reason why Macao cannot get rid of its stereotyped image of a gambling city. In this sense, it is necessary to offer different elements of Macao, and to deliver a new and concise image to the world. Place branding is a process that enhances place image through the experience of place identity and the change of mindsets of place consumers (Anholt, 2010). Macao city brand may be constructed in three dimensions, including: “the core values”, “consumer products” and “city symbol”.

The Core Values

Self-improvement is perhaps the best reflection of Macao’s city spirit. Macao resident’s personality and other cultural characteristics contribute to this distinctive trait. Buddhism, Taoism, Islam, and Catholicism are commonly accepted religions in Macao, a multi-religious integration is thus formed. Chinese, Portuguese, Macanese and other ethnic cultures are respected and blended with one another. Macao remains close relationships with Portuguese speaking nations in all aspects, including: trade and economics, linguistics, architecture, catering, and so on. Having a city development history of about 500 years, Macao is the important stronghold of the Maritime Silk Road, the earliest open port of Ming Dynasty, the first missionary center in the Far East, and the earliest base of east and west cultural exchange. Being a Special Administrative Region, Macao plays an important role in the economy of the region. It has strengthened its cooperation with the Pearl River Delta (PRD) in mainland China, and strives to transform itself into “one center” (A World Center of Tourism and Leisure) and “one platform” (A Services Platform for Trade Cooperation between China and Portuguese-Speaking Countries) under president Xi’s “One Belt One Road” guidance.

Consumer Products

According to the findings of the survey, it can be seen that the city consumer products include tourism, investment, and talent attraction.

Tourism

Gambling industry is the pillar industry of Macao. It has been dominating the economic development for a long time, and nearly 80% of government revenue comes directly from tax on gambling. Due to central government's fight against corruption and money laundering, plus visa restrictions, the gambling revenue of Macao fell 2.6% in 2014 to MOP 352 billion (Statistics and Census Service of Macau, 2015). Moreover, because of the fierce competition from neighboring Asian countries, it is risky for Macao to continually rely on gambling industry to support the economic growth in the foreseeable future. Macao has been stereotyped as a gambling hub for a long time, its rich historical and cultural features are often being ignored despite Macao SAR government's re-positioning strategies. Macao, therefore, needs to emphasize other aspects of tourism, apart from the gaming industry. Cultural experience and sightseeing; recreation and leisure; and conference and exhibition.

Cultural Experience and Sightseeing

The co-existence of eastern and western cultures in Macao reflects continuous open door policy of China. It is the essence of mutual respect and tolerance of different cultures and civilizations. The architecture not only reflects designers own values, but also the city's spirit and temperament. Thus unique cultural experience of Macao has already integrated into the city's life. So, it is essential to present the humanity connotation, and promote traditional festivals to refresh memories of the city, and to strengthen the uniqueness. Tourists from all over the world would regard Macao as an outdoor museum which provides rich cultural experience.

Recreation and Leisure

Macao is one of the fastest developing regions in the world, and is now going through transfer from rapid to steady growth rate. Therefore, a new term is used to describe Macao's current state. The "new normal state" refers to the fact that bottleneck for economic development has been overcome by smooth paces. Strategic adjustment of the economic structure has been made to weaken government's heavy reliance on gambling. In the new era, Macao strive to promote "non-gambling elements" such as leisure facilities, shopping, performances and catering. Since there is no entertainment tradition in Macao, there is a big challenge to establish Macao as a family entertainment hub, and it requires distinctive marketing approaches to ensure its success. In recent years, some new landmarks, such as the Grand Canal Shoppes of the Venetian, the House of Dancing Water of the City of Dreams, and the Music Fountain of Wynn Macao have attracted a considerable number of tourists. However, cultural creative activities are still at the beginning stage. There is a huge potential for Macao to attract more customers with a holistic view of all elements combined.

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Conference and Exhibition

MICE (Meeting, Incentive, Conference, and Exhibition) is an important emerging industry in Macao which promotes diversification and strategic transformation of Macao's economy (Whitfield et al., 2014). Although Macao Government has decided to build Macao as an ideal location for MICE with world class convention and exhibition facilities, Macao is still struggling to change its image from a one-day destination. There is a clear difference between what is being promoted and what is actually being perceived by travelers. Moreover, the MICE industry in Macao operates in a highly competitive region where two well-established and globally recognized MICE centers – Hong Kong and Guangzhou are only mile away. Therefore, the MICE industry in Macao needs to raise its recognition, and increase collaboration with all stakeholders. Furthermore, a creative communication strategy seems necessary.

Investment Product

Macao is one of the members of the World Trade Organization (WTO). Economic openness and freedom without any barriers lay a solid foundation for trade and investment in Macao. Goods, capital and personnel enter and leave freely. Also, approval of the establishment of a company is comparatively simple. Macao's independent tariff policy ensures simple and low taxation system, and broad international market network. In addition, Macao is the beneficiary of the Mainland and Macao Closer Economic Partnership Agreement (CEPA). After Macao's returned back to China in 1999, the "Individual Visit Scheme" began, and Macao enters into a rapid growth path. The economic indicators such as visitor arrivals, retail sales and median income are significantly increased, while the unemployment rate remains at a relatively low level. However, the rapid economic development has caused rental expenses to increase dramatically, and a shortage of qualified human resources. As a result, competition and threats from the external environment make it difficult for entrepreneurs to start up business. Recently, Macao has taken up the role of a regional trade and economic service platform. Further regional co-operation would help enterprises gain more competitive advantages and enrich connotations of Macao.

Talent Attraction

The Macao SAR government insists to improve residents' living standard, and share the city's economic boom with all stakeholders as massive tax revenue (mainly from the gaming industry) pours in. In Macao, residents enjoy a wide range of social benefits and subsidized health care, education and housing. According to the 100 Greater China City urban livability index in 2014 (National University of Singapore, 2014), Macao is the most livable city in Greater China, surpassing Hong Kong, Beijing, Shanghai and Guangzhou on five indicators: economic competitiveness, environment and sustainability, domestic security, socio-cultural conditions and public governance. Because many large scale projects are under construction, and there is an enormous potential in the regional cooperation, it is important for Macao to attract and retain all sorts of talents who are determined to realize their ambition, and to fulfill Macao's long term objectives.

City Symbol. Name and logo are key components of brand identity because they are the most pervasive elements in corporate and brand communications, and they provide instant recognition of the brand. In its long history, Macao has been a calm and peaceful place, and gradually earned a reputation of “the land of the treasure lotus”. Macao is described as a lotus that floats in the open sea, and has been called a lotus island for a long time. Due to its unique shape of territory, most Macao people believe that Macao is the reincarnation of a lotus flower that protects Macao from social crisis and wars, cataclysms and plagues.

In China, lotus flower is personified as a noble character. According to “Ai Lian Shuo”(I love lotus)- a famous poem in Song Dynasty, lotus flower grows under muddy water but blooms clean and pure. People love lotus because lotus symbolizes good fortune, peace and holiness. So the use of lotus as the identity of Macao city brand may reduce the gaming image of Macao, and increase some cultural elements to regard Macao as a holy, peaceful, and beautiful city. Besides lotus, the Ruins of St. Paul’s, one of the most important heritages of the colonial era, symbolizes Macao’s history of several hundreds of years. The Ruins of St. Paul’s in the city symbol represents Macao’s unique multicultural identity, and its determination as a provider for trade and economic co-operation between China and Portuguese speaking countries.

Competitiveness and Sustainable Development

Since Macao liberalized gaming industry in 2002, revenue has been increasing steadily and surpasses that of Las Vegas. The size of the economy, which relies heavily on gaming industry, has increased more than 5 times than before. However, due to the China central government’s fight against corruption, and neighboring regions’ development of gaming center, an economic slow-down begins to emerge. This again proves that the establishment of an effective Macao city brand can highlight cultural identity, and adjust Macao’s international image, and moreover, can attract more tourists, investment, and talents, and reduce the dependence on gaming industry.

Schwab (2010) regards competitiveness as the set of institutions, policies, and factors that determine a region’s productivity. According to the survey findings, future development of Macao should be in line with the brand personalities. Macao’s international competitiveness may be enhanced by sustainable development.

Macao is a small place with 328 square kilometers of land, and 85 square kilometers of sea. In order to achieve maximized investment, and raise the residents’ living standard, it is necessary to develop high value-added industry (But, 2017). As natural and human resources are very limited, it is better to further develop service industry which does not demand for area and number of people at much. Moreover, to pursue high quality, high efficiency and environmental protection ensures sustainability and the goal of being “small but beautiful”.

In order to diversify its economy and maintain competitive advantages, Macao’s city brand should be extended to cover integrated elements as a whole.

Limitations and Future Research

“Place Branding” is a relatively new research topic in Macao. Due to limited resources and a tight schedule, only 393 valid samples were collected. Future research shall collect data randomly from multi-level and multi-sources. Besides, more variables may be explored in the theoretical framework to obtain more prediction of Macao city brand, and more outcome variables may be assessed to test the importance of

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place branding. This study adopts quantitative method, future research may compliment questionnaire survey with qualitative methods such as interviews and target groups to obtain better understanding of more comprehensive and in-depth ideas and perceptions. Last but not least, a series of longitudinal studies may be necessary to validate Macao's city brand, and to show its profound and lasting influence to all aspects.

CONCLUSION

Macao is entering into a “new normal state”, featuring a transfer from high economic growth rate to a medium and steady growth stage. It is necessary to have a strategic adjustment of the economic structure and promote diversified development. Although the construction of infrastructure in Macao has reached a high standard, the establishment of soft cultural power becomes critical in the foreseeable future. Therefore, branding Macao may make a great contribution in transforming the inherent impression – a pure gambling city to a diversified city with a rich and concise cultural connotation image.

Based on this research results, it can concluded that brand personality is the integral part of Macao's city brand. Macao is characterized as “Exquisite and Exalted”, “Fantasy and Passionate” and “Calm and Relaxed”. In other words, Macao may build a favorable brand on the basis of these connotation features. The core values of the city reflect Macao's vision and missions. Consumer product is a core part of Macao city brand as well. Tourism, investment, and talent attraction are some tangible criteria that can be measured periodically. City Symbol is the first sight representative of Macao city brand which differentiates Macao from other cities, and should be well-recognized by citizens and visitors. The use of lotus flower as the identity of Macao city brand may dilute the gaming image of Macao, in the meanwhile, reinforce the cultural characteristics. City brand is the most significant predictor of competitiveness and sustainable development. The gaming industry together with other hospitality sectors may benefit from a well-established city brand. The establishment of an effective Macao city brand is, therefore, one of the most urgent and challengeable tasks that the special administrative government need to fulfill.

REFERENCES

- Aaker, J. L. (1997). Dimensions of brand personality. *JMR, Journal of Marketing Research*, 34(3), 347–356. doi:10.2307/3151897
- Ahmad, A., & Thyagaraj, K. S. (2014). Brand Personality and Brand Equity Research: Past Developments and Future Directions. *IUP Journal of Brand Management*, 11(3), 19–56.
- Anholt, S. (2010). Definitions of place branding - Working towards a resolution. *Place Branding and Public Diplomacy*, 6(1), 1–10. doi:10.1057/pb.2010.3
- Banerjee, S. (2016). Influence of consumer personality, brand personality, and corporate personality on brand preference: An empirical investigation of interaction effect. *Asia Pacific Journal of Marketing and Logistics*, 28(2), 198–216. doi:10.1108/APJML-05-2015-0073
- Brand China Industry Union (2010). *The Research Report of Beijing Olympic Games and Brand China*. Author. (in Chinese)

- Browning, C. S. (2016). Nation branding and development: Poverty panacea or business as usual? *International Journal of Relations and Development*, 19(1), 50–75. doi:10.1057/jird.2014.14
- But, J. W. P., & Ap, J. (2017). The impacts of casino tourism development on Macao residents' livelihood. *Worldwide Hospitality and Tourism Themes*, 9(3), 260–273. doi:10.1108/WHATT-02-2017-0011
- Campbell, S. (1996). Green cities, growing cities, just cities? Urban planning and the contradictions of sustainable development. *Journal of the American Planning Association*, 62(3), 296–312. doi:10.1080/01944369608975696
- Carson, R. (2002). *Silent spring*. China Travel & Tourism Press. (in Chinese)
- Chan, C. S., & Marafa, L. M. (2016). The green branding of Hong Kong: Visitors' and residents' perceptions. *Journal of Place Management and Development*, 9(3), 289–312. doi:10.1108/JPMD-02-2016-0008
- Chan, C. S., Peters, M., & Marafa, L. M. (2016). An assessment of place brand potential: Familiarity, favourability and uniqueness. *Journal of Place Management and Development*, 9(3), 269–288. doi:10.1108/JPMD-01-2016-0003
- d'Astous, A., & Boujbel, L. (2007). Positioning countries on personality dimensions: Scale development and implications for country marketing. *Journal of Business Research*, 60(3), 231–239. doi:10.1016/j.jbusres.2006.11.005
- Dobni, D., & Zinkhan, G. M. (1990). In search of brand image: A foundation analysis. *Advances in Consumer Research*. Association for Consumer Research (U. S.), 17(1), 110–120.
- Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of price, brand and store information on buyers' product evaluations. *JMR, Journal of Marketing Research*, 28(3), 307–319. doi:10.2307/3172866
- Escalas, J. E., & Bettman, J. (2003). You are what they eat: The influence of reference groups on consumers' connections to brands. *Journal of Consumer Psychology*, 13(3), 339–348. doi:10.1207/S15327663JCP1303_14
- Ezeala-Harrison, F. (2005). On the competing notions of international competitiveness. *Advances in Competitiveness Research*, 13(1), 80–87.
- Foroudi, P., Gupta, S., Kitchen, P., Foroudi, M. M., & Nguyen, B. (2016). A framework of place branding, place image, and place reputation: Antecedents and moderators. *Qualitative Market Research*, 19(2), 241–264. doi:10.1108/QMR-02-2016-0020
- Green, A., Grace, D., & Perkins, H. (2016). City branding research and practice: An integrative review. *Journal of Brand Management*, 23(3), 252–272. doi:10.1057/bm.2016.8
- Greenwood, V. A., & Dwyer, L. (2016). Reinventing Macau tourism: Gambling on creativity? *Current Issues in Tourism*, 20(6), 580–602. doi:10.1080/13683500.2016.1187585
- Hankinson, G. (2001). Location branding: A study of the branding practices of 12 English cities. *Journal of Brand Management*, 9(2), 127–142. doi:10.1057/palgrave.bm.2540060
- Harrison-Walker, L. J. (2012). Place brands and the relational branding communication process. *Academy of Marketing Studies Journal*, 16(Supplement 4), 51–59.

A Study of Place Branding of Macao

Hosany, S., & Ekinci, Y. (2006). Destination personality: An application of brand personality to tourism destinations. *Journal of Travel Research*, 45(2), 127–139. doi:10.1177/0047287506291603

Hosany, S., Ekinci, Y., & Uysal, M. (2006). Destination image and destination personality: An application of brand theories to tourism places. *Journal of Business Research*, 59(5), 638–642. doi:10.1016/j.jbusres.2006.01.001

Kaplan, M. D., Yurt, O., Guneri, B., & Kurtulus, K. (2010). Branding places: Applying brand personality concept to cities. *European Journal of Marketing*, 44(9/10), 1286–1304. doi:10.1108/03090561011062844

Kemp, E., Childers, C. Y., & Williams, K. H. (2012). Place branding: Creating self-brand connections and brand advocacy. *Journal of Product and Brand Management*, 21(7), 508–515. doi:10.1108/10610421211276259

Kerr, G. (2006). From destination brand to location brand. *Journal of Brand Management*, 13(4-5), 276–283. doi:10.1057/palgrave.bm.2540271

Kim, C. K., Han, D., & Park, S. B. (2001). The effect of brand personality and brand identification on brand loyalty: Applying the theory of social identification. *Japanese Journal of Psychological Research*, 43(4), 195–206. doi:10.1111/1468-5884.00177

Kotler, P., & Gartner, D. (2002). Country as brand, products, and beyond: A place marketing and brand management perspective. *Journal of Brand Management*, 9(4/5), 249–261. doi:10.1057/palgrave.bm.2540076

Kotler, P., Nebenzahl, I. D., Lebedenko, V., Rainisto, S., Gertner, D., Clifton, R., & Aaker, D. (2004). Where is place branding heading? *Place Branding and Public Diplomacy*, 1(1), 12–35. doi:10.1057/palgrave.pb.5990002

Liu, C. (2017). International competitiveness and the fourth industrial revolution. *Entrepreneurial Business and Economics Review*, 5(4), 111–133. doi:10.15678/EBER.2017.050405

Maheshwari, V., Vandewalle, I., & Bamber, D. (2011). Place branding's role in sustainable development. *Journal of Place Management and Development*, 4(2), 198–213. doi:10.1108/17538331111153188

National University of Singapore (2014). *Liveability Ranking and Simulation Studies on 100 Greater China Cities*. Author.

Netemeyer, R., Krishnan, B., Pullig, C., Wang, G., Yagci, M., Dean, D., ... Wirth, F. (2004). Developing and validating measures of facets of customer-based brand equity. *Journal of Business Research*, 57(2), 209–244. doi:10.1016/S0148-2963(01)00303-4

Nicholas, L., & Thapa, B. (2010). Visitor perspectives on sustainable tourism development in the pitons management area world heritage site, St. Lucia. *Environment, Development and Sustainability*, 12(5), 839–857. doi:10.1007/10668-009-9227-y

Niu, X. Y. (2005). *The Character of Chinese City*. Beijing: China Material Publishing House. (in Chinese)

Nunnally, J. C. (1978). *Psychometric theory*. McGraw-Hill.

- Pant, D. R. (2005). A place brand strategy for the Republic of Armenia: “quality of context” and “sustainability” as competitive advantage. *Place Branding and Public Diplomacy*, 1(3), 273–282. doi:10.1057/palgrave.pb.5990028
- Pedersen, S. B. (2004). Place branding: Giving the region of Oresund a competitive edge. *Journal of Urban Technology*, 11(1), 77–95. doi:10.1080/1063073042000341998
- Peighambari, K., Sattari, S., Foster, T., & Wallstrom, A. (2016). Two tales of one city: Image versus identity. *Place Branding and Public Diplomacy*, 12(4), 314–328. doi:10.1057/pb.2015.25
- Raftowicz-Filipkiewicz, M. (2012). Nation branding as an economic challenge for the countries of the middle and east Europe on the example of Estonia. *Equilibrium*, 7(4), 49–59. doi:10.12775/EQUIL.2012.026
- Ryan, C., & Zahra, A. (2004). The politics challenge: the case of New Zealand’s tourism organizations. In N. Morgan, A. Pritchard, & R. Pride (Eds.), *Destination Branding: Creating the Unique Destination Proposition* (pp. 79–110). Oxford, UK: Butterworth-Heinemann.
- Saeida, S., Ghaseminezhad, M., Pakdel, M. R., & Rezaei, A. K. (2017). The Effect of Brand Personality on Consumer Loyalty and Buying Intention. *International Journal of Economic Perspectives*, 11(1), 1270–1281.
- Sarabia-sanchez, F. J., & Derda-bertomeu, M. J. (2017). Place brand developers’ perceptions of brand identity, brand architecture and neutrality in place brand development. *Place Branding and Public Diplomacy*, 13(1), 51–64. doi:10.105741254-016-0017-7
- Saraniemi, S. (2011). From destination image building to identity based branding. *International Journal of Culture, Tourism and Hospitality Research*, 5(3), 247–254. doi:10.1108/17506181111156943
- Schwab, K. (Ed.). (2010, September). *The global competitiveness report 2010-2011*. Geneva: World Economic Forum.
- Sertyesilisik, B., & Sertyesilisik, E. (2016). Eco industrial Development: As a Way of Enhancing Sustainable Development. *Journal of Economic Development, Environment and People*, 5(1), 6–27. doi:10.26458/jedep.v5i1.133
- Sheng, M., & Gu, C. (2018). Economic growth and development in Macau (1999-2016): The role of the booming gaming industry. *Cities (London, England)*, 75, 72–80. doi:10.1016/j.cities.2018.01.003
- Silander, M. T. (1997). The new regional policy and the location of the firm’s behavior. Central Finland Economic Research Publications 142.
- Statistics and Census Service of Macau. (2015). *Statistics*. Author.
- Tsiotsou, R. H., & Goldsmith, R. E. (Eds.). (2012). *Strategic Marketing in Tourism Services*. Emerald Group Publishing.
- Viot, C. (2011). Can brand identity predict brand extensions’ success or failure? *Journal of Product and Brand Management*, 20(3), 216–227. doi:10.1108/10610421111134941

A Study of Place Branding of Macao

Walker, M. (2000). Place marketing and local proactivity in the economic development of Benoni. *Urban Forum Journal*, 11(1), 73–99. doi:10.1007/BF03036832

Wan, Y. K. P., & Li, X. (2011). Sustainability of tourism development in Macao, China. *International Journal of Tourism Research*, 15(1), 52–65. doi:10.1002/jtr.873

Wang, X., Shen, H. W., Cui, W. J., Li, X., & Chen, Y. (2017). Crisis and opportunity of Macao gambling industry-based on the history of gambling industry in Macao. *Journal of Business Theory and Practice*, 5(4), 281–292.

Whitfield, J., Dioko, L. A. N., Webber, D., & Zhang, L. (2014). Attracting convention and exhibition attendance to complex MICE venues: Emerging data from Macao. *International Journal of Tourism Research*, 16(2), 169–179. doi:10.1002/jtr.1911

World Competitiveness Yearbook. (2014). *IMD business school*. Author.

Xu, Y. (2010). *What does Asian Games bring to Guangzhou? The researcher of Academy of Social Sciences: Enhance the city brand*. *Southern Metropolis Daily*. (in Chinese)

Yi, B. Z. (2003). Study on the Sustainable Development Principle and the Regional Development. [in Chinese]. *Population Journal*, 140(4), 4.

Zhang, Y. Y., Song, H. J., & Park, K. S. (2016). A study on tourism experiences and satisfaction to Macao casinos. *International Journal of Tourism and Hospitality Research*, 30(10), 83–95. doi:10.21298/IJTHR.2016.10.30.10.83

Chapter 17

New Silk Road: Trade and Investment Perspectives for EU and New Partnerships – Global Value Chain Model of China

Maria Fernanda Pargana Ilhéu
Lisbon University, Portugal

ABSTRACT

China feels that by being the second world economy it has the moral obligation to actively contribute to a new conceptual model of world economic development. China proposes to develop global value chains led by Chinese companies. Investment and trade cooperation is a major task in implementing this initiative and the removal of investment and trade barriers as well as the opening up of free trade areas are targets to unleash the potential for expanded cooperation. In physical terms, it is a huge logistical and infrastructure project to link Europe and China with six land routes and one maritime silk road, but it is much more than this, because this vision comes embedded into the Confucian ideal of harmony and no uniformity abiding by political consensus with moral content on how different ethnic groups and different states can coexist and cooperate peacefully in a global project, fulfilling the Chinese dream of a harmonious world and a harmonious society.

GLOBALIZATION AND CHINA

The Davos World Economic Forum Annual Meeting 2016 conclusions were that inclusive growth is a big global challenge, and the rising of income inequality was appointed as a cause for economic and social problems, from low consumption to social and political unrest. Participants referred that several years after the 2008 crisis, the world economy was still struggling with slow growth, the labor market was showing a mismatching, with a need of 500 million jobs till 2020 for unemployed people around the globe and at the same time a shortage of skilled people that the businesses were looking for. International trade and investment were considered vital drivers for economic growth.

DOI: 10.4018/978-1-5225-7095-0.ch017

New Silk Road

In his Davos Forum 2017 speech, President Xi Jinping recognized that *“The global economy has remained sluggish for quite some time. The gap between the poor and the rich and between the South and the North is widening. The root cause is that the three critical issues in the economic sphere have not been effectively addressed”*. He went on to identify these three root causes as being: the lack of driving forces for global growth, the inadequate global economic governance and the uneven global development. Essaying an answer to these problems he placed China as the leader of globalization process, taking the perspective that the US is clearly initiating a protectionist movement. He affirmed *“If the U.S. does take a more mercantilist route, overall the Asians and Europeans will have to combine to preserve global free trade”* and he added *“We must remain committed to developing global free trade and investment, (and) promote trade and investment liberalization,”*. He assumed that globalization has problems and threats, however he also mentioned the positive aspects saying *“China has not only benefited from economic globalization but also contributed to it. Rapid growth in China has been a sustained, powerful engine for global economic stability and expansion”*.

Integration of China in Global Value Chains

According to the World Bank, the first 38 years of the China Economic Reform took 700 million people out of poverty in China, at the same time benefiting the economy of the Global South due to the integration of the Transnational Corporations (TNCs) Global Value Chains (GVCs) with China. China has already made a fundamental contribution to the present globalization process and has also benefited highly from this process by becoming the final stage of the GVCs production networks in Asia. In 2012 the processing trade units based in China imported 60% of the components incorporate in their production from Japan, South Korea, Taiwan and other Asian countries, and they exported 17.1% of their final production to the USA, 16.3% to EU and around 41% to Asian Countries.

Chinese government understood the economic rationale of GVCs, as well as that of the Flying Geese Model and Foreign Direct Investment Eclectic Paradigm and introduced policies to attract foreign capital, technology, production, and foreign buyers.

In GVCs, intermediate goods and services are traded in fragmented and internationally-dispersed production processes. GVCs establish trade flows of intermediary goods and services between different places in the world and are incorporated at various stages in the production process of goods and services for the final consumer, typically being coordinated by TNCs. This cross-border trade of inputs and outputs takes place within the networks of affiliates, contractual partners and arm's-length suppliers. Presently TNCs coordinated GVCs accounted for some 80% of global trade in goods and services, whereas it had been around 60% in 2013, 49% in 2011 and 36% in 1995 (World Investment Report, UNCTAD 2013; International Statistics 2015). This shows the progressive trend of countries to specialize in particular stages of good's production (known as vertical specialization), brought about by foreign direct investment, that thus create new trade opportunities.

WIR (2013) defends that GVCs have been important for the economic growing of developing countries, contributing on average to 30% of the GDP of these countries whilst its contribution to the income of the developed countries was around 18%. The WIR also considers that a positive correlation exists between participation in the GVCs and growth rates of GDP per capita, as these chains have a direct economic impact on the added value, employment and income of the countries where they operate.

Global investment and trade are thoroughly entwined in international production networks. This is especially true of TNCs investing in productive assets worldwide, as they manage trading inputs and

outputs in cross-border value chains which are often highly complex. Such value chains (intra-firm or inter-firm, regional or global) transfer technology and knowledge, facilitated by trade with intermediates and Foreign Direct Investment which made it possible for developing countries in 70's, such as Korea, Taiwan, Hong Kong and Singapore to move up the product ladder in terms of capital intensity and quality. At the same time, the industrialization of these countries or territories gave rise to an increase in wages, which, in turn, triggered the outsourcing of unskilled labor-intensive tasks to China, Thailand, the Philippines, Indonesia and Malaysia after 1990.

The integration of GVCs in China transformed this country into the biggest buying market of many resources and energy suppliers from less-developed countries in Asia, Africa and South America. The synergy of Chinese model was also highly beneficial for the power consumption of millions of European and American low and middle classes citizens, who were able to buy cheap products made in China.

Akamatsu (1962) Flying Geese Model explains that this industrial development process as a result of the interaction between developing and the developed countries, concluding that technology and production fly away from the more advanced countries to the less-developed ones, making use of international labor division based on dynamic comparative advantages. In Asia the leader geese were considered to be from Japan followed by the Dragons, after this the Tigers and then China, followed by Vietnam, Cambodia, etc.

The economic rational of the GVCs obliges companies to create their own specific advantages, because these advantages will be critical for the acceptance clients' products, and subsequently for their success in international markets. According with Dunning Eclectic Paradigm (1980; 1988) these companies that supply a particular market are chosen by their ownership of specific advantages, and it is these companies that choose the production location of the products that they are going to supply, according to the countries' specific local advantages, which can be; labor costs, resources, knowledge, infrastructures, trade facilities or taxes incentives, all of which fall into the company's country of origin or other parts of the world, and which obliges countries to create specific local advantages. As referred to above countries' specific advantages today are far more complex than just the cost of labor, which thus oblige countries to offer competitive business environments to attract the inward investment of the transnational companies with ownership advantages, which can then choose them as the production location.

During the 1st Phase of China's globalization process, China's political leaders concentrated their policies on attracting the Direct Foreign Investment of TNCs in China, be they American, European, Japanese, Overseas Chinese, Korean, or others, in order to bring investment, technology and the setting-up of markets. At the beginning, these investments were in intensive low-cost export-oriented sectors, as China's leaders believed that if China knew how to tap the advantages of backwardness in technology, industry, and social and economic institutions, by pursuing a structural transformation, it could grow at an annual rate several times more than that of high-income countries (Lin, 2011).

In 1979 when Deng Xiao Ping initiated a structural economic transformation with the "Reform and Open-Door" and "Four Modernizations" policies, the per capita income of China was US\$182. Thirty-five years later, the per capita income was US\$ 7900, as an output of GDP annual growth rates of 9.9% in media. This strategy accepted that the added-value that remain in China, albeit very small it was very important for providing jobs to millions of Chinese in order to take them out of the absolute poverty line. Other policies taken during the first 35 years of the China Economic Reform, were equally important, such as the "Grasp the Big Let Go the Small", the "Socialist Market Economy", the "Go West" and the "Go Global" to transform Chinese economy in the second biggest in the world.

New Silk Road

This first stage of globalization gained considerable momentum in 2001, when China joined the World Trade Organization (WTO). Indeed, it could be said that a new world economic order began at this date, placing China at the center of the world. Just before China joined the WTO, the percentage of Chinese exports carried out by Foreign Investment Enterprises (FIEs) was around 60%, most of these exports (60%) being manufactured by processing trade units that imported from between 50% to 80% of the exported incorporated value that make up foreign products and parts in 2016, the percentage of Chinese exports carried out by FIEs being 43.7%, with just 34% being manufactured by processing trade units that imported only 24.9% of the final value exported. To a degree, China has increased its participation in GVCs in another way, whereby the percentage of value added in China is significantly higher. For, whereas at the beginning Chinese exports were driven by transnational foreign companies with investments in China, this role now belongs more-and-more to Chinese companies.

But this model doesn't produce anymore such high rates of growth, and Chinese domestic economy signs that China has to avoid middle income trap, raise income per capita, reduce inequality, grow up more based on domestic consumption and less in exports and investment, achieve a sustainable economic development, created by leading global value chains and by leading innovation, all together reducing pollution and guarantying energetic securitization. This new economic model indicates that the objective of Chinese economic policies is not any more integrate GVCs in China but lead them in the world and do it in an ecological way.

China and the World Are Interdependent: The New Silk Road - BRI

Since China and the World are interdependent, China feels that by being the world's second biggest economy, it now has the moral obligation to actively contribute to a new conceptual model of world economic development. In China's vision, the world needs a more integrated and globally-controlled world economic model, to achieve a more dynamic and balanced growth, where China must assume global responsibilities. China wants to have a role in the decision-making of the rules of the relationship model for the world's countries, especially regarding international organizations and regional integration policy. The world can expect a higher integration of China in the global economy (Angang, 2015, p.8). According with this author the more integrated is the Chinese economy more it will act as a global stabilizer, as it happens in 2008, when the aggressive economic stimulus plan of Chinese government positively contributed to the global recovery.

To enhance this new stage of globalization China launched the initiative "One Belt One Road and the 21st-Century Maritime Silk Road", also referred in literature as New Silk Road or simply Belt and Road Initiative (BRI). This initiative that was announced by Chinese President in 2013. According with the 'Vision and Actions in Jointly Building Silk Road Economic Belt and 21st Century Maritime Silk Road' published in March 2015, by National Development and Reform Commission (NDRC) and the Ministry of Commerce of PRC "*The initiative will enable China to further expand and deepen its opening-up, and to strengthen its mutually beneficial cooperation with countries in Asia, Europe and Africa and the rest of the world*".

Winter (2016) refers BRI as "*the most significant and far-reaching initiative that China has ever put forward*" and mention five major goals for this initiative policy coordination; facilities connectivity; unimpeded trade; financial integration; and people to people bonds.

The justification presented by NCRD of the Chinese Government to create BRI is centered in the complex and profound changes that have affected world as well as the 2008 crisis, which continues to impact the world with slow economic growth recovery, and uneven global development as well as the difficulty felt by many countries in their development process as was referred above on Davos 2016 conclusions and in Davos 2017 speech of Xi Jinping.

The need of a new domestic economic model in China already referred above should also be considered as an important justification for the creation of this initiative, though not expressed by NCRD. In fact, China New Normal growth rate hides a domestic economic downturn, with high economic voltage, massive liquidity applied in speculative economy, housing bubble, excess capacity in the industrial sector (mainly linked to construction) and nonperforming bank loans. Investment and trade cooperation is a major task in implementing this project and the removal of investment and trade barriers and the opening up of free trade areas are targets to unleash the potential for expanded cooperation. Unimpeded trade will be facilitated by a network of free zones trade, throughout the countries of BRI which in that way can interconnect their development strategies, complementing their competitive advantages.

China has been acting in a proactive way during the world process of globalization, which has led to the creation of integrated regional economic spaces as the ASEAN – China Free Trade Area; the Regional Comprehensive Economic Partnership (RCEP); the CEPA-Closer Economic Partnership Agreement, the Shanghai Cooperation Organization and; the Euro-Asia Free Trade Zone which has a larger geographic scope and is presently on the agenda for talks with the EU.

During its current globalization phase, China's mode of entry in the international markets is being achieved through Outward Foreign Direct Investment (OFDI), mostly in the form of Mergers and Acquisitions (M&A). According to China Global Investment Tracker combined Chinese investment and construction overseas is worth over US\$1.8 trillion in 2017.

China's new globalization strategy is well noted and felt in Africa, South America, Middle East, Europe and the USA, as mentioned by Neil Shen in his book 'Sequoia's Capital' where he states "*today it's not just copycats...China will expand, through its own innovations and through acquisitions.*" (Economist 12/09/2015). China adds Foreign Aid to less developed countries, to this entry mode, practicing 'soft power diplomacy'. Additionally to promote a favorable environment for this expansion strategy, China signed Global Strategic Partnership Agreements with around 47 countries and three international organizations, namely: European Union (EU); Association of Southeast Asian Nations (ASEAN), and; African Union (AU) (Zhongping & Jing, 2014).

President Xi Jinping based the structure of China's global diplomatic action for the coming years on the BRI project, basically choosing two ways of linking China to Europe, one by land – "the Belt", the other by sea – "the Road"- the 21st-Century Maritime Silk Road.

The Belt includes development areas in the north of China linking Chongqing in China to Duisburg in Europe, with stretching routes to the south to integrate six inland economic development corridors, namely;

1. China-Mongolian-Russia Economic Corridor,
2. New Euro Asian Land Bridge Economic Corridor,
3. China-Central Asia-West Asia Economic Corridor,
4. Bangladesh-China- India- Myanmar Economic Corridor,
5. China - Pakistan Economic Corridor,
6. China-Indochina Peninsula Economic Corridor.

New Silk Road

This initiative involves the economic integration with China of important energy and commodity-supplier countries in Asia like Turkmenistan, Kazakhstan and Uzbekistan, Pakistan and Russia in hubs of cooperation platforms, with inland distribution logistic networks, infrastructures and industrial parks.

The 21st-Century Maritime Silk Road begins in the South of China heads along the South China Sea, embraces Indochina, Southeast Asia and then goes across the Indian Ocean and across the Mediterranean to the Atlantic Ocean, circumventing the Iberian Peninsula until Duisburg touching on its way some other ports in Africa, Middle East, and Europe. China's economy is highly dependent on the Ocean, with 90% of its external trade being carried out by sea. Indeed, China has 19% of the global market for maritime transport and 22% for containerization. The Belt can be a viable alternative as railway transport infrastructures from China to Europe are now being build which will highly reduce the number of transport days, although the price has to be taken into consideration, as the maritime transport is the cheapest option.

The BRI now involves nearly 70 countries with a population of over 4.8 billion people, around 63% of world's population, it covers economies worth a total sum of US\$21 trillion, accounting for 62% of the world's GDP, 65% of global land and 30% of maritime-based economic production. The Economist 09/12/2015, referred that *"Mr. Xi hopes to increase the trade value with more than 40 countries for \$2.5 trillion in a decade, spending about \$1 trillion of government money. SOEs and financial institutions are to be motivated to invest abroad in infrastructure and construction"*. Three years later, we can conclude that these figures were very modest, in 2017 the total trade between China and countries involved in BRI already reached 7.4 trillion yuan (US\$1.15 trillion), and the investment climbed to US\$70 billion creating 200 000 jobs in those countries, according with the Ministry of Commerce of China.

BRI Objectives, Resources and Principles

The objectives stated in the project's Vision Paper are: recovery of the global economy; better use of resources; increased connectivity between China Asian countries, Europe and Africa; increased market integration and construction of a multipolar world; increased application of information technologies; investments in infrastructure, transport, maritime cooperation and energy in the Asian region; increased coordination of development strategies among countries included in the BRI project; increase trade, investment and consumption; create demand and employment opportunities and, improve cultural exchanges and communication between the various people.

The importance given by China to this project is correlated with the huge amount of resources which it was allocated to what is basically a New Silk Road Fund, which was set-up with US\$40 billion to promote private investment in the BRI countries, recently the funding of more US\$14.5 billion was announced. The Asia Infrastructure Investment Bank which was created in 2015 by 57 founding member countries, and which now has 80 members. Its capital will very soon be US\$100 billion. Furthermore, there is the China Development Bank, a Chinese state bank with a declared intention to invest US\$900 billion in BRI (Bert Hofman, World Bank, 04/12/2015), with a further US\$36.5 billion being announced in 2017. Nobody knows exactly the full amount of resources needed to fully develop this initiative, some sources point out 4 trillion USD others say 8 trillion, anyway China alone cannot support it, so the involvement of local governments, multilateral finance institutions, and private capital should be considered.

The `Vision and Actions in Jointly Building Silk Road Economic Belt and 21st Century Maritime Silk Road´ states that this project respects the five principles of the United Nations Charter:

1. Mutual respect for sovereignty and territorial integrity;
2. Mutual non-aggression;
3. No mutual interference;
4. Equality and mutual benefit;
5. Peaceful coexistence.

Accordingly, He Huaihong a professor at the Department of Philosophy at the University of Beijing stated at the ‘Dialogue Portugal - China and New Silk Road Seminar’ in Lisbon, May 2015, that the principles are harmony and inclusivity because this Vision looks for “*A moral and political consensus on how different ethnic and different states groups can coexist peacefully, respect the paths and chosen modes of development*”. At the same seminar, Hu Shisheng, a director of the ‘Institute of South and Southeast Asian and Oceanic Studies’ of the China Institute of Contemporary International Relations affirmed “*is not a Marshall Plan ... We will practice mutual consultation and mutual construction*”.

China will work with the countries of the route in plans of bilateral and multilateral interest, the priorities being cooperation; the coordination of policies; improved connectivity; increased trade and investment; financial integration, and; increased links between peoples. As reference, we can highlight actions such as the promotion of cultural and academic exchanges (China offers 10,000 scholarships to students of BRI countries every year); media cooperation; cooperation between youth and women’s organizations; tourist promotion; weeks of TV; art festivals; movies, and; voluntary services, among others.

BRI International Production and Third-Country Market Cooperation

China links the BRI with two complimentary initiatives - the ‘International Production Cooperation’ and ‘Third-country Market Cooperation’.

The ‘International Production Cooperation’ was launched by Chinese Government on the 16th May 2015, with the release of the ‘Guiding Opinions of the State Council on Promoting International Cooperation in Industrial Capacity and Equipment Manufacturing’. This initiative aims to match the China’s industrial production with existing global demand, giving priority to China’s cooperation with emerging countries whose economic structures require large amounts of money to spur growth. ‘Third-country Market Cooperation’ was first mentioned by Premier Li Keqiang in June-July 2015, when he attended the 17th China-EU Leaders’ Meeting and visited Belgium and France. This initiative aims to combine China’s production capacity with developed countries’ advanced technology and equipment, to jointly develop markets in developing countries.

According to China Outlook (2016, p.26) “*This would benefit: China, by facilitating the export of its production capacity and industrial products to the international market; Developed countries, by creating new sources of economic growth; Developing countries, by promoting their industrialization and economic development*”. During Summer World Economic Forum in Davos in September 2015, Premier Li Keqiang referred doing his speech in September 2015 to the fact that “*China has come up with the initiatives to build the Silk Road Economic Belt and the 21st Century Maritime Silk Road, and to promote global cooperation on production capacity. We believe these initiatives could help further open up our country and forge a more balanced and inclusive global industrial chain. This in turn could pool the comparative strengths of all countries and foster a global community of common interests and development for win-win, inclusive and common progress*”.

New Silk Road

We can conclude that now China is not passively following globalization process but rather is taking the initiative by leading those GVCs that will include the main resource-supplier countries in the Middle East, the Far East, and in Africa, as well as the main region of high quality consumption - the EU, and, China the main global producer.

ECONOMIC COOPERATION PARTNERSHIP OBJECTIVES BETWEEN CHINA AND EU IN THE BRI

In 2004, during his first visit to Europe, the then Chinese Premier Wen Jiabao described the Sino-EU Comprehensive Strategic Partnership as follows - *“By ‘comprehensive’, it means that the cooperation should be all-dimensional, wide-ranging and multi-layered. It covers economic, scientific, technological, political and cultural fields, contains both bilateral and multilateral levels, and is conducted by both governments and non-governmental groups. By ‘strategic’, it means that the cooperation should be long-term and stable, bearing on the larger picture of China-EU relations. It transcends the differences in ideology and social system and is not subjected to the impacts of individual events that occur from time to time. By ‘partnership’, it means that the cooperation should be equal-footed, mutually beneficial and win-win. The two sides should base themselves on mutual respect and mutual trust, endeavor to expand converging interests and seek common ground on the major issues while shelving differences on the minor ones”* (Zongping & Jing, 2014, p.7-8).

China’s strategic partnership with the EU is presently being negotiated to move to a deeper cooperation level. For example, the Joint Statement of the China-EU Summit 2015 was held under the theme *“The future after 40 years of China-EU Cooperation”* which clearly mentioned the objective of trade and market access facilitation and raised the idea of creating China-EU Free Trade Zones as well as promoting a mutual investment agreement for infrastructure and industrial parks.

The Joint Statement also established the following actions in the EU-China 2020 Strategic Agenda for Cooperation: the development of the digital economy; the improvement of communication infrastructure and transport; the cooperation in the financial sector and funding sources; cooperation on innovation; cooperation in partnership in urbanization; environment; energy; water; improvements in the protection of intellectual property rights, and; the inclusion of the EU in the BRI.

The dimension of globalization that the BRI seeks to achieve will change the existing geo- economy and also world relations among nations, which has already been understood by Brussels *“If Brussels is unable to answer the Beijing’s call to build the New Silk Road, China will pursue her goal alone or with other pro-active partners and the EU will rapidly find herself at the periphery of an economic and diplomatic network designed and realized on the terms of the Middle Country”* (Prodi & Gosset, 2015).

Perspectives for the Development of Investment and Trade With EU

According to Cappiello and Vanino (2015, p.510) *“EU and China are among the world’s largest originators and recipients of foreign investment, but investment flows between the two regions still remain limited in comparison with a continuously increasing trade relationship”*. In fact, investment flows show great untapped potential, especially considering the size of the two respective economies. China accounts for just 2 or 3% of overall European investments abroad, whereas Chinese investments in Europe are rising, albeit from an even lower base.

According to the report of China's Ministry of Commerce, published at the end of 2013, the EU was a key destination and a priority recipient of Chinese investment, especially for companies seeking access to a major market with high purchasing power, wishing to increase their technological capacity and to develop or have access to a global brand. This report indicates that at the end of 2013, around 2,000 Chinese firms had operations in the EU, which together employed 47,000 people, and accounted for a cumulative investment of USD 40.097 million.

Bruegel, a Brussels-based think tank also concluded that Europe is becoming an important recipient of Outward Chinese Foreign Direct Investment (OFDI) accounting for around 19% of its total in 2014. From 2010 to 2014 the total stock of Chinese investments in Europe jumped from US\$6 to US\$55 billion (Le Corre & Sepulchre, 2016). This trend was confirmed in 2015 with Chinese FDI in Europe increasing 44%, reaching €20 billion in EU, mostly due to the large investment of ChemChina which acquired the Pirelli Tyre Company in Italy for US\$ 7.7 billion, and also the Chinese investor Wanda which acquired the British Sunseeker Luxury Yachtmaker for £320 million. . In 2016, Chinese OFDI in Europe reached a new high of US\$31.5 billion, which represented a growth rate of 77% up to 2015, the biggest transactions being the investment of a Tencent-led consortium in the Finnish gaming company Supercell for €6.7 billion, and the Midea acquisition of the German Robotics company KUKA for €4.4 billion, whilst other important investments included the purchase by a Chinese consortium of 49% of the UK company Global Switch for €2.8 billion, and the acquisition by HNA of the Irish aircraft leasing firm Avolon, for €2.3 billion.

According to the report of ESADE China Europe (2016), important transactions include, among others: the purchase of 35% of the Italian bank Cassa Depositi e Prestiti (CDP) Reti by State Grid in the electricity sector; the acquisition of 80% of the Portuguese financial institution Fidelidade by the Fosun Group; the purchase of the Dutch-based agricultural conglomerate Nidera by the food group COFCO; the Chinese automotive firm Dongfeng buying the French enterprise Peugeot; the China Development Bank buying Barclays for US\$3.040 billion; Bright Food's acquisition of Weetabix for US\$1.940 billion; CIC's purchase of 30% of Gaz de France (GDF) Suez for US\$3.240 billion; Wuhan Iron & Steel's participation in the lift manufacturer ThyssenKrupp; China International Marine Containers participation in Burg Industries; Jinsheng Industries' stake in the machine manufacturer EMAG; Geely purchase of stakes in the Ford subsidiary and Volvo for US\$1.800 million and US\$900 million, respectively; Three Gorges Corporation acquisition of 21% of the State-owned company Energias de Portugal, and; China State Grid's purchased of 25% of Redes Energéticas Nacionais (REN).

Baker Mckenzie (2018) reports that the Chinese investment in Europe reached US\$46 billion and US\$81 billion in 2016 and 2017 respectively. In 2017 the megadeal was the buying of Swiss chemical and food conglomerate Syngenta by ChemChina, for US\$43 billion and, should also be referred the acquisition of the British firm Logisor by CIC for the amount of US\$13.8 billion.

BRI is boosting investment in Europe particularly in transport, utilities, logistics and infrastructures., as per China Global Investment Tracker between 2005 and 2017 the Chinese investment and construction contracts in Europe reach US\$335.03 billion, mostly in the energy, chemical and agribusiness, transport, ICT, real estate, healthcare and finance sectors.

There has been an evolution in the target sectors of outward Chinese investment, when China grew at two digits, with rapid industrialization and urbanization the Chinese companies had to invest abroad to secure sources of raw materials and energy. With the advent of a more mature economy, the New Normal Growth's pace, China's investment priorities focused more on sectors based on industrial technology, machinery, consumer, modern services and financial institutions.

The Chinese economy has now entered a state of new normal growth, as explained by President Xi Jinping at the Boao Forum for Asia Annual Conference - *“It is shifting gear from high speed to medium-to-high speed growth, from an extensive model that emphasized scale and speed to a more intensive one emphasizing quality and efficiency, and from being driven by investment in production factors to being driven by innovation”*. According to Hanemann and Huotar’s (2016) database, seven sectors accounted for 95% of Chinese investment in the EU from 2010 to 2014: energy (US\$18.170 million, 31.2% of the total); real estate (US\$13.350 million, 22.9%); manufacturing (US\$7.850 million, 13.5%); agri-business (US\$4.880 million, 8.4%); the financial sector (US\$4.250 million, 7.3%); logistics, transportation and infrastructure (US\$4.060 million, 7%), and; telecommunications and software (US\$2.650 million, 4.5%).

Also, a shift of outward countries destination was verified according to Hanemann and Huotar (2016), these authors concluded that after a large-scale investment in Southern European countries, from 2011 till 2015, Chinese investors focused now more on the three major European economies “Germany, England and France” these three countries attracted 53% of the total Chinese investment in the EU in 2016.

The acquisitions of purchases of minority interests of European firms by Chinese companies does not follow a clear pattern, and different possibilities for this choice of investments have been advanced. For example, Philippe Le Corre and Alain Sepulchre (2016, p.1) refer that *“for several years now, Europe has attracted both State-run and private Chinese enterprises looking for investment opportunities, despite the historical, geographic, legal, linguistic, societal, and cultural complexities of investing in Europe”*. However, although private companies had reached a record for investment in Europe in 2015 of around 6 billion Euros, the *“State-owned investors continue to account for the majority of China’s EU OFDI, and new financing entities could further boost the role of State capital”*, in fact, *“Sovereign and State-related investment from China offers plenty of opportunities for Europe to advance new projects where interests are aligned, for instance, with regard to infrastructure development in Eastern Europe”* (Hanemann & Huotar, p.5, 2016).

Chinese global banking services serve as intermediaries between State-Owned Enterprises (SOEs) and investors throughout Europe, or for financing projects that range from the participation in key infrastructure projects (water, gas, ports, and airport installations), or for buying up corporations. We need to refer to the fact that ICBC - China’s largest commercial bank, has 12 European branches, and that also Chinese banks give credit facilities to Chinese private companies to invest in Europe and buy properties. These investments range from: chateaux in the Bordeaux region (where 20 have been bought by an intermediary of the ICBC); corporations, such as the Pizza Express restaurant chain in the UK, Putzmeister, a German machine toolmaker, and; important real estate assets, such as the emblematic Edificio Espanhã in Madrid (Le Corre & Sepulchre 2016).

Following Le Corre and Sepulchre (2016) research, several drivers for the increasing interest of Chinese investments in Europe, can be identified, namely:

- **1st:** Finance – After the 2008 crisis, the Chinese government start to shift the application of its huge foreign currency reserves from American bonds to Eurobonds, as well as to buying at very competitive prices infrastructure companies in countries facing adverse economic conditions and sovereign debt problems.
- **2nd:** Technology and Know-How Transfer to China - EU countries have a good selection of Small Medium Enterprises (SMEs) with the best technology worldwide, and some of these companies need capital to expand or to survive, in case of countries affected by the Crisis. These companies can become global companies with Chinese investment and the possibility of entering Chinese

and Asian markets where Chinese business people have a very important presence. Example include sectors such as: autos; food; energy; transport; luxury brands; entertainment, and; travel.

- **3rd:** External Politics – To balance the world power of the USA, China needs powerful allies. China's relations with the EU and many European countries are better than its relations with the USA.
- **4th:** Internal Politics – The 'Going out' policy was initiated in the '90s, whereby the Chinese government promotes the investment of SOEs and gives support to private companies. This was mostly in natural resources in Africa, Asia, and South America, whereas in the case of Europe, investment was mainly in high quality consumption markets, where the strategy is to acquire brands, distribution networks, technology, and market know-how, utilizing the massive financial assistance offered by both State-run and commercial banks and sovereign funds.
- **5th:** Good Bilateral Diplomatic Relations – China has historic ties and good diplomatic relations with some European countries, such as the top recipients of Chinese FDI in the EU (the UK, France, Germany, Italy and Portugal). As Winter (2016) states, "*The Belt and Road gives impetus to a network of heritage diplomacy that fosters diplomatically valuable institutional and interpersonal connections*".

This Chinese interest in investments in Europe is reinforced by the EU-China Comprehensive Strategic Partnership and also by the BRI, which is focused on infrastructure investments and has demonstrated a strong interest in building, or rebuilding some of the current European infrastructure — energy plants, utilities, airports, ports, highways, and similar, with investment in the EU and the BRI being top negotiation priorities for the EU-China agenda.

At the same time, Chinese OFDI in the EU increased significantly, with EU FDI in China in 2015 being responsible for 7.9% of total FDI in China, although this figure has demonstrated a decreasing trend, being €20.1bn in 2011, € 9.9bn in 2014, and €8bn in 2016.

It is very difficult to trace EU companies' investments in China, as, for strategic financial, fiscal and legal reasons, many companies create companies in Hong Kong, and it is these Hong Kong companies that invest in China. In fact, Hong Kong is responsible for 73% of FDI in China, and this share has been increasing over the last years. For instance, the value of this investment was 64% in 2013, with considerable participation by: Hong Kong companies; Chinese companies that invest in Hong Kong and then back to China, and; companies from the rest of the world which utilise Hong Kong as an investment platform.

The decreasing FDI investment by the EU in China can be better understood by an analysis of the perceptions of European companies regarding their investments in China, as expressed in the Annual Business Confidence Survey conducted by the EU Chamber of Commerce in China (EUCCC). For instance, the report of 2014 concludes that this decreasing trend is linked to the slowdown of the Chinese economy, rising labor costs, and difficulties in attracting and retaining talent. In this report, 68% of large companies stated that business in China has become more difficult, and 46% of European companies believe that the 'golden age' for multinational companies in China has ended, with this perception increasing to 55% in the Business Confidence Survey of 2016.

As a result, those European companies that have invested in China are setting more modest expectations. According to the above-mentioned EUCCC survey, only 47% of existing EU investors plan to expand their current operations in China, which is a percentage that has reduced from 86% in 2013. The respondents to this survey add to that they plan to scale back their investment plans, and also have

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concerns over China's growing debt, declining exports, and dwindling returns on investment - especially in sectors burdened by overcapacity.

This trend is confirmed in the Business Confidence Survey (2016), where more than half of the respondents reported that doing business in China is becoming more difficult year-on-year. Entrenched anti-competitive policies and a failure to enact tangible reforms in crucial areas, such as the rule of law, eliminating local protectionism, removing market access barriers, reigning in overcapacity, and tackling high levels of domestic debt are among some of the key reasons cited in justifying that 41% of European companies are now re-evaluating their operations in China and are planning to cut costs, whereas, only three years ago, 86% of the companies were planning to expand operations in China.

This pessimism is balanced by recent huge EU multi-year greenfield investment projects which have got underway recently, including: Lego's US\$471 million plant in Jiaying; Airbus' Tianjin completion center; Shell's JV with CNOOC in Guangdong; R&D facilities by AstraZeneca; a piano plant by Bluthne; new investments by chemical giant BASF into a catalyst plant and the expansion of an R&D center; a new chemical plant by giant BASF, and; a US\$20 million acquisition of a leasing company by BMW (EU-China FDI Monitor 2016). Some investments are even the result of government agreements between some EU countries and China, such as, for instance, the planned Sino-German (Shenyang) Intelligent Equipment Manufacturing Park, with 48 square kilometers surrounding the BMW factory; or the Foshan Sino-German Industry Services Zone, with 88 square kilometers planned to be built, and 5 already built.

The Ex-Head of the Chinese Mission to the EU, Ambassador Yang Yanyi, tried to reassure these expectations at the Lunch of the EU-China Business Association in Brussels on 4th February, 2016, by saying *"The China-EU 2020 Strategic Agenda for Cooperation is being fully implemented. Negotiations for a China-EU Investment Agreement are yielding substantive progress. Cooperation in finance, energy, technological innovation, sustainable development and urbanization has been intensified" ... "Consensus has been reached between China and the EU in five new areas: drawing synergies between China's Belt and Road initiative and the EU Investment Plan, establishing a new Connectivity Platform; collaborating in the digital economy and cyber security; launching a legal affairs dialogue, and; facilitating people-to-people exchanges"*. In fact, *"European companies are also now counting on a successful conclusion to the EU-China Comprehensive Agreement on Investment negotiations, to improve the business environment and to reduce market access barriers. Firms hope to be provided with a clear schedule outlining when they will be able to take greater control of their China-based operations, making it easier to undertake strategic acquisitions, as well as allowing them to enter new business areas or product segments"* (Business Confidence Survey, 2016, p.8).

China and Europe now trade well over €1 billion a day. Indeed, Ambassador Yang Yanyi (2016) stated, *"China and the EU together account for 29% of total global trade in goods"*. China is the EU's biggest source of imports and has also become one of the EU's fastest growing export markets. Considering the Eurostat and the China Statistical Bureau's 2015 figures for trade in goods, the EU is presently China's main buyer, amounting to US\$344 billion, which represents 20.3% of all EU imports, and it is the second largest partner for exports, after the USA, with US\$170 billion, which represents around 9.5% of total EU exports. EU imports from China are dominated by industrial and consumer goods, especially machinery and equipment, footwear and clothing, furniture and lamps, and toys. EU exports to China are mainly machinery and equipment, motor vehicles, aircraft, and chemicals. The total bilateral trade in goods between China and the EU in 2016 was around €514 billion, showing a huge trade deficit of more than €174 billion in favor of China. Bilateral trade in services, however, only amounts to 10% of total trade in goods, and the EU's exports of services only amount to 20% of the EU's exports of goods.

This imbalanced trade situation between China and the EU is of significant interest to officials at the European Commission in Brussels. Analysts explain that this imbalance is in part a reflection of global and Asian value chains, although it is also the result of the continuation of market access barriers in China.

Pangratis, the Ex-EU Ambassador to China, referred in his statement of 1st July, 2014, at the WTO, that the EU is concerned with the lack of transparency, industrial policies, and non-tariff measures in China which discriminate against foreign companies, as well as a strong degree of government intervention in the economy, resulting in a dominant position of State-own-enterprises and unequal access to subsidies and cheap finance, and also the inadequate protection and enforcement of intellectual property rights in China. During a visit to the University of International Business and Economics in Beijing on 11th July, 2016, Cecilia Malmström, the EU Commissioner for Trade, mentioned the recent survey by the European Chamber of Commerce in China, which refers that more than half of EU firms based in China have the perception that it was getting harder for EU firms to do business in China and that there was a disconnect between reform commitments and action taken. In other words, it requires reciprocal openness to *“Keep the EU market open, to the great benefit of China and the EU”*.

The ‘Vision and Actions on Jointly Building the Silk Road Economic Belt and the 21st Century Maritime Silk Road’, states that *“Investment and trade cooperation is a major task in building the Belt and Road. We should strive to improve investment and trade facilitation, and remove investment and trade barriers for the creation of a sound business environment within the region and in all related countries. We will discuss with countries and regions along the Belt and Road the opening of free trade areas so as to unleash the potential for expanded cooperation”*.

Pangratis (2014), in his declaration, also points out that there are many challenges, because *“China’s market and rapid development also continues to offer huge opportunities, with significant potential for further expanding trade and investment and strengthening of the relations”*, and he added *“The launch of negotiations on a bilateral investment agreement is an important forward-looking initiative that aims to promote bilateral investment by providing transparency, legal certainty, and market access to investors from both sides”*.

However, during her visit to UIBE Beijing on 11th July, 2016, Cecilia Malmström, the EU Trade Commissioner attempted to cool down this perspective, by saying *“The free trade zones have made relatively limited progress, or have been completely abandoned... There are still real concerns about the enforcement of intellectual property rights... Discrimination against EU businesses remains a fact; one that we are worried could be reinforced in the Manufacturing 2025 plan... Keeping the EU market open, to the great benefit of China and the EU, requires us to be able to address these questions of reciprocal openness”*. She suggested the creation of one single agreement, instead of the current 26, to cover all investment between EU and China, which would put domestic and foreign investors on a level footing for the access to the Chinese market, adding legal certainty, and improving the balance between investment protection, sustainable development, and the capacity of States to regulate in the public interest.

On July 18th, 2016, the EU Foreign Ministry Council updated its policy strategy towards China. In its conclusions, it is clearly stated that *“A Comprehensive Agreement on Investment is the EU’s main priority towards deepening and rebalancing its economic relationship with China”*, and that, *“After the conclusion of an ambitious comprehensive agreement on investment, this could allow both sides to envisage, once the conditions are right, broader ambitions, such as a Free Trade Agreement as a longer term perspective”*. It also is affirmed that *“The Council supports co-operation with China for its ‘One Belt, One Road’ initiative, on the basis of China fulfilling its declared aim of making it an open platform which adheres to market rules, EU and international requirements and standards, and complements*

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EU policies and projects, in order to deliver benefits for all parties concerned and in all the countries along the planned routes”.

However, the Chinese government links the discussion on the agreement on investment with the discussion on the BRI and the Free Trade Agreement (FTA). Chi Fulin, the chair of the China Institute for Reform and Development declared to the China Daily newspaper on 29th July, 2016, p.14, “*Right now is the time for China to request (such talks), but if the EU doesn’t respond urgently, China may ignore the bloc when it realizes the importance in the years to come*”. He recommends that China and the EU finish their talks on FTA. In the China Daily on 22nd July, 2016, p.11, Fu Jing, the Deputy Director of the China Daily European Bureau wrote “*What Brussels needs most, is a pragmatically ambitious and visionary framework of foreign policy toward Beijing, sending a clear message that could encourage Europeans to trust the union and its leaders’ wisdom...The ministers must carefully review the constructive and friendly messages Beijing has repeated at China-EU summits and at gatherings such as the Asia-Europe Meeting*”. He also affirmed that Brussels leaders must change direction, as now is a critical time to think outside the box when dealing with Beijing.

Future Partnerships to Be Expected

China positioning is quiet attractive, for during his speech at the Boao Forum, Xi Jinping announced that “*In the coming five years, China will import more than US\$10 trillion of goods, Chinese investment abroad will exceed US\$500 billion, and more than 500 million outbound visits will be made by Chinese tourists.*”

Through an analyzes of the Vision and Actions document, we can conclude that the BRI aims for a win-win cooperation in promoting common development and prosperity, as China proposes to work with the countries of the BRI in plans of bilateral and multilateral interest. Economic development is an important target, whereby countries along the Belt and Road may fully coordinate their economic development strategies and policies. Investment and trade cooperation is referred to as being a major task in building cooperation for expanding BRI, with important steps to achieve it including the creation of a sound business environment within the region and in all related countries and regions along the BRI, with the removal of investment and trade barriers, and the opening up of free trade areas.

Clearly this initiative aims for global and regional cooperation, for the document mentions that plans and measures should be worked out for regional cooperation and large-scale projects, implementing ‘Third-country Market Cooperation’ and creating the conditions for the development of the China Global Value Chain Model of BRI, whereby, in the spirit of the ‘International Production Cooperation’, the division of labor and the distribution of industrial chains should be improved by encouraging the entire industrial chain and related industries to develop in conjunction, as well as to establish R&D, production, and marketing systems.

In the EU-China Summit joint statement in Brussels of 29th June, 2015, p.1, both sides “*confirmed their strong interest in each other’s flagship initiatives, namely the Investment Plan for Europe, and the ‘Silk Road Economic Belt’ and the ‘21st Century Maritime Silk Road’*”. Leaders decided and agreed to “*support synergies*” between the Investment Plan for Europe (also known as the Juncker Plan) and BRI. The two sides subsequently agreed that the European Commission, the European Investment Bank, and the Silk Road Fund would jointly identify how exactly China could co-operate with the Juncker Plan.

In this spirit, it is important to find fields of cooperation and new partnerships between China and the EU, as Luigi Gambardella, chair of the China EU Association wrote in the China Daily on 29th July,

2016, p.11, - “*The EU’s economic strengths are complementary to the priorities of China’s 13th Five Years Plan (2016-2020), such as innovation, services, green growth, and balancing urban and rural development*”, and also “*Mutually beneficial cooperation on all aspects of investment should be increased*”.

The Juncker’s Plan goals are: to boost investment, to increase competitiveness, and to support long-term economic growth in the EU. This investment Plan for Europe has three pillars: the creation of a European Fund for Strategic Investment (EFSI); ensure that investment finance reaches the real economy, and; improve the investment environment. The EFSI focuses on investment in a broad range of sectors, including infrastructure, energy, research and innovation, broadband, and education. The fund is also ready to support small and medium-sized businesses and has been established as a managed account within the European Investment Bank (EIB), constituted by a €16 billion guarantee from the EU budget, and €5 billion from the EIB, which is expected to have a multiplier effect and generate investment of €315 billion over three years for the projects to be developed within the above-mentioned sectors. In July, 2016, 289 transactions, with a total investment of €168 billion were approved.

The 5th Plenary of the 18th Chinese Communist Party Committee on 25th - 29th October, 2015, approved the guidelines for the 13th Five-Year Plan covering the period 2016 - 2020. Xi promised that openness to foreign investors will continue, and yet, in practice, there has been a renewed devotion to national industry in China. Innovation and entrepreneurship are considered to be the keywords for future growth, however information control and ideological rhetoric are on the increase in China. The 13th Five-Year Plan targets the improvement of Chinese industry in order to develop the ‘Industry 4.0’ Plan through the implementation of the ‘Made in China 2025’ and ‘Internet Plus’ plans.

These strategies are not new, indeed they are a continuation of the industrial policies designed to be implemented in the 11th and 12th Plans, particularly in the so-called ‘Strategic Industries’, which are still goals to be achieved. In the 11th Five-Year Plan (2006-2011), a new development paradigm was announced, focusing on “*scientific development*”, concerned with creating a “*harmonious society*”, where a new development model would be devised during that period, indicating new priority areas and policies for a greater redistribution of income. The priorities of this Plan were the following: energy saving; public health; the environment, and; education systems.

The ‘15 year Medium-to Long Term Plan for the Development of Science and Technology’ was launched in 2006, with the aim of creating an innovation-oriented society, with an expected investment of 2.5% of GDP in Research and Development by 2020, with the objective of China becoming the world leader in science and technology by 2050. The quest for growth is not enough, with the central theme of the 12th Five-Year Plan (2011-2015) being “*inclusive growth*”, meaning that China’s growth model should be driven by sustainability and quality, with two important vectors: the change of growth dependence based on exports and investment for growth based on domestic consumption, and; the protection of the environment, with a reduction in carbon emission rates by 40% to 45% by 2020. To achieve this goal, there would be a need to upgrade existing industries and to implement new strategic industries, with seven priority ones, namely: energy saving and environmental protection; next generation information technology; biotechnology; productive set-of-the-art equipment; new energy; new materials, and; alternative energy vehicles.

A new Chinese leadership was empowered President Xi Jinping and Premier Li Keqiang in November 2012. At the Summer Davos Forum in Dalian, in his speech on the 13th September, 2013, Premier Li affirmed, “*Without structural transformation and upgrading, we will not be able to sustain economic growth in the long term*”, and, “*in the long term, the government will have to face excess production capacity and the rise of non-performing credits*”. At the Summer Davos Forum of 2015, Li Keqiang ex-

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pressed that “*China will promote liberalization and the facilitation of trade and investment*”, and, “*will vigorously advance the construction of the Silk Road Economic Belt and the 21st Century Maritime Silk Road, to encourage Chinese enterprises to ‘go global’, and achieve common development in the openness process among all countries*”.

China’s State Council announced the ‘Made in China 2025’ plan in May 2015, as a national initiative to improve its manufacturing industry – initially up to 2025, and then up to 2035 and 2049. The 10 Year Plan is to be followed by another two plans, in order to transform China into a leading manufacturing power by 2049, the year of the 100th anniversary of the founding of the PRC. ‘Made in China 2025’ was inspired by Germany’s ‘Industry 4.0’ Plan.

The concept of this Plan is to link virtual reality to real production, as in the German project, which primarily means using the Internet of Things to connect small and medium-sized companies more efficiently in global production (Kennedy, 2015). This Plan stresses the need to underscore the innovation-driven approach in making the switch of emphasis from ‘Made in China’ to ‘Create in China’, from speed to quality, and from products to brands. In order to avoid the ‘Middle Income Trap’, China needs to move up the value chain to avoid being challenged at one end by low-cost countries, and at the other end by high-quality manufacturers around the world. This presents opportunities for partnerships with EU companies with renowned expertise in the export of high tech equipment, technical and management consultancy services, joint R&D, design, education and skills training, and financial and professional services.

The ‘Made in China 2025’ document available on the State Council website identified ten priority sectors for China, highlighting areas of opportunity for partnerships with EU companies. The sectors include: advanced rail and equipment; aviation and aerospace equipment; agricultural machinery and technology; power equipment and technology; low and new-energy vehicles; new materials; high-end manufacturing control equipment and robotics; biopharmaceuticals and high-end medical equipment; advanced marine equipment and high-tech vessels, and; integrated circuits and new generation information technology.

At the Summer Davos Forum in 2016, Premier Li referred that “*The leading role of consumption and services is becoming more visible. New areas of consumption, such as information and communication, smart phones, and new energy vehicles are rapidly expanding. The five ‘happiness industries’ of tourism, culture, sports, health, and old-age care are rapidly growing*”, and he advocated “*mass entrepreneurship and innovation, to further promote the ‘Internet+’ strategy, extensively applying the new generation of information technologies, such as the Internet of Things, big data, and cloud computing*. Premier Li promise to implement the ‘Made in China 2015’ initiative to make manufacturing more “*IT-based and smarter*”.

Furthermore, the EU and China showed intentions to boost their research and innovation cooperation at the 13th Joint Steering Committee of the EU-China Agreement for Scientific and Technological Cooperation, which took place in Brussels, on 29th March, 2017, and agreed to develop a package of joint flagship initiatives to be launched in 2017, with co-funding from the EU and China, namely in the target areas of food, agriculture and biotechnologies, environment and sustainable urbanization, surface transport, aviation, and also biotechnologies and biomaterials.

CONCLUSION

The Belt and Road initiative, together with the ‘Third-country Market Cooperation’ initiative can be very important for the increase of world trade and world growth, by contributing to the development of bilateral economic cooperation and partnerships between China and Europe, as well as cooperation and partnerships between these two economic spaces and third parties in Africa, Asia, or South America.

In particular, there are a many complementarities between the Chinese 13th ‘Five-Year Plan, the ‘Made in China 2025’ Plan, and the Juncker’s Plan, if the EU and China reach a constructive agreement focusing on investment and trade, with the removal of investment and trade barriers and the implementation of China-EU Free Trade Zones. An important cooperation can be expected in sectors such as: infrastructure projects; energy; advanced rail and equipment; aviation and aerospace equipment; agricultural machinery and technology; power equipment and technology; low and new-energy vehicles; new materials; high-end manufacturing control equipment and robotics; biopharmaceuticals and high-end medical equipment; advanced marine equipment and high-tech vessels; integrated circuits and new generation information technology; research and innovation, and; broadband and education.

SMEs can also greatly benefit from this agreement, and they can expect an increase in cooperation and business in: tourism; culture; sports; health and old-age care and other social economic activities; startup companies with cooperation in mass entrepreneurship and innovation; the “Internet+” strategy; the Internet of Things; big data, and; cloud computing.

Cooperation and partnerships between the EU and China, in Europe, China, and Third World Countries can also be effective in building new, or rebuilding, existing infrastructures, energy plants, utilities, airports, ports, and highways.

These projects can result from proposals made by individual European countries to China, or alternatively, from projects proposed by the EU, or proposed by China. It is important that the European countries are conscience of the importance of these Chinese initiatives, and that they know which bilateral or multilateral cooperation and partnerships can be established that can be beneficial for those countries involved. In both China and some European countries, think tanks are already researching these types of project, which have to make sense, in the light of the economic development of these countries.

REFERENCES

- Akamatsu, K. (1962). A Historical Pattern of Economic Growth in Developing Countries. *Journal of Development Economics*, 1, 3–25. doi:10.1111/j.1746-1049.1962.tb01020.x
- Angang, H. (2015, May). Embracing China’s “New Normal.” *Foreign Affairs Review*.
- Bert, H. (2015). *China’s One Belt One Road Initiative: What We Know Thus Far*. World Bank.
- Mckenzie, B. (2018). *Rising of Tension. Assessing China’s FDI drop in Europe and North America*. Rhodium Group.
- Cappiella, B., & Vanino, E. (2015). The New Silk Road Achievements and Perspectives of EU-China Investment Relations, *Diritto del Commercio Internazionale*, Anno XXIX, Fasc. 2. Ed.Giuffrè, Milano.

New Silk Road

- China Global Investment Tracker. (2018). *AEI, Heritage Foundation*. Retrieved from <http://www.aei.org/china-global-investment-tracker/>
- China Outlook. (2016). *KPMG Global China Practice*. Retrieved from <https://www.kpmg.com/CN/en/IssuesAndInsights/ArticlesPublications/Documents/china-outlook-2016.pdf>
- China State Council. (n.d.). Retrieved from <https://www.csis.org/analysis/made-china-2025>
- Dunning, J. H. (1980). Toward an Eclectic Theory of International Production: Some Empirical *Tests*. *Journal of International Business Studies*, 11(1), 9–31. doi:10.1057/palgrave.jibs.8490593
- Dunning, J. H. (1988). The Eclectic Paradigm of International Production, a Restatement and Some Possible Extensions. *Journal of International Business Studies*, 19(Spring), 1–31. doi:10.1057/palgrave.jibs.8490372
- EIB. (2016). Retrieved from <http://www.eib.org/efsi/efsi>
- ESADE. (2016). *China Europe Club*. Chinese Investment in Europe.
- EU-China FDI Monitor. (2016, January). *Foreign Investment in China: Global Trends*. Rhodium Group.
- Fu, J. (2016, July 22). EU Must Change Its China Strategy. *China Daily*, 11.
- Gambardella, L. (2016, July 29). EU Needs Forward-Looking China Plan. *China Daily*, 11.
- Hanemann, T., & Huotari, M. (2016). *A New Record Year for Chinese Outbound Investment in Europe*. Retrieved from http://ec.europa.eu/priorities/jobs-growth-and-investment/investment-plan_en
- International Statistics. (2015). *UN*. Retrieved from http://unstats.un.org/unsd/methods/internatlinks/sd_intstat.htm
- Investment Plan, . (2016). European Council. *European Union*.
- Kennedy, S. (2015). *Made in China 25*. Retrieved from Center for Strategic and International Studies (CSIS): <https://www.csis.org/analysis/made-china-2025>
- Le Corre, P., & Sepulchre, A. (2016). *China Offensive in Europe*. Brookings Institution Press.
- Li, K. (2015). *A New Blue Print for Global Growth*. Summer World Forum. Retrieved from <http://english.gov.cn/premier/news/2015/09/11/content281475187661153.htm>
- Lin, Y. J. (2011). *Demystifying the Chinese Economy*. Cambridge University Press. doi:10.1017/CBO9781139026666
- Malmström, C. (2016, July). A Vital Relationship for our Prosperity. *UIBE Beijing*.
- Pangratis, A. (2014). *EU statement on 5th Trade Policy Review of China, 01/07*. Retrieved from <http://trade.ec.europa.eu/doclib/docs/2012/june/tradoc149542.pdf>
- Prodi, R., & Gosset, D. (2015, November 16). The European Union and China on the New Silk Roads. *Huffington Post*.

Vision and Actions in Jointly Building Silk Road Economic Belt and 21st Century Maritime Silk Road. (2015). National Development and Reform Commission. Retrieved from <http://en.ndrc.gov.cn/newsrelease/201503/t20150330669367.html>http://en.ndrc.gov.cn/newsrelease/201503/t20150330_669367.html

Winter, T. (2016). One Belt, One Road, One Heritage: Cultural Diplomacy and the Silk Road. *The Diplomat*. Retrieved from <http://thediplomat.com/tag/one-belt-one-road/>

World Investment Report. (2013). UNCTAD.

Xi, J. (2015). *Towards a Community of Common Destiny and a New Future for Asia*. Boao Forum for Asia Annual Conference.

Yang, Y. (2016). *EUCBA bulletin, Quarterly Newsletter of the EU-China Business Association*. Retrieved from http://www.eucba.org/images/contents/files/bulletin/EUCBA_news2160523_def2.pdf

Zongping, F., & Jing, H. (2014). *China's strategic partnership diplomacy: engaging with a changing world* (Working paper). ESP (European Strategic Partnership Observatory).

Chapter 18

Green Business: An Indian Perspective

Rabindra Ku Jena

Institute of Management Technology, India

ABSTRACT

Green business is an enterprise that has minimal negative impact on the global or local environment, community, society, or economy. It is the way of doing business that strives to meet the triple bottom line. Green business embraces sustainable operating procedures, product and material sourcing, labor practices, and shipping methods. The goal of green business is to eliminate any negative impact on the environment on both a local and global scale. This chapter elaborates on the challenge and perspective of green business and explores different dimensions to creating environmentally sustainable organizations in India. Towards the end, this chapter also discussed the initiatives taken by different organizations in India to transact eco-friendly business according to the guidelines of GreenCo, India. GreenCo rating is the first of its kind in the world holistic framework that evaluates companies on the basis of their environmental friendly activities using life cycle approach.

INTRODUCTION

The notion of “green business” emerged at the end of the 20th century in the wake of the ever increasing public concern about the sustainability of economic development (Wright & Nyberg, 2015). Latter, in turn, the term Green business was roused up by the growing awareness of environmental issues such as the accelerating depletion of natural resources and the deterioration of environmental quality. While the origins of the modern “green movements” can be traced down to the middle of the 1960s. It took almost two decades for business to adapt to the “greening” trends and adopt them into its ideology and practice (McNeill & Engelke, 2014). However, even today, the substance of the green business concept is rather ambiguous as demonstrated by the variety of its definitions that could be found in different sources. Furthermore, green business practices are still far from being universally embraced and applied by business entities around the world with perceptible differences of business penetration by the “green” ideas in various countries. This is due to several reasons, one of them being the fact that the “greening

DOI: 10.4018/978-1-5225-7095-0.ch018

of business” is still largely perceived as an extra burden (in terms of cost increase or revenue loss), and the other reason being related to the national specifics in terms of cultural, political, and economic differences (Jones, 2017).

In the same time, the ever-increasing world-wide population, the demand for living standards, and the on-going exploitation of natural resources have increased a wider awareness for the necessity of sustainability in living as well as organizing, performing, and managing work. Sustainable practices are more than ever on the agenda of organizations, triggered by a growing demand of the wider population towards approaches and practices that can be considered “green” or “sustainable” (Jones, 2017). With the emergence of environmental sustainability as an additional dimension of organizational performance, however, these classical process imperatives are increasingly subjected to critical scrutiny. This is because they do not appropriately reflect environmental objectives such as “minimize energy consumption”, “reduce carbon footprint,” or “provide ecologically sustainable solutions” (Reijers & Mansar, 2005).

In effect, the classical management of business processes for business improvement, known as the devil’s quadrangle of *time*, *cost*, *quality*, and *flexibility* (Reijers and Mansar, 2005) (see Figure 1) is due for replacement. As contemporary organizations become increasingly aware of the need to become more sustainable, they look for information technology (IT)-enabled business processes that are successful in terms of their economic but also their ecological and perhaps also social impact. Exemplary ecological key performance indicators that increasingly find their way into the agenda of managers include carbon emissions, data center energy, or renewable energy consumption (Reijers and Mansar, 2005). The devil’s quadrangle, therefore, becomes a devil’s pentagon, which recognizes *sustainability* as an important emergent dimension in the management of business (see Figure 2).

Considering the implications of the devil’s pentagon, the challenge arises how sustainability considerations such as carbon footprint, renewable energy consumption, wastage production, and other environmental performance indicators can be considered in the management of an organization’s processes so as to warrant the establishment of “The Sustainable Enterprise” (Reijers and Mansar, 2005). One of

Figure 1.

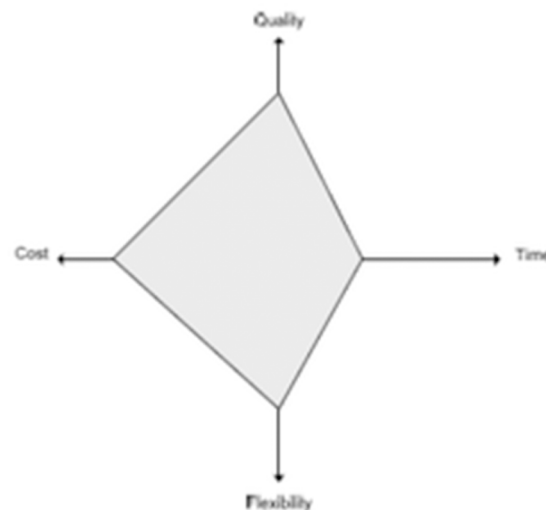
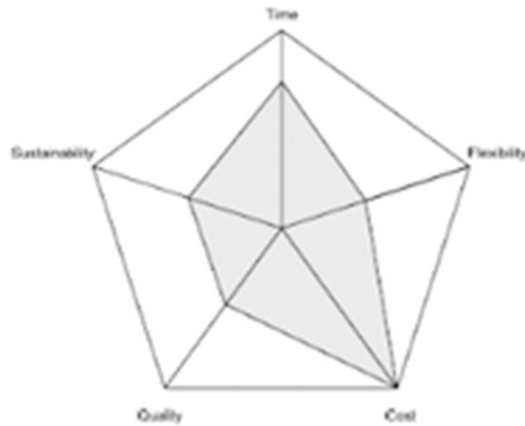


Figure 2.



the perspectives towards this challenge that underpins this chapter is that information systems play an eminent role in the design, implementation, and execution of sustainable business processes. This is because information systems are considered the greatest force of productivity improvement in the last half-century, mostly due to the cross-functional view they offer for an organization, and their ability to understand, change, and reinvent business processes (Watson, Boudreau, & Chen, 2010). The rest of the chapter discusses green business and green business model.

BUSINESS: GOING GREEN

Becoming green is a multifaceted process; there are various practices that can be applied when business wants to shift to a green behavior. Broadly speaking, an environmentally aware business should participate at least in one of “4Rs” – reduction, reuse, recycling, and recovery (Čekanavičius, Bazytė, & Dičmonaitė, 2014; Kassaye, 2001). Each of those “Rs” can be achieved through several practices, some of which might serve the purpose of more than one “R”. Figure 3 presents a non-exhaustive scheme of commonly employed green business practices.

“R” as reduction has a twofold meaning: as a reduction of resource consumption and a reduction of waste. A typical example of the first type of practice is the reduction of energy consumption, e.g., by replacing incandescent lamps with energy-efficient compact fluorescents bulbs and LED bulbs which enable to save up to 75% of energy, or simply by turning off electronic appliances when they are not in use (Kassaye, 2001). In order to save trees, some companies recommend printing on both sides of paper or to print only the main documents. Application of green packaging might serve either one or both goals of reduction. Some companies minimize the volume and weight of packaging (e.g., Campbell Soup), while others (e.g., Sears) strive to reduce packaging waste. Some companies (e.g., Whole Foods Market, Revlon, Estee Lauder) have started using degradable, natural or organic ingredients for their products. Companies might also apply the “product stewardship” policy. It means that the manufacturer is responsible for waste reduction, recycling and the use of renewable materials (Kassaye, 2001).

Figure 3.



The Eco-labeling (also known as green or environmental labeling, or green branding) seeks to take advantage of market forces by providing consumers with information about products' environmental profile, e.g., about their environmentally harmless manufacturing and residual disposal processes, recycling potential, consumption quality (Lavallee & Plouffe, 2004). The benefits of providing this kind of information to customers are many: consumer attraction, public standing, brand awareness, and improvement opportunities. Consumer attraction implies that by informing consumers on the environmental benefits of products, the business can rouse the consumer's interest in eco-issues and develop a purposive demand for a particular type of articles/products. The public standing is enhanced by the use of environmental labels as tools to demonstrate a company's corporate social responsibility to consumers, general public, partners and regulators. Green brands appeal to those who priorities "going green" and hence offer a competitive eco-advantage by raising the brand awareness of both retail consumers and B2B customers. Finally, eco labeling compels to take care of the environmental profile of the product range and thence offer improvement opportunities that may help to cope with the new environmental legislation when it is introduced.

There are two ways of setting a voluntary eco label: it can be self-declared or obtained through the already existing environmental labeling scheme. A self-declared environmental label is considered to be a declaration, a label or a symbol which draws attention to a certain element of the organization's activities, products or services that can influence the environment. Such claim (e.g., "Contains no Es!") can appear on the product or packaging itself or in any associated marketing materials (Petru, 2014). It can be issued by any party that might benefit from such declaration – producers, importers, distributors or retailers. The parameters intended to prove the product's environmental friendliness are chosen by

the company itself. Another option is to use the existing eco labeling schemes, such as Mobius Loop, Green Dot, Fairtrade, and Marine Stewardship Council (Petru, 2014). This way might save both time and costs pertinent to building a new eco-label, another advantage being that such schemes, being operated on a not-for-profit basis, are viewed as more trustworthy than claims of a commercial concern. From the financial side, all of the labeling schemes carry the costs of adjusting operations, auditing and communication to customers about what it is and what does it represent. The positive part is related to an increased profitability when carrying that label.

There are also a number of “minor” green actions that still can contribute to the greening of business. For instance, some companies encourage their employees to use public transportation instead of their own cars in order to reduce air pollution, or to refuel the car after 6 p.m. when the gas fumes reputedly are less harmful to the environment (Collins, 2008). Other “green” practices include waste sorting, organizing seminars about “green business” and environmental protection, the rule of not smoking in the office, etc. It should be noted that the number and specifics of the green business actions adopted by companies depends on a particular business’s abilities to those change its operations to environmentally friendly. There might be reasons which preclude a business from “going green”. For instance, companies simply might not know *how* to become green or regard “greening” as an expensive fancy that drains away resources and diminishes profits.

GREEN BUSINESS MODEL

Business models (BM) combine all the core components of business strategies and operations that create and deliver value to the customers as well as to the firm (FORA (2010)). The components of business models typically include strategic decisions on customer segmentation, products and services (or value propositions) to offer, business and research partners to engage with, resources to create and channels to deliver value, as well as the underlying cost structure and revenue streams to ensure economic viability of business (Osterwalder & Pigneur, 2010). Business models, whether explicit or implicit, underlie all business plans and ventures. In order to strengthen or retain their market position, firms have to continuously rethink and reinvent their business models. Business models innovation is relevant for all firms and organizations as it is about staying in the game or being at the forefront of competition while assuring economic viability or sustainability of their operations. Radical changes in business models imply revisiting the customer base and value chain or redefining products and services. Such changes may involve high risk and include a degree of uncertainty for most of the companies to make them difficult to pursue. Business models often change gradually and do not necessarily imply fundamental revisiting of value propositions. Instead, the changes could also focus on improving production processes or reconfiguring organizational structures.

In the other hand, there are many terms in the public and academic debate about how companies green their business and how they are categorized as green companies (Linder & Cantrell, 2000). The concepts of the green economy, green growth, and eco-industries all emphasize sustainable use of resources, so that future generations may not experience resource scarcities or be exposed to environmental risks. A company’s business model can be analyzed in different ways and many different tools have been developed to analyses business model concepts (Linder & Cantrell, 2000). The business model canvas¹ gives any company a simple and intuitive tool to describe and think through the different elements of its business models in order to systematically challenge the way it does business and thereby be able to create new

strategic alternatives. The canvas tool consists of nine basic building blocks covering four main areas of a business: customers, offering, infrastructure, and financial viability (Osterwalder & Pigneur, 2010). This gives the company a simple and intuitive map to understand its business models, but also a way to challenge and find successful alternatives of doing business. At the same time, companies can look at other companies' business models to be inspired to do similar changes to their own model or to design a completely new business model. Business model innovation is basically about improving the building blocks of the business model. Business models often change gradually and do not necessarily imply fundamental revisiting of value propositions, but of course the changes could also focus on improving production processes or reconfiguring organizational structures. Usually the changes taking place in a business model is represented by one of the following forms (Osterwalder & Pigneur, 2010):

- Modification through small and progressive adjustments;
- Re-design materialized in significant changes;
- Alternative building blocks, which can fulfill the same function or operate as substitutes for the original ones;
- Creation and introduction of entirely new and innovative building blocks.

Generally, it can be said that the more parts of a business model which are changed and have a green effect, and the more profoundly a green change is taking place within the individual parts of the business model. While new ways of talking about sustainability are being shaped, companies are increasingly recognizing the values of innovation that can help them to become more competitive by either developing new products or services based on new technology (i.e. greentech and cleantech) (Rajala & Westerlund, 2007). These changes are here referred to as companies' green business model innovation. Companies might innovate by substituting to greener inputs, reusing or recycling resources, offering their product as a service function while continuing to have ownership of the products, or by developing greener products, services and processes. Some of the important factors of green business model are discussed below:

Drivers of Green Business Model

One of the most important drivers for companies to initiate green business model innovation is increased consumer awareness towards sustainability (Rajala & Westerlund, 2007). All of the companies use the green agenda as a driver for their green business model innovation irrespective of the size or sector of the company. Another important driver is the opportunity for companies to differentiate their products and services and create a competitive advantage by being greener and more sustainable than their competitors. A driver of a different nature is related to increasing costs of resources and supply risk, which has forced companies to consider alternative resources for their production. Many companies have set forth processes to cut costs and create new revenue streams by changing or expanding their focus on how to source from surplus materials, design recyclable products, add services to products or create take-back mechanisms for reuse of products or components (Osterwalder & Pigneur, 2010).

Barriers to Green Business Model

Some of the most important barriers encountered among companies changing their business models into greener ones, is a lack of knowledge and skills throughout the entire value chain. In the development

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and production phases, employees lack knowledge of what substances are contained in the materials they use, alternative materials to use and how to use new materials when developing and designing new products. Some customers are willing to buy more sustainable products and services, but there is still a large group of customer that do not have enough knowledge about what sustainability is and who are too conservative to change their buying habits where price is the main purchasing incentive. Another great barrier for companies wanting to transform their business models is the large costs of new machinery and new materials or changes that must be implemented in new product development and design. Furthermore, recycling and reusing materials require infrastructure systems, which also are costly to develop and implement.

Policy for Green Business Model

Policy needs to be developed in new ways if green growth and green business model innovation is to be enhanced. Dialog between the regulative authorities and private companies can pave the way for a common understanding of the challenges, and the need for new solution and new regulation to go hand in hand. Pilot projects and role models based on public procurement can enable the proliferation of collaboration between regulative authorities and private companies on future regulation (Bisgaard, Henriksen, & Bjerre, 2012). The rationale for policy intervention lies in market failure related to the negative externalities of climate change and other environmental challenges leading to under-investments in eco-innovation and green business model innovation. Furthermore, there might be systemic failures that hindering the flow of technology and knowledge and reducing the efficiency of the innovation efforts (Bryson & Lombardi, 2009).

GREEN BUSINESS INITIATIVES IN INDIA

Green practices are no longer an extra discipline but an integral part of the business acumen. Now-a-days, pursuing growth and preserving ecology is the mantra adopted by most of the Indian industries. Opportunities to increase competitiveness by going green and improving resource efficiency are widespread and far-reaching. Companies that are prepared to absorb and exploit these opportunities have the chance to gain competitive advantage.

The art of managing constraints and the emerging innovative thinking have offered solutions making our living and businesses more sustainable. This is what green is all about and this is what the GreenCo Rang System advocates (Pradeep Bhargava, Chairman, GreenCo Rating System).

GreenCo Rating is the “first of its kind in the World” holistic framework that evaluates companies on the environmental friendliness of their activities using life cycle approach. Implementation of GreenCo rating provides leadership and guidance to companies on how to make products, services and operations greener. Industry personnel are trained on the latest Green concepts and facilitated for implementing better systems and implementing global best practices in green GreenGo, India). The Green Company Rating System advocates a performance-based approach. The rating system evaluates green features of companies against the following performance parameters (Figure 4).

GreenCo evaluates the performance of companies on the ecological front in a holistic manner and guides these enterprises to make their products, services, operations and supply chain greener. The GreenCo rated companies have not only reduced their environmental impact but have also improved their

Figure 4.



competitiveness. It is encouraging to see the environmental benefits and monetary benefits reported by the companies. This compilation showcases some of the best practices from select GreenCo rated companies and respective savings achieved by each of them. Few case studies are presented below, showing the effort of Indian companies taken towards green business.

Kempegowda International Airport Limited (KIAL)¹

Kempegowda International Airport Limited (KIAL), Bengaluru (formerly Bangalore International Airport Limited, BIAL) has the distinction of being the first airport in India, to be constructed through a public-private partnership. Built and operated along the highest international standards, KIAL is committed to establishing this airport as one of India's leading projects in terms of quality and efficiency.

KIAL has the distinction of being the First GreenCo Rated Company in India. With all its effort, KIAL has achieved GreenCo Silver in the year 2012. KIAL also has achieved the LEED Gold rank and is in Level 3 - Optimization Level under Airport Carbon Accreditation Program. KIAL has developed a clear framework to address the environmental sustainability parameters within the facility which is laid down as a part of its Environment Management System (EMS). KIAL has a target of achieving 25% of its energy requirements through the use of renewable energy. KIAL has done significant work in the area of waste management and material conservation. It has a clear-cut mechanism for collecting, segregating and disposal of wastes within the facility.

Brakes India Pvt. Limited (BIPL)²

Brakes India Limited is one of the leading manufacturers of Automotive Braking Systems and Ferrous Castings in India. In 1981, Brakes India established a Foundry Division at Sholinghur, Vellore district of Tamil Nadu. The plant was established to manufacture Permanent Mould Grey Iron castings at 5,000 MTPA which has been increased to 12,000 MTPA. A total of 5 sand foundries were installed, all of which amounts to a total capacity of 80,000 MTPA.

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Brakes India Ltd, Foundry Division (BIF) is certified under ISO 14001 and OHSAS 18001. BIF won the prestigious 'Energy Conservation Award' instituted by the Ministry of Power, Govt. of India and 'The Green Foundry Award' from The Institute of Indian Foundry men in the year 2005. In the year 2000-2001, the unit has become Zero discharge facility in the areas of process water and pollutants.

BIF, as a proactive corporate, has demonstrated excellent commitment towards environmental sustainability. The unit has been taking steady steps to reduce their environment footprint and has done good work in areas of energy efficiency, renewable energy, GHG mitigation, waste management and material conservation.

HIL Limited³

HIL Limited is a flagship Company of the C.K. Birla Group of Companies. HIL Limited is one of the market leaders in manufacturing of Aerated Autoclaved Construction (AAC) Building Block, an eco-friendly construction material. As Green Building concept has gained wide acceptance in India, the number of consumers showing interest in green products have increased substantially. The manufacturing facility of Aerated Autoclaved Concrete Blocks

(AAC Blocks) of HIL Limited is situated in Golan near Surat, Gujarat. It was established in 2008 and the commercial production commenced in 2009. Aerocon blocks are made out of 'Fly Ash' which is a by-product of thermal power plants.

HIL Ltd, Golan Unit led by a proactive corporate, has shown an excellent commitment towards environmental sustainability. The unit has been taking steady steps to reduce their environmental footprint and has done good work in areas of energy efficiency, renewable energy, GHG mitigation, waste management and material conservation. HIL Limited, Golan has done commendable work by meeting its entire electrical energy requirements through renewable energy.

HIL Limited, Golan unit has developed a dedicated and a cross-functional team to monitor the overall water consumption in the plant, to develop strategies and to implement water conservation projects. HIL Golan has taken several awareness creation and employee involvement initiatives on water conservation. HIL Limited, Golan unit has a well defined mechanism for collection, segregation and disposal of different types of wastes generated from the facility. The unit has clear short term and long-term targets for various raw material conservation

Larsen & Toubro Limited⁴

Larsen & Toubro (L&T) is an engineering, construction, manufacturing and financial services conglomerate, with global operations. Larsen & Toubro is globally acknowledged as one of the top five companies in heavy engineering. The heavy engineering division offers custom made equipment for process plant equipment used in fertilizer, petrochemical, thermal power plants, defense, nuclear and aerospace, etc. Plate cutting, fabrication, welding & machining are the major operations done at the heavy engineering division.

L&T, as a committed organization towards achieving environmental sustainability, had implemented several indicatives and projects across various GreenCo parameters even before the GreenCo Rang System. The implementation of GreenCo helped L&T enhance its environmental performance. L&T, Powai has a tripartite agreement with Enercon and the Maharashtra State Electricity Board to purchase renewable energy power equivalent to 150 Lakh units per year. The plant has increased the wind power utilization

to 80% of their total power consumption plant was commissioned in 2010 that converts organic waste from canteen into methane. The biogas generated from food waste is used for cooking in the canteen.

The plant has also installed 18500 Litres/day capacity solar water heater systems to fulfill their hot water requirements and has also installed a 4 KW Solar PV system for fulfil their power requirement.

Kirloskar Brothers Limited⁵

Kirloskar Brothers Limited (KBL) is an electrical pump manufacturing company with expertise in engineering and manufacture of systems for fluid management. KBL provides complete fluid management solutions for large infrastructure projects in the areas of water supply, power plants, irrigation, oil & gas and marine & defense. Kirloskar Brothers Limited, Coimbatore is located in Kaniyur village of Coimbatore district. This small compact plant started its operation in the year 2011. The unit manufactures 50,000 pumps per month on an average.

KBL Coimbatore is the “First unit in the mini pump manufacturing sector” to attain the prestigious GreenCo Rating. Good efforts in all verticals of resource conservation, supplier education and facilitation of green practices of suppliers and vendors, implementation of systems such as SMDS, KANBAN, ERP and many more, has earned the plant several awards and accolades.

KBL, Coimbatore has taken good efforts to comply with the GreenCo Rang System which has led to significant improvements in its overall environmental performance. KBL Coimbatore has been implementing several energy efficiency and productivity improvement projects. The plant has achieved 17.1% reduction in specific energy consumption in the last three years. KBL Coimbatore is one amongst the few companies to have benchmarked their energy performance with their peers and competitors. KBL Coimbatore has replaced all the street lights into solar street lights within their facility. Kirloskar Brothers Limited, as a corporate initiative, owns seven windmills supplying about 5.6 MW of wind power.

The plant has put in sincere efforts in capturing the rain water harvesting potential of their region. With collection and dispersion trenches inside their facility, they have been able to capture 100% of their total rain water harvesting potential of their roof top and paved areas.

The organization has taken several measures to enhance resource efficiency that has helped them to emerge as a GreenCO Silver Rated unit. GreenCo is a continuous journey and many new GreenCo Silver initiatives have been taken up by the plant for implementation. The plant has worked extensively on material reduction, toxicity reduction, beer inventory management, use of online vendor portal and Green Cover development which has helped them gain cost benefits and improve their overall competitiveness.

Waterlife⁶

Waterlife tackles the acute lack of safe drinking water in India. Contaminated water is widespread in the country and causes disease and death. Initially, the government built large water treatment systems, which, however, quickly stopped running due to inadequate operation and maintenance. Waterlife pioneered an innovative business model, which integrates long-term operation and maintenance by charging small user fees for the safe water. In cooperation with local government, Waterlife has expanded its work to seven states and installed over 17,000 systems. The community water systems (CWSs) provided by Waterlife will be maintained for five to ten years, after which the villagers own and maintain their own CWS – employing a so-called ‘build-operate-transfer’ model.

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As a result of Waterlife's activities, villagers now have access to clean drinking water. The positive health effects associated with access to clean drinking water create further 'spillover effects:' villagers can work more productively, increasing their income; children can attend school, and women in particular save time previously dedicated to fetching water. Local businesses also benefit directly, as they operate as distributors of the water. Additionally, local people are hired and trained to operate, maintain and service the CWSs.

To implement this inclusive business model, greening aspects were integrated into its design from the outset. Sudesh Menon, the co-founder of Waterlife, states: *'We wanted to do this in an environmentally sustainable manner. India will be water-stressed for the next ten years, and by 2030 demand-supply gap will be 50%. People who aim to address water scarcity often use technologies that damage the aquifers. However, we are convinced that you can't use a model that brings social and economic sustainability, but damages the environment.'* Thus, it employs a variety of green technologies and innovations. For example, the company uses bioremediation to treat the arsenic. Waterlife also provides systems with alternate energy sources in villages that do not have grid power.

Sustaintech⁷

Sustaintech is a start-up company that promotes a fuel-efficient wood burning stove for commercial kitchens. The stove was developed by a local non-profit organization (TIDe), which judged that a non-profit model would not be an effective way to promote and sell the stove widely.

TIDe thus developed a way to produce the stove based on the generation of (small) profits to finance its distribution. However, as a charity, the organization was not allowed to engage in commercial activities, even though it was clear that the profits were exclusively intended to scale up the business. As a result, Sustaintech had to be created out of TIDe, which took on the burden of registering a new organization with appropriate legal status and going through many lengthy registration periods. Although the regulatory barriers were overcome, they delayed the project significantly and made it more complex.

Winning prize money from the Ashden Award enabled the company to succeed and fine-tune the stove. It now saves consumers at least 40% in fuel (firewood or charcoal) and between Rs 14,000 and Rs 40,000 (EuR 200 – 570) per year (Gilcher, Sebastian. 2012).

CONCLUSION

As demonstrated by the review of "green business" definitions, the substance of the concept is still rather fuzzy, ranging from the equation of it with the broader notion of "sustainable business" to the rather narrow accentuation of some "green" feature of production, e.g., the use of renewable resources. The suggested definition of "green business" as an organization committed to the principles of environmental sustainability in its operations striving to use renewable resources and trying to minimize the negative environmental impact of its activities allows to distinguish, but not to dissociate, "green business" concept from the broader term of "sustainable business".

The shift of a business to the green trend should be regarded as the outcome of the interaction of three main agents of the process i.e consumers, governments, and the business itself. The first two contributing to the formation of "green request" to business and the latter implementing green practices.

Based on the existing research, the concept and characteristics of the green business and business model are described in this chapter. The framework of the green business model is put forward around ‘one core logic, two transformations, triple bottom line and interfaces’. As to the green business model, there are several interesting aspects for further research can be identified. First, the theoretical system about the green business model is needed to be perfected. There are many theories and concepts which are related with the green business model, such as green economy, green growth, green innovation, eco-innovation, etc. the theoretical system about the green business model should be built on the base of clarifying different theories and concepts, which can establish a foundation for the future research. Second, the design of the green business model prototypes should be researched in the Indian context. Future research should be focused on the designing methods of the green business model, which should include the objectives, components, relational structure, supporting network, evaluation system, etc. Third, the research on the green business model for special enterprises should be conducted. In the existing literature, the research on the green business model is aimed at different subjects, such as the industry (e.g. industrial symbiosis), the enterprise (e.g. PSS), the design of products (e.g. from cradle to cradle). The foundation of developing green economy is the innovative practice in enterprises, so the enterprises should be the leading force for establishing the green business model. The future research should be focused on enterprises’ level, especially the special group of enterprises (e.g. small and medium-sized enterprises, new venture). Forth, the research on the green business model should be based on dynamic perspective. In general, the sustainability of any specific business model (including the green business model) is unclear, as market changes (new innovations, competitors, regulations, etc.) can quickly make existing business models obsolete or less profitable, and this means continuous business model innovation is an important capability for every firm seeking success in the long term. Fifth, more case studies of Indian organizations should include to highlight the detailed steps taken by them to conduct a sustainable business. Finally, further research on the green business model should be based on dynamic perspective, and the innovation on the green business model should be integrated with enterprises’ growth and their corporate social responsibilities.

REFERENCES

- Bisgaard, Henriksen, & Bjerre. (2012). *Green Business Model Innovation Conceptualisation, Next Practice and Policy*. Nordic Innovation.
- Bryson, J. R., & Lombardi, R. (2009). Balancing Product and Process Sustainability against Business Profitability: Sustainability as a competitive strategy in the Property Development process. *Business Strategy and the Environment*, 18(2), 97–107. doi:10.1002/bse.640
- Čekanavičius, L., Bazytė, R., & Dičmonaitė, A. (2014). Green business: Challenges and practices. *Ekonomika (Nis)*, 93(1), 74–88.
- Collins, J. (2008). Why “Green” is good for business. *Business and Economic Review*, 25–26.
- FORA. (2010). *Green Business Models in the Nordic Region – A key to promote sustainable growth*. Paper commissioned by the Nordic Council of Ministers GreenCo, India. Retrieved from <http://www.greenco.in/gco/aboutgreencorating.php>

- Gilcher, S. (2012). *Green and Inclusive Businesses in India: A Summary and Evaluation of Surveys*. GIZ. CII (Confederation of Indian Industry). Retrieved from www.cii.in/
- Jones, G. (2017). *Profits and Sustainability. A Global History of Green Entrepreneurship*. Oxford, UK: Oxford University Press.
- Kassaye, W. (2001). Green dilemma. *Marketing Intelligence & Planning*, 19(6), 444–455. doi:10.1108/EUM0000000006112
- Lavallée, S., & Plouffe, S. (2004). The ecolabel and sustainable development. *The International Journal of Life Cycle Assessment*, 9(6), 349–354. doi:10.1007/BF02979076
- Linder, J., & Cantrell, S. (2000). *Changing Business Models: Surveying the Landscape*. Accenture Institute for Strategic Change.
- McDonalds. (n.d.). *Greener than Ever*. Retrieved from http://www.mcdonalds.com/us/en/our_story/values_in_action/greener_than_ever.html
- McNeill, J. R., & Engelke, P. (2014). *The Great Acceleration. An Environment History of the Anthropocene since 1945*. Cambridge, MA: The Belknap Press of Harvard University Press.
- Osterwalder, A., & Pigneur, Y. (2010). *Business Model Generation*. John Wiley & Sons, Inc., Hoboken.
- Petru, A. (2014). *Green Labels 101: What Labels Are Out There, and Which Ones Can We Trust?* Retrieved from <https://www.triplepundit.com/special/setting-the-standard/green-labels-101-labels-ones-can-trust/>
- Rajala, R., & Westerlund, M. (2007). Business models – a new perspective on firms’ assets and capabilities. *Entrepreneurship and Innovation*, 8(2), 115–125. doi:10.5367/000000007780808039
- Ramanathan, G. (2012). The Solar Mission is Technology Neutral: Dr Farooq Abdullah, Minister for Renewable Energy. *The Energy Business*. Retrieved from <http://energybusiness.in/thesolar-mission-is-technology-neutral/>
- Reijers, H. A., & Mansar, S. L. (2005). Best Practices in Business Process Redesign: An Overview and Qualitative Evaluation of Successful Redesign Heuristics. *Omega*, 33(4), 283–306. doi:10.1016/j.omega.2004.04.012
- Watson, R. T., Boudreau, M.-C., & Chen, A. J. (2010). Information Systems and Environmentally Sustainable Development: Energy Informatics and New Directions for the IS Community. *Management Information Systems Quarterly*, 34(1), 23–38. doi:10.2307/20721413
- Whole Foods Market. (n.d.). *Green Mission*. Retrieved from <http://www.wholefoodsmarket.com/values/green-mission.php>
- Wright, C., & Nyberg, D. (2015). *Climate Change, Capitalism, and Corporations. Processes of Creative Self-Destruction*. Cambridge, UK: Cambridge University Press. doi:10.1017/CBO9781139939676

ENDNOTES

- 1 www.bengaluruairport.com/
- 2 <https://www.brakesindia.com/brakesUI/foundry/awards-and-certifications.htm>
- 3 www.ckbirlagroup.com/hil.php
- 4 <http://www.larsentoubro.com/corporate/sustainability/green-portfolio/>
- 5 <http://www.kirloskarpumps.com/contact-us-manufacturing-plants.aspx>
- 6 <http://www.simplygreen.co.za/2017/06/09/there-is-hope-in-the-future/water-life-crop/>
- 7 <http://www.sustaintech.in/>

Chapter 19

Mutual Relationship Between Supply Chain, Business Strategy, and Knowledge Management in Supply Chain

Mohsen Shafiei Nikabadi
Semnan University, Iran

Amir Hakaki
Semnan University, Iran

ABSTRACT

The goal of this study is to present a multidimensional structure for relationship between supply chain (SC) strategies, business strategies, and knowledge management (KM) strategies with knowledge sharing in SC of the automotive industry of Iran. This is an applied research and has done as a survey, correlation, and cause-effect research. In this research, confirmative factor analysis, correlation test, co-linearity test, and path analysis were used. The chapter tries to describe quantitatively all the relations in multidimensional structure. Effective knowledge sharing in SC is influenced by the hierarchy of strategies. Thus, SC strategies influence the business strategies, business strategies affect knowledge strategies, and knowledge strategies influence the effective and systematic knowledge sharing in the SC. Therefore, knowledge sharing is most of all influenced by KM strategies but is indirectly influenced by business and SC strategies.

INTRODUCTION

The world, after agricultural and industrial revolution, witnessed information revolution that the key and valuable source of it is knowledge (Dong et al., 2017; Elahi et al., 2014). Among the significant developments in the field of management science, the manifest phenomenon was knowledge management (Shafiei Nikabadi et al., 2015). Today, knowledge is considered as a key resource especially in knowledge-based economies (Shafiei Nikabadi & Salimi, 2015). Since the existence of knowledge is

DOI: 10.4018/978-1-5225-7095-0.ch019

important for organisations, they try to develop some strategies to strengthen their knowledge (Amin-beidokhti et al., 2016).

In terms of value and challenges (Wan et al., 2015), the issue of knowledge management in university and industry has grown significantly (Twum-Darko & Harker, 2017; Dwivedi et al., 2011). Knowledge management is one of the main competitive sources for every organization so that many believe that the more an organization acquires the knowledge and puts it into practice, the more it succeeds (Bryant & Nguyen, 2017; Shafiei Nikabadi, 2013). Knowledge management is the process of gathering, organizing, and storing the expertise and organizational experiences from different sources and then transmitting them to the corresponding sections that lead to improvement in performance and perception of staffs in different rankings, causes more income and finally yet importantly helps the organization to create value (Nonaka, 1994). Knowledge management is the process of acquiring information through various ways in order to use it immediately and extensively. Indeed, knowledge management is an attempt to provide appropriate knowledge, in appropriate time, and appropriate situation (Shafiei Nikabadi et al., 2016) to maximize profits and provides a comparative advantage for organizations (Carvalho & Gomes, 2017).

With the changing global markets, the ability of companies to take advantage of new technologies plays a vital role in maintaining a competitive advantage (Aliakbari Nouri & Shafiei Nikabadi, 2015). However, high technologies and knowledge have had such rapid changes that many thinkers believe the acceleration in the innovation of produced goods by high-level technology and creation of knowledge and its development have exceeded learning speed of human beings. Therefore, the related organizations may not be able to confront such acceleration even if they employ their strategies, time, and human resources for learning. Knowledge is considered as a key resource for organizations in the long run. For the success of organization, knowledge should consider as an asset and interchangeable between humans. Knowledge of how to solve problems can be obtained and knowledge management will be able to create other knowledge (Shafiei Nikabadi et al., 2015). In fact, Effective management of knowledge is an issue for success (Nevo & Chan, 2007). Shafiei Nikabadi et al. (2015) with the aim of studying the effect of knowledge management strategies on performance of new product development in knowledge-based companies found that there is positive relationship between strategy of knowledge management and new product development performance. Nonaka and Takeuchi (1995) believe that successful companies are the companies that constantly discover and create new knowledge to resolve new and unfamiliar problems. They develop Knowledge purposefully and systematically and in accordance with specific strategic objectives in all layers of the organization, and they change it into new technology and new products (Nassim, 2009) for making sustainable competitive advantages (Gloet & Samson, 2016; Chawla & Joshi, 2011).

With regard to the great importance of knowledge management in organizations, researchers went on to work more of knowledge management, however, most research on knowledge management is organizational, and no comprehensive research on knowledge management in the supply chain has been observed (Shafiei Nikabadi & Ameri Shahrabi, 2014). In this research, we deal with the relationship between supply chain strategies, business strategies, and knowledge management strategies with knowledge sharing in the supply chain of the automotive industry by presentation of a multidimensional structure. Several studies have been done about the relationship between strategies and knowledge management, but no special report has been found by the present researchers that contain a comprehensive view of three strategies of supply chain, business management, and knowledge management. The innovative aspect of the study is a comprehensive view about the relationship between key strategies of each organization to knowledge sharing in the supply chain. Paying attention to supply chain strategies within knowledge

management is also another aspect of the study's innovation. The present study has tried to deal with the introduced key criteria in each part of the structure and their quantitative relationship instead of descriptive expression of the available modeled relations.

LITERATURE REVIEW

Considering the basic purpose of the study, the literature has been divided to four parts: Knowledge Sharing, Supply Chain Strategy, Business Strategy, and Knowledge Management Strategy.

Knowledge Sharing

The creation and production of knowledge refers to the development or creation of knowledge resources by organizations while operating across borders and organizational duty (Dong et al., 2017; Shafiei Nikabadi & Ameri Shahrabi, 2014). Knowledge has been considered as an important source of competitive advantage and value creation as well as an essential element for sustainable development and generally as a determining factor for organizations (Bryant & Nguyen, 2017; Shafiei Nikabadi et al., 2016). Utilization and application of knowledge refers to the extent of using and sharing knowledge in organizations (Ritala, 2017; Liao et al., 2011). Advances in computer-based communication technologies have increased the variety of choices individuals have when sharing knowledge both within and across organizational boundaries (Di Gangi et al., 2012). Knowledge Sharing includes sharing information, ideas, suggestions, and expertise among people in an organization (Nayir & Uzuncarsili, 2008). It refers to the amount of knowledge sharing within functional boundaries. This capability can change the business processes fundamentally. Sharing information not only causes the facilitation of inter-functional interactions, but also shares knowledge repositories among the cooperators in the organizational processes. Many organizations have established some sort of knowledge management strategy in an attempt to structure and support knowledge sharing across the internal and external organization (Shafiei Nikabadi et al., 2016). This leads to deep understanding of a process (Liao et al., 2011). Muhammed et al. (2011) explained that Knowledge sharing and application enhance operational knowledge indirectly through changes in conceptual and contextual knowledge.

Supyuenyong and Swierczek (2011) found that Knowledge dissemination influences customer satisfaction and reputation. Organizations have increasingly recognized the importance of managing customer relationships (as main goal of supply chain (Chopra & Meindl, 2007), and Knowledge Management from the perspective of a process approaches assure positive impact on customer retention (Nehari-Talet et al., 2010).

Knowledge Sharing and Knowledge Transformation often play substantial role for each other. They describe the business processes that transmit and distribute knowledge among the members of an organization or collegiate groups. At this stage, care must be taken to present the distributed knowledge in a suitable, useful, interpretable, and understandable manner (Kongpichayanond, 2009). Channels of knowledge sharing can be formal or informal (Nayir & Uzuncarsili, 2008; Sedera & Gable, 2010). Informal channels can accelerate the process of knowledge socialization. Such channels are very suitable for small organizations, whereas the distribution of knowledge through Formal channels such as instruction ensures broader distribution of knowledge. This is more suitable for the concept-centered and expertise-centered knowledge in large organizations (Sedera & Gable, 2010).

The process in which knowledge has been distributed correctly is referred to as successful organizational learning. It is believed that it is dependent upon the creation of motivation, encouragement of employees, the ability of sharing knowledge resources, and ability of knowledge acceptance on behalf of the knowledge receiver (Nayir & Uzuncarsili, 2008). This process can be facilitated through criteria such as creation of relation between knowledge sharing and business strategy, the active role of human networks, the active role of leaders and managers in sharing knowledge, the appropriateness of knowledge sharing in the organizational culture, the creation of coherent relationship between knowledge sharing and daily affairs, institutionalization of the learning principals (Leibowitz & Chen, 2001), putting forward new ideas and suggestions on behalf of employees (Liao & Wu, 2009), and the existence of inter-unit meetings to investigate the chain procedures (Hult et al., 2004).

Fawcett et al. (2007) also divide the process of knowledge sharing in the supply chain to two key components, namely connectivity and willingness. For the connectivity section, they introduced such criteria as the integration of information systems, high integration of information applications in the organization, information systems related to customers, and information systems suitable for creation of connectivity among the chain members. For the willingness part as well they introduced such criteria as regular and high frequency connectivity among the chain members, their willingness to share information, using Cross-functional teams, sharing technical information with providers and customers, the interaction of high management chains with each other and use of supply chain teams whose members are from numerous companies along the chain. Fugate et al. (2009) also introduced some criteria for the distribution of knowledge in such logistics as rapid information sharing among the logistic members, other operational members and high organizational managers, sharing vast volumes of information via formal instruments, sharing information only with the related people of the logistics, sharing information only with the people related to the information in other operational units (instead of all people in other units), sharing information only with high managers related to this information (instead of all high managers). Other criteria have also been considered, including: encouraging the management to share knowledge, corresponding information systems to share correct information, existence of a strong culture of information sharing, propagation of new knowledge resources for employees, free information sharing among different functional parts, existence of strong internet network, top-down and bottom-up information sharing within the organization (Fard & Selseleh, 2010), knowledge sharing among the high organizational management and subgroup members, knowledge sharing among colleagues and departments (Chen et al., 2009).

Lin (2008) also introduced some criteria in his survey of knowledge sharing effects such as the ability to review and update data via information instruments, the use of different data bases to improve the quality of processes, encouragement to transact knowledge and experience and knowledge transaction of units with each other. Masa and Testa (2009) have also introduced readiness factors of organizations to distribute knowledge on the job, use of technological instruments to facilitate connectivity, existence of consultation acceptance culture in the organization, informal and personal chats at work, formation of work groups and informal groups outside the work environment, production and sales meetings, job rotation, existence of electronic networks in the work environment, creation of quality circles, supervision and compilation of work accounts, and records of the process of transmission and sharing. Goldoni and Oliveira (2010) consider some criteria to be enabling the factors of knowledge sharing. These criteria include the number of active practical communities, statistics of using scientific intranet and organizational resources, colleagues' awareness of the available communicative instruments within the organization and costs of knowledge distribution process. Others also recognized some scales including

the connectivity and social networks, physical proximity of colleagues with each other, the acceptance culture of any question, informally driven meetings, and people’s satisfaction for the contribution they have made. Considering this review, a set of the most common factors is selected as basic criteria of this process in supply chain (Table 1).

Question 1: *What are the most important criteria of knowledge distribution, transmission, and sharing in the supply chain?*

Supply Chain Strategy

Another important dimension that affects the knowledge management and its processes is the factors outside the organization which has attracted few researchers in comparison with the internal affairs of the organization. In the present research, attempt is made to deal with the supply chain strategies as a factor outside the organization. To present a framework for knowledge management processes in supply chain, Shafiei Nikabadi (2013) by investigating 206 experts in automotive industry in Iran found that among knowledge management processes, all of them are necessary for supply chain. These processes are considered as follow: 1) Transfer sharing and distribution, 2) Use application and exploiting, 3) Acquisition creation and generate knowledge, 4) Organization and storage and 5) Evaluation and Feedback. In fact, the focus on the KM process as one of the most important tools for improving the supply chain performance and achievement of organizational goals is of great importance (Shafiei Nikabadi, 2013). However, scarcity of research in this field reveals the need for further research.

In today’s economy, competing is not so much company against others, but the chains that go on competing with each other (Tarafdar & Qrunfleh, 2017; Hult et al., 2007). Some reasons, such as the complexity of the business world, economic developments, intense competition, new technology, and

Table 1. The criteria of transition, sharing and distribution process of knowledge in supply chain

Criteria	Researchers
The existence of cross-functional meetings and teams for investigation of different procedures in the market and chain	Hult et al., 2004; Lin, 2008; Fawcett et al., 2007; Massa & Testa, 2009; Fugate et al.,2009; Fard & Selseleh, 2010; Chen et al., 2009
The existence of instruments, commutative networks and information systems which are suitable and pertinent to facilitate communication and sharing of information among chain members	Fawcett et al., 2007; Massa & Testa, 2009; Fugate et al.,2009; Fard & Selseleh, 2010; Lilleoere & Hansen, 2011
Creation of informal groups and human networks (such as quality circles)	Leibowitz & Chen, 2001; Fugate et al.,2009; Massa & Testa, 2009; Lilleoere & Hansen, 2011
The existence of open and strong culture to share information and accept consultation	Leibowitz & Chen, 2001; Fard & Selseleh, 2010; Massa & Testa, 2009; Lilleoere & Hansen, 2011
Sharing of technical information with suppliers and logistics members	Fawcett et al., 2007; Fugate et al.,2009; Chen et al., 2009
Encouragement and support of management to share knowledge and information	Leibowitz & Chen, 2001; Lin, 2008; Fard & Selseleh, 2010
To use up-to-date databases and different knowledge repositories to improve the quality process	Lin, 2008; Goldoni & Oliviera, 2010
The existence of mutual organizational communications among top managers and members	Fugate et al.,2009; Fard & Selseleh, 2010

rapidly changing customer needs, have made organizations use some advantages like rapid information flow, group decision-making, better coordination with partners, and a holistic approach. The existence of these developments can be seen in the discussion of the supply chain (Shafiei Nikabadi & Ameri Shahrabi, 2014). The supply chain can be considered to include all stages directly or indirectly involved in meeting customer requirements (Chopra & Meindl, 2007). It involves a range extended from final customers to initial suppliers (Shafiei Nikabadi & Ameri Shahrabi, 2015). There are three main information, physical, and monetary streams flowing through this chain (Nurmilaakso, 2007).

The supply chain strategy differs from the collection of available traditional strategies in each business, because the supply chain strategy requires the cooperation of a set of economical institutes and companies to achieve its goals. Supply chain strategy is based on inter-organizational cooperation, but other business strategies are based on inter-process cooperation within an organization. The final goal of the supply chain strategy is to present the maximum value-added to all stakeholders and beneficiaries in the chain (Defee & Stank, 2005). Various researches did about this main goal of Supply Chain (Supyuenyong & Swierczek, 2011; Sivaramakrishnan et al., 2010; Nehari-Talet et al., 2010). These researches found the positive impact of KM on Customer satisfaction and retention. This results show that all organizations should consider Supply Chain Strategy for a Sustainable customer satisfaction and a win-win relationship among members of supply chain. This point must always be considered that there should be a consistency between chain strategies and business strategies of an organization. We can observe this consistency in augmentation of competitive power and business performance.

Roh et al. (2008) in a qualitative research have dealt with the relationship between organizational culture and supply chain strategies for improvement of information current along the chain. Chopra and Meindl (2007) believe that the supply chain strategy will be under the effect of competitive strategy of organization, and they pose it as one of the subgroups of competitive strategies. They have expressed different supply chain strategies in from of two efficiency-centered (paying attention to production cost and rapid delivery to customer) and responsibility-centered (consistency of members for responsibility to demand changes) structures. Chopra and Meindl (2007) have also introduced special criteria for supply chain strategy, and since supply chain includes three basic sections of customer, provider and producer and supply chain strategy must pay attention to its each three key parts, here we have tried to have a new approach to criteria. We have put them in the three categories of supplier-centered, producer-centered and customer-centered in Table 2.

Question 2: *What are the most important criteria of supply chain strategy for knowledge sharing in supply chain?*

Business Strategy

Not only Business Strategy indicates direction of organization to achieve its goals, but also it can be an important source to create competitive advantage (Shafiei Nikabadi, 2014). Therefore, types of Business Strategies have a broad effect on collection of operational strategies as subgroups of great strategies of organization. Therefore, we can deduce that the type of Business Strategy has a great effect on knowledge management strategies and other factors of knowledge management. Since knowledge in the business environment acts as a supporter, as a producer and factory, as an unexpected scientific progress and ultimately as a weapon for obtaining competitive advantage (Shafiei Nikabadi et al., 2016), organization requires aligning business strategy with development of knowledge and capabilities for supporting

Table 2. Criteria of supply chain strategy

<p align="center">Criteria (Chopra & Meindl, 2007; Roh et al., 2008; Rahmanseresht & Afsar,2009)</p>	<p align="center">Dimensions of Supply Chain Strategy</p>
<p>Constant response, rapid and efficient to customers' requirement change, constant measurement of customer's satisfaction, performing corrective actions to obviate customer's dissatisfaction, considering margin interest in pricings</p>	<p align="center">Supply Chain Strategy Based on Customer</p>
<p>Performance Optimization with the lowest cost, maximum exploitation of volume according to standards with the lowest cost, emphasis on flexibility of volume for creation of a shield against uncertainty of supply and demand in the chain, the existence of the least inventory in the warehouse and preservation of cautious reserve for facing with uncertainty of supply and demand in the chain</p>	<p align="center">Supply Chain Strategy Based on Producer</p>
<p>Rapid and efficient response to the change of suppliers, the decrease of delivery time of part to the factory, the selection of supplier just based on quality and cost, the selection of supplier based on rapidity/ flexibility/ certainty/ quality</p>	<p align="center">Supply Chain Strategy Based on Supplier</p>

their strategy because. Knowledge strategy helps organizations to identify and manage their current and future knowledge needs (Dorostkar Ahmadi & Shafiei Nikabadi, 2015). Knowledge strategy acts as an instrument to operationalize the Business Strategy. Knowledge management strategy, therefore, must be consistent with company strategy (Ulrich, 1998; Nahapiet & Goshal, 1998). In other words, every effort in the context of knowledge management should be part of an organization's business strategy formulation process and should be in the direction of organization objectives (Shafiei Nikabadi et al., 2015). In this regard, culture is an important factor. To study the effect of organizational culture and supply chain culture on knowledge sharing in supply chain of automotive industry, Shafiei Nikabadi et al. (2012) found that the culture of the supply chain has had the greatest impact of Business culture. On the other hand, business culture had a strong but indirect effect on supply chain performance. Finally, the greatest effect of knowledge sharing and transferring was on non-financial performance of supply chain.

Conely and Zheng (2009) believe that knowledge management must be consistent with essential needs of the organization on one hand and the type of Business Strategy on the other. Zak's research (1999) also indicated that many successful factors of knowledge management depend on consistency of knowledge management strategy with total strategies of business. Dabinett and Richardson (1995) also dealt with the investigation of meaningful and effective relation of knowledge and power with strategic planning and assessment of policies. Snyman and Kruger (2004) also acknowledge the mutual and effective relationship between business strategies and knowledge management strategies; they consider the creation of consistency between these two issues obligatory. Aliaga (2000) says knowledge management has become one of key aspects in each business. He believes that the importance of key role of knowledge management in strategic planning must be assessed and analyzed. He considers strategic planning of organization effective on knowledge management. Maier and Remus (2002) also believe in the existence of relationship between competitive strategies and factors of organization and knowledge management. They have observed the relationship between knowledge management and business strategies based on both market-centered and resource-centered approaches. Market-centered strategy indicates the essence of competition in an industry and considers this competition as a result of different available forces in industry and takes the organization towards stable competitive advantage. This is created only

via acquisition and preservation advantage; and only via acquisition and preservation of higher levels of functional effectiveness than opponent (Porter, 1996). In the resource-centered attitude, instead of exclusive situation of market, companies are considered as a collection of resources. In this attitude, resource is an essential element for better organization of processes. Concentration of this attitude is on resources, key merits, abilities of the organization, development of exclusive resources of organization via management and combination of key resources of organization to create distinction, and reaching strategic situation (Lowson, 2002). Akhter (2003) believes that companies have to use knowledge to acquire competitive merit in complicated and large environments. He believes that managers can provide a knowledge road map by using strategic planning elements (making scenario and analysis of internal situation) and integrating them to acquire stable merits in competitive markets. He considers mutual relation of knowledge with strategic planning and knowledge and business strategy in today's complicated environment as an essential issue. Diakoulakis et al. (2004) also indicate the positive relationship between business strategy criteria (like strategic alliance and joint venture) and knowledge management. Tseng (2008) also believes that knowledge management success is related to connectivity of knowledge strategy with business strategy. Knowledge capitalization has become a major economic driver in business today and has created enormous requirements for organizations as they reconsider their goals and adapt their business strategies. Good knowledge management can help with achieving business goals, as it requires an alignment of knowledge management strategy and Business Strategy. (Botoo Ekionea & Swain, 2008). The results of shih and Chiang's research (2005) indicated that the cost leading strategy and human resources' bureaucratic strategy are suitable for codification strategies of knowledge management. Companies that use distinction strategy are willing to establish human resource organic strategies and personalization strategy in knowledge management. Beaumont (2010) also acknowledges that knowledge management develops within organization and is posed as an operational strategy which must be discussed annually in the meetings regarding the major business plans. He believes that knowledge management strategy must be related to business strategies, and he informed all employees about it (like major business strategies). Miles and Snow (1978) divided companies to four strategic types:

1. **Prospectors:** They have concentration on growth via development of product and new market. The existence of broad products, innovation and income management is significant for them.
2. **Defenders:** They concentrate on protection and enhancement of their statue in market. Their emphasis is on scales such as limited products, low price, good quality, engineering power and cost management.
3. **Analyzers:** They search for new markets which are related to their previous products when they are trying to enhance their situation. This strategy is between the two previous strategies.
4. **Reactors:** They have no strategy and they go to a direction that environment imposes on them.

In this research, we have selected four strategies of Miles and Snow (1978) and we will use its criteria to investigate the effect of organization strategies on knowledge management processes. We have noticed a collection of these criteria in table 3.

Question 3: *What are the most important criteria of business strategy to knowledge sharing in the supply chain?*

Table 3. Business strategy criteria

Business Strategy	Criteria
<i>Prospectors</i>	Emphasis on innovation required for customers, emphasis on acquisition of market share and more interest, emphasis on income management
<i>Analyzers</i>	Emphasis on new markets but related to previous products, emphasis on improvement of previous situation and condition
<i>Defenders</i>	Emphasis on limited products, emphasis on low price, emphasis on high quality, emphasis on engineering power, emphasis on cost management
<i>Reactors</i>	Emphasis on subordination to environment

Knowledge Management Strategy

Given the importance of the knowledge for the increase the competitiveness, knowledge needs to be managed within the structure of organizations (Gonzalez, 2016). In knowledge management Studies, concepts that are related to strategic approach to of knowledge management are new and innovative. Knowledge management is not a duty just for a particular part, it is obligatory for every parts of organization (Sangari et al., 2015). The two concepts of “knowledge management strategy” and “knowledge strategic” is controversial among scholars who translated the texts, especially in this area should be considered for translators (Shafiei Nikabadi et al., 2015). Some researchers regarded the two concepts as one. However, according to the nature and function of these two concepts in organizations, most scholars and writers have been presented different definitions of two concepts. Based on studies carried out in the field of knowledge management strategy, it is necessary to distinguish between these two concepts. Generally, these two concepts can be expressed as follows: In general we can say that knowledge management strategy based on the knowledge categories can divided to explicit knowledge (explicit) and tacit knowledge (tacit). Knowledge management strategy suggests that organizations for managing their knowledge assets and the implementation of knowledge management processes (including the acquisition, creation, transfer and application of knowledge), how and with what amount of investment property must control on knowledge assets. While the formulation of knowledge strategy helps the organization to determine what knowledge, from what source, by whom and in what way for supporting of strategic planning should be used (Zack, 1999). Knowledge strategy is a specific method for creating and translating knowledge into competitive advantage by optimizing the organization (Zack, 1999). Kasten (2009) defines knowledge strategy as the set of guidelines and philosophies that guide an organization’s knowledge-based activities, such as knowledge gathering, development, storage, and utilization (Kasten, 2009).

Organizations use knowledge management strategy to assess their knowledge of strategic resources and capabilities and extensive knowledge of the strategy to focus on the gap between what an organization knows and what the organization should consider to determine. Knowledge management strategies are high-level organizational programs, which are designed to provide necessary knowledge and expertise in line with the mission and outlook of the organization (Shafiei Nikabadi et al., 2016). Zack (1999) considers knowledge management strategy as a total approach to organization to create consistency among resources and knowledge abilities with the collection of requirements of that strategy. Point of View Zack3 (1999), knowledge strategy for bridging the gap between existing knowledge and the knowledge needed to be developed. The goal of the strategy is to answer strategic questions that emphasize internal competitive intelligence and knowledge retrieval systems (Shafiei Nikabadi et al., 2015). On the other

hand, knowledge management strategy can be considered as the process of production, encryption, and transmission of explicit knowledge into tacit knowledge, as well as, providing appropriate knowledge for appropriate person and in appropriate time and place (Halawi et al., 2006). Shafiei Nikabadi and Zamanloo (2013) think that based on two criteria can be judge about knowledge management strategies. One of criteria is the area of strategy concentration and the second is the source of knowledge.

Zack (1999) divides knowledge strategies to two groups: Conservation and Aggressive. Aggressive strategies are more suitable for better performance. Some people also believe that these strategies can be described by criteria such as innovative organizations due to great financial success in performance (Bierly & Chakrabarti, 1996). But limited research has been done about investigation of the relation between knowledge management strategies and performance. Even during review of literature, no special research has been observed about the relation of knowledge management strategies with supply chain performance. The reason is the difficulty of measurement of knowledge value and knowledge management system in industrial and economical institutes. Lee et al. (1999) introduced four types of knowledge strategies based on two dimensions of focus on knowledge and knowledge resources: 1) Pioneer and aggressive; 2) internal knowledge and human-centered; 3) external knowledge and reuse-centered and 4) Passive. They found out that companies which had pioneer and aggressive strategy and combined two strategies of human-centered and reuse-centered reached better financial performance in the factor of investment return rate. In other researches, it was recognized that human-centered strategy is the best strategy in manufacturing companies (Kankanhalli et al., 2003), and the best strategy in financial companies is system-centered attitude (Abell & Oxbrow, 2001). Choi and Jong (2010) also believe that the industry type affects knowledge management strategies, hence, when we go towards manufacturing companies, strategy types lean towards human-centered strategies and we necessitate ourselves to perform continuous interactions with employees, suppliers and customers. Actually, industry type makes effective factors on knowledge management strategy different. For example, technology-based factors for knowledge management in supply chain of auto industry are more important in comparison with other factors. To obtain a frame work for technology-based factors for knowledge management in supply chain of auto industry, Shafiei Nikabadi (2014) found that These factors are information technology (IT) tools, information systems integration and information security management. Schulz and Jobe (2001) have introduced four strategy groups named codification, manifestation, concentrated, and un-concentrated. They found out that concentrated strategies are the best strategies in transnational companies. Different types of knowledge required consistency of codification forms to increase the performance of subsidiaries. Choi and Lee (2003) have introduced four strategies of static, human-centered, system-centered and dynamic in their research. They found out that dynamic strategy would cause better performance in organizations. Keskin (2005) divided knowledge management strategies to two groups based on features and characteristics of knowledge: considering explicit knowledge and considering implicit knowledge. He found out that strategies which are based on explicit knowledge have greater effect on business performance. Yang (2010) followed the investigation of the effect of knowledge management strategy on organizational strategic performance in companies with advanced technology in china in view of theories of resources. He used new criteria for knowledge management strategies. Research results determined that performance-centered strategies and merits of knowledge management must be taken into consideration in performing knowledge management strategies. Palte et al. (2011) demonstrated that there is a positive relationship between knowledge management strategy and the performance of knowledge management processes, which are both closely related to knowledge management success. Story and Kahn (2010) found out that codification strategy (system based on documentation and documents) increases the

ability of service companies for developmental activities of new services, and personalization strategy (system based on interpersonal communicative networks) causes that market to recognize the company as innovative and inventive.

Considering the present review, we can find out that based on two dimensions, we can judge about knowledge management strategy. One dimension is the place of strategy focus which indicates that whether the strategy is based on explicit knowledge or implicit knowledge; the other dimension is used for knowledge source, i.e. they follow internal knowledge or consider their knowledge external. For example, Bierly and Chakrabarti (1996) and Zak (1999) put the basis of their definition of strategies on each of the two dimensions. Keskin (2005) and Schulz and Jobe (2001) also put the only basis of their strategies design on the place of knowledge focus. In Table 4, the most significant criteria for different dimensions of knowledge management strategies have been noticed.

Question 4: *What are the most important criteria of knowledge management strategy to knowledge sharing in the supply chain?*

RESEARCH METHOD

Multidimensional Structure

One of the most strenuous and suitable methods of analysis in the domain of humanities, social, and behavioral knowledge research is the multidimensional analysis. In this method, researchers use multidimensional structure for introduction of their suggestive model. A structure that contains a number of features which are related to each other and exists in multidimensional domains is called multidimensional structure. In comparison with a collection of one-dimensional structures which are related to each other, dimensions of a multidimensional structure can be determined by a total structure (Law et al., 1998). But we must notice that in models of multidimensional structure we must, at first, insert multidimensional structures and their dimensions in an identical model. Secondly, a model must include hypotheses which are related to communicative direction between multidimensional structure and their

Table 4. Dimensions and criteria of knowledge management strategies

Focus	Implicit Knowledge	<ul style="list-style-type: none"> - Emphasis on acquisition of knowledge from experts and colleagues - Emphasis on communicative networks and informal and face to face conversations by experts - Emphasis on knowledge acquisition by direct person to person trainings
	Explicit Knowledge	<ul style="list-style-type: none"> - Emphasis on performance of documentations - Acquisition and sharing of knowledge via coded and documented manners
Knowledge Source	Internal	<ul style="list-style-type: none"> - The amount of certainty to interorganizational knowledge resources - Emphasis to use interorganizational knowledge for creation of new knowledge
	External	<ul style="list-style-type: none"> - Emphasis on acquisition of knowledge from customers - Significance of outside consultations - Emphasis on knowledge acquisition via cooperation and formation of unions - Emphasis on knowledge acquisition via investigation and analysis of opponents' knowledge
Bierly & Chakrabarti, 1996; Lee et al., 1999; Zack, 1999; Choi & Lee, 2003; Merono-Carden et al., 2007; Storey & Kahn, 2010; Choi & Jong, 2010		

dimensions. Thirdly, analyses must deal with the investigation of strength and adaptability of communications between multidimensional structures and their dimensions (Edwards, 2001).

Conceptual Model of Research

Considering the review of the related literature, the conceptual model of the research can be design as Figure 1.

Variables and Hypotheses of the Research

Considering the aforementioned multidimensional structure, we can introduce criteria of supply chain strategy as independent variable, criteria of business strategy and knowledge management strategy as semi-dependent variable, and knowledge sharing as dependent variable of the research. Therefore, we can express research hypotheses as follows:

Hypothesis 1: *Supply chain strategy has a significant effect on business strategy.*

Hypothesis 2: *Supply chain strategy has a significant effect on knowledge management strategy.*

Hypothesis 3: *Business strategy has a significant effect on knowledge sharing in the supply chain.*

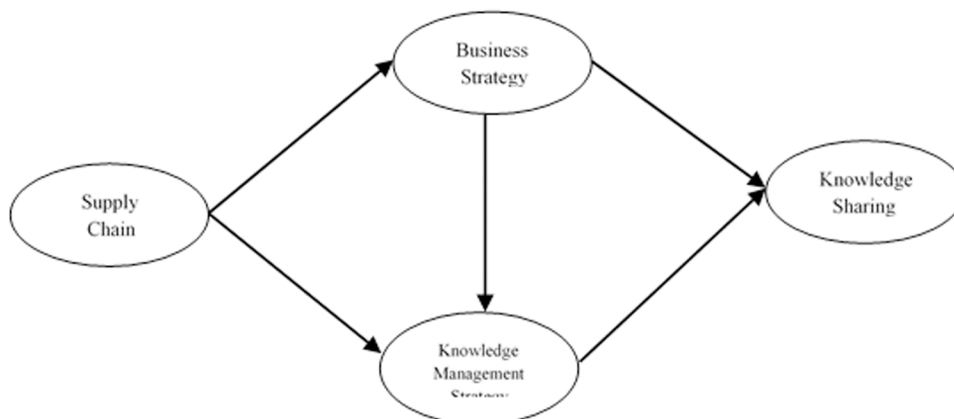
Hypothesis 4: *Business strategy has a significant effect on knowledge management strategy.*

Hypothesis 5: *Knowledge management strategy has a significant effect on knowledge sharing in the supply chain.*

Research Methodology

This research is an applied one from the results' point of view and includes qualitative variables. It is a descriptive and causal research. The instrument used in this research is questionnaires based Likert (Five-point). The spatial domain of the research includes collection of producers, suppliers, and after-sale service companies in Iran's auto industry.

Figure 1. Conceptual model of research



Statistical Society and Sample

Due to the fact that the analysis unit of this research is the supply chain of auto industry, the statistical society of the research includes experts of the auto industry. Experts and specialists who constitute statistical society of the research in this part have been selected from those who had three years experience in domain management and had at least one of the following features:

1. University degree (BA or higher) in management and economics fields of study.
2. Have scientific records, researches or articles in domains of knowledge management, supply chain management and supply chain performance.
3. Their executive activity in their organization is related to strategy, program and plan, supply chain, and knowledge management.

The available statistical sample in this part has been selected from among the largest automotive supply chain in Iran (Iran Khodro & Saipa). The basic reason of this selection is that these two companies have the most share of car market in Iran. Historical Background of these two companies is more than any other company in this industry (Hanafizadeh & Nikabadi, 2011). Therefore, sampling has been performed from experts who are related to research subject in these two companies. Hence, the research subject is one of the new subjects in the industry; and since the number of favorite respondent people for that responsibility is limited, we have selected the sample selectively and purposefully.

Validity and Reliability

In this research, at first, we used content validity for assessment of adequacy and precision of criteria of multidimensional structure of research. Then, the modification and reformations of scales were performed based on frequency amount in the research literature. These changes were finally done by three university professors in the field of industrial management and three experts in industry who had 5 years experience. Construct validity has also been used to assess factor validity of multidimensional structure of research. Cronbach's Alpha method and Composite reliability method have been used for reliability investigation in this research. If reliability coefficient is more than 0.7, reliability will have accepted (Shafiei Nikabadi & Hakaki, 2017).

Method of Data Gathering and Analysis

Method and instrument of data gathering in this research is Library and Field. To analyze the data and answer the questions and hypotheses of the research, instruments of descriptive and deductive statistics have been used, especially Factor analysis and Path analysis and model Fitness. Statistical analyses have been performed by the SPSS (Version 18) and LISREL software (Version 8.54).

FINDINGS

We distributed 125 questionnaires but only 115 questionnaires were suitable for statistical analysis. 45 questionnaires belonged to suppliers, 40 questionnaires to producers and 30 questionnaires to after sale

services companies in the supply chain. 75 questionnaires have been taken from supply chain of Iran Khodro Company and 40 questionnaires from supply chain of Saipa Company. According to demographic information resulted from distributed questionnaires, 51 percent of people were post graduated. 45 percent of the people had from 5 to 10 years of experience. 55 percent of them had from 10 to 20 years experience in the SC of auto industry.

Sampling Adequacy and Confirmative Factor Analysis

Factor analysis presents a new collection of variables which create the essence and feature of the main variables in a few numbers of these variables (Kline, 1994). In this method, problems of variables' abundance or great dependency among them can be decreased essentially by substitution of new variables. In this research, the purpose of using confirmative factor analysis is to decrease components of available dimensions in research to recognize more significant components. But before performing factor analysis, KMO test must be done to assure adequacy of sampling. We consider 0.6 instead of 0.5 for more certainty in this research (Handfield & Nichols, 1999).

Considering Table 5, we can determine that which one of the criteria in each dimension has the most significance and has been confirmed (answering the research questions). The amount of reliability for each dimension has been measured separately. Since all are higher than 0.7, we can confirm the reliability of the research. Adequacy of sampling has also been confirmed. Considering the extracted criteria of Table 5, the multidimensional structure of the research can be designed. Finally, we can deal with the investigation of this structure. Because the factor of the reactor strategy was recognized as an unimportant factor, the reactor strategy variable can be deleted from this structure in modification of multidimensional structure. Different dimensions of multidimensional structure of the research have been formed based on the criteria of Table 5. Considering the necessary conditions for multidimensional structures, literature review, conceptual model of the research, and finally results of Table 5, we will design multidimensional structure of research as Figure 2.

The above multidimensional structure was designed by LISREL software. Fitness Indices have presented in Table 6. Since different Indices for the Fitness of the model are proportionate to their favorite amount, we can conclude that multidimensional structure of this research enjoys satiable deserving in supply chain of auto industry. Consequently, construct validity of research is also confirmed. Different factor loading have also been created for each of factors which are effective on knowledge sharing. It is indicative of their correlation amount with Latent variable and the importance amount of each of these variables in structure. Table 7 indicates factor loading for each of the available variables in the model.

The Assessment of Co-Linearity Between Available Variables in Structural Model

Before performing the path analysis, the nonexistence of co-linearity between the available variables in the structural model must be confirmed. Hence, the knowledge sharing in the supply chain is affected by variables of supply chain strategy, business strategy, and knowledge management strategy. More than one independent variable affects the dependent variable in the model. On the other hand, there is a correlation between variables which are effective on knowledge sharing (Table 8). We have to investigate co-linearity between effective variables in the multidimensional structure. For this important issue, we

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Table 5. Reliability and identification of key criteria of multidimensional structure of research

Dimension		Components	Factor Loading	Yes or No	t-value	Alpha's Cronbach	Composite Reliability	KMO
Distribution, Sharing, and Transmission of Knowledge	The existence of Cross-functional meetings and teams for investigation of different procedures in the market and chain		0.56	<u>N</u>	6.2	0.843	0.846	0.871
	The existence of instruments, commutative networks and information systems which are suitable and pertinent to share communications and information among chain members		0.74	Y	8.8			
	The creation of informal groups and human networks (such as quality circles)		0.53	<u>N</u>	5.76			
	The existence of open and strong culture to share information and accept consultation		0.68	Y	7.88			
	Sharing technical information with suppliers and logistics members		0.60	Y	6.64			
	Encouragement and support of management in sharing knowledge and information		0.73	Y	8.68			
	To use and update databases and different resources of knowledge for improvement of process quality		0.57	<u>N</u>	6.31			
	The existence of mutual organizational communications among top managers and members		0.68	Y	7.83			
Supply Chain Strategy	Based on Customer	Constant, rapid and efficient response to the requirement change of customers	0.75	Y	9.25	0.917	0.919	0.912
		Constant measurement of customer's satisfaction	0.74	Y	9.04			
		The performance of corrective actions to obviate customers' dissatisfaction	0.75	Y	9.19			
		Paying attention to margin of interest on pricings	0.46	<u>N</u>	4.98			
	Based on Producer	Optimization of performance by the lowest cost	0.69	Y	8.28			
		Maximum exploitation of volume according to standards with the lowest cost	0.78	Y	9.82			
		Emphasis on flexibility of volume for creation of a shield against uncertainty of supply and demand in the chain	0.73	Y	8.89			
		The existence of the least inventory in the warehouse and preservation of cautious reserve for facing with uncertainty of supply and demand in the chain	0.75	Y	9.15			
	Based on suppliers	Rapid and efficient response to the change of suppliers	0.78	Y	9.79			
		The decrease of time delivery of part to the factory	0.69	Y	8.17			
		Selection of suppliers just based on cost and quality	0.47	<u>N</u>	5.11			
		Selection of suppliers based on rapidity/ flexibility/ certainty/ quality	0.74	Y	9.03			
Business Strategy	Prospectors	Emphasis on required innovations for customers	0.74	Y	0.894	0.828	0.843	0.823
		Emphasis on acquisition of market share and more interest	0.66	Y	7.67			
		Emphasis on income management	0.63	Y	7.26			
	Analyzers	Emphasis on absorption of new markets but pertinent to previous products	0.53	<u>N</u>	5.88			
		Emphasis on improvement of previous situation and condition	0.60	Y	6.77			
	Defenders	Emphasis on limited products	0.16	<u>N</u>	1.64			
		Emphasis on low price	0.27	<u>N</u>	2.78			
		Emphasis on high quality	0.84	Y	10.89			
		Emphasis on engineering power	0.79	Y	9.93			
	Reactors	Emphasis on cost management	0.75	Y	9.18			
Reactors	Emphasis on the subordination of the environment	0.14	<u>N</u>	1.49				

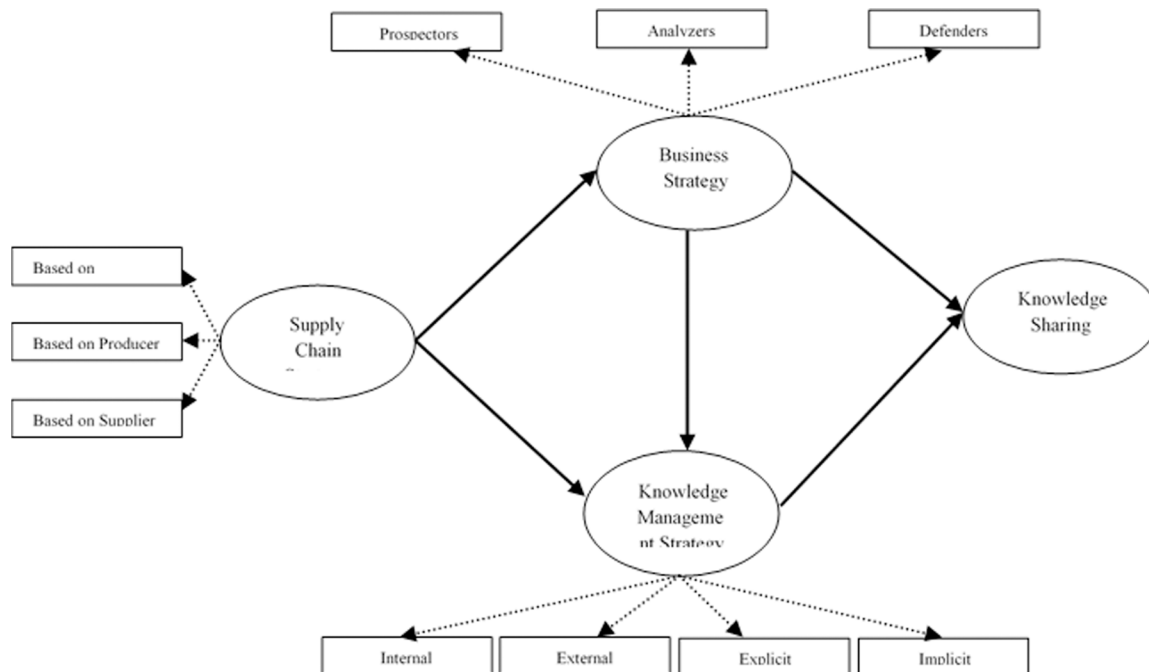
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Table 5. Continued

Dimension	Components	Factor Loading	Yes or No	t-value	Alpha's Cronbach	Composite Reliability	KMO	
Knowledge Management Strategy	Implicit	Emphasis on acquisition of knowledge from experts and colleagues	0.59	N	6.69	0.878	0.879	0.848
		Emphasis on communicative networks and informal and face to face conversations to experts	0.65	Y	7.5			
		Emphasis on acquisition of knowledge via direct and person to person trainings	0.66	Y	7.66			
	Explicit	Emphasis on documentations	0.58	N	6.55			
		Acquisition and sharing of knowledge via coded and documented manners	0.61	Y	6.98			
	Internal	The amount of certainty to resources of interorganizational knowledge	0.66	Y	7.64			
		Emphasis on use of interorganizational knowledge to create new knowledge	0.64	Y	7.42			
	External	Emphasis on acquisition of knowledge from customers	0.73	Y	8.72			
		Importance of internal consultations	0.51	N	5.61			
		Emphasis on acquisition of knowledge via cooperation and formation of unions	0.64	Y	7.28			
		Emphasis on acquisition of knowledge via investigation and analysis of opponents' knowledge	0.66	Y	7.69			

Figure 2. Multidimensional structure of the research



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Table 6. Construct validity for multidimensional structure of research (fitness test)

x ² / df	Standard Root Mean Square Residual (SRMSR)	Goodness of Fit Index (GFI)	Adjusted Goodness of Fit Index	Root Mean Square Error of Approximation (RMSEA)	Normed Fit Index (NFI)	Non-Normed Fit Index (NNFI)	Comparative Fit Index
1.267	0.047	0.93	0.90	0.048	0.93	0.98	0.98

Favorite amounts: $x^2 / df \leq 3$; GFI, NFI, NNFI, CFI ≥ 0.90 ; RMSEA ≤ 0.08 ; SRMSR ≤ 0.10 Hartwik & Barki (1994); Segares & Graver (1993)

Table 7. Factor loading of variables in the multidimensional structure

Based on Customer	Based on Producer	Based on Supplier	Prospectors	Analyzers	Defenders	Internal	External	Explicit	Implicit
0.92	0.79	0.95	0.86	0.60	0.87	0.68	0.82	0.59	0.69

use Variance Inflation Factor (VIF) (less than or equal to 10) and Tolerance (more than 0.1) (Hair et al., 1998).

Considering the Table 9, since the above conditions exist, there is the possibility of path analysis.

Path Analysis

After the investigation of Co-linearity nonexistence, path analysis is used to investigate and confirm the existence of rational relation between variables to investigate the posed hypotheses. By using this technique, we will determine the amount of direct and indirect effect of available variables in the multidimensional structure. Table 10 indicates available effects among independent and dependent variable of research.

Table 8. Correlation between the available factors in the multidimensional structure

		Knowledge Sharing	Knowledge Management Strategy	Business Strategy	Supply Chain Strategy
Knowledge Sharing	Pearson Correlation Sig. (2-tailed)	1			
Knowledge Management Strategy	Pearson Correlation Sig. (2-tailed)	.656** .000	1		
Business Strategy	Pearson Correlation Sig. (2-tailed)	.505** .000	.555** .000	1	
Supply Chain Strategy	Pearson Correlation Sig. (2-tailed)	.483** .000	.489** .000	.689** .000	1

Table 9. Investigation of nonexistence of co-linearity between variables which are effective on knowledge sharing

	Co-Linearity Statistics	
	Tolerance	VIF
Knowledge Management Strategy	.670	1.492
Business Strategy	.463	2.162
Supply Chain Strategy	.509	1.954

Table 10. Direct, indirect, and total effects (results of path analysis)

	Effect of supply chain strategy on			Effect of Business strategy on			Effect of Knowledge management strategy on		
	Total Effect	Direct Effect	Indirect Effect	Total Effect	Direct Effect	Indirect Effect	Total Effect	Direct Effect	Indirect Effect
Business Strategy	0.73	0.73	-						
Knowledge Management Strategy	0.56	0.12	0.44	0.60	0.60	-			
Knowledge Distribution	0.51	-	0.51	0.57	0.12	0.49	0.81	0.81	-

Considering Table 10, we can express that hypothesis 1 has been confirmed. But hypothesis 2 is not confirmed, because direct effect of supply chain strategy on knowledge management strategy is low. Hypothesis 3 is not confirmed because of low amount of direct effect of business strategy on knowledge distribution. Hypotheses 4 and 5 have been confirmed.

DISCUSSION AND IMPLICATIONS

Knowledge sharing describes business processes that knowledge transfer among members of organization or peer group. According Table 5, we can find out that the most important criteria for knowledge sharing among chain members are “existence of instruments, communicative networks and pertinent and suitable information system to facilitate communication and share information among chain members, “and” encouragement and support of management in sharing information and knowledge. It can also be expressed that in addition to existence of instruments and suitable communicative networks which are related to knowledge sharing, existence of encouragement and support of management for knowledge distribution within business and among chain members are key factors of success in effective distribution of knowledge in the supply chain. Indeed, Management support plays an essential role in knowledge sharing, because even if all the conditions are ready, without management support and permission, there is no possibility for knowledge sharing. The interesting point is that, those factors have been recognized as key factors for effective distribution of knowledge that firstly be related to instruments of knowledge distribution and secondly be pertinent to organizational and managerial culture among members of supply

chain. According to the study of Fawcett et al., (2007), we can infer that knowledge sharing in supply chain is a function of each of the two factors of connectivity and willingness. Therefore, concurrent attention to these two factors can lead to successful organizational learning (Nayir & Uzuncarsili, 2008).

This issue indicates that supplier variable in the supply chain has the most significant role in knowledge sharing among chain members. Then, the components which are based on customer's strategies are important. The results of table 7 also indicated this issue. Hence, the highest factor loading has been for strategies based on supplier. Then, the strategy based on customer has significance in the supply chain. According to experts, since the main strategy of supply chain is to maximize value added for customers, these strategy allocate the highest factor loading to themselves.

To results of Table 8 and 10, supply chain strategies had the least correlation and effect with knowledge sharing in the supply chain. But the important point is that the supply chain strategy had the most effect on business strategies and knowledge management strategies. Besides, it is the business strategies which had the most effect on knowledge management strategies. Ultimately, knowledge management strategy conducts and directs knowledge sharing in the supply chain. Therefore, we can infer that in the domain of knowledge management, supply chain strategies affect the purposefulness of business strategy and business strategy affects the knowledge management strategy. It is knowledge management strategy which affects purposeful and effective distribution of knowledge in the supply chain directly and strongly. Therefore, for suitable distribution of knowledge among chain members, at first we need suitable strategies of supply chain along with knowledge management until we strengthen knowledge distribution in the chain via this hierarchical relation. We can observe the existence and the amount of this hierarchical effect in table 10. Previous researches also confirm that strategies of chain and industry can affect the effective management of knowledge (Soni & Kodali, 2011; Choi and Jong, 2010). But the important point is that researches about the effect of supply chain strategies on knowledge management processes, which are considered not only as methods for collecting knowledge, processing and using it to improve operational processes, but also classified and organizational processes that use to achieve, organize, and communicate with knowledge of employees, were very meager. These researches have just paid attention to one type of strategy and have presented their analysis descriptively.

According to table 5, the first conclusion is that passive strategies will not have any role in knowledge sharing in the supply chain. Emphasis on high quality and high engineering power are the most important criteria in business strategy. We can recognize that these criteria are mostly related to the supplier party and are based on customer's satisfaction. This issue is observable in the importance of supply chain strategies based on supplier and customer. Business strategy will have the greatest effect on knowledge management strategy directly and on knowledge sharing in the chain indirectly. Previous researches which have dealt with business strategy and its relation to knowledge management processes confirm these findings (Ulrich, 1998; Nahapiet & Ghoshal, 1998; Zack, 1999; Snyman & Kruger, 2004; Tseng, 2008; Conely & Zheng, 2009). In these researches, researchers just paid attention to business strategies and they did not pay attention to other effective strategies such as supply chain strategies. They did not have a special attention to the key role of knowledge management strategies, and the most important scale has been the scale which emphasizes the knowledge acquisition on behalf of the customer. According to results of table 5, we can infer that the most important criteria for compilation of knowledge management strategy belong to the variable of internal knowledge of organization. The results of Table 7 also indicate that the most important variable among variables for compilation of knowledge management strategies in the supply chain of auto industry is external knowledge variable and consideration of key scales of this variable.

According to Table 10, knowledge sharing in supply chain has been under the direct effect of knowledge management strategies. Nevertheless, it has also been under the indirect effect of business strategies and supply chain strategy. Finally, we can say that the effective knowledge sharing in supply chain is under the effect of hierarchy of strategies. Hence, supply chain strategies affect business strategy, and business strategy on knowledge management strategy, and finally it is the knowledge management strategy which conducts and directs effective and purposeful knowledge sharing in the SC.

CONCLUSION

The main goal of the research is to present a multidimensional structure to determine the effect of types of strategies (supply chain, business, and knowledge management) on knowledge sharing in the supply chain of automotive industry. This research has been performed in the supply chain of Iran Khodro and Saipa companies as the largest and the most active auto companies in Iran.

During a survey and Cause-effect research, we determined that the effective distribution of knowledge in supply chain is under the effect of hierarchy of strategies. Besides, existence of instruments, communicative networks and pertinent and suitable information system to facilitate communication and share information among chain members, encouragement and support of management in sharing information and knowledge are the most important criteria for knowledge sharing among chain members that be related to instruments of knowledge distribution and be pertinent to organizational and managerial culture among members of supply chain respectively.

Hence, supply chain strategies affect business strategy, and business strategy affects knowledge management strategy. Finally, it is the knowledge management strategies which conduct and direct the effective and purposeful knowledge sharing in the supply chain. Therefore, knowledge management strategies have been under the direct effect of knowledge management strategies, but they are also under the indirect effect of business strategies and supply chain strategies.

Of course, it is noticed that this research has been performed in supply chain of auto industry; therefore, generalization of its results to other supply chains in other industries needs more research. Because, national culture may explain the differences among countries in their knowledge sharing and transfer capacities (Khalil & Seleim, 2010). Moreover, it is worth mentioning that organizational, supply chain, and business culture are different among different industries. Based on Shafiei Nikabadi et al. (2012), the culture of the supply chain has had the greatest impact of business culture and business culture had a strong but indirect effect on supply chain performance.

Consequently, as executive suggestions, it is advised to Irankhodra and Saipa as the greatest car factories in Iran to develop their communications with supply chain members for sharing knowledge in order to improve their efficiency and obtain sustainable competitive advantage in comparison to their competitors. Since supply chain strategy effect on business strategy, these companies' strategy should be coordinate with their supply chain members to create an integrated system against to reduce the bullwhip effect of supply chain. Moreover, it is better for them to go towards knowledge sharing more because of reducing costs and risks of investing on R&D and paying more attention to customers' satisfaction. Those companies that want to improve knowledge management strategy should have a comprehensive plan for organization learning, reward system, employees, and suppliers. Indeed, Irankhodro and Saipa should coordinate their knowledge management with their business strategy and supply chain strategy because strategy among supply chain, business, and knowledge management is Hierarchy.

Other researchers can also study about effect of factors within the organization and outside the organization on all processes of knowledge management (Creation; Storage; Sharing and Application/ Use) by extension of this structure and addition of other dimensions (Like Organizational Culture and Structure and Human Resources practices).

REFERENCES

- Abell, A., & Oxbrow, N. (2001). *Competing with Knowledge*. London: Library Association Publishing.
- Akhter, H. S. (2003). Strategic planning, hyper competition, and knowledge management. *Business Horizons*, 46(1), 19–24. doi:10.1016/S0007-6813(02)00275-6
- Aliaga, A. O. (2000). Knowledge Management and Strategic Planning. *Advances in Developing Human Resources*, 2(1), 91–104. doi:10.1177/152342230000200108
- Aliakbari Nouri, F., & Shafiei Nikabadi, M. (2015). Justifying and Choosing Advanced technology: Applying FANP-FARS Approach. *Journal of Technology Development Management*, 2(3), 109–134.
- Aminbeidokhti, A., Shafiei Nikabadi, M., & Hoseini, A. M. (2016). The role of transformational leadership and knowledge management processes on the rate of organisational innovation. *International Journal of Knowledge Management Studies*, 7(3-4), 270–287. doi:10.1504/IJKMS.2016.082345
- Beaumont, J. (2010). Knowledge management in a regional law firm: A worthwhile investment or time wasted? *Business Information Review*, 27(4), 227–232. doi:10.1177/0266382110389296
- Bierly, P., & Chakrabarti, A. (1996). Generic knowledge strategies in the US pharmaceutical industry. *Strategic Management Journal*, 17(10), 123–135. doi:10.1002/mj.4250171111
- Botoo Ekionea, J. P., & Swain, D. E. (2008). Developing and aligning a knowledge management strategy: Towards a taxonomy and a framework. *International Journal of Knowledge Management*, 4(1), 29–45. doi:10.4018/jkm.2008010103
- Bryant, S., & Nguyen, T. (2017). Major factors affecting knowledge sharing in emerging economies: A theoretical study. *International Journal of Management & Human Resources*, 5(1).
- Carvalho, N., & Gomes, I. (2017). Knowledge Sharing between Enterprises of the Same Group. *International Journal of Knowledge Management*, 13(1), 34–52. doi:10.4018/IJKM.2017010103
- Chawla, D., & Joshi, H. (2011). Impact of Knowledge Management dimensions on learning organization: Comparison across business excellence awarded and non-awarded Indian organizations. *International Journal of Knowledge Management*, 7(2), 68–85. doi:10.4018/jkm.2011040104
- Chen, M. Y., Huang, M. J., & Cheng, Y. C. (2009). Measuring knowledge management performance using a competitive perspective: An empirical study. *Expert Systems with Applications*, 36(4), 8449–8459. doi:10.1016/j.eswa.2008.10.067
- Choi, B., & Jong, A. M. (2010). assessing the impact of knowledge management strategies announcements on the market value of firms. *Information & Management*, 47(1), 42–52. doi:10.1016/j.im.2009.10.001

- Choi, B., & Lee, H. (2003). An Empirical investigation of KM styles and their effect on corporate performance. *Information & Management*, 40(5), 403–417. doi:10.1016/S0378-7206(02)00060-5
- Chopra, S., & Meindl, P. (2007). *Supply chain management*. Prentice-Hall Publication.
- Conely, A. C., & Zheng, W. (2009). Factors Critical to Knowledge Management Success. *Advances in Developing Human Resources*, 11(3), 334–348. doi:10.1177/1523422309338159
- Dabinett, G., & Richardson, T. (1995). the European Spatial Approach: The Role of Power and Knowledge in Strategic Planning and Policy Evaluation. *Evaluation*, 5(2), 220–236. doi:10.1177/13563899922208931
- Defee, C. C., & Stank, T. P. (2005). applying the strategy-structure-performance paradigm to the supply chain environment. *International Journal of Logistics Management*, 16(1), 28–50. doi:10.1108/09574090510617349
- Di Gangi, P. M., Wasko, M. M., & Tang, X. (2012). Would you share? Examining knowledge type and communication channel for knowledge sharing within and across the organizational boundary. *International Journal of Knowledge Management*, 8(1), 1–21. doi:10.4018/jkm.2012010101
- Diakoulakis, E. I., Georgopoulos, B. N., Koulouriotis, E. D., & Emiris, M. D. (2004). Toward a Holistic Knowledge Management Model. *Journal of Knowledge Management*, 8(1), 32–46. doi:10.1108/13673270410523899
- Dong, Y., Bartol, K. M., Zhang, Z. X., & Li, C. (2017). Enhancing employee creativity via individual skill development and team knowledge sharing: Influences of dual-focused transformational leadership. *Journal of Organizational Behavior*, 38(3), 439–458. doi:10.1002/job.2134
- Dong, Y., Bartol, K. M., Zhang, Z. X., & Li, C. (2017). Enhancing employee creativity via individual skill development and team knowledge sharing: Influences of dual-focused transformational leadership. *Journal of Organizational Behavior*, 38(3), 439–458. doi:10.1002/job.2134
- Dorostkar Ahmadi, N., & Shafiei Nikabadi, M. (2015). A Fuzzy Intelligent Model for Evaluating Knowledge Management Processes in the Supply Chain. *Industrial Management Prospective*, 18, 153–157.
- Dwivedi, Y. K., Venkitachalam, K., Sharif, A. M., Al-Karaghoul, W., & Weerakkody, V. (2011). Research trends in knowledge management: Analyzing the past and predicting the future. *Information Systems Management*, 28(1), 43–56. doi:10.1080/10580530.2011.536112
- Edwards, J. R. (2001). Multidimensional Constructs in organizational Behavior Research: An Integrative Analytical Framework. *Organizational Research Methods*, 4(2), 144–192. doi:10.1177/109442810142004
- Elahi, S., Rastegar, A. A., & Shafiei Nikabadi, M. (2014). Investigate the Impact of Knowledge Management Process Capabilities on Innovation Performance Considering Mediating Effect of Innovation Processes in High-Tech Organizations. *Journal of Technology Development Management*, 1(4), 105–129.
- Fard, D. H., & Selseleh, M. (2010). Measuring Knowledge Management Cycle: Evidence from Iran. *European Journal of Scientific Research*, 41(2), 297–309.

Fawcett, S. E., Osterhaus, P., Magnan, G. M., Brau, J. C., & McCarter, M. W. (2007). Information sharing and supply chain performance: The role of connectivity and willingness. *Supply Chain Management*, 12(5), 358–368. doi:10.1108/13598540710776935

Fugate, S. B., Stank, P. T., & Mentzer, T. J. (2009). Linking improved Knowledge Management to Operational and Organizational Performance. *Journal of Operations Management*, 27(3), 247–264. doi:10.1016/j.jom.2008.09.003

Gloet, M., & Samson, D. (2016). Knowledge Management and Systematic Innovation Capability. *International Journal of Knowledge Management*, 12(2), 54–72. doi:10.4018/IJKM.2016040104

Goldoni, V., & Oliveira, M. (2010). Knowledge management metrics in software development companies in Brazil. *Journal of Knowledge Management*, 14(2), 301–313. doi:10.1108/13673271011032427

Gonzalez, R. V. D. (2016). Knowledge Management Process in Multi-Site Provision of Service. *International Journal of Knowledge Management*, 12(2), 20–37. doi:10.4018/IJKM.2016040102

Hair, J. F., Anderson, R. E., Tathman, R. L., & Black, W. C. (1995). *Ultivariate Data Analysis*. Prentice Hall.

Halawi, L. A., McCarthy, R. V., & Aronson, J. E. (2006). Knowledge management and the competitive strategy of the firm. *The Learning Organization*, 13(4), 384–397. doi:10.1108/09696470610667751

Hanafizadeh, P., & Shafiei Nikabadi, M. (2011). Framework for Selecting an Appropriate E-Business Model in Managerial Holding Companies, Case Study: Iran Khodro. *Journal of Enterprise Information Management*, 24(3), 237–267. doi:10.1108/17410391111122844

Handfield, R. B., & Nichols, E. L. (1999). *Introduction to Supply Chain Management*. Upper Saddle River, NJ: Prentice-Hall.

Hult, G., Ketchen, D. J., & Arrfelt, M. (2007). Strategic supply chain management: Improving performance through a culture of competitiveness and knowledge development. *Strategic Management Journal*, 28(1), 1035–1052. doi:10.1002/mj.627

Hult, G., Ketchen, D. J., & Stanley, S. F. (2004). Information processing, knowledge development, and strategic supply chain performance. *Academy of Management Journal*, 47(2), 241–253.

Kankanhalli, A., Tanudidjaja, F., Sutanto, J., & Tan, B. C. Y. (2003). the Role of IT in Successful Knowledge Management Initiatives. *Communications of the ACM*, 46(9), 69–73. doi:10.1145/903893.903896

Kasten, J. E. (2009). Knowledge strategy and its role in the organization: An exploratory study. *International Journal of Knowledge Management*, 5(3), 38–53. doi:10.4018/jkm.2009070103

Keskin, H. (2005). *the Relationships between explicit and tacit oriented KM strategy, and Firm Performance*. *The Journal of American Academy of Business, Cambridge*, 7(1), 73–77.

Khalil, O., & Seleim, A. A. S. (2010). Culture and knowledge transfer capacity: A cross-national Study. *International Journal of Knowledge Management*, 6(4), 60–86. doi:10.4018/jkm.2010100104

Kline, R. B. (1998). *Principles and Practice of Structural Equation Modeling*. The Guilford Press.

- Kongpichayanond, P. (2009). Knowledge Management for Sustained Competitive Advantage in Mergers and Acquisitions. *Advances in Developing Human Resources*, 11(3), 375–387. doi:10.1177/1523422309339725
- Law, K. S., Wong, C. S., & Mobley, W. H. (1998). Toward a taxonomy of multidimensional constructs. *Academy of Management Review*, 23(4), 741–755. doi:10.5465/amr.1998.1255636
- Lee, H., Chang, Y., & Choi, B. (1999). Analysis of Effects of Knowledge Management strategies in Corporate Performance. *Korean Intelligent Information Journal*, 5(2), 99–120.
- Leibowitz, J., & Chen, Y. (2001). Developing Knowledge-Sharing Proficiencies: Building a supportive culture for Knowledge-Sharing. *Knowledge Management Review*, 3(6), 12–15.
- Liao, C., Chuang, S. H., & To, P. L. (2011). How knowledge management mediates the relationship between environment and organizational structure. *Journal of Business Research*, 64(7), 728–739. doi:10.1016/j.jbusres.2010.08.001
- Liao, S. H., & Wu, C. C. (2009). the Relationship among Knowledge Management, Organizational Learning, and Organizational Performance. *International Journal of Business and Management*, 4(4), 64–76. doi:10.5539/ijbm.v4n4p64
- Lilleoere, A. M., & Hansen, E. H. (2011). Knowledge-sharing enablers and barriers in pharmaceutical research and development. *Journal of Knowledge Management*, 15(1), 53–70. doi:10.1108/13673271111108693
- Lin, W. B. (2008). the effect of knowledge sharing model. *Expert Systems with Applications*, 34(2), 1508–1521. doi:10.1016/j.eswa.2007.01.015
- Lowson, R. H. (2002). Operations Strategy: Genealogy, Classification and Anatomy. *Int. J. of Operations and Productions Management*, 22(10), 1112–1129. doi:10.1108/01443570210446333
- Maier, R., & Remus, U. (2002). Defining Process-oriented Knowledge Management Strategies. *Knowledge and Process Management*, 9(2), 103–118. doi:10.1002/kpm.136
- Massa, S., & Testa, S. (2009). a knowledge management approach to organizational competitive advantage: Evidence from the food sector. *European Management Journal*, 27(2), 129–141. doi:10.1016/j.emj.2008.06.005
- Merono-Cerdan, L. A., Lopez-Nicolas, C., & Sabater-Sanchez, R. (2007). Knowledge management strategy diagnosis from KM instruments use. *Journal of Knowledge Management*, 11(2), 60–72. doi:10.1108/13673270710738915
- Miles, R. E., & Snow, C. C. (1978). *Organizational Strategy, Structure and Process*. McGraw Hill.
- Muhammed, S., Doll, W. J., & Deng, X. (2011). Impact of knowledge management practices on task knowledge: An individual level study. *International Journal of Knowledge Management*, 7(4), 1–21. doi:10.4018/jkm.2011100101
- Nahapiet, J., & Goshal, S. (1998). Social capital, intellectual capital and the organizational advance. *Academy of Management Review*, 23(2), 242–266. doi:10.5465/amr.1998.533225

- Nassim, B. (2009). Investigating the impact of knowledge management factors on new product development performance. *International Journal of Knowledge Management*, 5(3), 21–37. doi:10.4018/jkm.2009070102
- Nayir, D. Z., & Uzuncarsili, U. (2008). a cultural perspective on knowledge management: The success story of Sarkuysan company. *Journal of Knowledge Management*, 12(2), 141–155. doi:10.1108/13673270810859578
- Nehari-Talet, A., Alhawari, S., & Alryalat, H. (2010). The outcome of knowledge process for customer of Jordanian companies on the achievement of customer knowledge retention. *International Journal of Knowledge Management*, 6(1), 44–61. doi:10.4018/jkm.2010103003
- Nevo, D., & Chan, Y. E. (2007). A Delphi of Knowledge Management Systems: Scope of Requirements. *Information & Management*, 44(6), 583–597. doi:10.1016/j.im.2007.06.001
- Nikabadi, M. S., & Hakaki, A. (2018). A Dynamic Model of Effective Factors on Open Innovation in Manufacturing Small and Medium Sized Companies. *International Journal of System Dynamics Applications*, 7(1), 1–26. doi:10.4018/IJSDA.2018010101
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 14–37. doi:10.1287/orsc.5.1.14
- Nonaka, I., & Takeuchi, H. (1995). *The Knowledge Creating Company*. Oxford University Press.
- Nurmilaakso, J. M. (2007). *XML-based e-business frameworks and supply chain integration*. Helsinki University of Technology.
- Palte, R., Hertlein, M., Smolnik, S., & Riempp, G. (2011). The effects of a KM strategy on KM performance in professional services firms. *International Journal of Knowledge Management*, 7(1), 16–34. doi:10.4018/jkm.2011010102
- Porter, M. E. (1998). *Competitive strategy: Techniques for analyzing industries and competitors*. FREE Press.
- Rahmanseresht, H., & Afsar, A. (2009). the effect of Information Sharing on Competitive Strategies and Supply chain Performance. *Iranian Journal of Information Technology Management*, 1(1), 48–37.
- Ritala, P., Husted, K., Olander, H., & Michailova, S. (2018). External knowledge sharing and radical innovation: The downsides of uncontrolled openness. *Journal of Knowledge Management*, 22(5), 1104–1123. doi:10.1108/JKM-05-2017-0172
- Roh, J. J., Hong, P., & Park, Y. (2008). Organizational culture and supply chain strategy: A framework for effective information flows. *Journal of Enterprise Information Management*, 21(4), 361–376. doi:10.1108/17410390810888651
- Sangari, M. S., Hosnavi, R., & Zahedi, M. R. (2015). The impact of knowledge management processes on supply chain performance: An empirical study. *International Journal of Logistics Management*, 26(3), 603–626. doi:10.1108/IJLM-09-2012-0100

- Schulz, M., & Jobe, A. L. (2001). Codification and Tacitness as Knowledge Management strategies: An empirical exploration. *The Journal of High Technology Management Research*, 12(1), 139–165. doi:10.1016/S1047-8310(00)00043-2
- Sedera, D., & Gable, G. G. (2010). Knowledge Management Competence for Enterprise System Success. *The Journal of Strategic Information Systems*, 19(4), 296–306. doi:10.1016/j.jsis.2010.10.001
- Shafiei Nikabadi, M. (2013). A Framework for Knowledge Management Processes in Supply Chain. *Iranian Journal of Information and Processing Management*, 28(3), 611–642.
- Shafiei Nikabadi, M. (2014). A framework for technology-based factors for knowledge management in supply chain of auto industry. *Vine*, 44(3), 375–393. doi:10.1108/VINE-09-2013-0057
- Shafiei Nikabadi, M., & Ameri Shahrabi, M. (2015). A framework for evaluation criteria of supply chain performance in automotive industry: The case of the Iranian automotive supply chain. *International Journal of Automotive Technology and Management*, 15(4), 358–380. doi:10.1504/IJATM.2015.072870
- Shafiei Nikabadi, M., & Ameri Shahrabi, M. (2015). The Impact of Human resources management Practices on the Acquisition, Creation and Production of Knowledge in the Supply Chain of the Automotive Industry. *Journal of Applied Environmental and Biological Sciences*, 4(3), 353–361.
- Shafiei Nikabadi, M., Bagheri, S., & Mohammadi-Hoseini, S. A. (2016). Effects of knowledge management strategy and organizational learning capability on innovation-driven performance in an oil company. *Knowledge Management & E-Learning*, 8(2), 334–355.
- Shafiei Nikabadi, M., Dehghan, M., & Farmanian-Arani, M. (2015). The effect of knowledge management strategies on performance of new product development in knowledge-based companies. *Indian Journal of Science and Technology*, 8(7), 263–277. doi:10.17485/ijst/2015/v8iS7/70152
- Shafiei Nikabadi, M., Feizi, K., Olfat, L., & Taghavi Fard, M. T. (2012). Multidimensional Structure for Defining the Effect of Organizational Culture and Supply Chain Culture on Knowledge Sharing in Supply Chain of Automotive Industry: With Emphasis on Improving Supply Chain Performance. *Iranian Journal of Information and Processing Management*, 28(1), 103–127.
- Shafiei Nikabadi, M., Naderi, R., & Tajik, H. (2016). External Organizational Factors Affecting Knowledge Management in Supply Chain. *Industrial Management Perspective*, 23, 131–156.
- Shafiei Nikabadi, M., & Salimi, A. (2015). Evaluating The Effect of Organizational Culture on Non-Financial Performance Through The mediating Role of Knowledge Utilization and Application by Using Fuzzy Network data Envelopment Analysis (FNDEA). *Productivity Management*, 9(34), 45–72.
- Shafiei Nikabadi, M., & Zamanloo, S. H. Z. (2013). A multidimensional structure for describing the influence of supply chain strategies, business strategies, and knowledge management strategies on knowledge sharing in supply chain. *International Journal of Knowledge Management*, 8(4), 50–70. doi:10.4018/jkm.2012100103
- Shih, H. A., & Chiang, Y. H. (2005). Strategy alignment between HRM, KM, and corporate development. *International Journal of Manpower*, 26(6), 582–603. doi:10.1108/01437720510625476

- Sivaramakrishnan, S., Delbaere, M., Zhang, D., & Bruning, E. (2010). Critical success factors and outcomes of market knowledge management: A conceptual model and empirical evidence. *International Journal of Knowledge Management*, 6(3), 1–21. doi:10.4018/jkm.2010070101
- Snyman, R., & Kruger, C.J. (2004). the interdependency between strategic management and strategic Knowledge management. *Journal of Knowledge Management*, 8(1), 5–19. doi:10.1108/13673270410523871
- Soni, G., & Kodali, R. (2011). the strategic fit between competitive strategy and supply chain strategy in Indian manufacturing industry: An empirical approach. *Measuring Business Excellence*, 15(2), 70–89. doi:10.1108/13683041111131637
- Storey, C., & Kahn, K. B. (2010). the Role of Knowledge Management Strategies and Task Knowledge in Stimulating Service Innovation. *Journal of Service Research*, 13(4), 397–410. doi:10.1177/1094670510370988
- Supyuenyong, V., & Swierczek, F. W. (2011). Knowledge management process and organizational performance in SMEs. *International Journal of Knowledge Management*, 7(2), 1–21. doi:10.4018/jkm.2011040101
- Tarafdar, M., & Qrunfleh, S. (2017). Agile supply chain strategy and supply chain performance: Complementary roles of supply chain practices and information systems capability for agility. *International Journal of Production Research*, 55(4), 925–938. doi:10.1080/00207543.2016.1203079
- Tseng, S. M. (2008). Knowledge management system performance measure index. *Expert Systems with Applications*, 34(1), 734–745. doi:10.1016/j.eswa.2006.10.008
- Twum-Darko, M., & Harker, L. A. L. (2017). Understanding Knowledge Sharing in an Organization: A Perspective of Actor-Network Theory. *International Journal of Knowledge Management*, 13(1), 53–74. doi:10.4018/IJKM.2017010104
- Ulrich, D. (1998). *Intellectual capital = competence * commitment*, Sloan anagement. *RE:view*, 39(2), 15–27.
- Wan, Z., Haggerty, N., & Wang, Y. (2015). Individual level knowledge transfer in virtual settings: A review and synthesis. *International Journal of Knowledge Management*, 11(2), 29–61. doi:10.4018/IJKM.2015040103
- Yang, J. (2010). the knowledge management strategy and its effect on firm performance: A contingency analysis. *International Journal of Production Economics*, 125(2), 215–223. doi:10.1016/j.ijpe.2010.03.012
- Zack, M. H. (1999). developing a Knowledge Strategy. *California Management Review*, 41(3), 125–145. doi:10.2307/41166000

Chapter 20

The Effects of Entrepreneurship Education on Entrepreneurial Intention Among University Students in China

Chunpei Lin

Huaqiao University, China

Yali Pan

Huaqiao University, China

Yenchun Jim Wu

National Taiwan Normal University, Taiwan & Huaqiao University, China

Li-Ming Wang

Huaqiao University, China

ABSTRACT

Entrepreneurship education for college students increasingly attracts extensive attention of both government and universities in China. However, few studies focus on the effectiveness of this external “input” learning for Chinese college students, and whether entrepreneurship education can be expected to increase college students’ intention of starting a business. Based on cognitive perspective, the authors collected 327 valid questionnaires from college students in China to explore the impact mechanism of entrepreneurship education on entrepreneurial intention. Results shows that entrepreneurship education has a positive effect on risk perception capability and entrepreneurial intention. Risk perception capability positively affects entrepreneurial intention and plays an intermediary role in the relationship of entrepreneurship education and entrepreneurial intention. Then the authors put forward suggestions and strategies for the implementation and popularization of entrepreneurship education for domestic universities in China.

DOI: 10.4018/978-1-5225-7095-0.ch020

INTRODUCTION

With the rapid development of education in China, the number of college graduates is growing rapidly every year, the scarcity of college students had been broken. Fresh graduate has a great numerous post options. Entrepreneurship is regarded as one of the main ways for graduates, and it has been very common for foreign college students and at the same time the trend is still growing (Okenjom, 2016). Our enthusiasm for entrepreneurship began in the late 1970s when a researcher noticed that most job growth came from newer and smaller companies, not from the giant conglomerates of that era. As job growth is a prime objective of almost every city, state, and nation, it seemed obvious that entrepreneurship should be encouraged (Phillips, F, 2018). The increase in entrepreneurship education programs have been driven by the recognition of it in creating more work opportunities, reducing the unemployment and shaping a regions development. The issue of entrepreneurship amongst university students, and the fostering of entrepreneurship activity, are increasingly becoming important. (Movabedi, Fathi & Brigal, 2011)

In 1999, the Ministry of Education introduced the “21st Century Action Plan for Invigorating Education”, it proposed to strengthen entrepreneurship education both for teachers and students to encourage them to establish high-tech enterprises. In 2002, the Ministry of Education issued series of policies and adopted enormous measures to encourage college students to become self-employed. Then the Ministry of Education set nine universities, including Tsinghua University, as entrepreneurship education pilots, encouraging these universities to explore methods adapted to entrepreneurship education and provide applicable references for other domestic universities in domestic to develop entrepreneurship education. An important assumption underlying these entrepreneurship programs is that “entrepreneurs can be made”, that it is possible to learn how to be an entrepreneur through different specific educational policies and programs (Erikson, 2003).

Subsequently, many universities started to set up entrepreneurship education program to promote the implementation of entrepreneurship education of college students. In 2010, the Ministry of Education released important documents that emphasized the importance of popularizing education, building up Students Entrepreneurship Base and providing the further policy supports to college students, all these had a vital catalytic role in promoting college students to entrepreneurship. At one time, entrepreneurship has become a hot research area. Due to the entrepreneurial intention can better predict the entrepreneurial behavior (Ajzen, 1991; Zhang et al., 2013), academic research is mainly focused on the entrepreneurial intention and its influence factors (Bae et al., 2014; Warren, 2011). Some scholars believed that with the increasing number of college graduates more competitive and high expectations will aggravate serious employment situation, so implement the entrepreneurship education timely is good for improving entrepreneurial intentions of college students (Abdullah et al., 2014). However, entrepreneurship is full of uncertainties, even college students have an entrepreneurial intention, when faced with difficulties such as management, capital, risk and etc, most college students discouraged and it was reported that the success rate of college students entrepreneurship is only 1%.

The study proposed that entrepreneurship education improve the entrepreneurial competence of college students and transform them into having a more positive and optimistic attitude, hence improving their intention to start a new business using the theory of planned behavior what is the theoretical framework of this paper. It strongly holds the view that individual intention is a predictor to one’s actual action, which is the headstone of our paper. With reference to the research framework about “entrepreneurship education - entrepreneurial competence - entrepreneurial intention” of Pérez López et al. (2015) and Oosterbeek et al. (2008), risk perception capability was put into our research on the relation between

entrepreneurship education and entrepreneurial intention, using 327 questionnaire data collected from college students to test four hypotheses. The object of the research is to increase the number of individuals considering business start-ups through more determined entrepreneurship education initiative.

The rest of the paper is organized as follows. In section two, we state the rational of the theory of the planned behavior. In section two we put forward four hypothesis and construct model. In section four, we describe about the methodology that we used. In section five our research result is presented. In section six there is some discussions. And the last section is limitations and directions for future researches.

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Theory of Planned Behavior

The theory of planned behavior is the theoretical framework of this paper as it is conducive to understand entrepreneurial intentions (Heuer & Kolvereid, 2014). It was originally developed by Ajzen (1991) to understand intentions that can help measure actual individual behavior, what is helpful to analyze the processes, individual entrepreneurship intention leads to entrepreneurial behavior during the context of entrepreneurship education. Over the past 20 years, the theory planned behavior has become one of the most utilized theories in terms of explaining and predicting behavior in individuals. The theory of planned behavior roots in psychology studies and whose main ideals are that behavior is preceded by one's intentions to perform the behavior and perceived control over the behavior (Ajzen, 1991). The theory of planned behavior is indeed applicable to learn the entrepreneurship education's operation mechanism on the entrepreneurship.

The premise of the theory of planned behavior is to use intention as a proxy for behavior. Ajzen (2005) proposed that when the ratio of success is high then individuals will pay more attention to their intentions. This means that venture creation will result when intentions can be used to measure actual behavior (Kolvereid & Isaksen, 2006). Specially, people start to take actions, Based on the theory of planned behavior, there are some factors influencing entrepreneurial intention including entrepreneurship education, risk perception capability as well as individual traits. These factors impact entrepreneurial intention, subsequently, affect the start up rate of business ventures. Entrepreneurship is an intentional process in which individuals cognitively plan to carry out the behavior of opportunity recognition, venture creation, and venture development.

The theory of planned behavior lies that cognitive structures including intention need to be changed for learning to occur (Heuer & Kolvereid, 2014). Cognitive structures can include an individual's underlying behavior that can be influenced through information content (Krueger, 2009). Entrepreneurship education plays a significant role in launching a new venture. As the acquisition of knowledge can change behavior, entrepreneurial intentions are impacted by learning outcomes. As individuals learn different behavior and convert their attitudes this will affect their intentions to be entrepreneurial. The theory of planned behavior focuses on attitudes, norms and behavior, which are key interactions that an individual has that determines their intentions (Beadnelletal., 2007).

We argue that when students are exposed to entrepreneurship education, they are more likely to investigate new ideals and to link a vast array of domain relevant information absorbed from entrepreneurship education. Meanwhile they are more concerned with how information is both applied and extended for practical use than those who not. Further, a cognitive process works that aligns with evaluation and

judgment, a individual actually begins the process of assessing opportunities for their likelihood of success or market viability. This is a hatching process of entrepreneurship. If luckily, it turns to start a actual business and possibly make it into a large taxpayer and offer more opportunities to job searchers. The next section will further discuss the hypothesis and proposed model to reveal how it relates to entrepreneurship.

Literature Review

In recent years, entrepreneurship is remaining a hot point, not only with its great effect on innovation but also its contribution to reducing unemployment rate. Entrepreneur as the central hub plays an inevitable role to social change and integral to innovation. As a result, entrepreneurship is regarded as a force to economic growth, Asia is not exception, particularly those developing countries.

Many Asia countries are facing problems similar to other advanced countries such as a changing demographic structure and a need for industrial transformation through the utilization of advanced knowledge. (Shih, T., & Huang, Y. Y, 2017). In this vein, entrepreneurs are therefore saw as pioneers to push these obstacles. Consequently, education focusing on forming science based/high-tech entrepreneurs is also on the rise, a case in Taiwan suggests.

The scholarship and pedagogy within the field of entrepreneurship education has matured considerably over the last 20 years, major gaps remain related to what the distinct impact mechanism between entrepreneurship education and entrepreneurship, further, what content to teach and how to delivery. In addition, most research has been conducted in North American or Europe, the growth of entrepreneurial education in East Asia suggests the need to also understand this within the East Asian context as both culture and educational systems significantly differ (Mok, 2013; Thomas & Kelley, 2011). Thus, there are little references for Asia entrepreneurs, a big challenge.

HYPOTHESIS AND MODEL CONSTRUCTION

Entrepreneurship Education and Risk Perception Capability

As UNESCO describes “entrepreneurship education generally means cultivating creative individual”. The aim of entrepreneurship education is to enable educators to embark behavior innovation in the social-economic, cultural and political fields, to open up and broad new space for development, and then provides more working opportunities for others in contemporary society. We define entrepreneurship education as a type of educational activities carried out to cultivate and improve the entrepreneurial consciousness and entrepreneurial competencies of college students. Such as, building the entrepreneurship education into existing syllabus to promote the integration of entrepreneurship education and professional education through reform in education and adjustment in curriculum (Seikkula, 2011); Enhance college students’ entrepreneurial competencies(management, finance, marketing and risk taking) through multiply practical entrepreneurial activities in College Students Pioneer Park or university-based Science Parks(Hu, 2015); Encourage college students to embark on entrepreneurship via new government policy and resource support (Hoppe, 2015). Nowadays, there are growing debates on entrepreneurship education relate to what kind of content to teach, how to teach it, who qualifies to teach, and what kind of person is ideal to be taught. Here are two new and dominant arguments, one suggests that theoretically-oriented courses and

practically-oriented courses vary differently on students' entrepreneurial intention (Prosperous, P and Imodium, D, 2015), practically-oriented courses have a positive impact on student's intention to becoming self-employment, whereas the theoretically-oriented courses have a negative one. The other thought is that the future trend of entrepreneurship education is to set up blended program—that merged entrepreneurial curriculum with a technical degree—located outside traditional business school settings (Tobin Turner and Peter Gianiodis, 2018). Both sheds many implications to educators and curriculum builders.

Risk perception belongs to the psychology category (Sjoberg, 2000) and describes an individual's perception and attitudes towards specific risks of outside world, it's the measurement of psychological panic (Julian, 2003). Risk perception capability, as the name implies, refers to the ability of an individual to judge the risk by their intuitive feel and subjective judgment of the real world. According to the experience obtained by intuitional judgment and subjective feeling, the individual makes the judgment of risk according to the environmental stimulation, the information that is recorded and screened. Most people use it as the judgment basis of the attitude of escaping, changing and accepting the risk and the decision of behavior. There are two basic factors in risk perception: Dread Risk, which is associated with the disastrous and uncontrollable degree of risk; the Unknown Risk, which represents the degree of knowing of the risk. If public knowledge of specific risk events is more comprehensive, the cognition of the results of the event can be objectively perceived, and people can accept multiple rather than single information, can evaluate the impact of risk events on themselves and the society as well as have appropriate behavioral responses, then, such individuals can be more rational in dealing with risk events. Knowledge structure of individuals is correlated with their educational level and personal experience. If someone builds himself with strong risk perception capacity, he is more sure about the next action he will adopt. The result for risk taking propensity influencing entrepreneurial intentions means that individuals with a developable set of skills are often attracted to entrepreneurship education (Johannisson, 1991). This is due to entrepreneurs being associated with personality traits such as self-efficacy, proactiveness and risk taking orientation (Heuer & Kolvereid, 2014).

Francis Bacon points out that knowledge is the fountain of competence, though knowledge isn't exactly equal to competence, the accumulation of rich knowledge is a prerequisite for lifting capacity. The individual who accepted entrepreneurship education through the long-term learning and accumulation, obtaining abundant entrepreneurial knowledge and experience (Federici et al., 2008; Zahra & Wrigh, 2011), which lay a solid knowledge foundation for entrepreneurial competence (Li & Ding, 2006; Carswell, 2001). Entrepreneurship education not only improve entrepreneurial consciousness, entrepreneurial psychological quality, professional ability, managing ability, comprehensive ability and entrepreneurial knowledge structure (Graevenitz et al., 2009), but also form a relatively a clear framework of entrepreneurship and management for college students, enable them master basic essentials of entrepreneurship and capacity of enterprise administration, and further strengthen college students' awareness of entrepreneurial risk and establish an overall and long-term sight, finally improve their risk perception capability (Saulo et al., 2008). The following hypothesis is proposed.

Hypothesis 1: College students' entrepreneurship education is positively related to their risk perception capability.

Entrepreneurship Education and Entrepreneurship Intention of College Students

The word “intention” stem from social psychology and was considered as an objective predictor of behavior. In 2010, from Elke Luedemann’s paper, which further examine the theory, students who stated entrepreneurial intentions at aged 16 have a significantly higher probability of being an entrepreneur at aged 34 than those who did not state through tracking test. Bird (1988) firstly proposed the concept of “entrepreneurial intention” and describes it as a mental state of entrepreneur’s attention and energy, even behavior that lead to the entrepreneurship or the creation of new value in existing firms, including the entrepreneur’s individual willing and entrepreneur’s intention imposed by external. Based on commitment perspective, Krueger (1993) pointed out that entrepreneurial intention is the level of entrepreneur’s commitment to launch a new venture, the entrepreneurial intention will be stronger if the level of entrepreneur’s commitment is higher. Douglas & Fitzsimmon (2008) defines entrepreneurial intention as a individual’s perception of the results bring by entrepreneurship and self-efficacy as well as the behavior based on that. But as the definition confuse action and intention so this definition caused some dispute. We use the definition of Thompson (2009), entrepreneurial intention is the belief of individual to launch a new venture, and they will consciously fulfill these plans in the future. This definition distinguished action from intention, and explicitly incorporates planning and “behavior trend” into the conceptual categories of intention. This view is the same as the theory of planned behavior, when the ratio of success is high then individuals will pay more attention to their intention, subsequently, transform their inside intention to action.

The theory of planned behavior focuses on three aspects, attitudes, norms and behavior. There are contributory to intention. When people accept entrepreneurship education, they will get a large knowledge about entrepreneurship they didn’t turn to before. The more message they get, they will change their attitude to entrepreneurship. People might have a passive impression on entrepreneurship as it has a bad reputation with low ratio of success before taking a entrepreneurship. And after they having the relevant courses, they pose a more comprehensive knowledge and become a fresh mavin in corporate field, which makes it possible for them to have a more positive attitude to entrepreneurship. Norms mean people’s exception. Behavior refers to the action that a person actually takes, behavior intention is the judgment of a person’s subjective probability of taking a particular act, which reflects the individual’s willingness to adopt a particular act. Cognitive and Behavior Theory indicates that the key to correct one’s negative cognition is to assure he has a comprehensive understanding of the problem and then establishes correct behavioral awareness, which will facilitate his positive action. Since entrepreneurship is full of uncertainty that often brings tension and anxiety to individual. Entrepreneurship education could enhance college students’ entrepreneurial knowledge, improve their entrepreneurial skills and stimulate their interest in entrepreneurship (Moses & Mosunmola, 2014) and finally increase their entrepreneurial intention (Autio et al., 2013). Moreover, the higher level and the more popular of college students’ entrepreneurship education (Mugenyi, 2013), a more correct entrepreneurship view they will set up, which greatly improve their acceptance of entrepreneurship (Oosterbeek et al., 2007). The following hypothesis is proposed.

Hypothesis 2: Entrepreneurship education for college students is positively related to their entrepreneurial intention.

Risk Perception Capability and Entrepreneurial Intention

The model of the entrepreneurial event (Shapiro & Sokol, 1982) is one of the theoretical models of entrepreneurial intention, which sheds light that entrepreneurship is an event and it can be explained by the interaction of pioneering spirit, ability, management, autonomy and adventurous spirit. Perceived feasibility as one of the variables that measures entrepreneurial events, it refers to the ability and confidence to start a new business that a potential entrepreneur perceived (Dissanayake, 2014). Most people are risk averters, they tend to avoid things that in an unknown state, a prevention of entrepreneurship. Therefore, how do students' risk perception capability plays out in such settings in driving the students' entrepreneurial intention. One paper suggests that improving the college students' entrepreneur perception capability, especially the risk perception capability, can enhance college students' entrepreneurship awareness (Duan, 2008), and help them overcome the unilateral understanding of entrepreneurship and psychological barriers, then increase their entrepreneurship confidence and entrepreneurial intention (Küttim et al., 2014). As we all know, entrepreneurship activities are full of uncertainties and risks, entrepreneurship risk as one of the most important factors determining the entrepreneurial behavior of college students (Brown et al., 2011), enhancing college students' capability to perceive risk could help entrepreneurs to avoid uncertainties and develop reasonable plan of potential risk in advance, which could reduce the risk of occurrence and losses effectively (Kahneman & Tversky, 1979; Zurriagacarda et al., 2016), and enhance the entrepreneurial intention of college students. The following hypothesis is proposed.

Hypothesis 3: College students' risk perception capability is positively related to their entrepreneurial intention.

Mediating Effect of Risk Perception Capability

Hypothesis 1 and 3 have demonstrated the facilitating roles of entrepreneurship education on student's risk perception capability and the positive effect of risk perception capability on entrepreneurial intention. Some entrepreneurship studies showed that entrepreneurship education increases individual self-efficiency, and then enhance the entrepreneurial intention of individuals (Wilson et al., 2007; Zhao et al., 2005). The more entrepreneurial knowledge that individual learned, they are more able to form a real perception of real entrepreneurial activities (Peterman & Kennedy, 2003), which would influence the entrepreneurial tendency directly or indirectly (Ajzen, 2007). And other scholars thought the goal of entrepreneurship education is to develop intentions of entrepreneurial activity or factors that facilitate intention (Baocui & Zhang, 2016), such as entrepreneurial knowledge, entrepreneurial competence, attitude towards entrepreneurship, personal qualities and so on (Liñán, 2004). As a group that accepted higher education, college students possess knowledge and visionary, they have spirit of struggle and adventure. Entrepreneurship education help them reserve more knowledge, have a more comprehensive and objective understanding of business risks than who didn't accept entrepreneurship education, which will help them to perceive and evaluate risk more precisely and avoid or deal with foreseen risks, further promote in college students' entrepreneurial intention (Karimi et al., 2012). If someone has a well risk perception, he can create a entrepreneurial intention that is more likely to take actions to achieve. The following research hypothesis is proposed:

Hypothesis 4: College students' risk perception capability plays an intermediary role between entrepreneurship education and entrepreneurial intention.

Based on the above discussion, the theoretical model shown in Figure 1 constructed in this paper.

METHODOLOGY

Sample Selection

To ensure the rigor of the research design and the representativeness of the sample, We selected the sample of students with college diploma or higher, and carried out a total of 800 questionnaires consists of paper questionnaire and electronic questionnaire. The first part of the questionnaire explains the purpose of the study and the utility of the questionnaire to the participants, from the beginning of September to the end of December, 370 questionnaires were returned with a effective return-ratio 46.25%. After deleting 43 observations with missing values, we obtained the final sample of 327 cases to be used in all other analyses, the effective questionnaire recover rate is 40.875%.

There are 120 male respondents accounts for 36.7% and 207 female respondents accounts for 63.3%, which shows a gender distribution uniformity. According to the national enrollment age, the universal age of college student ranges from 20 to 23 years old, data shows that the number respondents falls within this range is 261, accounting for 86.2% of the total samples, so the data can represent general undergraduate situation. In addition, overseas students accounted for 23.9% of the respondents, which improved the richness of the sample. The proportion of student cadres accounted for 37.6% is also in line with the basic situation of today's college students, and the senior graduates accounted for 63.91%, to a greater extent the rigid demand for entrepreneurship wishes (see Table 1).

Measurement

The scale used in the survey questionnaire mainly adopt from the existing research both at home and abroad, and was revised after peretest. To ensure the accuracy and the scientific nature of the questionnaire, all the questions were self-reported by participants by five-point Likert-type scale (1=absolutely disagree, 5= absolutely agree). Given that most of the existing literature used proxy variables to measure entrepreneurship education, including the education, entrepreneurial experience, entrepreneurial knowledge and so on. In this study, entrepreneurship education not only includes the entrepreneurial,

Figure 1.

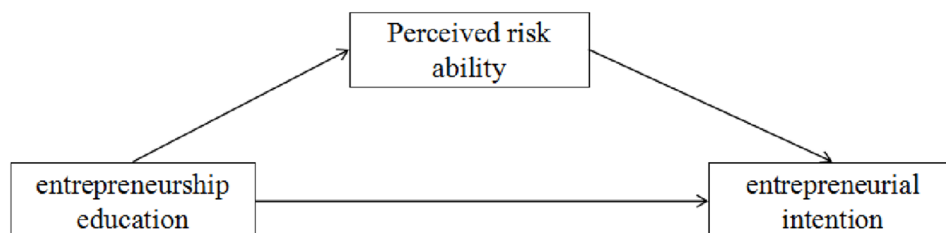


Table 1. Basic characteristics of sample (N = 327)

Basic Character of Sample	Category	Frequency	Effective Percentage (%)	Accumulated Percentage (%)
Gender	Male	120	36.7	36.7
	Female	207	63.3	100
Age	≤20	26	7.95	7.95
	21-23	261	79.82	87.77
	≥24	40	12.23	100.00
Foreign students	Y	78	23.9	23.9
	N	249	76.1	100
Student cadre	Y	123	37.6	37.6
	N	204	62.4	100
Grade	Freshman	5	1.5	1.5
	Sophomore	24	7.3	8.9
	Junior	89	27.2	36.1
	Senior	209	63.91	100

theoretical courses and practical education organized by external subjects represented by schools, but also the autonomic entrepreneurship learning of college students, there are four items used to measure entrepreneurship education, consisting of “I devote lots of energy and time to learn the frontier of enterprise operation”, “I have received education or training of entrepreneurship” and so on. The measurement of entrepreneurial intentions is based on the research of Davidsson (2006) and Thompson (2009), it consists of four items, such as “I will start my own business if i have the chance and freedom to decide”. The scale used to measure risk perception capability refers to the research of Barbosab and Kickul (2007), they divided risk perception capability into two dimensions: perceived loss and perceived benefit, and then obtained 12 initial measurement items. For example, “Entrepreneurship may not be recognized by my relatives or friends”.

Descriptive Statistics and Correlation Analysis

The correlation between different variables was reflected by the Pearson correlation coefficient, and the correlation between gender, age, major, grade, positions, entrepreneurial intention, risk perception capability and entrepreneurship education was tested by SPSS19.0 to assure the rationality of four research hypotheses and the general theoretical framework.

Table 2 shows the mean value, standard deviation of variables, and the correlation coefficient matrix between variables in the research. It can be seen from Table 2 that there is a significant positive correlation between entrepreneurial intention and entrepreneurship education ($\beta = 0.490, P < 0.01$); Entrepreneurial intention has a significantly positive effect on risk perception capability ($\beta = 0.479, P < 0.01$). And there was a significant positive correlation between risk perception capability and entrepreneurship education ($\beta = 0.287, P < 0.01$). In addition, there is no significant correlation between gender and perceived risk, entrepreneurial intention, position, degree, profession, and age. This is consistent with our hypothesis and thus provide strong support for it.

Table 2. Descriptive statistics and pearson relation of variables(N=327)

variable	1	2	3	4	5	6	7	8
1. Gender								
2. Age	-.008							
3. Major	.045	.054						
4 .Degree	-.099	.300**	-.010					
5. Position	-.002	-.031	-.043	-.032				
6.Entrepreneurship intention	.100	.003	.173**	.043	.070			
7 .Risk perception capability	-.033	.006	.102	.185**	.088	.479**		
8 .Entrepreneurship education	.125*	.093	.095	.065	.029	.490**	.287**	
M	.63	22.19	1.19	3.55	1.62	3.0558	3.5098	2.6521
SD	.483	1.215	.393	.729	.485	.98636	.66524	.96804

Note: “***” means P <0.01; “**” means P <0.05; “+” means P <0.1.M = mean value, SD = standard deviation.

Reliability and Validity

To ensure the validity and reliability of the constructs, using SPSS19.0 software to test the reliability of the scale used in research. As is known to all, α value (Cronbach’s alpha coefficient) reflects the internal consistency of data. The data shows that α value of the entrepreneurship education、 risk perception capability entrepreneurial intention are 0.853、 0.856 and 0.811. All of the α values of the constructs in this research are bigger than 0.8, means that there is a strong consistency between the corresponding problems of all factors, which suggest that the questionnaire has a good reliability. The α value of whole questionnaire is 0.889, indicating that the questionnaire has high reliability.

Subsequently, exploratory factor analysis of the questionnaires was carried out to test the validity, KMO coefficient (0.878) was bigger than 0.7, Bartlett spherical inspection P was less than 0.01, indicating that the questionnaire has good construct validity and factor analysis for next is reasonable. Then, using SPSS19.0 for each variable observation indicators were used principal component factor analysis and orthogonal rotation, the factor load of items in the corresponding variables was shown in Table 3 at appendix, from which we obtained four factors of entrepreneurship education, each factor load coefficient is bigger than 0.75; Ten factors of risk perception capability, each factor load coefficient is bigger than 0.625. And four factors of entrepreneurship intention are obtained, and each factor load coefficient is bigger 0.8. The above factor analysis shows that most of the factor load coefficients are in the range of 0.75 - 0.8, indicating that the structural validity of each variable is guaranteed.

RESULT

After the simple correlation analysis, we put entrepreneurship education, risk perception capability and entrepreneurial intention into the model successively to test our hypotheses by multiple linear regression analysis (see in Table 4). M1-M6 illustrate the results after bring the explanatory variables into the regression equation. And as the number of explanatory variables (independent variables) increases, the determination coefficient R^2 increased too.

Table 4. Regression analysis results

Variable	risk Perception Capability		Entrepreneurship Intention			
	M1	M2	M3	M 4	M5	M 6
Gender	-.018	-.053	0.200+	.038	.217*	.057
Age	-.059	-.079	-.022	-.057	.006	-.028
Major	.190*	.149+	.436**	.132**	.302*	.250*
Grade	.188***	.173***	.063	.036	-.034	-.034
Position	.134+	.120+	.079	.061	.032	.029
EE		.191***		.483***		.379***
RPC					.702***	.545***
EI						
R ²	.058	.133	.048	.250	.259	.381
F	3.981**	8.171***	3.224**	19.148***	18.636***	15.929***
△R ²		.074		.216	.211	.117
△F		27.272***		94.093***	91.166***	60.504***
VIF	1.003 ≤ VIF ≤ 1.156					

Note: M2 relative to M1; M4 relative to M3; M5 relative to M3; M6 relative to M4. EE = entrepreneurship education; RPC = risk perception capability; EI = Entrepreneurship Intention. “***” means P < 0.001, “**” means P < 0.01; “*” means P < 0.05; “+” means P < 0.1.

As is shown in Table 4, the R² in M1 is 0.058, illustrating these five independent variables can explain 5.8% of the variance of risk perception capability. After adding entrepreneurship education into the model, the change of multivariate correlation coefficient in M2 is 0.074, means that the entrepreneurship education can explain the variance of 7.4% (which is more than 5.8%) of the risk perception capability, and the change of F is 27.272, the significance probability value changed from P < 0.01 to P < 0.001, which proved that entrepreneurship education has a significant positive correlation with risk perception capability, and hypothesis 1 was verified. After adding the entrepreneurship education in M3, the square of the multivariate correlation coefficient changes from 0.048 to 0.250, and entrepreneurship education can explain the variance of 21.6% of entrepreneurial intention, more than other five independent variables, the change value of F is 94.093, the significance probability is changed from P < 0.01 to P < 0.001, which proved that there is significant positive correlation between entrepreneurship education and entrepreneurial intention, and hypothesis 2 is verified. Similarly, after adding the entrepreneurial perceptual risk ability in M3, the change value in the multivariate correlation coefficient is 0.211, indicating that risk perception capability can explain 21.1% variance of entrepreneurial intention, more than the other five independent variables, the change of F is 91.166, the significance probability is changed from P < 0.01 to P < 0.001, which proved that the education of entrepreneurship is positively correlated with the intention of entrepreneurship, and hypothesis 3 is verified.

DISCUSSION AND CONCLUSION

The initial purpose of this study is to examine the effects of entrepreneurship education on students' entrepreneurial intentions. Our first priority is to assume entrepreneurship education improve student's entrepreneurship intention, in return, directing students to launch a new venture personally. The paper utilized the theory of planned behavior to understand the drivers of entrepreneurship. The results of the questionnaire data analysis verified all the research hypotheses. Our research finds that entrepreneurship education positively impacts entrepreneurship intentions through changes in students' risk perception capability. This confirms that risk perception ability can be viewed as the stepping stone to entrepreneurship intentions, thus, it is necessary to increase risk perception capability towards entrepreneurship. In summary, the findings suggest that participation in entrepreneurship can positively influence an individual's intention to become an entrepreneur. These findings proved the conclusion of Zahra et al.(1999)、Souitaris et al.(2007)、Johannisson (1991)、Sitkin & Weingart(1995)and Saulo et al. (2008), the promotion of college students entrepreneurship education could enhance their entrepreneurial intention and their entrepreneurial abilities.

Moreover, college students who possess stronger risk perception capability will have more entrepreneurial intentions, it's further confirms the influence of entrepreneurial competence on entrepreneurial intention from the perspective of individual cognition, which is consistent with most of the existing conclusions (Wu, 2010;Ajzen, 2007). The higher the entrepreneurship education received by college students, they'll have stronger risk perception capability. This conclusion found a new way and empirical basis for further research. Moreover, from the data and analysis, college students entrepreneurial intention can be affected by their major, family background and other factors, which supported the conclusion of Wang (2011), but generally their entrepreneurial intention are relatively firm. It shows that the current college students have an appetite for knowledge and positive world view, which is also a sign of social education accomplishment.

There are also some implications for the entrepreneurship education in China and other Asia countries: in order to encourage college students to launch a new venture, universities must pay great attention to the development of entrepreneurship education and perfect the content and implementation method of entrepreneurship education, more research in the content of college students entrepreneurship education research should be implemented to improve entrepreneurship education from the whole to details, finally develop an appropriate entrepreneurship education in the Chinese context through redesigning curriculum more scientifically.

There is a research showing that theoretically-oriented courses and practically-oriented courses vary differently on students' entrepreneurial intention (Prosperous, P and Imodium, D,2015). Theoretically-oriented courses focus on the 'ought' of entrepreneurial actions, while practically-oriented courses focus on the 'can' of entrepreneurial actions(Levie,1999), which suggest we should resign more practical course into our curriculum, thus it puts forward a high standard for both teachers and universities. Our former entrepreneurship educations are highly focused on exploiting opportunities, and very little attention is to paid to developing skills and idea-generating processes. Any entrepreneurial education programme to be introduced should provide student straining in the essential competencies, such as management, finance and marketing competencies. Students' assessments should incorporate linking projects with small firms. Furthermore, lecturers should not only have the necessary knowledge in entrepreneurship but personal experiences should be integrated into the training programme to inspire the students. More so, some academics argue that not only should students go out of the classroom but also the teachers and

the academics should get out of the office and share experiences with students directly (Jeff Vanevenhoven, 2013), this will definitely be a new style reform on entrepreneurship education. The special skills in demand of the entrepreneur is dynamic and fast changing as the field of entrepreneurship education itself, which asks us to learn the demanding knowledge constantly. Blending entrepreneurship education programs is a growing future trend in entrepreneurship programs. It is indeed that blended entrepreneurship programs along with basic subjects such as music, science and technology, which are sources of entrepreneurship and thus more opportunities.

Though China has a great potential market, at the same time, there are still space for further improvement in the institution-building, system perfection and policy support. Under such a circumstance, how to improve entrepreneurial knowledge of entrepreneurs, especially in how to cultivate the risk perception capability of college students through entrepreneurship education with limited resources. Future curriculum design should consciously strengthen the effect. For example, teachers should not only spread the entrepreneurial knowledge, they also need to pay more attention in college students' psychology and motivation. Also, universities can invite more entrepreneurs and practitioners walk into the entrepreneurship education classroom and share their personal entrepreneurial experience with college students to inspire them to launch a new venture. Precious research has shown that role models have a powerful influence to push one man to be an entrepreneur.

Some proposals are proposed for governments and academics. We suggest that entrepreneurship academics ought to 'read' and 'interpret' the results of relevant research in this field in order to plan where (in which degrees and in which Schools), when (in what level of education) and why (what are the aims of the course and the degree program) entrepreneurship courses should be offered (Piperopoulos, P and Dimov, D, 2015). Policy makers need to concentrate on informing young people about innovation—driven types of entrepreneurship. To achieve this, policy makers need to understand that government initiatives will affect business formations only if these initiatives affect attitudes, entrepreneurial abilities, and subjective norms, which could motivate young people to start a promising enterprise. (Patrick Ebong Ebewo, Rebert Rugimbana).

This finding not only gives a strong data proof for current educational effectiveness of China, and the impact mechanism of college students' entrepreneurship education on entrepreneurial intention via improving their entrepreneurial awareness, risk perception capability and self-efficiency, which also gives support for Chinese entrepreneurship education target location. What we will emphasize is that our study has the same reference for both China and other Asia countries, as our respondents from different Asia countries. Subsequently, the study results will have an impact on globalization and business in Asia by improving entrepreneurship, pushing social changes and solving economic problems.

LIMITATION AND FUTURE WORK

As like all studies, this one has limitations, and thus offers opportunities for future research. Initially, the purpose of this research is to explore the intermediary effect of entrepreneurial competence between entrepreneurship education and entrepreneurial intention, but risk perception capability is just one dimension of entrepreneurial competence and can not completely represent the entrepreneurial competence. To explore the impact mechanism entrepreneurial capacity on entrepreneurial intention deeply, scholars need to analyze the other dimensions of entrepreneurial competence and its influence on entrepreneurial intention, to get a more accurate and comprehensive conclusion. Though we have saw distinct higher

entrepreneurship intention appealed from students after education, a fatal gap is that we didn't investigate actual entrepreneurial outputs and behaviours, in part, because the relative emerging program. Future study should examine the next step(s) in the entrepreneurial journey—moving from intentions to action. (Tobin Turner and Peter Gianiodis,2018)

Secondly, the sample of this research are the students with college diploma or higher, so it excluded the students with lower education level, which may limit generalizability of the funding to general population, in fact, the low education population through social work experience and experience accumulation, their understanding and direction on entrepreneurial is different from college students, and even have a complementary effect with highly educated entrepreneurs, which may cause our research conclusion are not applicable in a larger sample. What is more, we do not have a control group of students who were not exposed to an entrepreneurial program, and ideally, a truer experimental design would increase our confidence in the validity of our results. Future research is ripe for more robust treatment-control methodologies prevalent in education research (Dugar and Todman 1995). Future research can reconsider about restarting a research by control study, which will make a great contribution to this field of entrepreneurial research.

Finally we didn't consider certain competencies, individual features and their influence on intention of entrepreneur after entrepreneurship training programme. Therefore, follow-up research need explore the different dimensions of entrepreneurial competence carefully and comprehensively to measure the weight of different items, and then adjust the focus of entrepreneurship education. And enrich the diversity of sample properly, it can enlarge the scope of applicability to the research conclusion, which do a great contribution in more scientific and reasonable strategies for college students' entrepreneurship education in China. Apart from setting the type control group as mentioned above, in the later experiments, we can also set up another control group and an experimental group based on the personality traits, entrepreneurial ability and personal ability of the students. And follow up and observe the difference of their entrepreneurial intention after the entrepreneurship education. Future study could identify new types of factors that affect entrepreneurial intention that have not been previously addressed.

ACKNOWLEDGMENT

This study is supported by Program of Hi-end Foreign Experts (GDW20183500114).

REFERENCES

- Abdullah, M., Dali, M., Ridzwan, N., Azman, H., Nordin, A. R., Muhammad, S. N., & (2014). The Relationship Between Entrepreneurship Education and the Entrepreneurial Intention Among University Students in Malaysia. *International Muamalat and Entrepreneurship Conference*.
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. doi:10.1016/0749-5978(91)90020-T
- Autio, E., Keeley, R. H., Klofsten, M., & Ulfstedt, T. (2013). *Entrepreneurial intent among students: testing an intent model in Asia, Scandinavia and USA*. Institute of Technology.

- Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A meta-analytic review. *Entrepreneurship Theory and Practice*, 38(2), 217–254. doi:10.1111/etap.12095
- Baocui, H. U., & Zhang, J. (2016). *Goal, Path and Mechanism of Innovation and Entrepreneurship Education in Colleges and Universities—Based on the Thinking of Document No.36 [2015] from General Office of the State Council*. Education & Teaching Research.
- Barbosa, S. D., Kickul, J., & Smith, B. R. (2008). The road less intended: Integrating entrepreneurial cognition and risk in entrepreneurship education. *Journal of Enterprising Culture*, 16(04), 411–439. doi:10.1142/S0218495808000181
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, 13(3), 442–453. doi:10.5465/amr.1988.4306970
- Bober, S. J., Humphry, R., Carswell, H. W., & Core, A. J. (2001). Toddlers' persistence in the emerging occupations of functional play and self-feeding. *American Journal of Occupational Therapy Official Publication of the American Occupational Therapy Association*, 55(4), 369–376. doi:10.5014/ajot.55.4.369 PMID:11723980
- Brown, U. J. I., & Beale, R. L. (2011). White-Johnson S. Perceptions of entrepreneurial intentions & risk propensity: self reliance and self efficacy in college students to encourage knowledge. *Review of Business Research*, 11(5).
- Byabashaija, W., & Katono, I. (2011). The impact of college entrepreneurial education on entrepreneurial attitudes and intention to start a business in Uganda. *Journal of Developmental Entrepreneurship*, 16(01), 127–144. doi:10.1142/S1084946711001768
- Dissanayake, D. M. N. S. W. (2014). The impact of perceived desirability and perceived feasibility on entrepreneurial intention among undergraduate students in sri lanka: An extended model. *Social Science Electronic Publishing*, 2(1), 39–57.
- Douglas, E. J., & Fitzsimmons, J. R. (2008). *Individual intentions towards entrepreneurship vs intra-preneurship*. Agse International Entrepreneurship Research Exchange.
- Dugar, P., & Todman, J. (1995). Analysis of Pre-Test-Post-Test Control Group Designs in Educational Research. *Educational Psychology*, 15(2), 181–198. doi:10.1080/0144341950150207
- Federici, D., Ferrante, F., & Vistocco, D. (2007). On the sources of entrepreneurial talent in italy: tacit vs. codified knowledge. *SSRN Electronic Journal*, 6.
- Graevenitz, G. V., Harhoff, D., & Weber, R. (2010). The effects of entrepreneurship education. *Journal of Economic Behavior & Organization*, 76(1), 90–112. doi:10.1016/j.jebo.2010.02.015
- Heuer, A., & Kolvereid, L. (2014). Education in entrepreneurship and the theory of planned behavior. *European Journal of Training and Development*, 38(6), 506–523. doi:10.1108/EJTD-02-2013-0019
- Hoppe, M. (2015). Policy and entrepreneurship education. small business economics. *Business Economics*, 46(1), 13–29. doi:Small

Hu, Y. (2015). *Analysis on the construction of the pyramid-shaped innovation and entrepreneurship education model for college students: a case study on the entrepreneurship education implementation in lishui university*. Science Education Article Collects.

Johannisson, B. (1991). University training for entrepreneurship: Swedish approaches. *Entrepreneurship and Regional Development*, 3(1), 67–82. doi:10.1080/08985629100000005

Johannisson, B. (1991). University training for entrepreneurship: A Swedish approach. *Entrepreneurship and Regional Development*, 3(1), 67–82. doi:10.1080/08985629100000005

Kahneman, D., & Tversky, A. (1979). Prospect Theory. An Analysis of Decision Making Under Risk. *Econometrica*, 47(2), 263–291. doi:10.2307/1914185

Karimi, S., Biemans, H. J. A., Lans, T., Mulder, M., & Chizari, M. (2012). The role of entrepreneurship education in developing students' entrepreneurial intentions. *SSRN Electronic Journal*, 24(24), 121–150.

Krueger, N. F. (1993). The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability. Social Science Electronic Publishing.

Küttim, M., Kallaste, M., Venesaar, U., & Kiis, A. (2014). Entrepreneurship education at university level and students' entrepreneurial intentions ☆. *Procedia: Social and Behavioral Sciences*, 110, 658–668. doi:10.1016/j.sbspro.2013.12.910

Levie, J. (1999). *Enterprising Education in Higher Education in England*. London: Department for Education and Employment.

Liñán, F. (2004). Intention-Based Models of entrepreneurship education[J]. *Piccola Impresa/small Business (Atlanta, Ga.)*, 11–35.

Mok, K.-H. (2013). *The quest for entrepreneurial universities in East Asia*. New York: Springer. doi:10.1057/9781137317544

Moses, C., & Mosunmola, A. (2014). Entrepreneurship curriculum and pedagogical challenges in captivating students' interest towards entrepreneurship education. *Boiler Manufacturing*, 35(2011).

Mugenyi, P. (2013). *The level of education and entrepreneurial success in kampala district: a case of kalerwe market, kawempe division*. Academic Press.

Okenjom, G. (2016). *Entrepreneurship education for self-employment of university graduates*. Academic Press.

Oosterbeek, H., Van Praag, M., & Ijsselstein, A. (2007). The Impact of entrepreneurship education on Entrepreneurship Competencies and Intentions: An Evaluation of the Junior Achievement Student Mini-Company Program. *European Economic Review*, 54(3), 442–454. doi:10.1016/j.euroecorev.2009.08.002

Patrick, Ebewo, & Rugimbana. (2017). Effects of entrepreneurship education on students' entrepreneurial intentions: a case of botswana. *管理研究: 英文版*, (4), 278-289.

Pérezlópez, M. C., Gonzálezlópez, M. J., & Rodríguezariza, L. (2015). The impact of entrepreneurship education on the entrepreneurial competency of university students. a quasi-experimental study. *Journal of Geophysical Research, D, Atmospheres*, 114(D19).

- Peterman, N. E., & Kennedy, J. (2003). Enterprise education: Influencing students' perceptions of entrepreneurship. *Entrepreneurship Theory and Practice*, 28(2), 129–144. doi:10.1046/j.1540-6520.2003.00035.x
- Phan, P. H., Wong, P. K., & Wang, C. K. (2002). Antecedents to entrepreneurship among university students in Singapore: Beliefs, attitudes and background. *Journal of Enterprising Culture*, 10(02), 151–174. doi:10.1142/S0218495802000189
- Phillips, F. (2018). The sad state of entrepreneurship in America: What educators can do about it. *Technological Forecasting and Social Change*, 129, 12–15. doi:10.1016/j.techfore.2018.01.001
- Seikkula-Leino, J. (2011). The implementation of entrepreneurship education through curriculum reform in Finnish comprehensive schools. *Journal of Curriculum Studies*, 43(1), 69–85. doi:10.1080/00220270903544685
- Shapero, A., & Sokol, L. (1982). The social dimension of entrepreneurship. In C. A. Kent, D. L. Sexton, & K. H. Vesper (Eds.), *Encyclopedia of Entrepreneurship* (pp. 72–90). Englewood Cliffs, NJ: Prentice-Hall.
- Shih, T., & Huang, Y. Y. (2017). A case study on technology entrepreneurship education at a Taiwanese research university. *Asia Pacific Management Review*, 22(4).
- Shook, C. L., Priem, R. L., & McGee, J. E. (2003). Venture creation and the enterprising individual: A review and synthesis. *Journal of Management*, 29(3), 379–399. doi:10.1016/S0149-2063(03)00016-3
- Sitkin, S. B., & Weingart, L. R. (1995). Determinants of Risky Decision-Making Behavior: A test of the mediating role of risk perceptions and propensity. *Academy of Management Journal*, 38(6), 1573–1592.
- Sjoberg, L. (2000). Factors in risk perception. *Risk Analysis*, 20(1), 1–12. doi:10.1111/0272-4332.00001
- Souitaris, V., Zerbinati, S., & Al-Laham, A. (2007). Do Entrepreneurship Programmes Raise Entrepreneurial Intention of Science and Engineering Students? The Effect of Learning, Inspiration and Resources [J]. *Journal of Business Venturing*, 22(4), 566–591. doi:10.1016/j.jbusvent.2006.05.002
- Thompson, E. R. (2009). Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric. *Entrepreneurship Theory and Practice*, 33(3), 669–694. doi:10.1111/j.1540-6520.2009.00321.x
- Turner, T., & Gianiodis, P. (2018). Entrepreneurship unleashed: Understanding entrepreneurial education outside of the business school. *Journal of Small Business Management*, 1–2.
- Vanevenhoven, J. (2013). Advances and challenges in entrepreneurship education. *Journal of Small Business Management*, 51(3), 466–470. doi:10.1111/jsbm.12043
- Wang, W., Lu, W., & Millington, J. K. (2011). *Determinants of Entrepreneurial Intention among College Students in China and USA*. Academic Press.
- Wilson, F., Kickul, J., & Marlino, D. (2007). Entrepreneurial Self-Efficacy, and Entrepreneurial Career Intentions: Implications for entrepreneurship education 1. *Entrepreneurship Theory and Practice*, 31(3), 387–406. doi:10.1111/j.1540-6520.2007.00179.x
- Zahra, S. A., Kuratko, D. F., & Jennings, D. F. (1999). Entrepreneurship and the Acquisition of Dynamic Organizational Capabilities. *Entrepreneurship Theory and Practice*, (23), 5–10.

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Zahra, S. A., & Wright, M. (2011). Entrepreneurship's next act. *The Academy of Management Perspectives*, 25(4), 67–83. doi:10.5465/amp.2010.0149

Zhang, Y., Duysters, G., & Cloudt, M. (2013). The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. *The International Entrepreneurship and Management Journal*, 10(3), 623–641. doi:10.1007/11365-012-0246-z

Zhao, H., Seibert, S. E., & Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *The Journal of Applied Psychology*, 90(6), 1265–1272. doi:10.1037/0021-9010.90.6.1265 PMID:16316279

Zurriagacarda, A., Kageyama, K., & Akai, K. (2016). Effects of risk attitude, entrepreneurship education and self-efficacy on entrepreneurial intentions: A structure equation model approach to entrepreneurship. *International Review of Management & Business Research*, 5.

APPENDIX

Table 5. Rotation factor load array (N = 327)

Variable		factor		
		EE	RPC	EI
Observational Indicators		EE	RPC	EI
a1	I devote lots of energy and time to learn the frontier of enterprise operation	.758		
a2	I had received education or training of entrepreneurship	.871		
a3	I have a lot of wealthy management (entrepreneurship) knowledge	.874		
a4	I have lots of entrepreneurial experiences	.829		
a5	Entrepreneurial failure will weak my confidence		.710	
a6	Entrepreneurship would affect my image in those people around me		.625	
a7	Entrepreneurship may not be approved by my relatives or friends		.680	
a8	Entrepreneurship demands a great time commitment		.757	
a9	Entrepreneurial failure will bring me a great loss of money		.663	
a10	Entrepreneurship gives me more confidence		.749	
a11	Entrepreneurship will speed up my wealth accumulation		.757	
a12	Entrepreneurship can reflect my sense of social responsibility		.712	
a13	Entrepreneurship allows me to have a wide range of social networks		.764	
a14	Entrepreneurship enables me to do things with what i have learned		.662	
a15	I think i will go to start a new business in the future			.892
a16	I had considered running a company by myself			.867
a17	I will start my own business if i have a chance to choose			.871
a18	I still choose to start my own business in present circumstances			.806
Characteristic value		1.653	7.371	2.421
Variance Interpretation(%)		17.108	32.798	17.414
Cumulative variance explanations(%)		17.108	49.808	67.320

Note: EE = entrepreneurship education; RPC = risk perception capability; EI = Entrepreneurship Intention. Extraction method: principal component analysis; oblique rotation method: Kaiser normalization with the four maximum rotation methods.

Compilation of References

99. Indian households are covered by a bank account - Livemint. (n.d.). Retrieved March 25, 2018, from <https://www.livemint.com/Specials/vVKbQ0cMmiNbdwOIfd0Z4N/99-Indian-households-are-covered-by-a-bank-account.html>
- Aaker, J. L. (1997). Dimensions of brand personality. *JMR, Journal of Marketing Research*, 34(3), 347–356. doi:10.2307/3151897
- Abdelkader, A. (2015). Impact of perceived risk and attitude on internet purchase intention. *International Journal of Marketing Studies*, 15, 13–24.
- Abdullah, H. H., Abd Ghani, N. H., & Hanaysha, J. R. (2013). Relationship quality as a strategic tool in today's turbulent business world. *Australian Journal of Basic and Applied Sciences*, 7(14), 478–487.
- Abdullah, M., Dali, M., Ridzwan, N., Azman, H., Nordin, A. R., Muhammad, S. N., & (2014). The Relationship Between Entrepreneurship Education and the Entrepreneurial Intention Among University Students in Malaysia. *International Muamalat and Entrepreneurship Conference*.
- Abdul-Rahmana, M., & Kamarulzamanb, Y. (2012). The influence of relationship quality and switching costs on customer Loyalty in the Malaysian Hotel Industry. *Procedia: Social and Behavioral Sciences*, 62, 1023–1027. doi:10.1016/j.sbspro.2012.09.174
- Abell, A., & Oxbrow, N. (2001). *Competing with Knowledge*. London: Library Association Publishing.
- Abidin, M. Z. (2010). *Fiscal Policy Coordination in Asia: East Asian Infrastructure Investment Fund*. Asian Development Bank Institute. ADBI Working Paper No. 232.
- Abreu, M., & Mendes, V. (2010). Financial Literacy and Portfolio Diversification. *Quantitative Finance*, 10(5), 515–528. doi:10.1080/14697680902878105
- Abula, T., & Worku, A. (2017). Self-medication in three towns of North West Ethiopia. *The Ethiopian Journal of Health Development*, 15(1). doi:10.4314/ejhd.v15i1.9893
- Acar, A. S., & Polonsky, M. (2007). Online social networks and insights into marketing communications. *Journal of Internet Commerce*, 6(4), 55–72. doi:10.1080/15332860802086227
- ACRI. (2017). *Australia and the Belt and Road Initiative: An overview, ACRI facts*. Sydney: UTS.
- Adams, C. (2016). Direct-to-consumer advertising of prescription drugs can inform the public and improve health. *JAMA Oncology*, 2(11), 1395–1396. doi:10.1001/jamaoncol.2016.2443 PMID:27532690
- ADB Outlook. (2017). *Economy: India & South Asia*. Retrieved 03 April, 2018, from <https://www.adb.org/countries/india/economy>

- Agarwalla, S. K., Barua, S. K., Jacob, J., & Varma, R. (2013). *Financial Literacy among Working Young in Urban India*. W.P. No. 2013-10-02, October 2013, Indian Institute of Management. Ahmedabad: India Research & Publications.
- Agboola, A. (2000). Managing an acquisition windfall: A Nigerian university library experience. *Journal of Collection Building*, 19(2), 61–69. doi:10.1108/01604950010326760
- Agnew, B. (2000). When Pharma Merges, R&D Is the Dowry. *Science, New Series*, 287(5460), 1952–1953. PMID:10755948
- Agnihotri, A. (2014). Corporate reputation based theory of choice between organic, hybrid and inorganic growth strategies. *Corporate Communications*, 19(3), 247–259. doi:10.1108/CCIJ-11-2012-0080
- Ahad, A. D., Anshari, M., & Razzaq, A. (2017). Domestication of Smartphones among Adolescents in Brunei Darussalam. *Journal of Cyber Behavior. Psychology and Learning*, 7(4), 26–39. doi:10.4018/IJCBPL.2017100103
- Ahmad, A., & Thyagaraj, K. S. (2014). Brand Personality and Brand Equity Research: Past Developments and Future Directions. *IUP Journal of Brand Management*, 11(3), 19–56.
- Aikin, K.J., Swasy, J.L., & Braman, A.C. (2004). *Patient and Physician Attitudes and Behaviors Associated With DTC Promotion of Prescription Drugs—Summary of FDA Survey Research Results*. Washington, DC: U.S. Department of Health and Human Services. Food and Drug Administration. Center for Drug Evaluation and Research.
- Aikin, K. J., O'Donoghue, A. C. M., Squire, C., Sullivan, H. W., & Betts, K. R. (2016). An Empirical Examination of the FDAAA-Mandated Toll-Free Statement for Consumer Reporting of Side Effects in Direct-to-Consumer Television Advertisements. *Journal of Public Policy & Marketing*, 35(1), 108–123. doi:10.1509/jppm.14.077
- Ainin, S., Lim, C. H., & Wee, A. (2005). Prospects and Challenges of e-banking in Malaysia. *The Electronic Journal on Information Systems in Developing Countries*, 22. Retrieved from <http://ejisd.org/ojs2/index.php/ejisd/article/view/163>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. doi:10.1016/0749-5978(91)90020-T
- Ajzen, I. (2012). Theory of Planned Behavior. In E. T. Higgins, A. W. Kruglanski, & P. A. M. V. Lange (Eds.), *Handbook of Theories of Social Psychology* (pp. 438–459). Los Angeles, CA: SAGE.
- Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, NJ: Prentice Hall.
- Akamatsu, K. (1962). A Historical Pattern of Economic Growth in Developing Countries. *Journal of Development Economics*, 1, 3–25. doi:10.1111/j.1746-1049.1962.tb01020.x
- Akhter, H. S. (2003). Strategic planning, hyper competition, and knowledge management. *Business Horizons*, 46(1), 19–24. doi:10.1016/S0007-6813(02)00275-6
- Akinci, S., Aksoy, S., & Atilgan, E. (2004). Adoption of internet banking among sophisticated consumer segments in an advanced developing country. *International Journal of Bank Marketing*, 22(3), 212–232. doi:10.1108/02652320410530322
- Ako-Nai, E. A. (2011). *Effect of customer service on customer satisfaction, a case study of Fidelity Bank, Adum, Kumasi* (Master's dissertation). Institute of Distance Learning, Kwame Nkrumah University of Science and Technology.
- Alden, C., & Davies, M. (2006). A profile of the operations of Chinese multinationals in Africa. *South African Journal of International Affairs*, 13(1), 83–96. doi:10.1080/10220460609556787
- Aliaga, A. O. (2000). Knowledge Management and Strategic Planning. *Advances in Developing Human Resources*, 2(1), 91–104. doi:10.1177/152342230000200108

Compilation of References

- Aliakbari Nouri, F., & Shafiei Nikabadi, M. (2015). Justifying and Choosing Advanced technology: Applying FANP-FARS Approach. *Journal of Technology Development Management*, 2(3), 109–134.
- Allen, M. (2017). Web 2.0: An argument against convergence. In *Media Convergence and Deconvergence* (pp. 177–196). Cham: Palgrave Macmillan. doi:10.1007/978-3-319-51289-1_9
- AlSudairi, M. A. T. (2012). E-service quality strategy: Achieving customer satisfaction in online banking. *Journal of Theoretical and Applied Information Technology*, 38(1). Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.299.8787&rep=rep1&type=pdf>
- Aluri, A., & Palakurthi, R. (2011). The influence of demographic factors on consumer attitudes and intentions to use RFID technologies in the US hotel industry. *Journal of Hospitality and Tourism Technology*, 2(3), 188–203. doi:10.1108/17579881111173749
- Amari, M., & Anis, J. (2016). Financial literacy in Tunisia: Its determinants and its implications on investment behavior. *Ekonomski Pregled*, 67(3).
- Aminbeidokhti, A., Shafiei Nikabadi, M., & Hoseini, A. M. (2016). The role of transformational leadership and knowledge management processes on the rate of organisational innovation. *International Journal of Knowledge Management Studies*, 7(3-4), 270–287. doi:10.1504/IJKMS.2016.082345
- Anderson, J. C., & Narus, J. A. (1990). A model of distributor firm & manufacturer firm working partnerships. *Journal of Marketing*, 54(1), 42–58. doi:10.2307/1252172
- Andrews, L., & Bianchi, C. (2013). Consumer Internet Purchasing Behavior in Chile. *Journal of Business Research*, 66(10), 1791–1799. doi:10.1016/j.jbusres.2013.01.012
- Angang, H. (2015, May). Embracing China's "New Normal." *Foreign Affairs Review*.
- Angwin, D. (2007). *Mergers and acquisitions*. John Wiley & Sons, Ltd.
- Anholt, S. (2010). Definitions of place branding - Working towards a resolution. *Place Branding and Public Diplomacy*, 6(1), 1–10. doi:10.1057/pb.2010.3
- An, S. (2008). Antidepressant direct-to-consumer advertising and social perception of the prevalence of depression: Application of the availability heuristic. *Health Communication*, 23(6), 499–505. doi:10.1080/10410230802342127 PMID:19089697
- Anshari, M., & Alas, Y. (2015). Smartphones Habits, Necessities, and Big Data Challenges. *Journal of High Technology Management Research*, 26(2), 177-185. DOI: . doi:10.1016/j.hitech.2015.09.005
- Anshari, M., Alas, Y., Hardaker, G., Jaidin, J. H., Smith, M., & Ahad, A. D. (2016). Smartphone habit and behaviour in Brunei: Personalization, gender, and generation gap. *Computers in Human Behavior*, 64, 719–727. doi:10.1016/j.chb.2016.07.063
- Anshari, M., & Lim, S. A. (2017). E-Government with Big Data Enabled through Smartphone for Public Services: Possibilities and Challenges. *International Journal of Public Administration*, 40(13), 1143–1158. doi:10.1080/01900692.2016.1242619
- Ansong, A., & Gyensare, M. (2012). Determinants of University Working-Students' Financial Literacy at the University of Cape Coast, Ghana. *International Journal of Business and Management*, 7(9), 126–135. doi:10.5539/ijbm.v7n9p126
- Arora, R., & Stoner, C. (1996). The effect of perceived service quality & name familiarity on the service selection decision. *Journal of Services Marketing*, 10(1), 22–34. doi:10.1108/08876049610106699

- Arora, S., & Kaur, S. (2018). Perceived risk dimensions & its impact on intention to use e-banking services: A conceptual study. *Journal of Commerce & Accounting Research*, 7(2).
- Arrondel, L., Debbich, M., & Savignac, F. (2013). Financial Literacy and Financial Planning in France. *Advancing Education in Quantitative Literacy*, 6(2), 2013.
- Arunachalam, L., & Sivasubramanian, M. (2007). The future of internet banking in India. *Academic Open Internet Journal*, 20.
- Ashoka & Vinay. (2017). Customer Acceptance of Millennial Generation Banking Services: *Challenges and Prospects*. Available at SSRN: <https://ssrn.com/abstract=2929837>
- Ashoka, M. L., Rakesh, T. S., & Madhushree, S. (2017). Consumer Perception and Satisfaction Towards Internet Banking and Mobile Banking with Reference to Nationalized Banks in Rural India. *International Journal of Asian Business and Information Management*, 8(4), 29–40. doi:10.4018/IJABIM.2017100103
- Athanasopoulou, P. (2009). Relationship quality: A critical literature review and research agenda. *European Journal of Marketing*, 43(5/6), 583–610. doi:10.1108/03090560910946945
- Athukorala, P.-c. (2009). Outward Foreign Direct Investment from India. *Asian Development Review*, 26(2), 125–153.
- Atkinson, A., & Messy, F. (2012). *Measuring financial literacy: results of the OECD/International Network on Financial Education (INFE) Pilot Study* [Working Paper n. 15]. . doi:10.1787/5k9csfs90fr4-en
- Auka, D. O. (2012). Service quality, satisfaction, perceived value and loyalty among customers in commercial banking in Nakuru Municipality, Kenya. *African Journal of Marketing Management*, 4(5), 185–203.
- Aureli, S. (2015). Performance of unlisted Italian companies acquired by multinationals from emerging Markets. *Journal of Organizational Change Management*, 28(5), 895–924. doi:10.1108/JOCM-12-2014-0233
- Autio, E., Keeley, R. H., Klofsten, M., & Ulfstedt, T. (2013). *Entrepreneurial intent among students: testing an intent model in Asia, Scandinavia and USA*. Institute of Technology.
- Auton, F. (2004). The Advertising of Pharmaceuticals Direct to Consumers: A Critical Review of the Literature and Debate. *International Journal of Advertising*, 23(1), 5–52. doi:10.1080/02650487.2004.11072871
- Ayadi, R., Boussemart, J., Leleu, H., & Saidane, D. (2013). Mergers and Acquisitions in European banking higher productivity or better synergy among business lines? *Journal of Productivity Analysis*, 39(2), 165–175. doi:10.1007/1123-012-0309-8
- Azim, A., Shah, N. A., Mehmood, Z., Mehmood, S., & Bagram, M. M. M. (2014). Factors effecting the customers selection of restaurants in Pakistan. *International Review of Management and Business Research*, 3(2), 1003.
- Babin, B. J., Boles, J. S., & Griffin, M. (2015). The Moderating Role of Service Environment on the Customer Share-Customer Commitment Relationship. In *New Meanings for Marketing in a New Millennium, Developments in Marketing Science: Proceedings of the Academy of Marketing Science*. Springer. 10.1007/978-3-319-11927-4_90
- Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A meta-analytic review. *Entrepreneurship Theory and Practice*, 38(2), 217–254. doi:10.1111/etap.12095
- Bagozzi, R. P. (1995). Reflections on Relationship Marketing in consumer markets. *Journal of the Academy of Marketing Science*, 23(4), 272–277. doi:10.1177/009207039502300406
- Balakrishnan, P. (2006). Benign Neglect or Strategic Intent? Contested Lineage of Indian Software Industry. *Economic and Political Weekly*, 41(36), 3865-3872.

Compilation of References

- Ballantine, P. W., & Stephenson, R. J. (2011). Help me, I'm fat! Social support in online weight loss networks. *Journal of Consumer Behaviour*, 10(6), 332–337. doi:10.1002/cb.374
- Bandura, A., & Prentice, H. (1986). Social foundation of thought and action: A cognitive theory. *The Journal of Applied Psychology*, 12(1), 169.
- Banerjee, S. (2016). Influence of consumer personality, brand personality, and corporate personality on brand preference: An empirical investigation of interaction effect. *Asia Pacific Journal of Marketing and Logistics*, 28(2), 198–216. doi:10.1108/APJML-05-2015-0073
- Baocui, H. U., & Zhang, J. (2016). *Goal, Path and Mechanism of Innovation and Entrepreneurship Education in Colleges and Universities—Based on the Thinking of Document No.36 [2015] from General Office of the State Council*. Education & Teaching Research.
- Barbosa, S. D., Kickul, J., & Smith, B. R. (2008). The road less intended: Integrating entrepreneurial cognition and risk in entrepreneurship education. *Journal of Enterprising Culture*, 16(04), 411–439. doi:10.1142/S0218495808000181
- Barlow, R. G. (2000). Frequency marketing- What's next? *Direct Marketing*, 62(9), 2–4.
- Barnes, J. G. (1997). Closeness, Strength & Satisfaction: Examining the nature of relationships between providers of financial services & their retail customers. *Psychology and Marketing*, 14(8), 765–790. doi:10.1002/(SICI)1520-6793(199712)14:8<765::AID-MAR3>3.0.CO;2-C
- Barnes, J. G. (2000). *Secrets of customer relationship management*. New York: McGraw Hill.
- Barney, J. B. (1988). Returns to bidding firms in mergers and acquisitions: Reconsidering the relatedness hypothesis. *Strategic Management Journal*, 9(S1), 71–78. doi:10.1002/mj.4250090708
- Basavaraj, K. (2013). Customers Preference And Satisfaction Towards Banking Services With Special Reference To Shivamogga District In Karnataka. *Trans Asian Journal of Marketing & Management Research*, 28. Retrieved from <http://www.tarj.in/images/download/AJMMR/TAJMMR%20CONTENTS%20JANUARY%202013%20COMPLETE%20-%20PDF/1.3,%20RAVI%20C.S.pdf>
- Bauer, H., Patel, M., & Veira, J. (2015, October). *Internet of Things: Opportunities and Challenges for Semiconductor Companies*. McKinsey & Company. Retrieved from: <http://www.mckinsey.com/industries/semiconductors/our-insights/internet-of-things-opportunities-and-challenges-for-semiconductor-companies>
- Beal, D. J., & Delpachitra, S. B. (2003). Financial literacy among Australian university students. *Economic Papers*, 22(1), 65–78. doi:10.1111/j.1759-3441.2003.tb00337.x
- Beatty, S. E., Mayer, M. L., Coleman, J. E., Reynolds, K. E., & Lee, J. (1996). Customer-Sales associate retail relationships. *Journal of Retailing*, 72(Fall), 223–247. doi:10.1016/S0022-4359(96)90028-7
- Beaujean, M., Davidson, J., & Madge, S. (2006). The moment of truth in customer service. *The McKinsey Quarterly*, 1, 62–73.
- Beaumont, J. (2010). Knowledge management in a regional law firm: A worthwhile investment or time wasted? *Business Information Review*, 27(4), 227–232. doi:10.1177/0266382110389296
- Becker, D., & Diez, P. (2011). *Competing in the global truck industry - Emerging Markets spotlight*. KPMG International.
- Bejou, D., Wray, B., & Ingram, T. N. (1996). Determinants of relationship quality: An artificial neural network analysis. *Journal of Business Research*, 36(2), 137–143. doi:10.1016/0148-2963(95)00100-X

- Belanger, F., Hiller, J. S., & Smith, W. J. (2002). Trustworthiness in electronic commerce: The role of privacy, security, and site attributes. *The Journal of Strategic Information Systems*, 11(3-4), 245–270. doi:10.1016/S0963-8687(02)00018-5
- Belderbos, R., Carree, M., & Lokshin, B. (2004). Cooperative R&D and firm performance. *Research Policy*, 33(10), 1477–1492. doi:10.1016/j.respol.2004.07.003
- Bella, J., McNaughton, R., & Young, S. (2001). “Born-again global” firms: An extension to the “born global” phenomenon. *Journal of International Management*, 7(3), 173-189.
- Bell, R. A., Kravitz, R. L., & Wilkes, M. S. (1999). Direct-to-consumer prescription drug advertising and the public. *Journal of General Internal Medicine*, 14(11), 651–657. doi:10.1046/j.1525-1497.1999.01049.x PMID:10571712
- Bendapudi, N., & Berry, L. L. (1997). Customers motivations for maintaining relationships with service providers. *Journal of Retailing*, 73(1), 15–37. doi:10.1016/S0022-4359(97)90013-0
- Bennett, R. (2006). *International Business (2nd ed.)*. New Delhi Pearson Publication.
- Berry, L. L. (1995). Relationship Marketing of Services – Growing interest, emerging perspectives. *Journal of the Academy of Marketing Science*, 23(4), 236–245. doi:10.1177/009207039502300402
- Bert, H. (2015). *China’s One Belt One Road Initiative: What We Know Thus Far*. World Bank.
- Bettencourt, I. (1997). Customer voluntary performance: Customer as partners in service delivery. *Journal of Retailing*, 73(3), 383–406. doi:10.1016/S0022-4359(97)90024-5
- Bhardwaj, M., & Aggarwal, R. (2018). *Understanding Dynamics of Mobile Banking Adoption by Youth: Empirical Evidence from India*. FIIB Business Review.
- Bhat, L. A., & Bhat, B. J. (2013). Automated Teller Machines (ATMs): The Changing Face of Banking in India. *IUP Journal of Bank Management*, 12(4), 16.
- Bhattacharyay, & Nath, B. (2009). *Infrastructure development for ASEAN economic*. Asian Development Bank Institute (ADBI). Tokyo: ADBI working paper series No. 138.
- Bhattacharyya, S. S. (2011). Reflections on strategic insights for winning in the complex emerging market of India. *International Journal of Business Excellence*, 4(1), 15-43.
- Bhattacharyya, S. S. (2014). Real Options perspectives on business firm human resource factor sourcing and poverty alleviation. *International Journal of Indian Culture and Business Management*, 8(2), 237–252. doi:10.1504/IJICBM.2014.059212
- Bhutada, N. S., & Rollins, B. L. (2015). Disease-specific direct-to-consumer advertising for reminding consumers to take medications. *Journal of the American Pharmacists Association: JAPhA*, 55(4), 434–437. doi:10.1331/JAPhA.2015.14234 PMID:26161486
- Bidmon, S., & Terlutter, R. (2015). *Gender Differences in Searching for Health Information on the Internet and the Virtual Patient-Physician Relationship in Germany: Exploratory Results on How Men and Women Differ and Why*. Academic Press.
- Bierly, P., & Chakrabarti, A. (1996). Generic knowledge strategies in the US pharmaceutical industry. *Strategic Management Journal*, 17(10), 123–135. doi:10.1002/mj.4250171111
- BigBazaar. (2016). *Easy Returns*. Retrieved from <http://shop.bigbazaardirect.com/content/easy-returns>
- Bilgihan, A., & Bujisic, M. (2015). The effect of website features in online relationship marketing: A case of online hotel booking. *Electronic Commerce Research and Applications*, 14(4), 222–232. doi:10.1016/j.elerap.2014.09.001

Compilation of References

- Bilgihan, A., Okumus, F., Nusair, K., & Kwun, D. (2011). Information technology applications and competitive advantage in hotel companies. *Journal of Hospitality and Tourism Technology*, 2(2), 139–154. doi:10.1108/17579881111154245
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, 13(3), 442–453. doi:10.5465/amr.1988.4306970
- Bisgaard, Henriksen, & Bjerre. (2012). *Green Business Model Innovation Conceptualisation, Next Practice and Policy*. Nordic Innovation.
- Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *Journal of Marketing*, 56(2), 57–71. doi:10.2307/1252042
- Bober, S. J., Humphry, R., Carswell, H. W., & Core, A. J. (2001). Toddlers' persistence in the emerging occupations of functional play and self-feeding. *American Journal of Occupational Therapy Official Publication of the American Occupational Therapy Association*, 55(4), 369–376. doi:10.5014/ajot.55.4.369 PMID:11723980
- Bolton, L. E., Warlop, L., & Alba, J. W. (2003). Consumer perceptions of price (un) fairness. *The Journal of Consumer Research*, 29(4), 474–491. doi:10.1086/346244
- Bonaccorso, S. N., & Sturchio, J. L. (2002). Direct to consumer advertising is medicalising normal human experience. *British Medical Journal*, 324(7342), 910–911. doi:10.1136/bmj.324.7342.910 PMID:11950746
- Botoo Ekionea, J. P., & Swain, D. E. (2008). Developing and aligning a knowledge management strategy: Towards a taxonomy and a framework. *International Journal of Knowledge Management*, 4(1), 29–45. doi:10.4018/jkm.2008010103
- Boush, D., Madrigal, R., & Xie, G. X. (2015). *Disentangling the Effects of Perceived Deception and Anticipated Harm on Consumer Responses to Deceptive Advertising*. Academic Press.
- Bove, L. L., & Johnson, L. W. (1999). *Customer relationships with service personnel: do we measure closeness, quality or strength?* Paper presented at the International Services Marketing Conference, Brisbane, Australia.
- Bowen, D. E. (2016). The challenges roles of employees in service theory & practice: An interdisciplinary view. *Human Resource Management Review*, 26(1), 4–13. doi:10.1016/j.hrmr.2015.09.002
- Bower, J. (2001, March). Not All M & As are Alike – and That Matters. *Harvard Business Review*, 93-101.
- Bowman, D., Heilman, C. M., & Seetharaman, P. B. (2004). Determinants of Product-use Compliance Behavior. *JMR, Journal of Marketing Research*, 41(3), 324–338. doi:10.1509/jmkr.41.3.324.35987
- Boyd, D., & Ellison, N. (2010). Social network sites: Definition, history, and scholarship. *IEEE Engineering Management Review*, 3(38), 16–31. doi:10.1109/EMR.2010.5559139
- Boyd, T. (2017). *Opportunities for business in China's one belt one road*. Australian Financial Review.
- Bozic, K. J., Smith, A. R., & Hariri, S. (2007). The ABJS Marshall Urist Award - The impact of direct-to-consumer advertising in orthopaedics. *Clinical Orthopaedics and Related Research*, 202–219. PMID:17353799
- Bradley, G. T., & Wood, R. C. (1994). *Managing customer value: Creating quality and service that customers can see*. New York: Free Press - Simon and Schuster.
- Brady, M. K., Robertson, C. J., & Cronin, J. J. (2001). Managing behavioral intentions in diverse cultural environments: An investigation of service quality, service value, and satisfaction for American and Ecuadorian fast-food customers. *Journal of International Management*, 7(2), 129–149. doi:10.1016/S1075-4253(00)00041-7
- Brand China Industry Union (2010). *The Research Report of Beijing Olympic Games and Brand China*. Author. (in Chinese)

- Briesch, R. A., Krishnamurthi, L., Mazumdar, T., & Raj, S. P. (1997). A comparative analysis of reference price models. *The Journal of Consumer Research*, 24(2), 202–214. doi:10.1086/209505
- Bronner, F., & De Hoog, R. (2010). Consumer-generated versus marketer-generated websites in consumer decision making. *International Journal of Market Research*, 52(2), 231–248. doi:10.2501/S1470785309201193
- Brown, M., & Graf, R. (2013). Financial literacy and retirement planning in Switzerland. *Numeracy*, 6(2). Retrieved from <http://scholarcommons.usf.edu/numeracy/vol6/iss2/art6>
- Brown, U. J. I., & Beale, R. L. (2011). White-Johnson S. Perceptions of entrepreneurial intentions & risk propensity: self reliance and self efficacy in college students to encourage knowledge. *Review of Business Research*, 11(5).
- Brown, D. T., & Ryngaert, M. D. (1991). The mode of acquisition in takeovers: Taxes and asymmetric information. *The Journal of Finance*, 46(2), 653–669. doi:10.1111/j.1540-6261.1991.tb02678.x
- Brown, I., Hoppe, R., Muger, P., Newman, P., & Stander, A. (2004). The Impact of National Environment on the Adoption of Internet Banking: Comparing Singapore and South Africa. *Journal of Global Information Management*, 12(2), 1–26. doi:10.4018/jgim.2004040101
- Browning, C. S. (2016). Nation branding and development: Poverty panacea or business as usual? *International Journal of Relations and Development*, 19(1), 50–75. doi:10.1057/jird.2014.14
- Brown, S. A. (1997). *Breakthrough customer service*. New York: John Wiley.
- Bryant, S., & Nguyen, T. (2017). Major factors affecting knowledge sharing in emerging economies: A theoretical study. *International Journal of Management & Human Resources*, 5(1).
- Bryson, J. R., & Lombardi, R. (2009). Balancing Product and Process Sustainability against Business Profitability: Sustainability as a competitive strategy in the Property Development process. *Business Strategy and the Environment*, 18(2), 97–107. doi:10.1002/bse.640
- Buckley, P. J., Cross, A., & De Mattos, C. (2015). The principle of congruity in the analysis of international business cooperation. *International Business Review*, 24(6), 1048–1060. doi:10.1016/j.ibusrev.2015.04.005
- Bujan, I. L., Cerović, N., & Dukić, S. (2016). Socio Demographic Determinants of Financial Literacy of the Citizens of the Republic of Croatia. *Ekonomski Pregled*, 67(3), 206–226.
- Buono, A. F., Bowditch, J. L., & Lewis, J. W. III. (1985). When cultures collide: The anatomy of a merger. *Human Relations*, 38(5), 477–500. doi:10.1177/001872678503800506
- Burak, L., & Damico, A. (1999). Effects Of DTCA Of Pharmaceutical Products On College Students, Health Marketing. *Quarterly*, 17(2), 19–29.
- Burns-Millyard, K. (2016). *Benefit for Businesses Using the Internet*. Retrieved from <http://smallbusiness.chron.com/benefits-businesses-using-internet-322.html>
- Buss, A., & Strauss, N. (2009). *Online communities handbook: Building your business and brand on the Web*. Berkeley, CA: New Riders.
- But, J. W. P., & Ap, J. (2017). The impacts of casino tourism development on Macao residents' livelihood. *Worldwide Hospitality and Tourism Themes*, 9(3), 260–273. doi:10.1108/WHATT-02-2017-0011
- Buttle, F. (1999). The S.C.O.P.E. of Customer Relationship Management. *International Journal of Customer Relationship Management*, 1(4), 327–336.

Compilation of References

- Byabashaija, W., & Katono, I. (2011). The impact of college entrepreneurial education on entrepreneurial attitudes and intention to start a business in Uganda. *Journal of Developmental Entrepreneurship*, 16(01), 127–144. doi:10.1142/S1084946711001768
- Caceres, R. C., & Paparoidamis, N. G. (2007). Service quality, relationship satisfaction, trust, commitment & business-to-business loyalty. *European Journal of Marketing*, 41(7/8), 836–867. doi:10.1108/03090560710752429
- Cain, M. K., Zhang, Z., & Yuan, K. H. (2017). Univariate and multivariate skewness and kurtosis for measuring non-normality: Prevalence, influence and estimation. *Behavior Research Methods*, 49(5), 1716–1735. doi:10.375813428-016-0814-1 PMID:27752968
- Campbell, M. C. (1999). Perceptions of price unfairness: Antecedents and consequences. *JMR, Journal of Marketing Research*, 36(2), 187–199. doi:10.2307/3152092
- Campbell, S. (1996). Green cities, growing cities, just cities? Urban planning and the contradictions of sustainable development. *Journal of the American Planning Association*, 62(3), 296–312. doi:10.1080/01944369608975696
- Canny, I. U. (2014). Measuring the mediating role of dining experience attributes on customer satisfaction and its impact on behavioral intentions of casual dining restaurant in Jakarta. *International Journal of Innovation, Management and Technology*, 5(1), 25–29. doi:10.7763/IJIMT.2014.V5.480
- Cappiella, B., & Vanino, E. (2015). The New Silk Road Achievements and Perspectives of EU-China Investment Relations, *Diritto del Commercio Internazionale*, Anno XXIX, Fasc. 2. Ed. Giuffrè, Milano.
- Carpentier, F. R. D. (2016). Considering the Future of Pharmaceutical Promotions in Social Media: Comment on Trouble Spots in Online Direct-to-Consumer Prescription Drug Promotion: A Content Analysis of FDA Warning Letters. *International Journal of Health Policy and Management*, 5(4), 283–285. doi:10.15171/ijhpm.2016.15 PMID:27239874
- Carson, R. (2002). *Silent spring*. China Travel & Tourism Press. (in Chinese)
- Cartwright, S., & Cooper, C. L. (2014). *Mergers and acquisitions: The human factor*. Butterworth-Heinemann.
- Carvalho, N., & Gomes, I. (2017). Knowledge Sharing between Enterprises of the Same Group. *International Journal of Knowledge Management*, 13(1), 34–52. doi:10.4018/IJKM.2017010103
- Casadesus-Masanell, R., & Ricart, J. E. (2010). From strategy to business models and onto tactics. *Long Range Planning*, 43(2), 195–215. doi:10.1016/j.lrp.2010.01.004
- Cassiman, B., & Veugelers, R. (2002). R&D Cooperation and Spillovers: Some Empirical Evidence from Belgium. *The American Economic Review*, 92(4), 1169–1184. doi:10.1257/00028280260344704
- Casteleyn, J., Mottart, A., & Rutten, K. (2009). How to use data from Facebook in your market research. *International Journal of Market Research*, 51(4), 439–447. doi:10.2501/S1470785309200669
- Cater, T., & Cater, B. (2010). Product and relationship quality influence on customer commitment and loyalty in B2B manufacturing relationships. *Industrial Marketing Management*, 39(8), 1321–1333. doi:10.1016/j.indmarman.2010.02.006
- Čekanavičius, L., Bazytė, R., & Dičmonaitė, A. (2014). Green business: Challenges and practices. *Ekonomika (Nis)*, 93(1), 74–88.
- Chababar-Zahedan Track-Laying Underway. (2018). Retrieved 03 April, 2018, from <https://financialtribune.com/articles/economy-domestic-economy/79746/chababar-zahedan-track-laying-underway>
- Chaklader, B., & Roy, D. (2010). Sustainable development using the sustainability balanced score card: The case of Tata Motors, India. *International Journal of Sustainable Strategic Management*, 2(2), 155–167. doi:10.1504/IJSSM.2010.032558

- Challenge Cup Official Website. (n.d.). Retrieved from <http://www.tiaozhanbei.net/tzb>
- Chan, C. S., & Marafa, L. M. (2016). The green branding of Hong Kong: Visitors' and residents' perceptions. *Journal of Place Management and Development*, 9(3), 289–312. doi:10.1108/JPM-D-2016-0008
- Chan, C. S., Peters, M., & Marafa, L. M. (2016). An assessment of place brand potential: Familiarity, favourability and uniqueness. *Journal of Place Management and Development*, 9(3), 269–288. doi:10.1108/JPM-D-2016-0003
- Chang, J. (2013). *Empress Dowager Cixi: The concubine who launched modern China*. London: Johnathan Cape.
- Chao, D. H. (2012). Job seeking ability and professional competence: The end result of entrepreneurship education. *Jiangsu Higher Education*, 10(6), 104–106.
- Charney, A., Libecap, G. D., & Center, K. E. (2000). *The impact of entrepreneurship education: An evaluation of the Berger entrepreneurship program at the University of Arizona*. University of Arizona.
- Charnigo, L., & Barnett-Ellis, P. (2007). Checking out Facebook.com: The impact of a digital trend on academic libraries. *Information Technology and Libraries*, 26(1), 23. doi:10.6017/ital.v26i1.3286
- Chavan, J. (2013). Internet banking-Benefits and challenges in an emerging economy. *International Journal of Research in Business Management*, 1(1), 19–26.
- Chawla, D., & Joshi, H. (2018). The Moderating Effect of Demographic Variables on Mobile Banking Adoption: An Empirical Investigation. *Global Business Review*, 19(3), S90-S113.
- Chawla, D., & Joshi, H. (2011). Impact of Knowledge Management dimensions on learning organization: Comparison across business excellence awarded and non-awarded Indian organizations. *International Journal of Knowledge Management*, 7(2), 68–85. doi:10.4018/jkm.2011040104
- Chawla, D., & Joshi, H. (2017). Consumer perspectives about mobile banking adoption in India—a cluster analysis. *International Journal of Bank Marketing*, 35(4), 616–636. doi:10.1108/IJBM-03-2016-0037
- Chen, H. K. (2007). Research on quality evaluation index system of entrepreneurship education. *Science and Technology Higher Education Research*, 8(5), 67–70.
- Chen, M. Y., Huang, M. J., & Cheng, Y. C. (2009). Measuring knowledge management performance using a competitive perspective: An empirical study. *Expert Systems with Applications*, 36(4), 8449–8459. doi:10.1016/j.eswa.2008.10.067
- Chen, P. T., & Hu, H. H. (2010). The effect of relational benefits on perceived value in relation to customer loyalty: An empirical study in the Australian coffee outlets industry. *International Journal of Hospitality Management*, 29(3), 405–412. doi:10.1016/j.ijhm.2009.09.006
- Chen, Y., Fay, S., & Wang, Q. (2011). The role of marketing in social media: How online consumer reviews evolve. *Journal of Interactive Marketing*, 25(2), 85–94. doi:10.1016/j.intmar.2011.01.003
- Chesnes, M., & Jin, G. Z. (2016). *Direct-to-consumer advertising and online search (No. w22582)*. National Bureau of Economic Research. doi:10.3386/w22582
- Chetty, S., & Campbell-Hunt, C. (2004). A Strategic Approach to Internationalization: A Traditional Versus a “Born-Global” Approach. *Journal of International Marketing*, 12(1), 57–81. doi:10.1509/jimk.12.1.57.25651
- Chevalier, J., & Goolsbee, A. (2003). Measuring prices and price competition online: Amazon.com and BarnesandNoble.com. *Quantitative Marketing and Economics*, 1(2), 203–222. doi:10.1023/A:1024634613982

Compilation of References

- Chi, H., Yeh, H. R., & Tsai, Y. C. (2011). The influences of perceived value on consumer purchase intention: The moderating effect of advertising endorser. *Journal of International Management Studies*, 6(1), 1–6.
- China Global Investment Tracker. (2018). *AEI, Heritage Foundation*. Retrieved from <http://www.aei.org/china-global-investment-tracker/>
- China Outlook. (2016). *KPMG Global China Practice*. Retrieved from <https://www.kpmg.com/CN/en/IssuesAndInsights/ArticlesPublications/Documents/china-outlook-2016.pdf>
- China State Council. (n.d.). Retrieved from <https://www.csis.org/analysis/made-china-2025>
- Chittoor, R., & Ray, S. (2007). Internationalization paths of Indian pharmaceutical firms—A strategic group analysis. *Journal of International Management*, 13(3), 338–355. doi:10.1016/j.intman.2007.05.008
- Chiu, C.-M., Hsu, M.-H., & Wang, E. T. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision Support Systems*, 42(3), 1872–1888. doi:10.1016/j.dss.2006.04.001
- Chivakul, M. R., Lam, X., Liu, W., Maliszewski, W., & Schipke, A. (2015). *Understanding Residential Real Estate in China*. IMF.
- Choi, B., & Jong, A. M. (2010). assessing the impact of knowledge management strategies announcements on the market value of firms. *Information & Management*, 47(1), 42–52. doi:10.1016/j.im.2009.10.001
- Choi, B., & Lee, H. (2003). An Empirical investigation of KM styles and their effect on corporate performance. *Information & Management*, 40(5), 403–417. doi:10.1016/S0378-7206(02)00060-5
- Choi, S. M., & Lee, W. N. (2007). Understanding the impact of direct-to-consumer (DTC) pharmaceutical advertising on patient-physician interactions - Adding the web to the mix. *Journal of Advertising*, 36(3), 137–149. doi:10.2753/JOA0091-3367360311
- Choi, W. S., Heo, J. S., & Kim, M. J. (2012). Effects of physical environment on brand loyalty and moderated effects of brand image. *International Proceedings of Economics Development and Research*, 56, 57–61.
- Chopra, S., & Meindl, P. (2007). *Supply chain management*. Prentice-Hall Publication.
- Chow, I. H. S., Lau, V. P., Lo, T. W. C., Sha, Z., & Yun, H. (2007). Service quality in restaurant operations in China: Decision-and experiential-oriented perspectives. *International Journal of Hospitality Management*, 26(3), 698–710. doi:10.1016/j.ijhm.2006.07.001
- Christopher, M., Payne, A., & Ballantyne, D. (1991). *Relationship marketing*. Oxford, UK: Butterworth-Heinemann.
- Chung, M. (2010). *Doing Business Successfully in China*. Oxford, UK: Chandos Publishing.
- Chung, M., & Mascitelli, B. (2015). *Dancing with the Dragon: Doing business with China*. Business Expert Press.
- Churchill, G. A. (1979). A paradigm for developing better measures of marketing constructs. *JMR, Journal of Marketing Research*, 16(1), 64–73. doi:10.2307/3150876
- Cole, R. E. (2002). From continuous improvement to continuous innovation. *Total Quality Management*, 13(8), 1051–1056. doi:10.1080/09544120200000001
- Collins, J. (2008). Why “Green” is good for business. *Business and Economic Review*, 25–26.
- Conely, A. C., & Zheng, W. (2009). Factors Critical to Knowledge Management Success. *Advances in Developing Human Resources*, 11(3), 334–348. doi:10.1177/1523422309338159

- Coney, S. (2002, October 28). Some Think DTCA Ads Bad for Health; Others Contend Effects Hard to Prove. *Marketing News*.
- Coorey, P. (2018). *Australia mulls rival to China's 'belt and road' with US, Japan, India*, *Australian Financial Review*, 18 February 2018. Melbourne: Fairfax Press.
- Craig, A. (2004). *Posters-at-the-Capitol, Effects of Direct to Consumer Advertising on Physician Prescription Intention*. University of Kentucky
- Crnojevac, I. H., Gugic, J., & Karlovcan, S. (2010). eTourism: A comparison of online and offline bookings and the importance of hotel attributes. *Journal of Information and Organizational Sciences*, 34(1), 41–54.
- Cronin, J. J. Jr, Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76(2), 193–218. doi:10.1016/S0022-4359(00)00028-2
- Crosby, L. A., Evans, K. R., & Cowles, D. (1990). Relationship Quality in Services Selling: An interpersonal influence perspective. *Journal of Marketing*, 54(July), 68–81. doi:10.2307/1251817
- Curtis, K. &. (2006). *Hiding in plain sight: service innovation—a new priority for chief executives*. Somers, NY: IBM Institute for business value.
- Cuypers, I. R., Cuypers, Y., & Martin, X. (2017). When the target may know better: Effects of experience and information asymmetries on value from mergers and acquisitions. *Strategic Management Journal*, 38(3), 609–625. doi:10.1002/mj.2502
- CV NEWS. (2017, April 26). *2016 – 17, Heavy Commercial Vehicles Sales – A round up*. Retrieved from CV NEWS: www.cvnews.in/2016-17-heavy-commercial-vehicles-sales-a-round-up/
- Cyr, D. (2013). Website design, trust and culture: An eight country investigation. *Electronic Commerce Research and Applications*, 12(6), 373–385. doi:10.1016/j.elerap.2013.03.007
- d'Astous, A., & Boujbel, L. (2007). Positioning countries on personality dimensions: Scale development and implications for country marketing. *Journal of Business Research*, 60(3), 231–239. doi:10.1016/j.jbusres.2006.11.005
- Dabinett, G., & Richardson, T. (1995). the European Spatial Approach: The Role of Power and Knowledge in Strategic Planning and Policy Evaluation. *Evaluation*, 5(2), 220–236. doi:10.1177/13563899922208931
- Dahlia, I., Rabitah, H., & Zuraidah, M. (2010). A Study on Financial Literacy of Malaysian Degree Students. *Cross-Cultural Communication*, 5(4), 51–59.
- Dahl, S., Dahl, S., Eagle, L., & Eagle, L. (2016). Empowering or misleading? Online health information provision challenges. *Marketing Intelligence & Planning*, 34(7), 1000–1020. doi:10.1108/MIP-07-2015-0127
- Dakubo, G. D. (2016). Ethical Considerations in Biomarker Development. In *Cancer Biomarkers in Body Fluids* (pp. 285-299). Springer International Publishing. doi:10.1007/978-3-319-01580-4_11
- Damoiseau, Y., Black, W., & Raggio, R. (2011). Brand creation vs acquisition in portfolio expansion strategy. *Journal of Product and Brand Management*, 20(4), 268–281. doi:10.1108/10610421111148298
- Dana, L.P., & Dana, T.E. (2005). Expanding the scope of methodologies used in entrepreneurship research. *International Journal of Entrepreneurship and Small Business*, 2(1), 79-88.
- Dana, L.-P., & Dumez, H. (2015). Qualitative research revisited: Epistemology of a comprehensive approach. *International Journal of Entrepreneurship and Small Business*, 26(2), 154–170. doi:10.1504/IJESB.2015.071822

Compilation of References

- Dangayach, G. S., & Deshmukh, S. G. (2001). Practice of manufacturing strategy: Evidence from select Indian automobile companies. *International Journal of Production Research*, 39(11), 2353–2393. doi:10.1080/00207540110040448
- Daniel, E. (1999). Provision of electronic banking in the UK and the Republic of Ireland. *International Journal of Bank Marketing*, 17(2), 72–83. doi:10.1108/02652329910258934
- Das, S. C., Satpathy, I., Patnaik, B. C. M., & Panch, N. (n.d.). *Government Initiatives for Rural Banking: An Overview*. Academic Press.
- Das, G. (2000). *India Unbound*. New Delhi: Penguin.
- Dasgupta, S., Paul, R. I. K., & Fuloria, S. (2011). Factors affecting behavioral intentions towards mobile banking usage: Empirical evidence from India. *Romanian Journal of Marketing*, (1), 6.
- Datta, A., & Dave, D. (2017). Effects of Physician-directed Pharmaceutical Promotion on Prescription Behaviors: Longitudinal Evidence. *Health Economics*, 26(4), 450–468. doi:10.1002/hec.3323 PMID:26893065
- Datta, D. K., & Grant, J. H. (1990). Relationships between type of acquisition, the autonomy given to the acquired firm, and acquisition success: An empirical analysis. *Journal of Management*, 16(1), 29–44. doi:10.1177/014920639001600103
- Datta, S. K. (2010). Acceptance of e-banking among adult customers: An empirical investigation in India. *Journal of Internet Banking and Commerce*, 15(2), 1.
- Datti, B., & Carter, M. W. (2006). The effect of direct-to-consumer advertising on prescription drug use by older adults. *Drugs & Aging*, 23(1), 71–81. doi:10.2165/00002512-200623010-00007 PMID:16492071
- Davidsson, P., Delmar, F., & Wiklund, J. (2006). Entrepreneurship as growth: growth as entrepreneurship. In *Entrepreneurship and the Growth of Firms* (pp. 21–38). Edward Elgar Publishing. doi:10.4337/9781781009949.00009
- Davis, F. D. (1989). Perceived usefulness, Perceived ease of use, and user acceptance of information technology. *Management Information Systems Quarterly*, 13(3), 319–340. doi:10.2307/249008
- De Cannière, M. H., De Pelsmacker, P., & Geuens, M. (2010). Relationship Quality Purchase Intention & Behavior: The Moderating Impact of Relationship Strength. *Journal of Business and Psychology*, 25(1), 87–98. doi:10.1007/10869-009-9127-z
- De Jonge, A. (2017). *Australia risks missing out on China's One Belt One Road*. The Conversation.
- Defee, C. C., & Stank, T. P. (2005). Applying the strategy-structure-performance paradigm to the supply chain environment. *International Journal of Logistics Management*, 16(1), 28–50. doi:10.1108/09574090510617349
- Delmar, F., Davidsson, P., & Gartner, W. B. (2003). Arriving at the high-growth firm. *Journal of Business Venturing*, 18(2), 189–216. doi:10.1016/S0883-9026(02)00080-0
- DeLorme, Huh, & Jisu. (2011). Advertising in Health Communication: Promoting Pharmaceuticals and Dietary Supplements to U.S. Consumers. In *The Routledge Handbook of Health Communication* (2nd ed.). New York, NY: Routledge.
- DeLorme, D. E., & Huh, J. (2009). Seniors' uncertainty management of direct-to-consumer prescription drug advertising usefulness. *Health Communication*, 24(6), 494–503. doi:10.1080/10410230903104277 PMID:19735027
- DeLorme, D. E., Huh, J., & Reid, L. N. (2006). Age differences in how consumers behave following exposure to DTC advertising. *Health Communication*, 20(3), 255–265. doi:10.1207/15327027hc2003_5 PMID:17137417
- Deng, P., & Yang, M. (2015). Cross-border mergers and acquisitions by emerging market firms: A comparative investigation. *International Business Review*, 24(1), 157–172. doi:10.1016/j.ibusrev.2014.07.005

- Deshpande, A., Menon, A., Perri, M. III, & Zinkhan, G. (2004). Direct-to-consumer advertising and its utility in health care decision making: A consumer perspective. *Journal of Health Communication*, 9(6), 499–513. doi:10.1080/10810730490523197 PMID:15764449
- Devictor, N. (2013). R&D challenges for SFR design and safety analysis: Opportunities for international cooperation. *International atomic energy agency*, 2015(1665), 371-384.
- DFAT. (2017). *DFAT Composition of Trade Australia, 2016-17*. Canberra: Department of Foreign Affairs and Trade.
- Di Gangi, P. M., Wasko, M. M., & Tang, X. (2012). Would you share? Examining knowledge type and communication channel for knowledge sharing within and across the organizational boundary. *International Journal of Knowledge Management*, 8(1), 1–21. doi:10.4018/jkm.2012010101
- Diakoulakis, E. I., Georgopoulos, B. N., Koulouriotis, E. D., & Emiris, M. D. (2004). Toward a Holistic Knowledge Management Model. *Journal of Knowledge Management*, 8(1), 32–46. doi:10.1108/13673270410523899
- Dicken, P. (2007). *Global shift: Mapping the changing contours of the world economy*. London: Sage.
- Dissanayake, D. M. N. S. W. (2014). The impact of perceived desirability and perceived feasibility on entrepreneurial intention among undergraduate students in sri lanka: An extended model. *Social Science Electronic Publishing*, 2(1), 39–57.
- Dixit, J. N. (2001). *India's Foreign Policy And Its Neighbours*. New Delhi: Gyan Books.
- Dobni, D., & Zinkhan, G. M. (1990). In search of brand image: A foundation analysis. *Advances in Consumer Research. Association for Consumer Research (U. S.)*, 17(1), 110–120.
- Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of price, brand and store information on buyers' product evaluations. *JMR, Journal of Marketing Research*, 28(3), 307–319. doi:10.2307/3172866
- Donaldson, B., & O'Toole, T. (2002). *Strategic Market Relationships: From Strategy to Implementation*. John Wiley & Sons Ltd.
- Donaldson, D. (2018). Railroad of the Raj: Estimation the impact of Transportation Infrastructure. *The American Economic Review*, 108(4-5), 899–934. doi:10.1257/aer.20101199
- Dong, Y., Bartol, K. M., Zhang, Z. X., & Li, C. (2017). Enhancing employee creativity via individual skill development and team knowledge sharing: Influences of dual-focused transformational leadership. *Journal of Organizational Behavior*, 38(3), 439–458. doi:10.1002/job.2134
- Donohue, J., Berndt, E., Rosenthal, M., Epstein, A., & Frank, R. (2004). Effects of Pharmaceutical promotion on adherence to the treatment guidelines for depression. *Medical Care*, 42(12), 1176–1185. doi:10.1097/00005650-200412000-00004 PMID:15550797
- Doole, I., & Lowe, R. (2008). *International Marketing Strategy: Analysis, development and Implementaion*. Retrieved 15 April, 2015, from https://www.cengagebrain.co.uk/content/doole07630_1844807630_02.01_chapter01.pdf
- Doolin, B., Burgess, L., & Cooper, J. (2002). Evaluating the use of the Web for tourism marketing: A case study from New Zealand. *Tourism Management*, 23(5), 557–561. doi:10.1016/S0261-5177(02)00014-6
- Dorostkar Ahmadi, N., & Shafiei Nikabadi, M. (2015). A Fuzzy Intelligent Model for Evaluating Knowledge Management Processes in the Supply Chain. *Industrial Management Prospective*, 18, 153–157.
- Douglas, E. J., & Fitzsimmons, J. R. (2008). *Individual intentions towards entrepreneurship vs intrapreneurship*. Agse International Entrepreneurship Research Exchange.

Compilation of References

- Doyle, S. (2007). The role of social networks in marketing. *Journal of Database Marketing & Customer Strategy Management*, 15(1), 60–64. doi:10.1057/palgrave.dbm.3250070
- Dressler, N. (2009). *Truck industry 2020: The future is global*. Roland Berger Strategy Consultants.
- Dube, L., & Renaghan, L. (2000). Creating visible customer value. *The Cornell Hotel and Restaurant Administration Quarterly*, 41(1), 62–72. doi:10.1177/001088040004100124
- Duboff, R. S. (1986). Brands, like people, have personalities. *Marketing News*, 20(1), 8.
- Dudharejia, M. (2017). *8 reasons Facebook will beat all other digital marketing channels this year*. Retrieved March 11, 2018, from <https://www.entrepreneur.com/article/286441>
- Dugar, P., & Todman, J. (1995). Analysis of Pre-Test-Post-Test Control Group Designs in Educational Research. *Educational Psychology*, 15(2), 181–198. doi:10.1080/0144341950150207
- Dunford, A. (2010, February 9). *Five Consideration when Marketing to Early Adopters*. Retrieved from, www.rocket-watcher.com/blog/2010/02/early-adopters-innovation-and-marketing.html
- Dunning, J. H. (1980). Toward an Eclectic Theory of International Production: Some Empirical Tests. *Journal of International Business Studies*, 11(1), 9–31. doi:10.1057/palgrave.jibs.8490593
- Dunning, J. H. (1988). The Eclectic Paradigm of International Production, a Restatement and Some Possible Extensions. *Journal of International Business Studies*, 19(Spring), 1–31. doi:10.1057/palgrave.jibs.8490372
- Dutordoir, M., Roosenboom, P., & Vasconcelos, M. (2014). Synergy disclosures in mergers and acquisitions. *International Review of Financial Analysis*, 31, 88–100. doi:10.1016/j.irfa.2013.09.005
- Dutta, R., & Sundaram, K. P. M. (2004). *Indian Economy*. New Delhi: S Chand.
- Duval-Couetil, N. (2013). Assessing the Impact of Entrepreneurship Education Programs: Challenges and Approaches. *Journal of Small Business Management*, 51(3), 394–409. doi:10.1111/jsbm.12024
- Dwivedi, Y. K., Venkitachalam, K., Sharif, A. M., Al-Karaghoul, W., & Weerakkody, V. (2011). Research trends in knowledge management: Analyzing the past and predicting the future. *Information Systems Management*, 28(1), 43–56. doi:10.1080/10580530.2011.536112
- Dwyer, R. F., Schurr, P. H., & Oh, S. (1987). Developing buyer-seller relationship. *Journal of Marketing*, 51(April), 11–27. doi:10.2307/1251126
- Dyer, J., Kale, P., & Singh, H. (2004, July). When to Ally and When to Acquire? *Harvard Business Review*, 109-115.
- Economist. (2017). *Why nationalists are so bad at foreign policy*. Retrieved from <https://www.economist.com/news/united-states/21723864-donald-trump-skilled-populist-oddly-unworried-global-unpopularity-why>
- Edelman, D. C. (2007). From the periphery to the core: As online strategy becomes overall strategy, marketing organizations and agencies will never be the same. *Journal of Advertising Research*, 47(2), 130–134. doi:10.2501/S0021849907070146
- Edwards, J. R. (2001). Multidimensional Constructs in organizational Behavior Research: An Integrative Analytical Framework. *Organizational Research Methods*, 4(2), 144–192. doi:10.1177/109442810142004
- EIB. (2016). Retrieved from <http://www.eib.org/efsi/efsi>
- Elahi, S., Rastegar, A. A., & Shafiei Nikabadi, M. (2014). Investigate the Impact of Knowledge Management Process Capabilities on Innovation Performance Considering Mediating Effect of Innovation Processes in High-Tech Organizations. *Journal of Technology Development Management*, 1(4), 105–129.

- Elango, B., & Pattnaik, C. (2007). Building capabilities for international operations through networks: A study of Indian firms. *Journal of International Business Studies*, 38(4), 541–555. doi:10.1057/palgrave.jibs.8400280
- Eley, B., & Tilley, S. (2009). *Online marketing inside out*. Collingwood, Vic.: SitePoint.
- Elif. (2010). *Online health information seeking habits of middle aged and older people: A case study* (Master's Thesis).
- Emanuel, E. J., & Emanuel, L. L. (1992). Four Models of the Physician-Patient Relationship. *Journal of the American Medical Association*, 267(16), 2221–2226. doi:10.1001/jama.1992.03480160079038 PMID:1556799
- Erkmen, E., & Hancer, M. (2018). Creating value for restaurant customer: The role of other customers in dining experience. In *Tourist Behavior* (pp. 157–171). Cham: Springer. doi:10.1007/978-3-319-78553-0_11
- Ernst & Young. (2013). *Infrastructure 2013: Global priorities, Global Insights*. Retrieved 7 April, 2015, from [http://www.ey.com/Publication/vwLUAssets/Infrastructure_2013/\\$FILE/Infrastructure_2013.pdf](http://www.ey.com/Publication/vwLUAssets/Infrastructure_2013/$FILE/Infrastructure_2013.pdf)
- ESADE. (2016). *China Europe Club*. Chinese Investment in Europe.
- Escalas, J. E., & Bettman, J. (2003). You are what they eat: The influence of reference groups on consumers' connections to brands. *Journal of Consumer Psychology*, 13(3), 339–348. doi:10.1207/S15327663JCP1303_14
- Escape Square Brunei. (2018). *About Escape Square Brunei*. Retrieved March 11, 2018, from https://www.facebook.com/pg/escapesquarebn/about/?ref=page_internal
- Estell, L. (2002). Loyalty Lessons. *Incentive*, 176(11), 38–41.
- EU-China FDI Monitor. (2016, January). *Foreign Investment in China: Global Trends*. Rhodium Group.
- Ezeala-Harrison, F. (2005). On the competing notions of international competitiveness. *Advances in Competitiveness Research*, 13(1), 80–87.
- Facebook. (2018). *Facebook pages for marketing your business*. Retrieved February 9, 2018, from <https://www.facebook.com/business/products/pages#>
- Fang, Y. F., & Tong, X. L. (2013). Research on Evaluation of innovation and entrepreneurship education in Universities Based on fuzzy analytic hierarchy process. *Journal of North China Electric Power University*, 13(2), 137–140.
- Fard, D. H., & Selseleh, M. (2010). Measuring Knowledge Management Cycle: Evidence from Iran. *European Journal of Scientific Research*, 41(2), 297–309.
- Fawcett, S. E., Osterhaus, P., Magnan, G. M., Brau, J. C., & McCarter, M. W. (2007). Information sharing and supply chain performance: The role of connectivity and willingness. *Supply Chain Management*, 12(5), 358–368. doi:10.1108/13598540710776935
- Fayolle, A., & Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. *Journal of Small Business Management*, 53(1), 75–93. doi:10.1111/jsbm.12065
- Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programmes: A new methodology. *Journal of European Industrial Training*, 30(9), 701–720. doi:10.1108/03090590610715022
- Federici, D., Ferrante, F., & Vistocco, D. (2007). On the sources of entrepreneurial talent in Italy: tacit vs. codified knowledge. *SSRN Electronic Journal*, 6.
- Fenby, J. (2008). *Modern China - the fall and rise of a great power, 1850 to the present*. New York: Harper Collins Publisher.

Compilation of References

- Fernandes, T., Proença, J., & Rambocas, M. (2013). Evaluating the impact of customer demographical characteristics on relationship outcomes. *Proceedings of the 22nd International Business Information Management Conference (IBIMA)*.
- Floh, A., & Madlberger, M. (2013). The role of atmospheric cues in online impulse-buying behavior. *Electronic Commerce Research and Applications, 12*(6), 425–439. doi:10.1016/j.elerap.2013.06.001
- Fogel, J., & Nehmad, E. (2009). Internet social network communities: Risk taking, trust, and privacy concerns. *Computers in Human Behavior, 25*(1), 153–160.
- FORA. (2010). *Green Business Models in the Nordic Region – A key to promote sustainable growth*. Paper commissioned by the Nordic Council of Ministers GreenCo, India. Retrieved from <http://www.greenco.in/gco/aboutgreencorating.php>
- Foroudi, P., Gupta, S., Kitchen, P., Foroudi, M. M., & Nguyen, B. (2016). A framework of place branding, place image, and place reputation: Antecedents and moderators. *Qualitative Market Research, 19*(2), 241–264. doi:10.1108/QMR-02-2016-0020
- Forsythe, S. M., & Shi, B. (2003). Consumer patronage and risk perception in internet shopping. *Journal of Business Research, 56*(11), 867–875. doi:10.1016/S0148-2963(01)00273-9
- Fortuna, R. J., Ross-Degnan, D., Finkelstein, J., Zhang, F., Champion, F. X., & Simon, S. R. (2008). Clinician attitudes towards prescribing and implications for interventions in a multi-specialty group practice. *Journal of Evaluation in Clinical Practice, 14*(6), 969–973. doi:10.1111/j.1365-2753.2007.00913.x PMID:18462286
- Fournier, S. (1998). Consumers and Their Brands: Developing Relationship Theory in Consumer Research. *The Journal of Consumer Research, 24*(4), 343–373. doi:10.1086/209515
- Frankel, M. E., & Forman, L. H. (2017). *Mergers and acquisitions basics: the key steps of acquisitions, divestitures, and investments*. John Wiley & Sons. doi:10.1002/9781119380726
- Frazier, B., & Niehm, L. S. (2001). Students' entrepreneurial readiness in the United Arab Emirates: An empirical inquiry of related factors. *International Journal of Business and Globalisation, 18*(4), 63–77.
- Frazier, B., & Niehm, L. S. (2008). FCS Students' Attitudes and Intentions toward Entrepreneurial Careers. *Journal of Family and Consumer Sciences, 100*, 17–24.
- FreePress. (2015). *Shoppers Stop: Back to Retail Basics*. Retrieved from www.freepressjournal.in/uber-retailer/shoppers-stop/back/to/retail/basics-2/567530
- Friedman, Y., Carmeli, A., Tishler, A., & Shimizu, K. (2016). Untangling micro-behavioral sources of failure in mergers and acquisitions: A theoretical integration and extension. *International Journal of Human Resource Management, 27*(20), 2339–2369. doi:10.1080/09585192.2015.1042003
- Fu, J. (2016, July 22). EU Must Change Its China Strategy. *China Daily*, 11.
- Fugate, S. B., Stank, P. T., & Mentzer, T. J. (2009). Linking improved Knowledge Management to Operational and Organizational Performance. *Journal of Operations Management, 27*(3), 247–264. doi:10.1016/j.jom.2008.09.003
- Fuller, C. J., & Narasimhan, H. (2006). Engineering Colleges' Exposure and Information Technology: Professionals in Tamil Nadu. *Economic and Political Weekly, 258*–288.
- Gagić, S., Tešanović, D., & Jovičić, A. (2013). The vital components of restaurant quality that affect guest satisfaction. *Turizam, 17*(4), 166–176. doi:10.5937/Turizam1304166G
- Galloway, J. (Ed.). (2017). *Mergers and Acquisitions* (Vol. 3). Routledge.

- Gambardella, L. (2016, July 29). EU Needs Forward-Looking China Plan. *China Daily*, 11.
- Gan, C., & Wang, W. (2017). The influence of perceived value on purchase intention in social commerce context. *Internet Research*, 27(4), 772–785. doi:10.1108/IntR-06-2016-0164
- Gao, G. J., Yan, S., & Liu, D. (2013). Common problems and relevant countermeasures of entrepreneurship education in Universities Based on questionnaires from different types of universities in Shanghai. *Journal of China Geosciences University*, 13(3), 146–156.
- Gao, L. J., & Li, L. H. (2016). Study on the Evaluation and Promotion Strategy of the Effectiveness of University's Entrepreneurship Education. *Journal of East China Normal University*, 34(2), 22–29.
- Garbarino, E., & Johnson, M. S. (1999). The different roles of satisfaction, trust & commitment in customer relationships. *Journal of Marketing*, 63(2), 70–87. doi:10.2307/1251946
- Garzella, S., & Fiorentino, R. (2014). A synergy measurement model to support the pre-deal decision making in mergers and acquisitions. *Management Decision*, 52(6), 1194–1216. doi:10.1108/MD-10-2013-0516
- Gassmann, O., & Zedtwitz, M. (1999). New Concepts and Trends in International R&D Organization. *Research Policy*, 28(2-3), 231–250. doi:10.1016/S0048-7333(98)00114-0
- Gaur, A. S., & Kumar, V. (2009). International diversification, business group affiliation and firm performance: Empirical evidence from India. *British Journal of Management*, 20(2), 172–186. doi:10.1111/j.1467-8551.2007.00558.x
- Gayathri, N., & Meenakshi, K. (2012). Indian Education System and Emotional Intelligence. *Indian Journal of Higher Education*, 3(1).
- Gebreslassie, T. W. (2017). *E-Business Strategy to Adopt Electronic Banking Services in Ethiopia*. Academic Press.
- Ge, L., & Liu, Z. Y. (2014). Study on Evaluation Index System of Entrepreneurship Education Ability in Colleges and Universities Based on CIPP. *Journal of Northeastern University*, 16(4), 377–382.
- Gelbuda, M., Meyer, K. E., & Deliosc, A. (2008, March). International business and institutional development in Central and Eastern Europe. *Journal of International Management*, 14(1), 1–11. doi:10.1016/j.intman.2007.05.011
- George, A., & Gireeshkumar, G. S. (2012). Risks in Internet Banking: Sample Evidence from Idukki District, Kerala. *IUP Journal of Bank Management*, 11(3), 53.
- Ghani, E., Kerr, W. R., & O'connell, S. (2014). Spatial determinants of entrepreneurship in India. *Regional Studies*, 48(6), 1071–1089. doi:10.1080/00343404.2013.839869
- Ghemawat, P. (2001). Distance still matters. *Harvard Business Review*, 79(8), 137–147. PMID:11550630
- Ghina, A., Simatupang, T. M., & Gustomo, A. (2017). The relevancy of graduates' competencies to the effectiveness of entrepreneurship education: A case study at sbm itb-indonesia. *Journal of Entrepreneurship Education*, 20(1), 1–24.
- Ghoshal, S., & Bartlett, C. A. (1990). The multinational corporation as an interorganizational network. *Academy of Management Review*, 15(4), 603–626. doi:10.5465/amr.1990.4310825
- Ghosh, S., & Dutta, S. (2014). Mergers and Acquisitions: A Strategic Tool for Restructuring in the Indian Telecom Sector. *Procedia Economics and Finance*, 11(11), 396–409. doi:10.1016/S2212-5671(14)00207-X
- Gidey, E., Jilcha, K., Beshah, B., & Kitaw, D. (2014). The plan-do-check-act cycle of value addition. *Industrial Engineering & Management*, 3(124), 2169–0316.

Compilation of References

- Gilcher, S. (2012). *Green and Inclusive Businesses in India: A Summary and Evaluation of Surveys*. GIZ. CII (Confederation of Indian Industry). Retrieved from www.cii.in/
- Gingrich J A (1999). Five Rules for winning in Emerging Market Consumers. *Strategy and Business*, *Q2*, 9-13.
- Gloet, M., & Samson, D. (2016). Knowledge Management and Systematic Innovation Capability. *International Journal of Knowledge Management*, *12*(2), 54–72. doi:10.4018/IJKM.2016040104
- Goldoni, V., & Oliveira, M. (2010). Knowledge management metrics in software development companies in Brazil. *Journal of Knowledge Management*, *14*(2), 301–313. doi:10.1108/13673271011032427
- Gonzalez, R. V. D. (2016). Knowledge Management Process in Multi-Site Provision of Service. *International Journal of Knowledge Management*, *12*(2), 20–37. doi:10.4018/IJKM.2016040102
- Good & Huhmann. (2018). *Social relationships and social anxiety appeals in direct-to-consumer advertising*. Academic Press.
- Goyal, K. A., & Joshi, V. (2012). Indian banking industry: Challenges and opportunities. *International Journal of Business Research and Management*, *3*(1), 18–28.
- Graevenitz, G. V., Harhoff, D., & Weber, R. (2010). The effects of entrepreneurship education. *Journal of Economic Behavior & Organization*, *76*(1), 90–112. doi:10.1016/j.jebo.2010.02.015
- Green, A., Grace, D., & Perkins, H. (2016). City branding research and practice: An integrative review. *Journal of Brand Management*, *23*(3), 252–272. doi:10.1057/bm.2016.8
- Greenwood, V. A., & Dwyer, L. (2016). Reinventing Macau tourism: Gambling on creativity? *Current Issues in Tourism*, *20*(6), 580–602. doi:10.1080/13683500.2016.1187585
- Griffith, D. A., Krampf, R. F., & Palmer, J. W. (2001). The role of interface in electronic commerce: Consumer involvement with print versus online catalogs. *International Journal of Electronic Commerce*, *5*(4), 135–154. doi:10.1080/10864415.2001.11044219
- Gronroos, C. (1990). Relationship approach to marketing in service contexts: The marketing & organizational behaviour interface. *Journal of Business Research*, *20*(1), 3–11. doi:10.1016/0148-2963(90)90037-E
- Guenzi, P., & Pelloni, O. (2004). The Impact of Interpersonal Relationships on Customer Satisfaction & Loyalty to the Service Provider. *International Journal of Service Industry Management*, *15*(4), 365–384. doi:10.1108/09564230410552059
- Gulnoza, I., & Singh, J. (2017). Determinants of financial literacy: A quantitative study among young students in Tashkent, Uzbekistan. *Electronic Journal of Business and Management*, *2*(1), 61–75.
- Gummesson, E. (1994). Making Relationship marketing operational. *International Journal of Service Industry Management*, *5*(5), 5–20. doi:10.1108/09564239410074349
- Gummesson, E. (2002). Relationship marketing in the new economy. *Journal of Relationship Marketing*, *1*(1), 37–57. doi:10.1300/J366v01n01_04
- Gundlach, G. T., Achrol, R. S., & Mentzer, J. T. (1995). The structure of Commitment in Exchange. *Journal of Marketing*, *59*(1), 78–92. doi:10.2307/1252016
- Gupta, R., & Gupta, A. (2018). Awareness Among Rural Customers About Customers about Electronic Banking. *Digitalization*, *10*(4).

- Gupta, S., Yun, H., Xu, H., & Kim, H. W. (2017). An exploratory study on mobile banking adoption in Indian metropolitan and urban areas: A scenario-based experiment. *Information Technology for Development, 23*(1), 127–152. doi: 10.1080/02681102.2016.1233855
- Guritno, S. (2013). Perceived usefulness, ease of use, and attitude towards online shopping usefulness towards online airlines ticket purchase. *Procedia: Social and Behavioral Sciences, 81*(28), 212–216.
- Haery, F. A., & Badiezadeh, M. (2014). Studying the effect of food quality dimensions (physical environment, food and services) on mental image of the restaurant and customers' satisfaction and intentions based on Kisang's Model. *International Journal of Academic Research in Business and Social Sciences, 4*(7), 415–424. doi:10.6007/IJARBS/v4-i7/1032
- Hair, J. F., Anderson, R. E., Tathman, R. L., & Black, W. C. (1995). *Ultivariate Data Analysis*. Prentice Hall.
- Hair, J. F., Jr., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis* (6th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling* (2nd ed.). Thousand Oaks, CA: Sage.
- Hair, J., Anderson, R., Tatham, R., & Black, W. (1998). *Multivariate Data Analysis* (5th ed.). London: Prentice Hall International.
- Ha, J., & Jang, S. (2009). Perceived justice in service recovery and behavioral intentions: The role of relationship quality. *International Journal of Hospitality Management, 28*(3), 319–327. doi:10.1016/j.ijhm.2008.12.001
- Hajli, M. N. (2014). A study of the impact of social media on consumers. *International Journal of Market Research, 56*(3), 387–404. doi:10.2501/IJMR-2014-025
- Halawi, L. A., McCarthy, R. V., & Aronson, J. E. (2006). Knowledge management and the competitive strategy of the firm. *The Learning Organization, 13*(4), 384–397. doi:10.1108/09696470610667751
- Hamid, A. A., Razak, F. Z. A., Bakar, A. A., & Abdullah, W. S. W. (2016). The effects of perceived usefulness and perceived ease of use on continuance intention to use E-government. *Procedia Economics and Finance, 35*, 644–649. doi:10.1016/S2212-5671(16)00079-4
- Hamid, N. R. A., Saaidin, M., Kamari, M. N., Rose, R. M., & Ahmad, S. N. B. (2017). Service Quality in Halal Restaurants: A Comparison between Muslim and non-Muslim consumers. *Advanced Science Letters, 23*(8), 7750–7753. doi:10.1166/asl.2017.9568
- Hanafizadeh, P., & Shafiei Nikabadi, M. (2011). Framework for Selecting an Appropriate E-Business Model in Managerial Holding Companies, Case Study: Iran Khodro. *Journal of Enterprise Information Management, 24*(3), 237–267. doi:10.1108/17410391111122844
- Hanaysha, J. (2016). Physical environment as a key success factor for building strong brand equity: A study on restaurant industry. *Journal of Research in Business. Economics and Management, 5*(5), 686–693.
- Hanaysha, J. R. (2018). Customer retention and the mediating role of perceived value in retail industry. *World Journal of Entrepreneurship, Management and Sustainable Development, 14*(1), 2–24. doi:10.1108/WJEMSD-06-2017-0035
- Hanaysha, J. R., Loon, L. K., & Bakar, Z. A. (2017). Food quality and price promotion as key success factors for building strong brand equity. *Advanced Science Letters, 23*(9), 8877–8881. doi:10.1166/asl.2017.9988
- Handfield, R. B., & Nichols, E. L. (1999). *Introduction to Supply Chain Management*. Upper Saddle River, NJ: Prentice-Hall.

Compilation of References

- Hanemann, T., & Huotari, M. (2016). *A New Record Year for Chinese Outbound Investment in Europe*. Retrieved from http://ec.europa.eu/priorities/jobs-growth-and-investment/investment-plan_en
- Han, H., & Hwang, J. (2017). In-flight physical surroundings: Quality, satisfaction, and traveller loyalty in the emerging low-cost flight market. *Current Issues in Tourism*, 20(13), 1336–1354. doi:10.1080/13683500.2014.960371
- Han, H., & Ryu, K. (2009). The roles of the physical environment, price perception, and customer satisfaction in determining customer loyalty in the restaurant industry. *Journal of Hospitality & Tourism Research (Washington, D.C.)*, 33(4), 487–510. doi:10.1177/1096348009344212
- Hanif, S. A., & Amin, F. (2017). Evaluation Of The Advertising Claims Made By Pharmaceutical Companies In Drug Promotional Materials In Pakistan. *Medical Channel*, 23(1).
- Han, J., Jo, G. S., & Kang, J. (2016). Is high-quality knowledge always beneficial? Knowledge overlap and innovation performance in technological mergers and acquisitions. *Journal of Management & Organization*, 1–21.
- Hankinson, G. (2001). Location branding: A study of the branding practices of 12 English cities. *Journal of Brand Management*, 9(2), 127–142. doi:10.1057/palgrave.bm.2540060
- Hannan, T., & Pilloff, S. (2009). Acquisition Targets and Motives in the Banking Industry. *Journal of Money, Credit and Banking*, 41(6), 1167–1187. doi:10.1111/j.1538-4616.2009.00251.x
- Han, S. H., Nguyen, B., & Lee, T. J. (2015). Consumer-based chain restaurant brand equity, brand reputation, and brand trust. *International Journal of Hospitality Management*, 50, 84–93. doi:10.1016/j.ijhm.2015.06.010
- Han, S. L., Wilson, D. T., & Dant, S. (1993). Buyer-Seller relationships today. *Industrial Marketing Management*, 22(4), 331–338. doi:10.1016/0019-8501(93)90029-7
- Hansen, R. A., Chen, S.-Y., Gaynes, B. N., & Maciejewski, M. L. (2010). Relationship of Pharmaceutical Promotion to Antidepressant Switching and Adherence: A Retrospective Cohort Study. *Psychiatric Services (Washington, D.C.)*, 61(12), 1232–1238. doi:10.1176/ps.2010.61.12.1232 PMID:21123408
- Harrison-Walker, L. J. (2012). Place brands and the relational branding communication process. *Academy of Marketing Studies Journal*, 16(Supplement 4), 51–59.
- Harveston, P. D., Kedia, B., & Davis, P. S. (2000). Internationalization of born global and gradual globalizing firms: The impact of the manager. *Advances in Competitiveness Research*, 8(1), 92-99.
- Hassan, M., Hassan, S., Nawaz, M. S., & Aksel, I. (2013). Measuring customer satisfaction and loyalty through service fairness, service quality and price fairness perception: An empirical study of Pakistan Mobile telecommunication sector. *Science International*, 25(4), 971–980.
- Hassan, M., Patro, D., Tuckman, H., & Wang, X. (2007). Do mergers and acquisitions create shareholder wealth in the pharmaceutical industry? *International Journal of Pharmaceutical and Healthcare Marketing*, 1(1), 58–78. doi:10.1108/17506120710740289
- Hedman, J., & Kalling, T. (2003). The business model concept: Theoretical underpinnings and empirical illustrations. *European Journal of Information Systems*, 12(1), 49–59. doi:10.1057/palgrave.ejis.3000446
- Heenkenda, S. (2014). *Inequalities in the Financial Inclusion in Sri Lanka: An Assessment of the Functional Financial Literacy*. MPRA Paper No. 54419.
- Hennig-Thurau, T. (2000). Relationship quality & customer retention through strategic perspective. *Journal of the Academy of Marketing Science*, 16(1), 55–79.

- Hennig-Thurau, T., & Klee, A. (1997). The impact of customer satisfaction & relationship quality on customer retention: A critical reassessment & model development. *Psychology and Marketing*, 14(8), 737–764. doi:10.1002/(SICI)1520-6793(199712)14:8<737::AID-MAR2>3.0.CO;2-F
- Henökl, T. (2018). How Brexit affects EU external action: The UK's legacy in European international cooperation. *Futures*, 97, 63–72. doi:10.1016/j.futures.2017.07.002
- Herzenstein, M., Misra, S., & Posavac, S. S. (2004). How consumers' attitudes toward direct-to-consumer advertising of prescription drugs influences and effectiveness, and consumer and physician behavior. *Marketing Letters*, 15(4), 201–212. doi:10.1007/11002-005-0458-x
- Heuer, A., & Kolvereid, L. (2014). Education in entrepreneurship and the theory of planned behavior. *European Journal of Training and Development*, 38(6), 506–523. doi:10.1108/EJTD-02-2013-0019
- Hill, C. W. L., & Jain, A. (2009). *International Business (6th ed.)*. New Delhi: McGraw Hill.
- Hiremath, B. K., & Kenchakkanavar, A. Y. (2016). An alteration of the web 1.0, web 2.0 and web 3.0: a comparative study. *Imperial Journal of Interdisciplinary Research*, 2(4).
- Hitt, M. A., Ireland, R. D., & Harrison, J. S. (2001). Mergers and acquisitions. *The Blackwell handbook of strategic management*, 377-402.
- Hoffman, J.R., & Wilkes, M. (1999). *Direct to consumer advertising of prescription drugs*. Academic Press.
- Hofstede, G. (1994). The business of international business is culture. *International Business Review*, 3(1), 1–14. doi:10.1016/0969-5931(94)90011-6
- Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture*, 2(1), 8. doi:10.9707/2307-0919.1014
- Hogarth, J. M., & Hilgert, M. A. (2002). Financial knowledge, experience and learning preferences: Preliminary results from a new survey on financial literacy. *Consumer Interest Annual*, 48(1), 1–7.
- Holsti, O. R. (1969). *Content analysis for the social sciences and humanities*. Academic Press.
- Hong, W., Thong, J. Y., & Tam, K. Y. (2004). The effects of information format and shopping task on consumers' online shopping behavior: A cognitive fit perspective. *Journal of Management Information Systems*, 21(3), 149–184. doi:10.1080/07421222.2004.11045812
- Hoppe, M. (2015). Policy and entrepreneurship education. *small business economics*. *Business Economics*, 46(1), 13-29. doi:Small
- Hosany, S., & Ekinci, Y. (2006). Destination personality: An application of brand personality to tourism destinations. *Journal of Travel Research*, 45(2), 127–139. doi:10.1177/0047287506291603
- Hosany, S., Ekinci, Y., & Uysal, M. (2006). Destination image and destination personality: An application of brand theories to tourism places. *Journal of Business Research*, 59(5), 638–642. doi:10.1016/j.jbusres.2006.01.001
- Hou, C. E., Cheng, M. J., Hung, S. W., Chen, S. H., & Shen, M. Y. (2017). Where does customer value come from? An assessment of the global bicycle manufacturers industry's product attribute, technical capability, and brands. *Total Quality Management & Business Excellence*, 1–13. doi:10.1080/14783363.2017.1413935
- House, R., Javidan, M., Hanges, P., & Dorfman, P. (2002). Understanding cultures and implicit leadership theories across the globe: An introduction to project GLOBE. *Journal of World Business*, 37(1), 3–10. doi:10.1016/S1090-9516(01)00069-4

Compilation of References

- Howes, R., & Tah, J. H. (2003). *Strategic Management Applied to International Construction*. London: Thomas Telford Publications. doi:10.1680matic.32118
- Hsieh, H. Y., & Li, S. H. (2008). *A Relative Influence of Service Quality & Relationship Quality on Customers' Loyalty for Restaurants*. Department of Food & Beverage Management, Far East University.
- Hu, H. H., Kandampully, J., & Juwaheer, T. D. (2009). Relationships and impacts of service quality, perceived value, customer satisfaction, and image: An empirical study. *Service Industries Journal*, 29(2), 111–125. doi:10.1080/02642060802292932
- Huh, J., Delorme, D. E., & Reid, L. N. (2004). The third-person effect and its influence on behavioral outcomes in a product advertising context: The case of direct-to-consumer prescription drug advertising. *Communication Research*, 31(5), 568–599. doi:10.1177/0093650204267934
- Huh, J., DeLorme, D. E., & Reid, L. N. (2005). Factors affecting trust in on-line prescription drug information and impact of trust on behavior following exposure to DTC advertising. *Journal of Health Communication*, 10(8), 711–731. doi:10.1080/10810730500326716 PMID:16316935
- Huh, J., & Langteau, R. (2007). Presumed influence of direct-to-consumer (DTC) prescription drug advertising on patients - The physician's perspective. *Journal of Advertising*, 36(3), 151–172. doi:10.2753/JOA0091-3367360312
- Hu, L. T., & Bentler, P. M. (1999). Cut-off Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria versus New Alternatives. *Structural Equation Modeling*, 6(1), 1–55. doi:10.1080/10705519909540118
- Hult, G., Ketchen, D. J., & Arrfelt, M. (2007). Strategic supply chain management: Improving performance through a culture of competitiveness and knowledge development. *Strategic Management Journal*, 28(1), 1035–1052. doi:10.1002/mj.627
- Hult, G., Ketchen, D. J., & Stanley, S. F. (2004). Information processing, knowledge development, and strategic supply chain performance. *Academy of Management Journal*, 47(2), 241–253.
- Huntington, S. P. (1993). The clash of civilizations? *Foreign Affairs*, 72(3), 22–49. doi:10.2307/20045621
- Huntley, J. K. (2006). Conceptualization & measurement of relationship quality: Linking relationship quality to actual sale & recommendation intention. *Industrial Marketing Management*, 35(6), 703–714. doi:10.1016/j.indmarman.2005.05.011
- Hutzschenreuter, T., Kleindienst, I., & Schmitt, M. (2014). How mindfulness and acquisition experience affect acquisition performance. *Journal of Management Decision*, 52(6), 1116–1147. doi:10.1108/MD-07-2013-0376
- Hu, Y. (2015). *Analysis on the construction of the pyramid-shaped innovation and entrepreneurship education model for college students: a case study on the entrepreneurship education implementation in lishui university*. Science Education Article Collects.
- Ibrahim, H., & Najjar, F. (2008). Relationship Bonding Tactics, Personality Traits, Relationship Quality and Customer Loyalty: Behavioral Sequence in Retail Environment. *The ICFAI University Journal of Services Marketing*, 6(4), 6–37.
- Ingenbleek, P., Frambach, R. T., & Verhallen, T. M. (2010). The role of value-informed pricing in market-oriented product innovation management. *Journal of Product Innovation Management*, 27(7), 1032–1046. doi:10.1111/j.1540-5885.2010.00769.x
- International Statistics. (2015). *UN*. Retrieved from http://unstats.un.org/unsd/methods/internatlinks/sd_intstat.htm
- Internet banking in India. (n.d.). Retrieved July 24, 2015, from https://www.google.co.in/?gfe_rd=cr&ei=j3eyVciJG6zv8weYzrbYBw&gws_rd=ssl#q=internet+banking+in+India.pdf
- Investment Plan, . (2016). European Council. *European Union*.

- Ircon Annual Report 2016-17. (2017). Retrieved 03 april, 2018, from <http://ircon.org/images/file/annual%20report/English%20Annual%20Report.pdf>
- Ircon Website. (2015). *About the company*. Retrieved 2 April, 2015, from <http://www.ircon.org/content.aspx?Title=48>
- IRCON. (2015). Retrieved 14 May, 2015, from <http://ircon.org/content.aspx?Title=45>
- iSixSigma. (2018). *Deming Cycle, PDCA, iSixSigma*. Retrieved from <https://www.isixsigma.com/dictionary/deming-cycle-pdca/>
- Ismail, A. R. (2017). The influence of perceived social media marketing activities on brand loyalty: The mediation effect of brand and value consciousness. *Asia Pacific Journal of Marketing and Logistics*, 29(1), 129–144. doi:10.1108/APJML-10-2015-0154
- Ivens, B. S., & Pardo, C. (2007). Are Key Account Relationships Different? Empirical Results on Supplier Strategies & Customer Reactions. *Industrial Marketing Management*, 36(4), 470–482. doi:10.1016/j.indmarman.2005.12.007
- Iverson, S.A., Howard, K.B., & Penney, B.K. (2008). Impact of internet use on health-related behaviors and the patient-physician relationship: a survey-based study and review. *J Am Osteopath Assoc.*, 108(12), 699-711.
- Ives, D., Hoscheidt, M. M., Jaeger, B., & Tocchetto, J. S. (2013). Infrastructure Investments in the Middle East and North Africa. *UFRGS MOdel United Nations Journal*, 1, 308–362.
- Iwarere, H. T. (2009). *Competitive Management Accounting*. Bhoti International Publishing Limited.
- Jacob, N. T. (2018). Drug Promotion Practices: A review. *British Journal of Clinical Pharmacology*. doi:10.1111/bcp.13513 PMID:29349812
- Jacques, M. (2009). *When China Rules the World: the rise of Middle Kingdom and the end of Western world*. New York: Gildan Media Corp.
- Jaffrelot C (2003). India's look east policy: an Asianist strategy in perspective. *India Review*, 2(2), 35-68.
- Jagadeesh, R. (2000). Assuring quality in management education: The Indian context. *Quality Assurance in Education*, 8(3), 110–119. doi:10.1108/09684880010372707
- Jagarn Josh. (2013). *IRCON won the India Pride Award for Excellence in Central PSUs in India Image Enhancement*. Retrieved 2 April, 2015, from <http://www.jagranjosh.com/current-affairs/ircon-won-the-india-pride-award-for-excellence-in-central-psus-in-india-image-enhancement-1387609454-1>
- Jalan, B. (2004). *The Indian Economy: Problems and Prospects Paperback*. New Delhi: Penguin.
- Jamaluddin, N. (2013). *E-Banking: Challenges and Opportunities in India*. In *Proceedings of 23rd International Business Research Conference* (pp. 1–15). Melbourne, Australia: Marriott Hotel. Retrieved from http://www.academia.edu/7787990/1384600741_607-Jamal
- Jappelli, T., & Padula, M. (2013). *Investment in financial literacy, social security and portfolio choice*. CFS Working Paper, No. 2013/12. Frankfurt: Center for Financial Studies.
- Jaramillo, M. (2012). The changing role of international cooperation in developing countries (as they develop): A case study of skills development policies in Peru. *International Journal of Educational Development*, 32(1), 22–30. doi:10.1016/j.ijedudev.2011.03.004
- Jha, A. (2005). *A Study on the Role of Information Technology in Marketing Pharmaceutical products*. Unpublished Doctoral Thesis.

Compilation of References

- Jha, S., & Bhattacharyya, S. S. (2013). Learning orientation and performance orientation: Scale development and its relationship with performance. *Global Business Review*, 14(1), 43–54. doi:10.1177/0972150912466443
- Johannisson, B. (1991). University training for entrepreneurship: Swedish approaches. *Entrepreneurship and Regional Development*, 3(1), 67–82. doi:10.1080/08985629100000005
- Johanson, J., & Vahlne, J. (1990). The Mechanism of Internationalisation. *International Marketing Review*, 7(4).
- Johanson, J., & Vahlne, J. E. (2006). Commitment and opportunity development in the internationalization process: A note on the Uppsala internationalization process model. *Management International Review*, 46(2), 165–178. doi:10.1007/s11575-006-0043-4
- Johanson, J., & Vahlne, J. E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9), 1411–1431. doi:10.1057/jibs.2009.24
- Jones, G. (2017). *Profits and Sustainability. A Global History of Green Entrepreneurship*. Oxford, UK: Oxford University Press.
- Jones, T. O., & Sasser, E. J. (1995). Why satisfied customers defect? *Harvard Business Review*, (Nov-Dec): 88–99.
- Jon, R., Palihawadana, D., & Shabbir, H. (2008). The Ethical Aspects of Direct to Consumer Advertising of Prescription Drugs in the United Kingdom: Physician versus Consumer Views. *Journal of Advertising Research*.
- Joseph, J. (1999). Race, Gender, and Partnership in the Patient-Physician Relationship. *Journal of the American Medical Association*, 282(6), 583–589. doi:10.1001/jama.282.6.583 PMID:10450723
- Joseph, M., Spake, D. F., & And Godwin, D. M. (2008). Aging consumers and drug marketing: Senior citizens' views on DTC advertising, the medicare prescription drug programme and pharmaceutical retailing. *Journal of Medical Marketing*, 8(3), 221–228. doi:10.1057/jmm.2008.4
- Joseph, S. M., & Flynn, L. R. (2015). Offline and Online Atmospherics: Toward a Typology of Online Environmental Cues. In *Marketing, Technology and Customer Commitment in the New Economy* (pp. 63–68). Cham: Springer. doi:10.1007/978-3-319-11779-9_31
- Joshua, A. J., & Koshy, M. P. (2011). Usage patterns of electronic banking services by urban educated customers: Glimpses from India. *Journal of Internet Banking and Commerce*, 16(1), 1–12.
- Juyal, S. A. (2013). Effect of Demographic Factors on Consumer Buying Behaviour of Durable Goods. *Indian Journal of Marketing*, 43(12), 24. doi:10.17010/ijom/2013/v43/i12/80511
- Kahneman, D., & Tversky, A. (1979). Prospect Theory. An Analysis of Decision Making Under Risk. *Econometrica*, 47(2), 263–291. doi:10.2307/1914185
- Kamel (2005). *The use of information technology to transform the banking sector in developing nations*. Academic Press. Doi:10.1002/itdj.20023
- Kamel, S. (2005). *The use of information technology to transform the banking sector in developing nations*. Taylor & Francis.
- Kandampully, J., & Duddy, R. (1999). Relationship marketing: A concept beyond the primary relationship. *Marketing Intelligence & Planning*, 17(7), 315–323. doi:10.1108/02634509910301124
- Kankanhalli, A., Tanudidjaja, F., Sutanto, J., & Tan, B. C. Y. (2003). the Role of IT in Successful Knowledge Management Initiatives. *Communications of the ACM*, 46(9), 69–73. doi:10.1145/903893.903896

- Kaplan, M. D., Yurt, O., Guneri, B., & Kurtulus, K. (2010). Branding places: Applying brand personality concept to cities. *European Journal of Marketing*, 44(9/10), 1286–1304. doi:10.1108/03090561011062844
- Karimi, S., Biemans, H. J. A., Lans, T., Chizari, M., & Mulder, M. (2016). The Impact of entrepreneurship education: A study of Iranian students' entrepreneurial intentions and opportunity identification. *Journal of Small Business Management*, 54(1), 187–209. doi:10.1111/jsbm.12137
- Karimi, S., Biemans, H. J. A., Lans, T., Mulder, M., & Chizari, M. (2012). The role of entrepreneurship education in developing students' entrepreneurial intentions. *SSRN Electronic Journal*, 24(24), 121–150.
- Karjaluoto, H., Riquelme, H. E., & Rios, R. E. (2010). The moderating effect of gender in the adoption of mobile banking. *International Journal of Bank Marketing*, 28(5), 328–341. doi:10.1108/02652321011064872
- Kar, R. N., Soni, A., & Singh, C. K. (2014). Assessing the Impact of Mergers and Acquisitions on Firm Performance: Evidence from India. *FOCUS: Journal of International Business*, 1(1), 39–67.
- Kashima, G., Gallois, C., & McCamish, M. (1993). The theory of reasoned action and cooperative behaviour: It takes two to use a condom. *British Journal of Social Psychology*, 32(3), 227–239. doi:10.1111/j.2044-8309.1993.tb00997.x PMID:8220941
- Kassaye, W. (2001). Green dilemma. *Marketing Intelligence & Planning*, 19(6), 444–455. doi:10.1108/EUM0000000006112
- Kasten, J. E. (2009). Knowledge strategy and its role in the organization: An exploratory study. *International Journal of Knowledge Management*, 5(3), 38–53. doi:10.4018/jkm.2009070103
- Katz, R. (2004). *The human side of managing technological innovation: A collection of readings*. New York: Oxford University Press.
- Keck, Z. (2013). *China and the BRICS: Unavoidable Hegemony?* Retrieved from <https://thediplomat.com/2013/03/china-and-the-brics-unavoidable-hegemony/>
- Kedia, B., & Reddy, R. (2015). Language and cross-border acquisitions: An exploratory study. *International Business Review*, (25): 1321–1332.
- Kemp, E., Childers, C. Y., & Williams, K. H. (2012). Place branding: Creating self-brand connections and brand advocacy. *Journal of Product and Brand Management*, 21(7), 508–515. doi:10.1108/10610421211276259
- Kennedy, S. (2015). *Made in China 25*. Retrieved from Center for Strategic and International Studies (CSIS): <https://www.csis.org/analysis/made-china-2025>
- Kerber, R. (2005, April 18). Doctors Criticize Sleeping-Pill Ad (Lunesta from Sepracor Inc.). *Boston Globe*, p HS05.
- Kerr, G. (2006). From destination brand to location brand. *Journal of Brand Management*, 13(4-5), 276–283. doi:10.1057/palgrave.bm.2540271
- Kesharwani, A., & Singh Bisht, S. (2012). The impact of trust and perceived risk on internet banking adoption in India: An extension of technology acceptance model. *International Journal of Bank Marketing*, 30(4), 303–322. doi:10.1108/02652321211236923
- Keskin, H. (2005). *the Relationships between explicit and tacit oriented KM strategy, and Firm Performance*. *The Journal of American Academy of Business, Cambridge*, 7(1), 73–77.
- Khadria, B. (2002). *Skilled labour migration from developing countries: Study on India*. ILO.

Compilation of References

- Khalil, O., & Seleim, A. A. S. (2010). Culture and knowledge transfer capacity: A cross-national Study. *International Journal of Knowledge Management*, 6(4), 60–86. doi:10.4018/jkm.2010100104
- Khanna, T., Palepu, K.G., & Sinha, J. (2005, June). Strategies that fit emerging markets. *Harvard Business Review*.
- Khattab, A. A., Anchor, J., & Davies, E. (2007). Managerial perceptions of political risk in international projects. *International Journal of Project Management*, 25(7), 734-743.
- Kiani, S., Kiani, S., Kurian, D., Kurian, D., & Henkin, S. (2016). Direct to consumer advertising of robotic heart bypass surgery: Effectiveness, patient satisfaction and clinical outcomes. *International Journal of Pharmaceutical and Healthcare Marketing*, 10(4), 358–375. doi:10.1108/IJPHM-05-2015-0016 PMID:28331538
- Ki, E. J., & Hon, L. C. (2007). Testing the linkages among the organization–public relationship and attitude and behavioral intentions. *Journal of Public Relations Research*, 19(1), 1–23.
- Kim, H. J., Lee, C. K., Kim, M. J., & Ryu, K. (2011). Restaurant healthy food quality, perceived value, and revisit intention: testing a moderating role of green customers in South Korea. In *International CHRIE Conference-Refereed Track* (pp. 1-11). Academic Press.
- Kim, C. K., Han, D., & Park, S. B. (2001). The effect of brand personality and brand identification on brand loyalty: Applying the theory of social identification. *Japanese Journal of Psychological Research*, 43(4), 195–206. doi:10.1111/1468-5884.00177
- Kim, H., Lee, J.-M., & Rha, J.-Y. (2017). Understanding the role of user resistance on mobile learning usage among university students. *Computers & Education*, 113, 108–118. doi:10.1016/j.compedu.2017.05.015
- Kim, K., Park, J., & Kim, J. (2014). Consumer–brand relationship quality: When and how it helps brand extensions. *Journal of Business Research*, 67(4), 591–597. doi:10.1016/j.jbusres.2013.03.001
- Kim, W. G., Lee, Y., & Yoo, Y. (2006). Predictors of Relationship Quality & Relationship Outcomes in Luxury Restaurants. *Journal of Hospitality & Tourism Research (Washington, D.C.)*, 30(2), 143–169. doi:10.1177/1096348005285086
- Kim, W., & Han, H. (2008). Determinants of restaurant customers' loyalty intentions: A mediating effect of relationship quality. *Journal of Quality Assurance in Hospitality & Tourism*, 9(4), 218–238.
- Kincey, J., & Saltmore, S. (2018). Key questions to ask when evaluating medicines-related promotional data. *Stroke*, 13, 57.
- Kirkpatrick, C., Parker, D., & Zhang, Y.-F. (2006). Foreign direct investment in infrastructure in developing countries: Does regulation make a difference? *Transnational Corporations*, 15(1), 143–171.
- Kissinger, H. (2012). *On China*. New York: Penguin Books.
- Klapper, L., Lusardi, A., & Von Oudheusden, P. (2015). *Financial Literacy Around the World: Insights from the Standard & Poor's Ratings Services Global Financial Literacy Survey*. McGraw Hill Financial.
- Kline, R. B. (1998). *Principles and Practice of Structural Equation Modeling*. The Guilford Press.
- Kongpichayanond, P. (2009). Knowledge Management for Sustained Competitive Advantage in Mergers and Acquisitions. *Advances in Developing Human Resources*, 11(3), 375–387. doi:10.1177/1523422309339725
- Kon, R. H., Russo, M. W., Ory, B., Mendys, P., & Simpson, R. J. Jr. (2008). Misperception among physicians and patients regarding the risks and benefits of statin treatment: The potential role of direct-to-consumer advertising. *Journal of Clinical Lipidology*, 2(1), 51–57. doi:10.1016/j.jacl.2008.01.002 PMID:21291715

- Kortmann, S., & Piller, F. (2016). Open Business Models and Closed-Loop Value Chains. *California Management Review*, 58(3), 88–108. doi:10.1525/cm.2016.58.3.88
- Koshki, N., Esmailpour, H., & Ardestani, A. S. (2014). The study on the effects of environmental quality, food and restaurant services on mental image of the restaurant, customer perceived value, customer satisfaction and customer behavioral intentions: (Case study of Boroujerd's restaurants). *Kuwait Chapter of the Arabian Journal of Business and Management Review*, 3(10), 261–272. doi:10.12816/0018407
- Kotler, P., & Gartner, D. (2002). Country as brand, products, and beyond: A place marketing and brand management perspective. *Journal of Brand Management*, 9(4/5), 249–261. doi:10.1057/palgrave.bm.2540076
- Kotler, P., Nebenzahl, I. D., Lebedenko, V., Rainisto, S., Gertner, D., Clifton, R., & Aaker, D. (2004). Where is place branding heading? *Place Branding and Public Diplomacy*, 1(1), 12–35. doi:10.1057/palgrave.pb.5990002
- Koumanakos, E., Siriopoulos, C., & Georgopoulos, A. (2005). Firm acquisitions and earnings management: Evidence from Greece. *Managerial Auditing Journal*, 20(7), 663–678. doi:10.1108/02686900510611212
- Kozak, M., & Kozak, N. N. (2013). *Aspect of Tourist Behavior*. Cambridge Scholars Publishing. Retrieved From, <http://www.cambridgescholars.com/download/sample/57900>
- Kozminski, A., Yip, G., & Schuh, A. (2000). *Strategies for Central and Eastern Europe*. New York.
- KPMG Africa. (2013). Retrieved 4 April, 2015, from <https://www.kpmg.com/Africa/en/IssuesAndInsights/ArticlesPublications/General-Industries-Publications/Documents/Construction%20in%20Africa.pdf>
- KPMG. (2014). *BBG Retail*. Retrieved from <https://www.kpmg.com/IN/en/Issues&Insights/ArticlesPublications/Documents/BBG-Retail.pdf>
- KPMG/University of Sydney. (2016). *Demystifying Chinese Investment in Australia: the new normal: health, happiness, lifestyle and services*. KPMG.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610. doi:10.1177/001316447003000308
- Krippendorff, K. (2004). *Content analysis: An introduction to its methodology*. Sage (Atlanta, Ga.).
- Krishna, A., & Brihadesam, V. (2006). What does it take to become a software professional? *Economic and Political Weekly*, 3307–3314.
- Krishnan, R. T. (2010). *From jugaad to systematic innovation: The challenge for India*. Bangalore: Utpreraka Foundation.
- Krueger, N. F. (1993). *The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability*. Social Science Electronic Publishing.
- Krueger, N. F., & Brazeal, D. V. (2009). *Entrepreneurial Potential and Potential Entrepreneurs*. Social Science Electronic Publishing.
- Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: Applying the theory of planned behavior. *Entrepreneurship and Regional Development*, 5(3), 315–330. doi:10.1080/08985629300000020
- Kuhn, S., & Mostert, P. (2018). Relationship intention and relationship quality as predictors of clothing retail customers' loyalty. *International Review of Retail, Distribution and Consumer Research*, 28(2), 206–230. doi:10.1080/09593969.2017.1380067
- Kumar, N. (2009). How emerging giants are rewriting the rules of M&A. *Harvard Business Review*, 87(5), 115.

Compilation of References

- Kumar, N., Scheer, L. K., & Steenkamp, J. E. M. (1995). The effects of perceived interdependence on dealer attitudes. *JMR, Journal of Marketing Research*, 32(3), 348–356. doi:10.2307/3151986
- Kumar, R. (2014). Impact of Demographic Factors on Consumer Behaviour - A Consumer Behaviour Survey in Himachal Pradesh. *Global Journal of Enterprise Informaion System*, 6(2). doi:10.18311/gjeis/2014/3084
- Kurlander, Chey, Morris, Hu, Padival, Bangdiwala, ... Drossman. (2017). *Development and validation of the Patient-Physician Relationship Scale among patients with irritable bowel syndrome*. Academic Press.
- Küttim, M., Kallaste, M., Venesaar, U., & Kiis, A. (2014). Entrepreneurship education at university level and students' entrepreneurial intentions ☆. *Procedia: Social and Behavioral Sciences*, 110, 658–668. doi:10.1016/j.sbspro.2013.12.910
- Laforet, S., & Li, X. (2005). Consumers' attitudes towards online and mobile banking in China. *International Journal of Bank Marketing*, 23(5), 362–380. doi:10.1108/02652320510629250
- Lagace, R. R., Dahlstrom, R., & Gassenheimer, J. B. (1991). The relevance of ethical salesperson behaviour on relationship quality: The pharmaceutical industry. *Journal of Personal Selling & Sales Management*, 11(4), 39–47.
- Lages, C., Lages, C. R., & Lages, L. F. (2005). The RELQUAL scale: A measure of relationship quality in export market ventures. *Journal of Business Research*, 58(8), 1040–1048. doi:10.1016/j.jbusres.2004.03.001
- Lai, L. S., & Turban, E. (2008). Groups formation and operations in the Web 2.0 environment and social networks. *Group Decision and Negotiation*, 17(5), 387–402. doi:10.1007/10726-008-9113-2
- Lai, T. L. (2004). Service quality and perceived value's impact on satisfaction, intention and usage of short message service (SMS). *Information Systems Frontiers*, 6(4), 353–368. doi:10.1023/B:ISFI.0000046377.32617.3d
- Lal & Saluja. (2012). E-Banking: The Indian Scenario. *Asia Pacific Journal of Marketing & Management Review*, 1(4), 16–25.
- Lall, R. (1986). *Multinationals from the Third World: Indian firms investing abroad*. Oxford University Press.
- Lal, N. (2014). Mergers And Acquisitions In Banking Sector. *International Journal Of Research In Commerce & Management*, 5(5), 68–71.
- Landicho, J. (2017). *Facebook marketing trends for 2018*. Retrieved from <https://learn.infusionsoft.com/marketing/social-media/2018-facebook-trends>
- Lang, N. S., & Dauner, T. (2012). *Winning the BRIC Truck Battle*. Boston, MA: Boston Consulting Group, Inc.
- Laowiat, P., Suppapanya, P., & Yousapronpaiboon, K. (2014). A Study of Demographics Influencing on Consumer Behavior and Attitude towards Brand Equity of Optical Business in Thailand. *International Journal of Trade, Economics and Finance*, 5(4), 347–350. doi:10.7763/IJTEF.2014.V5.395
- Larsson, R., & Finkelstein, S. (1999). Integrating strategic, organizational, and human resource perspectives on mergers and acquisitions: A case survey of synergy realization. *Organization Science*, 10(1), 1–26. doi:10.1287/orsc.10.1.1
- Laskar, M. S., & Harada, N. (2003). International Cooperation from Japan in Health Care Education. *International Medical Journal*, 10(3), 175–178.
- Lasserre, P. (2003). The process of globalisation. In *Global strategic management* (2nd ed., pp. 36–65). New York: Palgrave Macmillan.
- Laurenson, J., van Nieuwenhuizen, S., & Collinson, E. (2017, November 16). Australia's misplaced fear over China's Belt and Road. *The Diplomat*.

- Lavallée, S., & Plouffe, S. (2004). The ecolabel and sustainable development. *The International Journal of Life Cycle Assessment*, 9(6), 349–354. doi:10.1007/BF02979076
- Law, K. S., Wong, C. S., & Mobley, W. H. (1998). Toward a taxonomy of multidimensional constructs. *Academy of Management Review*, 23(4), 741–755. doi:10.5465/amr.1998.1255636
- Law, M. R. (2009). Costs and Consequences of Direct-to-Consumer Advertising for Clopidogrel in Medicaid. *Archives of Internal Medicine*, 169(21), 1969–1974. doi:10.1001/archinternmed.2009.320 PMID:19933958
- Le Corre, P., & Sepulchre, A. (2016). *China Offensive in Europe*. Brookings Institution Press.
- Lebedev, S., Peng, M. W., Xie, E., & Stevens, C. E. (2015). Mergers and acquisitions in and out of emerging economies. *Journal of World Business*, 50(4), 651–662. doi:10.1016/j.jwb.2014.09.003
- Lee, H., Chang, Y., & Choi, B. (1999). Analysis of Effects of Knowledge Management strategies in Corporate Performance. *Korean Intelligent Information Journal*, 5(2), 99-120.
- Lee. (2011). Direct-to-consumer pharmaceutical advertising: therapeutic or toxic? *Pharmacy and Therapeutics*, 36(10), 669.
- Lee, B., Salmon, C. T., & Paek, H. J. (2007). The effects of information sources on consumer reactions to direct-to-consumer (DTC) prescription drug advertising - A consumer socialization approach. *Journal of Advertising*, 36(1), 107–119. doi:10.2753/JOA0091-3367360108
- Lee, S., & Jeong, M. (2012). Effects of e-servicescape on consumers' flow experiences. *Journal of Hospitality and Tourism Technology*, 3(1), 47–59. doi:10.1108/17579881211206534
- Lee, W. I. (2017). The Strategies for Building a New Innovation Ecosystem to Create a Virtuous Cycle Structure between the Hyper-Competitive Environment and the Social Economic Sector in the 21st Century. *International Journal of Innovation, Management and Technology*, 8(2), 118.
- Lehtinen, U. (1996). Our present state of ignorance in Relationship Marketing. *Asia-Australia Marketing Journal*, 4(1), 43–51. doi:10.1016/S1320-1646(96)70268-X
- Lehto, X. Y., Kim, D. Y., & Morrison, A. M. (2006). The effect of prior destination experience on online information search behavior. *Tourism and Hospitality Research*, 6(2), 160–178. doi:10.1057/palgrave.thr.6040053
- Leibowitz, J., & Chen, Y. (2001). Developing Knowledge-Sharing Proficiencies: Building a supportive culture for Knowledge-Sharing. *Knowledge Management Review*, 3(6), 12–15.
- Leuven, E., & Oosterbeek, H. (2008). An alternative approach to estimate the wage returns to private-sector training. *Journal of Applied Econometrics*, 23(4), 423–434. doi:10.1002/jae.1005
- Levie, J. (1999). *Enterprising Education in Higher Education in England*. London: Department for Education and Employment.
- Li, K. (2015). *A New Blue Print for Global Growth*. Summer World Forum. Retrieved from <http://english.gov.cn/premier/news/2015/09/11/content281475187661153.htm>
- Liang, B. A., & Mackey, T. (2011). Direct-to-consumer advertising with interactive Internet media. Global regulation and public health issues. *Journal of the American Medical Association*, 305(8), 824–825. doi:10.1001/jama.2011.203 PMID:21343583
- Liao, C., Chuang, S. H., & To, P. L. (2011). How knowledge management mediates the relationship between environment and organizational structure. *Journal of Business Research*, 64(7), 728–739. doi:10.1016/j.jbusres.2010.08.001

Compilation of References

- Liao, S. H., & Wu, C. C. (2009). the Relationship among Knowledge Management, Organizational Learning, and Organizational Performance. *International Journal of Business and Management*, 4(4), 64–76. doi:10.5539/ijbm.v4n4p64
- Lilleoere, A. M., & Hansen, E. H. (2011). Knowledge-sharing enablers and barriers in pharmaceutical research and development. *Journal of Knowledge Management*, 15(1), 53–70. doi:10.1108/13673271111108693
- Liñán, F. (2004). Intention-Based Models of entrepreneurship education[J]. Piccola Impresa/small. *Business (Atlanta, Ga.)*, 11–35.
- Lin, C.-P., & Ding, C. G. (2005). Opening the black box: Assessing the mediating mechanism of relationship quality & the moderating effects of prior experience in ISP service. *International Journal of Service Industry Management*, 16(1), 55–80. doi:10.1108/09564230510587159
- Linder, J., & Cantrell, S. (2000). *Changing Business Models: Surveying the Landscape*. Accenture Institute for Strategic Change.
- Ling, K. C., Daud, D., Piew, T. H., Keoy, K. H., & Hassan, P. (2011). Perceived risk, perceived technology, online trust for the online purchase intention in Malaysia. *International Journal of Business and Management*, 6(6), 167–182.
- Ling, L., Guo, X., & Yang, C. (2014). Opening the online marketplace: An examination of hotel pricing and travel agency on-line distribution of rooms. *Tourism Management*, 45, 234–243. doi:10.1016/j.tourman.2014.05.003
- Lin, W. B. (2008). the effect of knowledge sharing model. *Expert Systems with Applications*, 34(2), 1508–1521. doi:10.1016/j.eswa.2007.01.015
- Lin, Y. J. (2011). *Demystifying the Chinese Economy*. Cambridge University Press. doi:10.1017/CBO9781139026666
- Lipsky, M. S., & Taylor, C. A. (1997). The opinions and experiences of family physicians regarding direct-to-consumer advertising. *The Journal of Family Practice*, 45, 495–499. PMID:9420585
- Little known facts about India's banking network - Business Line. (n.d.). Retrieved March 25, 2018, from <https://www.thehindubusinessline.com/economy/infographic-little-known-facts-about-indias-banking-network/article9381949.ece>
- Litvin, S. W., Kar, G. H., & Goldsmith, R. E. (2001). Travel innovativeness and self-image congruity. *Journal of Travel & Tourism Marketing*, 10(4), 3345. doi:10.1300/J073v10n04_02
- Liu, C. (2017). International competitiveness and the fourth industrial revolution. *Entrepreneurial Business and Economics Review*, 5(4), 111–133. doi:10.15678/EBER.2017.050405
- Liu, C.-T., Guob, Y. M., & Lee, C.-H. (2011). The effects of relationship quality and switching barriers on customer loyalty. *International Journal of Information Management*, 31(1), 71–79. doi:10.1016/j.ijinfomgt.2010.05.008
- Liu, J. N. K., & Zhang, E. Y. (2014). An investigation of factors affecting customer selection of online hotel booking channels. *International Journal of Hospitality Management*, 39, 71–83. doi:10.1016/j.ijhm.2014.01.011
- Liu, Y., & Jang, S. S. (2009). Perceptions of Chinese restaurants in the US: What affects customer satisfaction and behavioral intentions? *International Journal of Hospitality Management*, 28(3), 338–348. doi:10.1016/j.ijhm.2008.10.008
- Li, W., Hardesty, D. M., & Craig, A. W. (2018). The impact of dynamic bundling on price fairness perceptions. *Journal of Retailing and Consumer Services*, 40, 204–212. doi:10.1016/j.jretconser.2017.10.011
- Lodgaard, E., Gamme, I., & Aasland, K. E. (2012, September). Success factors for PDCA as continuous improvement method in product development. In *IFIP International Conference on Advances in Production Management Systems* (pp. 645-652). Springer.

- Lovallo, D., Viguierie, P., Uhlaner, R., & Horn, J. (2007). Deals without delusions. *Harvard Business Review*, 85(12), 92–99. PMID:18283919
- Lowery, S. (2003). Mobilising the Patient Squadrons— Direct to Consumer Communications. *BHBIA Journal*, 7, 3–7.
- Lowson, R. H. (2002). Operations Strategy: Genealogy, Classification and Anatomy. *Int. J. of Operations and Productions Management*, 22(10), 1112–1129. doi:10.1108/01443570210446333
- LSC London. (2015). *LSC London*. Retrieved 15 may, 2015, from http://malaysiadb.lslondon.co.uk/resources/file.php/909/2_Project_Manual_-_Full_Version.pdf
- Lucas, R. W. (2004). *Customer services: Building successful skills for the twenty-first century* (3rd ed.). Spain: Mc Graw-Hill Publishers.
- Lu, L., & Chi, C. G. Q. (2018). Examining diners' decision-making of local food purchase: The role of menu stimuli and involvement. *International Journal of Hospitality Management*, 69, 113–123. doi:10.1016/j.ijhm.2017.10.012
- Lusardi, A., & Mitchell, O. (2009). *How Ordinary People make Complex Economic Decisions: Financial Literacy and Retirement Readiness*. NBER Working paper, 15350. Cambridge, UK: National Bureau of Economic Research.
- Lusardi, A., & Mitchell, O. (2016). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature*, 52(1), 5–44. doi:10.1257/jel.52.1.5 PMID:28579637
- Lusardi, A., Mitchell, O., & Curto, V. (2010). Financial Literacy Among The Young. *The Journal of Consumer Affairs*, 44(2), 358–380. doi:10.1111/j.1745-6606.2010.01173.x
- Machintosh, G., & Lockshin, L. S. (1997). Retail Relationships & Store Loyalty: A multi-level perspective. *International Journal of Research in Marketing*, 5(5), 487–497. doi:10.1016/S0167-8116(97)00030-X
- Mackevičiūtė, E. (2013). *Customer perceived value impact on customer satisfaction and loyalty: case of bakery and confectionery B2B market in Lithuania* (Master's thesis). ISM University of Management and Economics.
- Mackey, T. K. (2016). Digital Direct-to-Consumer Advertising: A Perfect Storm of Rapid Evolution and Stagnant Regulation: Comment on Trouble Spots in Online Direct-to-Consumer Prescription Drug Promotion: A Content Analysis of FDA Warning Letters. *International Journal of Health Policy and Management*, 5(4), 271–274. doi:10.15171/ijhpm.2016.11 PMID:27239871
- Maheshwari, V., Vandewalle, I., & Bamber, D. (2011). Place branding's role in sustainable development. *Journal of Place Management and Development*, 4(2), 198–213. doi:10.1108/17538331111153188
- Maier, R., & Remus, U. (2002). Defining Process-oriented Knowledge Management Strategies. *Knowledge and Process Management*, 9(2), 103–118. doi:10.1002/kpm.136
- Mai, K. (2016). *Saying "Two Conferences" - College Students' Innovation and Entrepreneurship*. Occupation.
- Malhotra, P., & Singh, B. (2009). Analysis of Internet banking offerings and its determinants in India. *Internet Research*, 20(1), 87–106. doi:10.1108/10662241011020851
- Malmström, C. (2016, July). A Vital Relationship for our Prosperity. *UIBE Beijing*.
- Malone, T. W., Weill, P., Lai, R. K., D'Urso, V. T., Herman, G., Apel, T. G., & Woerner, S. L. (2006). *Do some business models perform better than others?* MIT Sloan Working paper 4615-06.
- Manikandan, K. S., & Ramachandran, J. (2015). Beyond institutional voids: Business groups, incomplete markets, and organizational form. *Strategic Management Journal*, 36(4), 598–617. doi:10.1002/mj.2226

Compilation of References

- Maria, R. S., Urata, S., & Intal, J. P. S. (2017). *The ASEAN Economic Community Into 2025 and Beyond*. Academic Press.
- Marinac, J. S., Godfrey, L. A., Buchinger, C., Sun, C., Wooten, J., & Willsie, S. K. (2004). Attitudes of older Americans toward direct-to-consumer advertising: Predictors of impact. *Drug Information Journal*, 38(3), 301–311. doi:10.1177/009286150403800310
- Marjan, A. (2015). *A new world order and China's role in it*. Retrieved from <http://foreignpolicynews.org/2015/09/02/the-new-world-order-and-chinas-role-in-it/>
- Markovic, S., Iglesias, O., Singh, J. J., & Sierra, V. (2018). How does the perceived ethicality of corporate services brands influence loyalty and positive word-of-mouth? Analyzing the roles of empathy, affective commitment, and perceived quality. *Journal of Business Ethics*, 148(4), 721–740. doi:10.1007/10551-015-2985-6
- Marquardt, A. J. (2013). Relationship quality as a resource to build industrial brand equity when products are uncertain and future-based. *Industrial Marketing Management*, 42(8), 1386–1397. doi:10.1016/j.indmarman.2013.07.017
- Marrs, F. O., & Mundt, B. M. (2007). *Handbook of industrial engineering: Technology and operations management* (3rd ed.). Academic Press. doi:10.1002/9780470172339.ch2
- Marrs, M. (2013, April 15). *7 ways to market your business on Facebook*. Retrieved March 11, 2018, from <https://www.wordstream.com/blog/ws/2013/04/15/facebook-marketing>
- Massa, S., & Testa, S. (2009). a knowledge management approach to organizational competitive advantage: Evidence from the food sector. *European Management Journal*, 27(2), 129–141. doi:10.1016/j.emj.2008.06.005
- Mathur, M. B., Gould, M., & Khazeni, N. (2016). Direct-to-consumer drug advertisements can paradoxically increase intentions to adopt lifestyle changes. *Frontiers in Psychology*, 7. PMID:27752251
- Mawhinney, M. (2001). *International Business* (M. Mawhinney, Ed.). London: Blackwell Science Ltd.
- Maxwell, J. A. (1996). *Qualitative Research Design: An Interactive Approach*. Thousand Oaks, CA: Sage.
- McCarthy, M. (2015). US physician group calls for ban on direct to consumer drug advertising. *BMJ (Clinical Research Ed.)*, 351, h6230. PMID:26582786
- McDonalds. (n.d.). *Greener than Ever*. Retrieved from http://www.mcdonalds.com/us/en/our_story/values_in_action/greener_than_ever.html
- McDougall, G. H., & Levesque, T. (2000). Customer satisfaction with services: Putting perceived value into the equation. *Journal of Services Marketing*, 14(5), 392–410. doi:10.1108/08876040010340937
- McKelvie, A., & Wiklund, J. (2010). Advancing firm growth research: A focus on growth mode instead of growth rate. *Entrepreneurship Theory and Practice*, 34(2), 261–288. doi:10.1111/j.1540-6520.2010.00375.x
- Mckenzie, B. (2018). *Rising of Tension. Assessing China's FDI drop in Europe and North America*. Rhodium Group.
- McMullen, Safford, Bosworth, Phansalkar, Leong, Fagan, ... Vandermeer. (2015). *Centers for Education and Research on Therapeutics Patient-Centered Medication Management Workshop Working Group*. doi:10.1016/j.pec.2014.09.015
- McNeill, J. R., & Engelke, P. (2014). *The Great Acceleration. An Environment History of the Anthropocene since 1945*. Cambridge, MA: The Belknap Press of Harvard University Press.
- McRoy, L., Weech-Maldonado, R., Bradford, W. D., Menachemi, N., Morrisey, M., & Kilgore, M. (2016). The effects of direct-to-consumer advertising on medication use among Medicaid children with asthma. *Health Marketing Quarterly*, 33(3), 195–205. doi:10.1080/07359683.2016.1199205 PMID:27440407

- Meadows-Klue, D. (2008). Opinion piece: Falling in Love 2.0: Relationship marketing for the Facebook generation. *Journal of Direct. Data and Digital Marketing Practice*, 9(3), 245–250. doi:10.1057/palgrave.ddmp.4350103
- Mehmood, K. K., & Hanaysha, J. (2015). The strategic role of hedonic value and utilitarian value in building brand loyalty: Mediating effect of customer satisfaction. *Pakistan Journal of Social Sciences*, 35(2), 1025–1036.
- Menon, A. M., Deshpande, A. D., Perri, M. III, & Zinkhan, G. M. (2003). Consumers' attention to the brief summary in print direct-to-consumer advertisements: Perceived usefulness in patient-physicians discussions. *Journal of Public Policy & Marketing*, 22(2), 181–191. doi:10.1509/jppm.22.2.181.17636
- Merono-Cerdan, L. A., Lopez-Nicolas, C., & Sabater-Sanchez, R. (2007). Knowledge management strategy diagnosis from KM instruments use. *Journal of Knowledge Management*, 11(2), 60–72. doi:10.1108/13673270710738915
- Meyer, K. E., & Estrin, S. (2001). Brownfield entry in emerging markets. *Journal of International Business Studies*, 32(3), 575–584. doi:10.1057/palgrave.jibs.8490985
- Meyer, K. E., & Gelbuda, M. (2006). Process perspectives in international business research in CEE. *Management International Review*, 46(2), 143–164. doi:10.1007/11575-006-0042-5
- Miles, D. (1995). International COstruction Management Series No. 6. In *International Project Marketing*. Geneva: International Labour Office.
- Miles, R. E., & Snow, C. C. (1978). *Organizational Strategy, Structure and Process*. McGraw Hill.
- Miller, M., Reichelstein, J., Salas, C., & Zia, B. (2014). *Can You Help Someone Become Financially Capable? A Meta-Analysis of the Literature*. World Bank Policy Research Working Paper 6745.
- Milne, G. R., Rohm, A., & Bahl, S. (2009). If It's Legal, Is It Acceptable? *Journal of Advertising*, 38(4), 107–122. doi:10.2753/JOA0091-3367380408
- MindTools. (2018). *Root Cause Analysis: Tracing a problem to its origins*. Retrieved March 12, 2018, from https://www.mindtools.com/pages/article/newTMC_80.htm
- Minnema, A., Bijmolt, T. H., Petersen, J. A., & Shulman, J. D. (2018). Managing product returns within the customer value framework. In *Customer Engagement Marketing* (pp. 95–118). Cham: Palgrave Macmillan. doi:10.1007/978-3-319-61985-9_5
- Mintzes, B. (2002). Direct to consumer advertising in medicalising normal human experience: For, For and agains. *BMJ (Clinical Research Ed.)*, 324(7342), 908–909. doi:10.1136/bmj.324.7342.908 PMID:11950745
- Mitchell, O. S. (2011). *Managing risks in defined contribution plans: What does the future hold?* Insurance and Risk Management Working Paper WP 2011-05. Philadelphia: University of Pennsylvania
- Mitka, M. (2003). Survey Suggesting That Prescription Drug Ads Help Public Is Met with Skepticism. *JAMA*, 289(7), 827.
- Mittal, S., & Kumar, V. (2018). Adoption of Mobile Wallets in India: An Analysis. *IUP Journal of Information Technology*, 14(1), 42–57.
- Moghadam, A. H. (2014). The effect of demographic characteristics of passengerson relationship quality in airline industry. *Interdisciplinary Journal of Contemporary Research in Business*, 5(11), 170–180.
- Mohid, N. (2011). Exploring the relationship between perceived usefulness, perceived ease of use, perceived enjoyment, attitude and subscriber's intention towards using 3G mobile services. *Journal of Information Technology Management*, 22, 1–7.

Compilation of References

- Mok, K.-H. (2013). *The quest for entrepreneurial universities in East Asia*. New York: Springer. doi:10.1057/9781137317544
- Möller, K., Rajala, R., & Westerlund, M. (2008). Service innovation myopia? A new recipe for client-provider value creation. *California Management Review*, 50(3), 31–48. doi:10.2307/41166444
- Mondol, A. A. (2003). *Nationalism and Post-Colonial Identity: Culture and Ideology in India and Egypt*. New York: RoutledgeCurzon.
- Monroe, K. B. (1979). *Pricing: Making profitable decisions*. New York: McGraw-Hill.
- Montalvo, R. E. (2016). Social media management. *International Journal of Management & Information Systems (Online)*, 20(2), 45.
- Moore, G. C., & Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research*, 2(3), 192–222. doi:10.1287/isre.2.3.192
- Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between providers users of market research: The dynamics of trust within & between organizations. *JMR, Journal of Marketing Research*, 29(3), 314–328. doi:10.2307/3172742
- Morgan, E. (2001). Innovation and Merger Decisions in the Pharmaceutical Industry. *Review of Industrial Organization*, 19(2), 181–197. doi:10.1023/A:1011144517789
- Morgan, P. J., & Trinh, L. Q. (2017). *Determinants and Impacts of Financial Literacy in Cambodia and Viet Nam*. ADBI Working Paper 754. Tokyo: Asian Development Bank Institute. Available <https://www.adb.org/publications/determinants-and-impacts-financial-literacy-cambodia-and-viet-nam>
- Morosan, C., & Jeong, M. (2008). Users' perception of two types of hotel reservation web sites. *International Journal of Hospitality Management*, 27(2), 284–292. doi:10.1016/j.ijhm.2007.07.023
- Morris, A. W., Gadson, S. L., & Burroughs, V. (2007). For the good of the patient: Survey of the physicians of the National Medical Association regarding perceptions of DTC advertising, Part II", 2006. *Journal of the National Medical Association*, 99(3), 287–293. PMID:17393955
- Moses, C., & Mosunmola, A. (2014). Entrepreneurship curriculum and pedagogical challenges in captivating students' interest towards entrepreneurship education. *Boiler Manufacturing*, 35(2011).
- Mowday, R., Porter, L., & Steers, R. (1982). *Organizational Linkages: The Psychology of Commitment, Absenteeism & Turnover*. New York, NY: Academic Press Inc.
- Mowen, J. C. (1999). *The 3M Model of Motivation and Personality: Theory and Empirical Applications to Consumer Behavior*. Dordrecht: Kluwer Academic Publisher.
- Mowery, D. C. (1998). The changing structure of the US national innovation system: Implications for international conflict and cooperation in R&D policy. *Research Policy*, 27(6), 639–654. doi:10.1016/S0048-7333(98)00060-2
- Mueller, J., Hutter, K., Fueller, J., & Matzler, K. (2011). Virtual worlds as knowledge management platform—a practice-perspective. *Information Systems Journal*, 21(6), 479–501. doi:10.1111/j.1365-2575.2010.00366.x
- Mugenyi, P. (2013). *The level of education and entrepreneurial success in kampala district: a case of kalerwe market, kawempe division*. Academic Press.
- Muhammed, S., Doll, W. J., & Deng, X. (2011). Impact of knowledge management practices on task knowledge: An individual level study. *International Journal of Knowledge Management*, 7(4), 1–21. doi:10.4018/jkm.2011100101

- Mukerjee, K. (2018). The impact of brand experience, service quality and perceived value on word of mouth of retail bank customers: Investigating the mediating effect of loyalty. *Journal of Financial Services Marketing*, 23(1), 12–24. doi:10.105741264-018-0039-8
- Mukherjee, A., & Nath, P. (2003). A model of trust in online relationship banking. *International Journal of Bank Marketing*, 21(1), 5–15. doi:10.1108/02652320310457767
- Mukherji, J., & Mukherji, A. (2014). Attitudes toward Pharmaceutical Direct-to-Consumer Advertising: The Role of Culture. *Competition Forum*, 12(2), 40-44.
- Mukherji, P., Janakiraman, R., Dutta, S., & Rajiv, S. (2016). How Direct-to-Consumer Advertising for Prescription Drugs Affects Consumers' Welfare. *Journal of Advertising Research*.
- Mulder, P. (2012). *5 Whys analysis*. Retrieved March 12, 2018, from ToolsHero: <https://www.toolshero.com/problem-solving/5-whys-analysis/>
- Murray, E., Lo, B., Pollack, L., Donelan, K., & Lee, K. (2003). Direct-to-consumer advertising: Physicians' views of its effects on quality of care and the doctor-patient relationship. *The Journal of the American Board of Family Practice*, 16(6), 513–524. doi:10.3122/jabfm.16.6.513 PMID:14963078
- Murray, E., Lo, B., Pollack, L., Donelan, K., & Lee, K. (2004). Direct-to-consumer advertising: Public perceptions of its effects on health behaviors, health care, and the doctor-patient relationship. *The Journal of the American Board of Family Practice*, 17(1), 6–18. doi:10.3122/jabfm.17.1.6 PMID:15014047
- Mustapha, B., & Obid, S. N. (2015). Tax service quality: The mediating effect of perceived ease of use of the online tax system. *Procedia: Social and Behavioral Sciences*, 172, 2–9. doi:10.1016/j.sbspro.2015.01.328
- Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning & Education*, 16(2), 277–299. doi:10.5465/amle.2015.0026
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital and the organizational advance. *Academy of Management Review*, 23(2), 242–266. doi:10.5465/amr.1998.533225
- Nahavandi, A., & Malekzadeh, A. (1988). Acculturation in Mergers and Acquisitions. *Academy of Management Review*, 13(1), 79–90. doi:10.5465/amr.1988.4306790
- Nair, S., & Gupta, G. (2018). Consumer Awareness towards Financial Inclusion in India: A Study on Mahanagar Co Op Bank Ltd, Mumbai. In *Marketing Techniques for Financial Inclusion and Development* (pp. 165–185). IGI Global. doi:10.4018/978-1-5225-4035-9.ch009
- Nalwaya, N., & Vyas, R. (2014). Merger and Acquisition in the Telecom Industry: An Analysis of Financial Performance of Vodafone Plc and Hutchison Essar. *Journal of Marketing Communications*, 9(3), 67–73.
- Nambisan, S. (2002). Designing virtual customer environments for new product development: Toward a theory. *Academy of Management Review*, 27(3), 392–413. doi:10.5465/amr.2002.7389914
- Namkung, Y., & Jang, S. (2007). Does food quality really matter in restaurants? Its impact on customer satisfaction and behavioral intentions. *Journal of Hospitality & Tourism Research (Washington, D.C.)*, 31(3), 387–409. doi:10.1177/1096348007299924
- Namkung, Y., & Jang, S. C. (2010). Effects of perceived service fairness on emotions, and behavioral intentions in restaurants. *European Journal of Marketing*, 44(9/10), 1233–1259. doi:10.1108/03090561011062826

Compilation of References

- Narayanan, K. (1998). Technology acquisition, de-regulation and competitiveness: A study of Indian automobile industry. *Research Policy*, 27(2), 215–228. doi:10.1016/S0048-7333(98)00037-7
- Narula, R., & Hagedoom, J. (1999). Innovating through strategic alliances: Moving towards international partnerships and contractual agreements. *Technovation*, 19(5), 283–294. doi:10.1016/S0166-4972(98)00127-8
- Nassim, B. (2009). Investigating the impact of knowledge management factors on new product development performance. *International Journal of Knowledge Management*, 5(3), 21–37. doi:10.4018/jkm.2009070102
- National University of Singapore (2014). *Liveability Ranking and Simulation Studies on 100 Greater China Cities*. Author.
- Naude, P., & Buttle, F. (2000). Assessing Relationship Quality. *Industrial Marketing Management*, 29(4), 351–361. doi:10.1016/S0019-8501(00)00112-7
- Nayak, S. S., Panda, S. N., & Mishra, M. A. (2017). Prospects and challenges of cashless rural economy: An analysis. *International Education and Research Journal*, 3(9).
- Nayir, D. Z., & Uzuncarsili, U. (2008). a cultural perspective on knowledge management: The success story of Sarkuysan company. *Journal of Knowledge Management*, 12(2), 141–155. doi:10.1108/13673270810859578
- Naylor, G., & Frank, K. E. (2001). The effect of price bundling on consumer perceptions of value. *Journal of Services Marketing*, 15(4), 270–281. doi:10.1108/EUM000000005506
- Nehari-Talet, A., Alhawari, S., & Alryalat, H. (2010). The outcome of knowledge process for customer of Jordanian companies on the achievement of customer knowledge retention. *International Journal of Knowledge Management*, 6(1), 44–61. doi:10.4018/jkm.2010103003
- Netemeyer, R., Krishnan, B., Pullig, C., Wang, G., Yagci, M., Dean, D., ... Wirth, F. (2004). Developing and validating measures of facets of customer-based brand equity. *Journal of Business Research*, 57(2), 209–244. doi:10.1016/S0148-2963(01)00303-4
- Nevo, D., & Chan, Y. E. (2007). A Delphi of Knowledge Management Systems: Scope of Requirements. *Information & Management*, 44(6), 583–597. doi:10.1016/j.im.2007.06.001
- Nicholas, L., & Thapa, B. (2010). Visitor perspectives on sustainable tourism development in the pitons management area world heritage site, St. Lucia. *Environment, Development and Sustainability*, 12(5), 839–857. doi:10.1007/10668-009-9227-y
- Nidar, S. R., & Bestari, S. (2012). Personal Financial Literacy among University Students: Case Study at Padjadjaran University Students, Bandung, Indonesia, *World Journal of Social Sciences*, 2(4), 162–171.
- Nikabadi, M. S., & Hakaki, A. (2018). A Dynamic Model of Effective Factors on Open Innovation in Manufacturing Small and Medium Sized Companies. *International Journal of System Dynamics Applications*, 7(1), 1–26. doi:10.4018/IJSDA.2018010101
- Nikandrou, I., & Papalexandris, N. (2008). Employee responses to acquisitions: Evidence from Greek firms. *Journal of Employee Relations*, 30(2), 104–120. doi:10.1108/01425450810843311
- Nilforushan, S., & Haeri, F. A. (2015). The effect of packaging design on customers' perception of food products' quality, value, and brand preference (Case study: Pegah pasteurized cheese, in Isfahan city). *WALIA Journal*, 31(S3), 127–132.
- Nitiwanakul, W. (2018). A Comparative study of customer perceived value as a driver for fine dining restaurant selection. *AU Journal of Management*, 12(1), 1–13.
- Niu, X. Y. (2005). *The Character of Chinese City*. Beijing: China Material Publishing House. (in Chinese)

- Noble, S. M., & Phillips, J. (2004). Relationship hindrance: Why would consumers not want a relationship with a retailer? *Journal of Retailing*, 80(4), 289–303. doi:.jretai.2004.10.005 doi:10.1016/j
- Nolop, B. (2007). Rules to acquire by. *Harvard Business Review*, 85(9), 129. PMID:17886488
- Nonaka, I., & Takeuchi, H. (1995). *The Knowledge Creating Company*. Oxford University Press.
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 14–37. doi:10.1287/orsc.5.1.14
- Norman, A. S. (2010). Importance of financial education in making informed decision on spending. *Journal of Economics and International Finance*, 2(10), 199–207.
- Noyes, D. (2018). *Top 20 Facebook statistics*. Retrieved February 9, 2018, from <https://zephoria.com/top-15-valuable-facebook-statistics/>
- Ntemana, T. J., & Olotakun, W. (2012). Analyzing the influence of diffusion of innovation attributes on lecturers' attitudes towards information and communication technologies. *Human Technology*, 8(2), 179–197. doi:10.17011/hturn.201211203034
- Nunnally, J. C. (1978). *Psychometric theory*. McGraw-Hill.
- Nurmilaakso, J. M. (2007). *XML-based e-business frameworks and supply chain integration*. Helsinki University of Technology.
- O'Connor, P., & Frew, A. J. (2004). An evaluation methodology for hotel electronic channels of distribution. *International Journal of Hospitality Management*, 23(2), 179–199. doi:10.1016/j.ijhm.2003.10.002
- O'Donoghue, A. C., Sullivan, H. W., Aikin, K. J., Chowdhury, D., Moultrie, R. R., & Rupert, D. J. (2014). Presenting efficacy information in direct-to-consumer prescription drug advertisements. *Patient Education and Counseling*, 95(2), 271–280. doi:10.1016/j.pec.2013.12.010 PMID:24581929
- OECD. (n.d.). *OECD Data*. Retrieved from <https://data.oecd.org>
- OgwellV. (2015, April 16). Retrieved from <http://www.engineering.com/PLMERP/ArticleID/9961/VolkswagensEpic-ChallengetosynchronizePLMforitsTruckBrands>
- Okenjom, G. (2016). *Entrepreneurship education for self-employment of university graduates*. Academic Press.
- Oliva, T. A., Oliver, R. L., & Bearden, W. O. (1995). The relationships among consumer satisfaction, involvement, and product performance: A catastrophe theory application. *Systems Research and Behavioral Science*, 40(2), 104–132. doi:10.1002/bs.3830400203
- Oommen, T. K. (1989). India: 'Brain drain' or the migration of talent? *International Migration (Geneva, Switzerland)*, 27(3), 411–425. doi:10.1111/j.1468-2435.1989.tb00355.x PMID:12282407
- Oosterbeek, H., Van Praag, M., & Ijsselstein, A. (2007). The Impact of entrepreneurship education on Entrepreneurship Competencies and Intentions: An Evaluation of the Junior Achievement Student Mini-Company Program. *European Economic Review*, 54(3), 442–454. doi:10.1016/j.euroecorev.2009.08.002
- Ordóñez de Pablos, P. (2015). *Technological solutions for sustainable business practice in Asia*. Hershey, PA: IGI Global. doi:10.4018/978-1-4666-8462-1
- Ordóñez de Pablos, P. (2016). *Managerial strategies and solutions for business success in Asia*. Hershey, PA: IGI Global.

Compilation of References

- Ordóñez de Pablos, P., & Aung, Z. M. (2017). *Tourism and opportunities for economic development in Asia*. Hershey, PA: IGI Global.
- Osarenkhoe, A., & Benani, A.-E. (2007). An exploratory study of implementation of customer relationship management strategy. *Business Process Management*, 13(1), 139–164. doi:10.1108/14637150710721177
- Osterwalder, A., & Pigneur, Y. (2010). *Business Model Generation*. John Wiley & Sons, Inc., Hoboken.
- Oviatt, B. M., & McDougall, P. P. (2005). Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship Theory and Practice*, 29(5), 537–554. doi:10.1111/j.1540-6520.2005.00097.x
- Øystein, M., & Per, S. (2002, Fall). Born Global or Gradual Global? Examining the Export Behavior of Small and Medium-Sized Enterprises. *Journal of International Marketing*, 10(3), 49–72. doi:10.1509/jimk.10.3.49.19540
- Palmer, A., & Koenig-Lewis, N. (2009). An experiential, social network-based approach to direct marketing. *Direct Marketing: An International Journal*, 3(3), 162–176. doi:10.1108/17505930910985116
- Palmer, G., Parry, J., & Webb, M. (2005). Small unions and mergers: Evidence from two case studies. *Journal of Employee Relations*, 27(4), 340–353. doi:10.1108/01425450510605688
- Palte, R., Hertlein, M., Smolnik, S., & Riempp, G. (2011). The effects of a KM strategy on KM performance in professional services firms. *International Journal of Knowledge Management*, 7(1), 16–34. doi:10.4018/jkm.2011010102
- Pangratis, A. (2014). *EU statement on 5th Trade Policy Review of China, 01/07*. Retrieved from <http://trade.ec.europa.eu/doclib/docs/2012/june/tradoc149542.pdf>
- Pant, D. R. (2005). A place brand strategy for the Republic of Armenia: “quality of context” and “sustainability” as competitive advantage. *Place Branding and Public Diplomacy*, 1(3), 273–282. doi:10.1057/palgrave.pb.5990028
- Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Refinement & reassessment of the SERVQUAL scale. *Journal of Retailing*, 67(4), 420–450.
- Park, D. H., Lee, J., & Han, I. (2007). The effect of on-line consumer reviews on consumer purchasing intention: The moderating role of involvement. *International Journal of Electronic Commerce*, 11(4), 125–148. doi:10.2753/JEC1086-4415110405
- Parker, R. S., & Pettijohn, C. E. (2003). Ethical considerations in the use of direct-to-consumer advertising and pharmaceutical promotions: The impact on pharmaceutical sales and physicians. *Journal of Business Ethics*, 48(3), 279–290. doi:10.1023/B:BUSI.0000005783.58142.6e
- Park, H., & Yoo, Y. (2017). A Literature Review On Chief Executive Officer Hubris And Related Constructs: Is The Theory Of Chief Executive Officer Hubris An Antecedents Or Consequences? *Journal of Applied Business Research*, 33(4), 705. doi:10.19030/jabr.v33i4.9990
- Parnes, B., Smith, P. C., Gilroy, C., Quintela, J., Emsermann, C. B., Dickinson, L. M., & Westfall, J. M. (2009). Lack of impact of direct-to-consumer advertising on the physician–patient encounter in primary care: A SNOCAP report. *Annals of Family Medicine*, 7(1), 41–46. doi:10.1370/afm.870 PMID:19139448
- Patrick, Ebewo, & Rugimbana. (2017). Effects of entrepreneurship education on students’ entrepreneurial intentions: a case of botswana. *管理研究: 英文版*, (4), 278-289.
- Paul, P., & Bhawsar, P. (2011). Japanese acquisition in India’s Ranbaxy. *Competitiveness Review*, 21(Issue: 5), 452–470. doi:10.1108/10595421111171957

- Pedersen, S. B. (2004). Place branding: Giving the region of Oresund a competitive edge. *Journal of Urban Technology*, 11(1), 77–95. doi:10.1080/1063073042000341998
- Peighambari, K., Sattari, S., Foster, T., & Wallstrom, A. (2016). Two tales of one city: Image versus identity. *Place Branding and Public Diplomacy*, 12(4), 314–328. doi:10.1057/pb.2015.25
- Peng, M. (2003). *International Strategic Management*. New Delhi: Cengage.
- Peng, M. W. (2001). The resource-based view and international business. *Journal of Management*, 27(6), 803–829. doi:10.1177/014920630102700611
- Peng, M. W., Wang, D. Y., & Jiang, Y. (2008). An institution-based view of international business strategy: A focus on emerging economies. *Journal of International Business Studies*, 39(5), 920–936. doi:10.1057/palgrave.jibs.8400377
- Pérezlópez, M. C., Gonzálezlópez, M. J., & Rodríguezariza, L. (2015). The impact of entrepreneurship education on the entrepreneurial competency of university students. a quasi-experimental study. *Journal of Geophysical Research, D, Atmospheres*, 114(D19).
- Persinger, E. S., Civi, E., & Vostina, S. W. (2007). The born global entrepreneur in emerging economies. *International Business and Economics Research Journal*, 6(3), 73–82.
- Peterman, N. E., & Kennedy, J. (2003). Enterprise education: Influencing students' perceptions of entrepreneurship. *Entrepreneurship Theory and Practice*, 28(2), 129–144. doi:10.1046/j.1540-6520.2003.00035.x
- Petru, A. (2014). *Green Labels 101: What Labels Are Out There, and Which Ones Can We Trust?* Retrieved from <https://www.triplepundit.com/special/setting-the-standard/green-labels-101-labels-ones-can-trust/>
- Peyrot, M., Alperstein, N. M., Van Doren, D., & And, L. G. Poli. (1998). Direct-to-Consumer Ads Can Influence Behavior. *Marketing Health Services*, 18(2), 26–32. PMID:10180332
- Phan, P. H., Wong, P. K., & Wang, C. K. (2002). Antecedents to entrepreneurship among university students in singapore: Beliefs, attitudes and background. *Journal of Enterprising Culture*, 10(02), 151–174. doi:10.1142/S0218495802000189
- Phillips, F. (2018). The sad state of entrepreneurship in america: What educators can do about it. *Technological Forecasting and Social Change*, 129, 12–15. doi:10.1016/j.techfore.2018.01.001
- Piperopoulos, P., & Dimov, D. (2015). Burst bubbles or build steam? Entrepreneurship education, entrepreneurial self-efficacy, and entrepreneurial intentions. *Journal of Small Business Management*, 53(4), 970–985. doi:10.1111/jsbm.12116
- Piri, Z., & Lotfizadeh, F. (2016). Investigation of the influence of perceived quality, price and risk on perceived product value for mobile consumers. *Asian Social Science*, 12(1), 103–116. doi:10.5539/ass.v12n1p103
- Plummer, J. T. (1985). How personality makes a difference. *Journal of Advertising Research*, 24(6), 27–31.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management Information Systems*, 12(2), 531–544.
- Poh, M. (2018). *Facebook & your privacy: Why it matters*. Retrieved from <https://www.hongkiat.com/blog/facebook-privacy-matters/>
- Popping, R. (2000). *Computer-assisted text analysis*. Lanham, MD: University Press of America. doi:10.4135/9781849208741
- Porter, M. E. (1980). Industry structure and competitive strategy: Keys to profitability. *Financial Analysts Journal*, 36(4), 30–41. doi:10.2469/faj.v36.n4.30
- Porter, M. E. (1985). *Competitive advantage: creating and sustaining superior performance*. 1985. New York: FreePress.

Compilation of References

- Porter, M. E. (1998). *Competitive strategy: Techniques for analyzing industries and competitors*. FREE Press.
- Poterba, J., Venti, S., & Wise, D. A. (2007). *The changing landscape of pensions in the United States. Technical report, no. w13381*. Cambridge, UK: National Bureau of Economic Research. doi:10.3386/w13381
- Potrich, A. C., Grigion, V., Kelmara, M., & Kirch, G. (2015). Determinants of Financial Literacy: Analysis of the Influence of Socioeconomic and Demographic Variables. *Revista Contabilidade & Finanças*, 26(69), 362–377. doi:10.1590/1808-057x201501040
- Prahalad, C.K., & Lieberthal, K. (2003). The End of Corporate Imperialism. *Harvard Business Review*, 81(8), 109-17.
- Prahalad, C. K., & Ramaswamy, V. (2013). *The future of competition: Co-creating unique value with customers*. Harvard Business Press.
- Prebensen, N. K., & Xie, J. (2017). Efficacy of co-creation and mastering on perceived value and satisfaction in tourists' consumption. *Tourism Management*, 60, 166–176. doi:10.1016/j.tourman.2016.12.001
- Priya, R., Gandhi, A. V., & Shaikh, A. (2018). Mobile banking adoption in an emerging economy: An empirical analysis of young Indian consumers. *Benchmarking: An International Journal*, 25(2), 743–762. doi:10.1108/BIJ-01-2016-0009
- Prodi, R., & Gosset, D. (2015, November 16). The European Union and China on the New Silk Roads. *Huffington Post*.
- Profit, N. D. T. V. (2018a, January 19). *Ashok Leyland's 5 years Financial Summary*. Retrieved from NDTV Profit: http://profit.ndtv.com/stock/ashok-leyland-ltd_ashokley/financials-historical-ratio
- Profit, N. D. T. V. (2018b, January 19). *Tata Motor's 5 years Financial Summary*. Retrieved from NDTV Profit: http://profit.ndtv.com/stock/tata-motors-ltd_tatamotors/financials-historical-ratio
- PTI. (n.d.). *Jan DhanYojna makes it to Guinness World Records, 11.5 cr Jan Dhan accounts opened*. Retrieved from http://economictimes.indiatimes.com/articleshow/45955376.cms?intenttarget=no&utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
- PwC. (2014). South East Asian *Outlook to 2025*. Retrieved from <http://www.pwc.com/sg/en/capital-projects-infrastructure/assets/cpi-sea-infrastructure-spend-summary-201405.pdf>
- Rados, C. (2004). TRUTH in advertising: Rx drug ads come of age. (Cover story). *FDA Consumer*, 38, 20–27.
- Raftowicz-Filipkiewicz, M. (2012). Nation branding as an economic challenge for the countries of the middle and east Europe on the example of Estonia. *Equilibrium*, 7(4), 49–59. doi:10.12775/EQUIL.2012.026
- Rahman, M. A., & Ramli, M. F. (2016). The Influence of Relationship Quality on Customer Loyalty in the Dual Banking System in the Northern States of Penninsular Malaysia. *Procedia: Social and Behavioral Sciences*, 219, 606–613. doi:10.1016/j.sbspro.2016.05.040
- Rahman, M., & Lambkin, M. (2015). Creating or destroying value through mergers and acquisitions: A marketing perspective. *Industrial Marketing Management*, 46, 24–35. doi:10.1016/j.indmarman.2015.01.003
- Rahmanseresht, H., & Afsar, A. (2009). the effect of Information Sharing on Competitive Strategies and Supply chain Performance. *Iranian Journal of Information Technology Management*, 1(1), 48–37.
- Raichaudhur, A. (2005). Issues in Entrepreneurship Education. *Decision*, 32(2).
- Rajala, R., & Westerlund, M. (2007). Business models – a new perspective on firms' assets and capabilities. *Entrepreneurship and Innovation*, 8(2), 115–125. doi:10.5367/000000007780808039

- Rajani Chintan, H. (2012). A Study To Explore Scope Of Direct To Consumer Advertisement (Dtca) Of Prescription Drugs In India. *International Journal of Marketing and Human Resource Management*, 3(1), 19–28.
- Rajani. (2012). A Study To Explore Scope Of Direct To Consumer Advertisement (DTCA) Of Prescription Drugs In India, *International Journal Of Marketing And. Human Resource Management*, 3(1), 19–28.
- Ramakrishnan, D. (2011). *Financial Literacy- The Demand Side of Financial Inclusion*. doi:10.2139/ssrn.1958417
- Ramanathan, G. (2012). The Solar Mission is Technology Neutral: Dr Farooq Abdullah, Minister for Renewable Energy. *The Energy Business*. Retrieved from <http://energybusiness.in/thesolar-mission-is-technology-neutral/>
- Ramasawmy, D., Thapermall, S., Dowlut, S. A., & Ramen, M. (2013). A Study of the Level of Awareness of Financial Literacy among Management Undergraduates. In *Proceedings of 3rd Asia-Pacific Business Research Conference*. Kuala Lumpur: Asia-Pacific Business Research Conference.
- Ramsaran-Fowdar, R. R., & Fowdar, S. (2013). The implications of Facebook marketing for organizations. *Contemporary Management Research*, 9(1), 73–84. doi:10.7903/cmr.9710
- Rani, M. (2012). A study on the Customer Perception towards E-banking in Ferozpur District.ZENITH. *International Journal of Multidisciplinary Research*, 2(1). Retrieved from <http://www.zenithresearch.org.in/images/stories/pdf/2012/Jan/ZIJMR/8%20MALIKA%20RANI%20A%20STUDY%20ON%20THE%20CUSTOMERS%20PERCEPTION%20TOWARDS%20E-BANKING.pdf>
- Rani, N., Yadav, S. S., & Jain, P. K. (2015). Financial performance analysis of mergers and acquisitions: Evidence from India. *International Journal of Commerce and Management*, 25(4), 402–423. doi:10.1108/IJCoMA-11-2012-0075
- Rappaport, A., & Sirower, M. L. (1999). Stock or cash? The trade-offs for buyers and sellers in mergers and acquisitions. *Harvard Business Review*, 77, 147–159. PMID:10662003
- Rawat, P. L. (1970). *History of Indian Education*. Agra: Ram Prasad.
- Rayport, J. (1996). The virus of marketing. *Fast Company*, 6, 68.
- Reast, J. D., & Carson, A. M. (2000). UK Physicians' Attitudes towards Direct-to-Consumer Advertising of Prescription Drugs: An Exploratory Analysis. *International Journal of Advertising*, 19(3), 397–415. doi:10.1080/02650487.2000.11104808
- Reast, J., Palihawadana, D., & Spickett-Jones, G. (2004). UK Physicians' Attitudes towards Direct-to-Consumer Advertising of Prescription Drugs: An Extension and Review. *International Journal of Advertising*, 23(2), 229–251. doi:10.1080/02650487.2004.11072881
- Reichheld, F. F. (1996). Learning from customer defections. *Harvard Business Review*, 74(2), 56.
- Reichheld, F. F., & Sasser, W. E. Jr. (1990). Zero Defections: Quality Comes to Services. *Harvard Business Review*, 68(5), 105. PMID:10107082
- Reijers, H. A., & Mansar, S. L. (2005). Best Practices in Business Process Redesign: An Overview and Qualitative Evaluation of Successful Redesign Heuristics. *Omega*, 33(4), 283–306. doi:10.1016/j.omega.2004.04.012
- Remund, D. L. (2010). Financial Literacy Explicated: The Case for a Clearer Definition in an Increasingly Complex Economy. *The Journal of Consumer Affairs*, 44(2), 276–295. doi:10.1111/j.1745-6606.2010.01169.x
- Rennie, M. W. (1993). Born global. *The McKinsey Quarterly*, (4): 45–53.

Compilation of References

- Research, R. M. (2003). *Survey of adult financial literacy in Australia*. ANZ Banking Group. Retrieved from http://www.anz.com/Documents/AU/Aboutanz/AN_5654
- Reynolds, K. E., & Beatty, S. E. (1999). Customer benefits & company consequences of customer-salesperson relationships in retailing. *Journal of Retailing*, 75(1), 11–32. doi:10.1016/S0022-4359(99)80002-5
- Ricart, J. E., Enright, M. J., Ghemawat, P., Hart, S. L., & Khanna, T. (2004). New frontiers in international strategy. *Journal of International Business Studies*, 35(3), 175–200. doi:10.1057/palgrave.jibs.8400080
- Ridings, C. M., & Gefen, D. (2004). Virtual community attraction: Why people hang out online. *Journal of Computer-Mediated Communication*, 10(1).
- Rishi, S. G. (2009). *Truck 2020: transcending turbulence*. Somers, NY: IBM Corporation.
- Ritala, P., Husted, K., Olander, H., & Michailova, S. (2018). External knowledge sharing and radical innovation: The downsides of uncontrolled openness. *Journal of Knowledge Management*, 22(5), 1104–1123. doi:10.1108/JKM-05-2017-0172
- Roberts, K., Varki, S., & Brodie, R. (2003). Measuring the quality of relationships in consumer services: An empirical study. *European Journal of Marketing*, 37(1/2), 169–196. doi:10.1108/03090560310454037
- Robinson, A. R., Hohmann, K. B., Rifkin, J. I., Topp, D., Gilroy, C. M., Pickard, J. A., & Anderson, R. J. (2004). Direct-to-consumer pharmaceutical advertising - physician and public opinion and potential effects on the physician-patient relationship. *Archives of Internal Medicine*, 164(4), 427–432. doi:10.1001/archinte.164.4.427 PMID:14980994
- Rogers, E. M. (1962). *Diffusion of innovations* (1st ed.). New York: Free Press.
- Roh, J. J., Hong, P., & Park, Y. (2008). Organizational culture and supply chain strategy: A framework for effective information flows. *Journal of Enterprise Information Management*, 21(4), 361–376. doi:10.1108/17410390810888651
- Ronen, S., & Shenkar, O. (1985). Clustering countries on attitudinal dimensions: A review and synthesis. *Academy of Management Review*, 10(3), 435–454. doi:10.5465/amr.1985.4278955
- Rosen, D. E., & Surprenant, C. (1998). Evaluating relationships: Are satisfaction & quality enough? *International Journal of Service Industry Management*, 9(2), 103–125. doi:10.1108/09564239810210451
- Rosenthal, M. B., Berndt, E. R., Donohue, J. M., Epstein, A. M., & Frank, R. G. (2003). Demand Effects of Recent Changes in Prescription Drug Promotion. *Forum for Health Economics & Policy*, 6(1), 1–26. doi:10.2202/1558-9544.1044
- Rossi, M., & Vrontis, D. (2015). Biotechnological mergers and acquisitions: Features, trends and new dynamics. *Journal of Research in Marketing and Entrepreneurship*, 17(1), 91–109. doi:10.1108/JRME-07-2014-0013
- Rothenberger, S. (2015). Fairness through Transparency: The Influence of Price Transparency on Consumer Perceptions of Price Fairness. *Working Papers CEB*, 15.
- Roulston, K. (2010). Considering quality in qualitative interviewing. *Qualitative Research*, 10(2), 199–228. doi:10.1177/1468794109356739
- Roulston, K. (2011). Working through challenges in doing interview research. *International Journal of Qualitative Methods*, 10(4), 348–366. doi:10.1177/160940691101000404
- Rouse, M., & Kiwak, K. (2017). *What is viral marketing?* Retrieved March 10, 2018, from <http://searchsalesforce.techtarget.com/definition/viral-marketing>
- Rubin, H. J., & Rubin, I. S. (2011). Qualitative interviewing: The art of hearing data. *Sage (Atlanta, Ga.)*.
- Ruthven, P. (2018). *Australian government environment - At a glance*. Melbourne: Ruthven Institute.

- Ryan, C., & Zahra, A. (2004). The politics challenge: the case of New Zealand's tourism organizations. In N. Morgan, A. Pritchard, & R. Pride (Eds.), *Destination Branding: Creating the Unique Destination Proposition* (pp. 79–110). Oxford, UK: Butterworth-Heinemann.
- Ryu, K., Lee, H. R., & Kim, W. G. (2012). The influence of the quality of the physical environment, food, and service on restaurant image, customer perceived value, customer satisfaction, and behavioral intentions. *International Journal of Contemporary Hospitality Management*, 24(2), 200–223. doi:10.1108/0959611211206141
- Saeida, S., Ghaseminezhad, M., Pakdel, M. R., & Rezaei, A. K. (2017). The Effect of Brand Personality on Consumer Loyalty and Buying Intention. *International Journal of Economic Perspectives*, 11(1), 1270–1281.
- Sahay, B. B. (2003). Understanding trust in supply chain relationships. *Industrial Management & Data Systems*, 103(8), 553–563. doi:10.1108/02635570310497602
- Sanderson, M. (2010). Protection by Persuasion: International Cooperation in the Refugee Regime. *International Journal of Refugee Law*, 22(3), 460–466. doi:10.1093/ijrl/eeq028
- Sangameshwaran. (2004, September). Shoppers' Hard Sell. *Business Standard*.
- Sangari, M. S., Hosnavi, R., & Zahedi, M. R. (2015). The impact of knowledge management processes on supply chain performance: An empirical study. *International Journal of Logistics Management*, 26(3), 603–626. doi:10.1108/IJLM-09-2012-0100
- Sarabia-sanchez, F. J., & Derda-bertomeu, M. J. (2017). Place brand developers' perceptions of brand identity, brand architecture and neutrality in place brand development. *Place Branding and Public Diplomacy*, 13(1), 51–64. doi:10.105741254-016-0017-7
- Saraniemi, S. (2011). From destination image building to identity based branding. *International Journal of Culture, Tourism and Hospitality Research*, 5(3), 247–254. doi:10.1108/17506181111156943
- Sathye, M. (1999). Adoption of Internet banking by Australian consumers: An empirical investigation. *International Journal of Bank Marketing*, 17(7), 324–334. doi:10.1108/02652329910305689
- Sathye, M. (2005). Privatization, performance, and efficiency: A study of Indian banks. *Vikalpa*, 30(1), 7–16. doi:10.1177/0256090920050102
- Schafer, S. M., Smith, H. J., & Linder, J. C. (2005). The power of business models. *Business Horizons*, 48(3), 199–207. doi:10.1016/j.bushor.2004.10.014
- Schagen, S., & Lines, A. (1996). *Financial Literacy in Adult Life: A Report to the NatWest Group Charitable Trust*. Slough, UK: National Foundation for Educational Research 3rd Report.
- Schlenker, B. R., Helm, B., & Tedeschi, J. T. (1973). The Effects of Personality & Situational Variables on Behavioral Trust. *Journal of Personality and Social Psychology*, 25(3), 419–427. doi:10.1037/h0034088
- Schneider, C. J., & Slantchev, B. L. (2018). The Domestic Politics of International Cooperation: Germany and the European Debt Crisis. *International Organization*, 72(1), 1–32. doi:10.1017/S0020818317000406
- Schnipper, L. E., & Abel, G. A. (2016). Direct-to-Consumer Drug Advertising in Oncology Is Not Beneficial to Patients or Public Health. *JAMA Oncology*, 2(11), 1397–1398. doi:10.1001/jamaoncol.2016.2463 PMID:27532895
- Schroeder. (2010). The Era of the Empowered Patient. *DTC Perspectives*, 21-23.
- Schulz, M., & Jobe, A. L. (2001). Codification and Tacitness as Knowledge Management strategies: An empirical exploration. *The Journal of High Technology Management Research*, 12(1), 139–165. doi:10.1016/S1047-8310(00)00043-2

Compilation of References

- Schurr, P. H., & Ozanne, J. L. (1985). Influence on exchange processes: Buyers preconceptions of a sellers trustworthiness & bargaining toughness. *The Journal of Consumer Research*, 11(4), 939–953. doi:10.1086/209028
- Schwab, K. (Ed.). (2010, September). *The global competitiveness report 2010-2011*. Geneva: World Economic Forum.
- Scott, M. Q., & Twomey, D. F. (1988). The long-term supply of entrepreneurs: students' career Aspirations in relation to entrepreneurship. *Journal of Small Business Management*, 26(4), 5–13.
- Seckler, M., Heinz, S., Forde, S., Tuch, A. N., & Opwis, K. (2015). Trust and distrust on the web: User experiences and website characteristics. *Computers in Human Behavior*, 45, 39–50. doi:10.1016/j.chb.2014.11.064
- Sedera, D., & Gable, G. G. (2010). Knowledge Management Competence for Enterprise System Success. *The Journal of Strategic Information Systems*, 19(4), 296–306. doi:10.1016/j.jsis.2010.10.001
- Seikkula-Leino, J. (2011). The implementation of entrepreneurship education through curriculum reform in Finnish comprehensive schools. *Journal of Curriculum Studies*, 43(1), 69–85. doi:10.1080/00220270903544685
- Sellers, J. A. (2000). The two faces of direct- to -consumer advertising. *American Journal of Health-System Pharmacy*, 57, 1401. PMID:10938980
- Sen, A., Attravar, A., & Jaiswal, R. (2016). *Internet: E-commerce in ASEAN-Taking Off*. Retrieved from <https://www.jefferies.com/CMSFiles/Jefferies.com/files/Insights/EcommerceinASEAN.pdf>
- Sen, A. (1971). *Crisis in Indian education*. Hyderabad: Institute of Public Enterprise. [India]
- Senders, J. W. (2004). FMEA and RCA: The mantras of modern risk management. *BMJ Quality & Safety*, 13(4), 249–250. doi:10.1136/qshc.2004.010868 PMID:15289625
- Senecal, S., & Nantel, J. (2004). The influence of online product recommendations on consumers' online choices. *Journal of Retailing*, 80(2), 159–169. doi:10.1016/j.jretai.2004.04.001
- Seock, Y.-K., & Norton, M. (2007). Attitude toward internet web sites, online information search, and channel choices for purchasing. *Journal of Fashion Marketing and Management: An International Journal*, 11(4), 571–586. doi:10.1108/13612020710824616
- Sertyesilisik, B., & Sertyesilisik, E. (2016). Eco industrial Development: As a Way of Enhancing Sustainable Development. *Journal of Economic Development, Environment and People*, 5(1), 6–27. doi:10.26458/jedep.v5i1.133
- Shaari, N. A., Hasan, N. A., Mohamed, R. K. M., & Sabri, M. A. (2013). Financial Literacy: A Study Among the University Students. *Interdisciplinary Journal of Contemporary Research in Business*, 5(2), 279–299.
- Shafiei Nikabadi, M. (2013). A Framework for Knowledge Management Processes in Supply Chain. *Iranian Journal of Information and Processing Management*, 28(3), 611–642.
- Shafiei Nikabadi, M. (2014). A framework for technology-based factors for knowledge management in supply chain of auto industry. *Vine*, 44(3), 375–393. doi:10.1108/VINE-09-2013-0057
- Shafiei Nikabadi, M., & Ameri Shahrabi, M. (2015). A framework for evaluation criteria of supply chain performance in automotive industry: The case of the Iranian automotive supply chain. *International Journal of Automotive Technology and Management*, 15(4), 358–380. doi:10.1504/IJATM.2015.072870
- Shafiei Nikabadi, M., & Ameri Shahrabi, M. (2015). The Impact of Human resources management Practices on the Acquisition, Creation and Production of Knowledge in the Supply Chain of the Automotive Industry. *Journal of Applied Environmental and Biological Sciences*, 4(3), 353–361.

- Shafiei Nikabadi, M., Bagheri, S., & Mohammadi-Hoseini, S. A. (2016). Effects of knowledge management strategy and organizational learning capability on innovation-driven performance in an oil company. *Knowledge Management & E-Learning*, 8(2), 334–355.
- Shafiei Nikabadi, M., Dehghan, M., & Farmanian-Arani, M. (2015). The effect of knowledge management strategies on performance of new product development in knowledge-based companies. *Indian Journal of Science and Technology*, 8(7), 263–277. doi:10.17485/ijst/2015/v8iS7/70152
- Shafiei Nikabadi, M., Feizi, K., Olfat, L., & Taghavi Fard, M. T. (2012). Multidimensional Structure for Defining the Effect of Organizational Culture and Supply Chain Culture on Knowledge Sharing in Supply Chain of Automotive Industry: With Emphasis on Improving Supply Chain Performance. *Iranian Journal of Information and Processing Management*, 28(1), 103–127.
- Shafiei Nikabadi, M., Naderi, R., & Tajik, H. (2016). External Organizational Factors Affecting Knowledge Management in Supply Chain. *Industrial Management Perspective*, 23, 131–156.
- Shafiei Nikabadi, M., & Salimi, A. (2015). Evaluating The Effect of Organizational Culture on Non-Financial Performance Through The mediating Role of Knowledge Utilization and Application by Using Fuzzy Network data Envelopment Analysis (FNDEA). *Productivity Management*, 9(34), 45–72.
- Shafiei Nikabadi, M., & Zamanloo, S. H. Z. (2013). A multidimensional structure for describing the influence of supply chain strategies, business strategies, and knowledge management strategies on knowledge sharing in supply chain. *International Journal of Knowledge Management*, 8(4), 50–70. doi:10.4018/jkm.2012100103
- Shamdasani, P. N., & Balakrishnan, A. A. (2000). Determinants of relationship quality loyalty in personalized services. *Asia Pacific Journal of Management*, 17(3), 399–422. doi:10.1023/A:1015834214570
- Shapiro, A., & Sokol, L. (1982). The social dimension of entrepreneurship. In C. A. Kent, D. L. Sexton, & K. H. Vesper (Eds.), *Encyclopedia of Entrepreneurship* (pp. 72–90). Englewood Cliffs, NJ: Prentice-Hall.
- Sharma, A., Tzokas, N., Saren, M., & Kyziridis, P. (1999). Antecedents & consequences of relationship marketing — Insights from business service salespeople. *Industrial Marketing Management*, 28(6), 601–611. doi:10.1016/S0019-8501(98)00034-0
- Sharpe, B. (2015). *Market analysis of heavy-duty vehicles in India*. Washington, DC: The International Council on Clean Transportation.
- Sheaves, D. E., & Barnes, J. G. (1996). The Fundamentals of Relationships: An exploration of the concept to guide marketing implementation. In T. A. Swartz, D. E. Bowen, & S. Brown (Eds.), *Advances in Services Marketing & Management* (pp. 215–245). Greenwich, CT: JAI Press Inc.
- Sheldon, K. (1998). *Best of Class: Building a customer service organization*. Executive Excellence Publishing.
- Shelton, L. M. (1988). Strategic business fits and corporate acquisition: Empirical evidence. *Strategic Management Journal*, 9(3), 279–287. doi:10.1002/mj.4250090307
- Shemwell, D. J. Jr, & Cronin, J. J. Jr. (1995). Trust & commitment in customer/service provider relationships: An analysis of differences across service types & between sexes. *Journal of Customer Service in Marketing & Management*, 1(2), 65–75. doi:10.1300/J127v01n02_07
- Sheng, M., & Gu, C. (2018). Economic growth and development in Macau (1999-2016): The role of the booming gaming industry. *Cities (London, England)*, 75, 72–80. doi:10.1016/j.cities.2018.01.003

Compilation of References

- Sheth, J. N., & Parvatiyar, A. (1994). *Relationship Marketing: Theory, Methods & Applications*. Atlanta: Centre for Relationship marketing, Emory University.
- Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, 22(2), 159–170. doi:10.1016/0148-2963(91)90050-8
- Shetty & Modi. (2013). *Changing landscape of the Indian pharma industry*. Retrieved from <https://www.pwc.in/assets/pdfs/publications/2013/changing-landscape-of-the-indian-pharma-industry.pdf>
- Shi, J. X. (2009). *What are the reasons for the large gap in the proportion of entrepreneurship?* Retrieved from <http://shijianxun.blog.sohu.com/112562862.html>,3-19
- Shih, T., & Huang, Y. Y. (2017). A case study on technology entrepreneurship education at a taiwanese research university. *Asia Pacific Management Review*, 22(4).
- Shih, H. A., & Chiang, Y. H. (2005). Strategy alignment between HRM, KM, and corporate development. *International Journal of Manpower*, 26(6), 582–603. doi:10.1108/01437720510625476
- Shook, C. L., Priem, R. L., & McGee, J. E. (2003). Venture creation and the enterprising individual: A review and synthesis. *Journal of Management*, 29(3), 379–399. doi:10.1016/S0149-2063(03)00016-3
- Shulga, L., & Tanford, S. (2018). Measuring perceptions of fairness of loyalty program members. *Journal of Hospitality Marketing & Management*, 27(3), 346–365. doi:10.1080/19368623.2017.1359724
- Shy, O. (1998). The Multi Plant Monopoly. In *Industrial Organization: Theory and Applications* (pp. 80-81). Cambridge, MA: The MIT Press.
- Shy, O. (1998). *A modified Hotelling vertical-differentiation model*. Cambridge, MA: The MIT Press.
- Siddiqi, A. A., Siddiqi, A. A., Shah, S. Z. A., & Shah, S. Z. A. (2017). Physicians' attitude towards direct to consumer advertising of pharmaceutical drugs. *International Journal of Pharmaceutical and Healthcare Marketing*, 11(1), 37–48. doi:10.1108/IJPHM-10-2015-0049
- Sikdar & Makkad. (2013). Internet Banking in India – A perspective on Benefit and Challenges involved. *International Journal of Engineering, Business and Enterprise Applications*, 15-23.
- Silander, M. T. (1997). The new regional policy and the location of the firm's behavior. Central Finland Economic Research Publications 142.
- Singh, S., Srivastava, V., & Srivastava, R. K. (2010). Customer acceptance of mobile banking: A conceptual framework. *Sies Journal of Management*, 7(1), 55.
- Sitkin., S. B., & Weingart, L. R. (1995). Determinants of Risky Decision-Making Behavior: A test of the mediating role of risk perceptions and propensity. *Academy of Management Journal*, 38(6), 1573–1592.
- Sivaramakrishnan, S., Delbaere, M., Zhang, D., & Bruning, E. (2010). Critical success factors and outcomes of market knowledge management: A conceptual model and empirical evidence. *International Journal of Knowledge Management*, 6(3), 1–21. doi:10.4018/jkm.2010070101
- Sjoberg, L. (2000). Factors in risk perception. *Risk Analysis*, 20(1), 1–12. doi:10.1111/0272-4332.00001
- Snyman, R., & Kruger, C. J. (2004). The interdependency between strategic management and strategic Knowledge management. *Journal of Knowledge Management*, 8(1), 5–19. doi:10.1108/13673270410523871

- Soberer, R. F., & Adams, J. S. (1989). Role model Performance effects on development of entrepreneurial career preference. *Entrepreneurship Theory and Practice*, 13(1), 53–71.
- So, K. K. F., King, C., Hudson, S., & Meng, F. (2017). The missing link in building customer brand identification: The role of brand attractiveness. *Tourism Management*, 59, 640–651. doi:10.1016/j.tourman.2016.09.013
- Sokefun, A. O. (2013). Customer service and its effect on the banking business in Nigeria. *Journal of Research in National Development*, 9(2), 359–365.
- Song, L. (2015). The transfer of expats’ managerial positions to Chinese executives. *Management International*, 19(Special Issue), 50–65.
- Soni, G., & Kodali, R. (2011). the strategic fit between competitive strategy and supply chain strategy in Indian manufacturing industry: An empirical approach. *Measuring Business Excellence*, 15(2), 70–89. doi:10.1108/13683041111131637
- Sonnenwald, Maglaughlin, & Whitton. (2001). Using innovation diffusion theory to guide collaboration technology evaluation: Work in progress. *Proceedings - 10th IEEE International Workshop on Enabling Technologies: Infrastructure for Collaborative Enterprises*, 114–119.
- Souitaris, V., Zerbinati, S., & Al-Laham, A. (2007). Do Entrepreneurship Programmes Raise Entrepreneurial Intention of Science and Engineering Students? The Effect of Learning, Inspiration and Resources [J]. *Journal of Business Venturing*, 22(4), 566–591. doi:10.1016/j.jbusvent.2006.05.002
- Spais, G. S., & Vasileiou, K. (2011). Path modeling the antecedent factors to consumer repurchase intentions for advanced technological food products: Some correlations between selected factor variables. [JBCS]. *Journal of Business Case Studies*, 2(2), 45–72. doi:10.19030/jbcs.v2i2.4889
- Srivastava, S. (2003). What Is the True Level of FDI Flows to India? *Economic and Political Weekly*, 38(7), 608–610.
- Statistics and Census Service of Macau. (2015). *Statistics*. Author.
- Stefanou, C. J., Sarmaniotis, C., & Stafyla, A. (2003). CRM & customer-centric knowledge management: An empirical research. *Business Process Management Journal*, 9(5), 617–634. doi:10.1108/14637150310496721
- Stokes, R. (2010). Social media. In *EMarketing: The essential guide to online marketing* (p. 189). Washington, D.C.: Saylor Academy.
- Stone, B. (2017). *The Upstarts*. London: Penguin.
- Storbacka, K., Strandvik, T., & Gronroos, C. (1994). Managing customer relationships for profits: The dynamics of relationship quality. *International Journal of Service Industry Management*, 5(5), 21–38. doi:10.1108/09564239410074358
- Storey, C., & Kahn, K. B. (2010). the Role of Knowledge Management Strategies and Task Knowledge in Stimulating Service Innovation. *Journal of Service Research*, 13(4), 397–410. doi:10.1177/1094670510370988
- Strach, P., & Everett, A. (2006). Brand corrosion: Mass-marketing’s threat to luxury automobile brands after merger and acquisition. *Journal of Product and Brand Management*, 15(2), 106–120. doi:10.1108/10610420610658947
- Sudhagar, S. (2012). A Study on Perception and Awareness on Credit Cards among Bank Customers in Krishnagiri District. *IOSR Journal of Business and Management*, 14–23.
- Sullivan, H. W., & Campbell, M. (2015). Do Prescription Drug Ads Tell Consumers Enough About Benefits and Side Effects? Results From the Health Information National Trends Survey, Fourth Administration. *Journal of Health Communication*, 20(12), 1391–1396. doi:10.1080/10810730.2015.1018635 PMID:26120940

Compilation of References

- Supyuenyong, V., & Swierczek, F. W. (2011). Knowledge management process and organizational performance in SMEs. *International Journal of Knowledge Management*, 7(2), 1–21. doi:10.4018/jkm.2011040101
- Sureshchandar, G. S., Rajendran, C., & Anantharaman, R. N. (2003). Customer perceptions of service quality in the banking sector of a developing economy: A critical analysis. *International Journal of Bank Marketing*, 21(5), 233–242. doi:10.1108/02652320310488411
- Taber, K. S. (2017). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 1–24.
- Taft, M. K., Hosein, Z. Z., Mehrizi, S. M. T., & Roshan, A. (2013). The Relation between Financial Literacy, Financial Wellbeing and Financial Concerns. *International Journal of Business and Management*, 8(11), 463–475. doi:10.5539/ijbm.v8n11p63
- Tallberg, J. (2010). The Power of the Chair: Formal Leadership in International Cooperation. *International Studies Quarterly*, 54(1), 241–265. doi:10.1111/j.1468-2478.2009.00585.x
- Taneja, A. (2007). *India Retail Report*. New Delhi: Images Multimedia.
- Taneja, R. M. (2012). Money attitude – an abridgement. *Journal of Arts, Science & Commerce*, 3(3), 94–98.
- Tang, R., & Metwalli, A. (2013). Mergers and acquisitions in India, Pakistan and Bangladesh. *International Journal of Commerce and Management*, 23(4), 327–338. doi:10.1108/IJCoMA-04-2013-0039
- Tan, S. S.-L., & Goonawardene, N. (2017). Internet Health Information Seeking and the Patient-Physician Relationship. *Systematic Reviews*. PMID:28104579
- Tao, D., & Chen, D. H. (2010). Research on quality evaluation index system of entrepreneurship education in Chinese university. *Management of Science and Technology*, 9(5), 84–87.
- Tarafdar, M., & Qrunfleh, S. (2017). Agile supply chain strategy and supply chain performance: Complementary roles of supply chain practices and information systems capability for agility. *International Journal of Production Research*, 55(4), 925–938. doi:10.1080/00207543.2016.1203079
- Tata Motors. (2017). *Annual Report*. Mumbai: Tata Motors.
- Tata. (2004). *Alan Rosling joins the board of Tata International*. Retrieved from <http://www.tata.com/article/inside/rre3q2rMZ9A=/TLYVr3YPkMU=>
- Taylor, D. G., & Strutton, D. (2010). Has e-marketing come of age? Modeling historical influences on post-adoption era internet consumer behaviors. *Journal of Business Research*, 63(9-10), 950–956. doi:10.1016/j.jbusres.2009.01.018
- Terpstra, V., & Sarathy, R. (2001). *International Marketing*. Chicago: Dryden Press.
- Thakran, K., & Verma, R. (2013). The emergence of hybrid online distribution channels in travel, tourism and hospitality. *Cornell Hospitality Quarterly*, 54(3), 240–247. doi:10.1177/1938965513492107
- Thaler, R. H. (2013 October 5). Financial literacy, beyond the classroom. *The New York Times*. Retrieved from <http://www.nytimes.com/2013/10/06/business/financial-literacy-beyond-theclassroom.html?r=3&>
- Thapa, B. S., & Nepal, S. R. (2015). Financial Literacy in Nepal: A Survey Analysis from College Students. In *2nd International Conference on Economics and Finance*. Kathmandu, Nepal: Nepal Rastra Bank.
- The Financial Express. (2013). *Deal signed for construction of 2nd Bhairab Railway Bridge*. Retrieved 6 April, 2015, from <http://www.thefinancialexpress-bd.com/old/index.php?ref=MjBfMDlfMTFfMTNfMV84OF8xODMwMjU=>

- The Global Economy. (2015). *The Global Economy*. Retrieved 13 MAY, 2015, from <http://www.theglobaleconomy.com/economies/>
- The SundayLeader. (2015). *The SundayLeader*. Retrieved 6 April, 2015, from <http://www.thesundayleader.lk/2015/02/22/sri-lanka-opens-up-highways-sector-to-india/>
- Thiel, P., & Masters, B. (2014). *Zero to One*. Crown Business.
- Thompson, E. R. (2009). Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric. *Entrepreneurship Theory and Practice*, 33(3), 669–694. doi:10.1111/j.1540-6520.2009.00321.x
- Thompson, P. W., Wallace, T., Flecker, J., & Ahlstrand, R. (1995). It ain't what you do, it's the way that you do it: Production organisation and skill utilisation in commercial vehicles. *Work, Employment and Society*, 9(4), 719–742. doi:10.1177/095001709594005
- Thulani, D., Tofara, C., & Langton, R. (2009). Adoption and use of internet banking in Zimbabwe: An exploratory study. *Journal of Internet Banking and Commerce*, 14(1), 1.
- Tiago, M. T. P. M. B., & Veríssimo, J. M. C. (2014). Digital marketing and social media: Why bother? *Business Horizons*, 57(6), 703–708. doi:10.1016/j.bushor.2014.07.002
- Timetric report. (2014). *Road and rail projects fuel economies in Africa and Middle East*. Retrieved 7 April, 2015, from <https://timetric.com/info/media-center/press-releases/2014/12/17/road-and-rail-projects-fuel-economies-africa-and-middle-east/>
- Treadaway, C., & Smith, M. (2010). *Facebook marketing: An hour a day*. Indianapolis, IN: Wiley Publishing Incorporation.
- Trusov, M., Bucklin, R. E., & Pauwels, K. (2009). Effects of word-of-mouth versus traditional marketing: Findings from an internet social networking site. *Journal of Marketing*, 73(5), 90–102. doi:10.1509/jmkg.73.5.90
- Tseng, S. M. (2008). Knowledge management system performance measure index. *Expert Systems with Applications*, 34(1), 734–745. doi:10.1016/j.eswa.2006.10.008
- Tsiotsou, R. H., & Goldsmith, R. E. (Eds.). (2012). *Strategic Marketing in Tourism Services*. Emerald Group Publishing.
- Turner, T., & Gianiodis, P. (2018). Entrepreneurship unleashed: Understanding entrepreneurial education outside of the business school. *Journal of Small Business Management*, 1–2.
- Twarowska, K., & Kačo, M. (2013). International business strategy: Reasons and forms of expansion into foreign. In K. Twarowska & M. Kačo (Eds.), *Management, Knowledge and Learning International Conference 2013* (pp. 1005-1011). Zadar, Croatia: Active citizenship by Knowledge Management & innovation.
- Twum-Darko, M., & Harker, L. A. L. (2017). Understanding Knowledge Sharing in an Organization: A Perspective of Actor-Network Theory. *International Journal of Knowledge Management*, 13(1), 53–74. doi:10.4018/IJKM.2017010104
- Uddin, M., & Boateng, A. (2009). An analysis of short-run performance of cross-border mergers and acquisitions. *Review of Accounting and Finance*, 8(4), 431–453. doi:10.1108/14757700911006967
- Ullakonoja, J. (2011). *The effects of retail design on customer perceived value* (Master's Thesis). Aalto University.
- Ulrich, D. (1998). *Intellectual capital = competence * commitment*, Sloan management. *RE:view*, 39(2), 15–27.
- Ura, D. K., & Ordóñez de Pablos, P. (2014). *Asian business and management practices: Trends and global considerations*. Hershey, PA: IGI Global.

Compilation of References

- Urban Transport Technology. (2014). Retrieved 3 april, 2014, from <http://www.urbantransport-technology.com/features/featurethe-road-to-growth-infrastructure-investment-in-the-middle-east-4321559/>
- Urbina, S. P. (1981). Methodological issues in the quantitative analysis of dream content. *Journal of Personality Assessment*, 45(1), 71–78. doi:10.1207/15327752jpa4501_14 PMID:16370753
- Urpelainen, J. (2012). How uncertainty about outside options impedes international cooperation. *International Theory*, 4(1), 133–163. doi:10.1017/S1752971911000194
- Vahlne, J. E., Ivarsson, I., & Johanson, J. (2011). The tortuous road to globalization for Volvo's heavy truck business: Extending the scope of the Uppsala model. *International Business Review*, 20(1), 1–14. doi:10.1016/j.ibusrev.2010.05.003
- Vanevenhoven, J. (2013). Advances and challenges in entrepreneurship education. *Journal of Small Business Management*, 51(3), 466–470. doi:10.1111/jsbm.12043
- Vats, S. (2014). Impact of Direct to Consumer Advertising Through Interactive Internet Media on Working Youth. *International Journal of Business and Administration Research Review*, 1(2), 88-99.
- Vazirani, N. (2015). A Literature Review on Mergers and Acquisitions Waves and Theories. *SIES Journal of Management*, 11(1), 1–9.
- Venkatachalam, V. B., & Waqif, A. (2005). Outlook on Integrating Entrepreneurship in Management Education in India. *Decision*, 32(2).
- Venkatesh, V. (2000). Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the technology acceptance model. *Information Systems Research*, 11(4), 342–365. doi:10.1287/isre.11.4.342.11872
- Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of Information Technology: Extending the unified theory of acceptance and use of technology. *Management Information Systems Quarterly*, 36(1), 157–178.
- Verbeke, A. (2011). *International Business Strategy* (2nd ed.). New Delhi: Cambridge University Press.
- Verbeke, A. (2013). *International business strategy*. Cambridge University Press. doi:10.1017/CBO9781139227162
- Verma, R., & Bhaskar, U. (2013). *LIVE MINT: Indian firms to take legal route against Mozambique govt*. Retrieved 8 April, 2015, from <http://www.livemint.com/Industry/thQIHtUC96XYXwEMezfzJ/Indian-firms-to-take-legal-route-against-Mozambique-govt.html>
- Verma, S., & Bhattacharyya, S. S. (2016). Micro-foundation strategies of IOT, BDA, Cloud Computing: Do they really matter in bottom of pyramid? *Strategic Direction*, 32(Issue: 8), 36–38. doi:10.1108/SD-06-2015-0093
- Verma, V., Sharma, D., & Sheth, J. (2016). Does relationship marketing matter in online retailing? A meta-analytic approach. *Journal of the Academy of Marketing Science*, 44(2), 206–217. doi:10.1007/11747-015-0429-6
- Viale, P. H. (2003). What nurse practitioners should know about direct-to-consumer advertising of prescription medications. *Journal of the American Academy of Nurse Practitioners*, 15(7), 297–304. doi:10.1111/j.1745-7599.2003.tb01312.x PMID:12929250
- Vidyapriya, P., & Mohanasundari, M. (2015). Customer Responsiveness on Banking Technology Products in Rural South India. *Asian Journal of Managerial Science*, 4(1), 27–32.
- Vieira, A. L., Winklhofer, H., & Ennew, C. T. (2008). Relationship Quality: A literature review & research agenda. *Journal of Customer Behaviour*, 7(4), 269–291. doi:10.1362/147539208X386833

- Vijaya Lakshmi, V., Aparanjini Niharika, D., & Lahari, G. (2017). Impact of Gender on Consumer Purchasing Behaviour. *IOSR Journal of Business and Management*, 19(8), 33-36.
- Vinayagamoorthy, D. A., & Ganesan, M. (2015). A Study on Rural Consumer Perception towards Internet Banking Services In Salem District. *International Journal of Applied Research*, 1(12), 726–732.
- Viot, C. (2011). Can brand identity predict brand extensions' success or failure? *Journal of Product and Brand Management*, 20(3), 216–227. doi:10.1108/10610421111134941
- Vision and Actions in Jointly Building Silk Road Economic Belt and 21st Century Maritime Silk Road. (2015). National Development and Reform Commission. Retrieved from <http://en.ndrc.gov.cn/newsrelease/201503/t20150330669367.html>
- Vize, R. (2017). Relationship quality: an online retail perspective. Paper Presented at QUIS 15, Porto, Portugal.
- Vliet, V. V. (2010). *Root Cause Analysis (RCA)*. Retrieved March 12, 2018, from ToolsHero: <https://www.toolshero.com/problem-solving/root-cause-analysis-rca/>
- Vliet, V. V. (2014). *Sakichi Toyoda*. Retrieved March 12, 2018, from ToolsHero: <https://www.toolshero.com/toolsheroes/sakichi-toyoda/>
- Wade, G. (2017). *China's One Belt, One Road initiative, APH, 2017*. Retrieved from http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/BriefingBook45p/ChinasRoad
- Walker, M. (2000). Place marketing and local proactivity in the economic development of Benoni. *Urban Forum Journal*, 11(1), 73–99. doi:10.1007/BF03036832
- Walter, A., Muller, T. A., Helfert, G., & Ritter, T. (2003). Functions of industrial supplier relationships & their impact on relationship quality. *Industrial Marketing Management*, 32(2), 159–169. doi:10.1016/S0019-8501(02)00230-4
- Walter, S. G., & Block, J. H. (2016). Outcomes of entrepreneurship education: An institutional perspective. *Journal of Business Venturing*, 31(2), 216–233. doi:10.1016/j.jbusvent.2015.10.003
- Wang, W. (2014). Hospitality Consumers' Innovativeness: A Qualitative Study. *Advances in Hospitality and Leisure*, 37-56.
- Wang, W., Lu, W., & Millington, J. K. (2011). *Determinants of Entrepreneurial Intention among College Students in China and USA*. Academic Press.
- Wang, D., & Moini, H. (2016). Motivations, Valuation, and Performance Assessment in Cross-border Mergers and Acquisitions: Theory and Field Evidence. In *Perspectives on International Business*. Adonis & Abbey Publishers Ltd.
- Wang, L., Law, R., Guillet, B. D., Hung, K., & Fong, D. K. C. (2015). Impact of hotel website quality on online booking intentions: eTrust as a mediator. *International Journal of Hospitality Management*, 47, 108–115. doi:10.1016/j.ijhm.2015.03.012
- Wang, X., Shen, H. W., Cui, W. J., Li, X., & Chen, Y. (2017). Crisis and opportunity of Macao gambling industry-based on the history of gambling industry in Macao. *Journal of Business Theory and Practice*, 5(4), 281–292.
- Wan, Y. K. P., & Li, X. (2011). Sustainability of tourism development in Macao, China. *International Journal of Tourism Research*, 15(1), 52–65. doi:10.1002/jtr.873
- Wan, Z., Haggerty, N., & Wang, Y. (2015). Individual level knowledge transfer in virtual settings: A review and synthesis. *International Journal of Knowledge Management*, 11(2), 29–61. doi:10.4018/IJKM.2015040103

Compilation of References

- Watson, R. T., Boudreau, M.-C., & Chen, A. J. (2010). Information Systems and Environmentally Sustainable Development: Energy Informatics and New Directions for the IS Community. *Management Information Systems Quarterly*, 34(1), 23–38. doi:10.2307/20721413
- Weber, R. P. (1990). *Basic Content Analysis* (2nd ed.). Newbury Park, CA: Sage. doi:10.4135/9781412983488
- Webster, F. E. Jr. (1992). The Changing Role of Marketing in the Corporation. *Journal of Marketing*, 56(4), 1–7. doi:10.2307/1251983
- Weerawardena, J., Mort, G. S., Liesh, P. W., & Knight, G. (2007). Conceptualizing accelerated internationalization in the born global firm: A dynamic capabilities perspective. *Journal of World Business*, 42, 294–306.
- Wei, W. (2005). China and India: Any difference in their FDI performances? *Journal of Asian Economics*, 16(4), 719–736.
- Weissman, J. S. (2004). Physicians report on patient encounters involving direct-to-consumer advertising. *Health Affairs*, W4 – 219 – 33.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180. doi:10.1002/mj.4250050207
- Westbrook, R. A. (1981). Sources of consumer satisfaction with retail outlets. *Journal of Retailing*, 57(3), 68–85.
- Wheaton, B., Muthen, B., Alwin, D. F., & Summers, G. (1977). Assessing Reliability & Stability in Panel Models. *Sociological Methodology*, 8(1), 84–136. doi:10.2307/270754
- Wheaton, W., & Simonton, W. (2007). The secular and cyclic behaviour of ‘true’ construction costs. *Journal of Real Estate Research*, 29, 1–25.
- White, C. M. (2016). *Social media, crisis communication, and emergency management: Leveraging Web 2.0 technologies*. CRC Press.
- Whitfield, J., Dioko, L. A. N., Webber, D., & Zhang, L. (2014). Attracting convention and exhibition attendance to complex MICE venues: Emerging data from Macao. *International Journal of Tourism Research*, 16(2), 169–179. doi:10.1002/jtr.1911
- Whole Foods Market. (n.d.). *Green Mission*. Retrieved from <http://www.wholefoodsmarket.com/values/green-mission.php>
- Wilson, D. T. (1995). An integrated model of buyer-seller relationships. *Journal of the Academy of Marketing Science*, 23(4), 335–345. doi:10.1177/009207039502300414
- Wilson, F., Kickul, J., & Marlino, D. (2007). Entrepreneurial Self-Efficacy, and Entrepreneurial Career Intentions: Implications for entrepreneurship education 1. *Entrepreneurship Theory and Practice*, 31(3), 387–406. doi:10.1111/j.1540-6520.2007.00179.x
- Winter, T. (2016). One Belt, One Road, One Heritage: Cultural Diplomacy and the Silk Road. *The Diplomat*. Retrieved from <http://thediplomat.com/tag/one-belt-one-road/>
- Woloshin, S., Schwartz, L. M., Tremmel, J., & Welch, H. G. (2001). Direct-to-consumer advertisements for prescription drugs: What are Americans being sold? *Lancet*, 358(9288), 1141–1146. doi:10.1016/S0140-6736(01)06254-7 PMID:11597668
- Wong, A., & Sohal, A. (2002a). Customers perspectives on service quality & relationship quality in retail encounters. *Managing Service Quality*, 12(6), 424–433. doi:10.1108/09604520210451902

- Wong, A., & Sohal, A. (2002b). An examination of the relationship between trust, commitment & relationship quality. *International Journal of Retail & Distribution Management*, 30(1), 34–50. doi:10.1108/09590550210415248
- Wong, A., & Sohal, A. (2006). Understanding the quality of relationships in consumer services: A study in a retail environment. *International Journal of Quality & Reliability Management*, 23(3), 244–264. doi:10.1108/02656710610648215
- Woodruff, R. B. (1997). Customer value: The next source for competitive advantage. *Academy of Marketing Science*, 25(2), 139–153. doi:10.1007/BF02894350
- Woo, K.-S., & Ennew, C. T. (2004). Business-to-business relationship quality: An IMP interaction-based conceptualization & measurement. *European Journal of Marketing*, 38(9/10), 12–52. doi:10.1108/03090560410548960
- World Competitiveness Yearbook. (2014). *IMD business school*. Author.
- World Economic Forum. (2010). Retrieved 3 April, 2015, from World Economic Forum website: http://www3.weforum.org/docs/IN10/WEF_IES_2010_Report.pdf
- World Investment Report. (2013). UNCTAD.
- Wosinska, M. (2005). Direct-to-Consumer Advertising and Drug Therapy Compliance. *JMR, Journal of Marketing Research*, 42(3), 323–332. doi:10.1509/jmkr.2005.42.3.323
- Wray, B., Palmer, A., & Bejou, D. (1994). Using neutral network analysis to evaluate buyer-seller relationships. *European Journal of Marketing*, 28(10), 32–48. doi:10.1108/03090569410075777
- Wright, C., & Nyberg, D. (2015). *Climate Change, Capitalism, and Corporations. Processes of Creative Self-Destruction*. Cambridge, UK: Cambridge University Press. doi:10.1017/CBO9781139939676
- Wu, J.M., Yang, D.J., & Huang, J.Y. (2007). *The research development & prospects of relationship quality in relationship marketing*. I-Shou University.
- Wu, H. C. (2014). The effects of customer satisfaction, perceived value, corporate image and service quality on behavioral intentions in gaming establishments. *Asia Pacific Journal of Marketing and Logistics*, 26(4), 540–565. doi:10.1108/APJML-03-2014-0049
- Wu, T.-Y., & Lin, C. A. (2017). Predicting the effects of eWOM and online brand messaging: Source trust, bandwagon effect and innovation adoption factors. *Telematics and Informatics*, 34(2), 470–480. doi:10.1016/j.tele.2016.08.001
- Xi, J. (2015). *Towards a Community of Common Destiny and a New Future for Asia*. Boao Forum for Asia Annual Conference.
- Xi, J. P. (2013). *Xi Jinping Speech, peripheral Diplomacy Work Conference, Xinhua News Agency*. Retrieved from http://news.xinhuanet.com/politics/2013-10/25/c_117878897.htm
- Xia, L., Monroe, K. B., & Cox, J. L. (2004). The price is unfair! A conceptual framework of price fairness perceptions. *Journal of Marketing*, 68(4), 1–15. doi:10.1509/jmkg.68.4.1.42733
- Xie, D., & Heung, V. C. S. (2012). The effects of brand relationship quality on responses to service failure of hotel consumers. *International Journal of Hospitality Management*, 31(3), 735–744. doi:10.1016/j.ijhm.2011.09.010
- Xie, Z. Y. (2010). Quantitative research on performance evaluation system of entrepreneurship education in Colleges and universities. *Innovation and Entrepreneurship Education*, 4(6), 3–10.
- Xu, L., & Bilal, Z. (2012). *Financial Literacy around the World*. World Bank.

Compilation of References

- Xu, Y. (2010). *What does Asian Games bring to Guangzhou? The researcher of Academy of Social Sciences: Enhance the city brand. Southern Metropolis Daily*. (in Chinese)
- Yaacob, H. F., & Yusoff, M. Z. (2014). Comparing the relationship between perceived characteristics of innovation (PCI) and adoption of computer based training among trainer and trainees. *Procedia: Social and Behavioral Sciences*, 155, 69–74. doi:10.1016/j.sbspro.2014.10.258
- Yamakawa, Y., Peng, M. W., & Deeds, D. L. (2008). What Drives New Ventures to Internationalize from Emerging to Developed Economies? *Entrepreneurship, Theory and Practice*, 32(1), 59–82.
- Yang, Y. (2016). *EUCBA bulletin, Quarterly Newsletter of the EU-China Business Association*. Retrieved from http://www.eucba.org/images/contents/files/bulletin/EUCBA_news2160523_def2.pdf
- Yang, J. (2010). the knowledge management strategy and its effect on firm performance: A contingency analysis. *International Journal of Production Economics*, 125(2), 215–223. doi:10.1016/j.ijpe.2010.03.012
- Yi, B. Z. (2003). Study on the Sustainable Development Principle and the Regional Development. [in Chinese]. *Population Journal*, 140(4), 4.
- Yin, R. K. (2013). *Case study research: Design and methods*. Sage Publications.
- Young, H. N., Paterniti, D. A., Bell, R. A., & Kravitz, R. L. (2005). Do prescription drug advertisements educate the public? The consumer answers. *Drug Information Journal*, 39(1), 25–33. doi:10.1177/009286150503900104
- Yu, S. G. (2010). Innovative research on entrepreneurship education in Higher Vocational Colleges. *China's Education After School*, 3(22), 136-137.
- Yusof, J. M., Musa, R., & Rahman, S. A. (2018). Role of shopping value on green image and store loyalty relationship. *Journal of ASIAN Behavioural Studies*, 3(6), 169–177. doi:10.21834/jabs.v3i6.249
- Zack, M. H. (1999). developing a Knowledge Strategy. *California Management Review*, 41(3), 125–145. doi:10.2307/41166000
- Zahra, S. A., Kuratko, D. F., & Jennings, D. F. (1999). Entrepreneurship and the Acquisition of Dynamic Organizational Capabilities. *Entrepreneurship Theory and Practice*, (23), 5-10.
- Zahra, S. A., & Wright, M. (2011). Entrepreneurship's next act. *The Academy of Management Perspectives*, 25(4), 67–83. doi:10.5465/amp.2010.0149
- Zartner, D. (2010). The Rise of Transnational Crime: International Cooperation, State Contributions, and the Role of the Global Political Economy. *International Studies Review*, 12(2), 316–319. doi:10.1111/j.1468-2486.2010.00933.x
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing*, 60(2), 31–46. doi:10.2307/1251929
- Zeithaml, V., Bitner, M., & Gremler, D. (2009). *Services Marketing*. Boston: McGraw-Hill/Irwin.
- Zeng, Y. Q. (2006). A study on the evaluation methods of university education quality. *Journal of Higher Education Research*, 6(2), 27–30.
- Zeyar Myo Aung, U., & Ordóñez de Pablos, P. (2015). Managerial strategies and practice in the Asian business sector. Hershey, PA: IGI Global.
- Zhang, J. Z., Watson, G. F. IV, Palmatier, R. W., & Dant, R. P. (2016). Dynamic Relationship Marketing. *Journal of Marketing*, 80(5), 53–75. doi:10.1509/jm.15.0066

- Zhang, Y. Y., Song, H. J., & Park, K. S. (2016). A study on tourism experiences and satisfaction to Macao casinos. *International Journal of Tourism and Hospitality Research*, 30(10), 83–95. doi:10.21298/IJTHR.2016.10.30.10.83
- Zhang, Y., Duysters, G., & Cloudt, M. (2013). The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. *The International Entrepreneurship and Management Journal*, 10(3), 623–641. doi:10.1007/11365-012-0246-z
- Zhao, H., Seibert, S. E., & Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *The Journal of Applied Psychology*, 90(6), 1265–1272. doi:10.1037/0021-9010.90.6.1265 PMID:16316279
- Zhou, K. Z., Li, J. J., Zhou, N., & Su, C. (2008). Market orientation, job satisfaction, product quality & firm performance: Evidence from China. *Strategic Management Journal*, 29(5), 985–1000. doi:10.1002/mj.700
- Zhu, L. (2013). Is the College Students Pioneer Park “catalyst” or “sleeping pill”? *People's Daily*, 12-16.
- Zhu, Z.W., & Gu, R. (2013). Research on Evaluation of Service Quality of Entrepreneurship Education in Local Colleges Based on DEA. *Journal of Yangzhou University*, (2), 37-42.
- Ziethmal, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 2–22.
- Zongping, F., & Jing, H. (2014). *China's strategic partnership diplomacy: engaging with a changing world* (Working paper). ESP (European Strategic Partnership Observatory).
- Zott, C., Raphael, A., & Massa, L. (2011). The Business Model: Recent Developments and Future Research. *Journal of Management*, 37(4), 1019–1042. doi:10.1177/0149206311406265
- Zurriagacarda, A., Kageyama, K., & Akai, K. (2016). Effects of risk attitude, entrepreneurship education and self-efficacy on entrepreneurial intentions: A structure equation model approach to entrepreneurship. *International Review of Management & Business Research*, 5.

About the Contributors

Patricia Ordóñez de Pablos is a professor in the Department of Business Administration in the Faculty of Business and Economics at The University of Oviedo (Spain). She completed her education in The London School of Economics (UK). Her teaching and research interests focus on the areas of strategic management, knowledge management, organizational learning, human resource management, intellectual capital, information technologies, with special interest in Asia (Bhutan, China, Laos, Myanmar). She is Editor-in-Chief of the International Journal of Learning and Intellectual Capital (IJLIC) and International Journal of Asian Business and Information Management (IJABIM), respectively. She has edited books for IGI Global, Routledge and Springer.

* * *

Zahari Abu Bakar is a senior lecturer in DRB-HICOM University of Automotive Malaysia, specializing in Project Management, Information Technology and Operations Management. He holds a Doctor of Philosophy (PhD) in Technology Management and Master in Business Administration (Technology Management). He has more than 20 years of working experience in various industries such as airlines, banking, electronic payment services and education. He is a certified Project Management Professional (PMP) and Business Continuity Certified Specialist (BCCS).

Adilla Anggraeni is currently a faculty member of Binus Business School, Bina Nusantara University, Indonesia. Her research interests include consumer behaviour, social marketing and luxury marketing.

Muhammad Anshari is researcher at School of Business UBD. He received his BMIS (Hons) from International Islamic University Malaysia, his Master of IT (E-Business) from James Cook University Australia, and his PhD program from Universiti Brunei Darussalam (2014). His professional experience started when he was IT Business Analyst at Astra International. Research Fellowship from The Government Republic of China (Taiwan) at National Taiwan University (Jan-Dec, 2014). Research Fellowship from King Saud University The Kingdom of Saudi Arabia 2009. Best Paper and Presenter Award International Conference on ASEAN Studies 2 (ICONAS2) at Chulalongkorn University Bangkok Thailand 2015. Best Paper and Presenter Award, ASEAN Graduate Business Economic Programs Doctoral Colloquium April 2013, at Gadjah Mada University Indonesia. He is also research collaborator at Pasca-Sarjana UIN Sunan Kalijaga Yogyakarta.

Jehangir Bharucha has recently been conferred two Hon. D. Litt. Degrees for High Impact Teaching and Research on a Global Scale. He is an academician of international acclaim and is currently the Senior Vice-Principal at Mumbai's premier college for business and commerce education, H R College of Commerce and Economics and Faculty at Lincoln university College, Kualalumpur.

Som Sekhar Bhattacharyya is a Strategic Management faculty at National Institute of Industrial Engineering (NITIE), Mumbai, India. He has Bachelor of Technology (B.Tech) in Mining Engineering from Indian Institute of Technology - Indian School of Mines (IIT-ISM) Dhanbad, India. He has done his Fellow Programme in Management (FPM) in the functional specialization of Strategic Management from Management Development Institute (MDI) Gurgaon, India. He has research interest in 'Strategic Management', 'Strategic leadership', 'Strategic Corporate Social Responsibility' and 'Qualitative business research'. He has published many research papers and teaching cases in international journals of repute. For his research he has been awarded with Emerald Literati Awards for Excellence: Outstanding Paper Award – 2011 and Emerald Literati Awards for Excellence: Highly Commended Paper Award – 2014. For his teaching, he has received various awards like NITIE best teacher award 2014 and Business School Award for Best Professor in Strategic Management in India in 2014.

Sandeep Chinnobaiah, is an Construction Management professional with an interest in International business expansion strategy and he is currently working at Singapore as an Planning professional. He is an international business and professional experience in Singapore, Malaysia and India. His immense expertise with several multinational companies with three different countries makes him an outstanding professional in Strategy, International business and Business development areas. He continuously puts his efforts in gaining international experience and business challenges with deep learning.

Mona Chung is a bi-cultural business expert in doing business with China in particular negotiations. She addresses the major issues - overcomes the cultural gap between Westerners and Chinese in the fields of commerce and education. Dr Chung specialises in strategic planning, management and marketing practice for international organisations with the understanding of the culture of Chinese market first. As a bi-cultural consultant she short-circuits processes and produce results that increase efficiency by between 70% and 50%. Dr Chung is on the executive board of the Victoria branch of the Australia China Business Council. Being highly experienced in a large number of industries and a frequent visitor to China, Dr Chung is a guest speaker at many public forums and author of a list of over 80 publications in cross-cultural business studies. Her first book was 'Shanghaied: Why Foster's Could Not Survive China'. Her second book was 'Doing Business Successfully in China'. Her third book 'Doing business with China: getting ready for the Asia century'. Her latest book is 'Dancing with the Dragon: doing business with China'.

Ekta Duggal, Assistant Professor of Commerce, MotiLal Nehru College, University of Delhi. She is a Ph.D from Faculty of Management Studies (FMS), University of Delhi. She has participated in numerous conventions and seminars. She has published about two dozens of research papers in journals of repute including International Journal of Business Ethics in Developing Economies, Journal of Marketing and Business Communication and South Asian Journal of Global Business Research. Her research papers

About the Contributors

won best paper awards at national and international conferences. She participated in as the Consortium Fellow at 3rd Academy of Indian Marketing -American Marketing Association Sheth Foundation Doctoral Consortium at Dubai. She has published recently a book titled 'Marketing', published (2015) by Oxford University Press.

Jennifer H. Gao holds a Ph.D. in Organizational Behavior from the University of Macau, and is an Associate Professor at the School of Business, Macao Polytechnic Institute. She has taught in Ji Nan University in mainland China, Macao University of Science and Technology, and the University of Macau. She has over 10 years of managerial experience in various industries in Macao, Hong Kong, and New Zealand. Her research interests include human resource management, organizational behavior, cross-cultural comparisons, and leadership excellence. She has published in more than 20 international journals, conferences and books. She served on the editorial board of a few books, and now is an ad hoc reviewer for several scholarly journals.

Jalal Rajeh Hanaysha is currently a Senior Lecturer and Deputy Dean of Post Graduate Centre at DRB-HICOM University of Automotive Malaysia. He obtained his PhD majoring in Management from Universiti Utara Malaysia, Malaysia, in 2015, as well as an MSc (Management) from Universiti Utara Malaysia in 2011. He also received a Bachelor's degree in Marketing from Arab American University – Jenin, Palestine in 2008. To date, he has published more than 45 research articles in international journals and conferences. He has also received several awards for best research papers being presented at local and international conferences. His research interests include business management and marketing, in particular branding, consumer behaviour, social media marketing, CSR, business and product innovation, human resource practices, and business strategy.

Haim Hilman is a Professor of Strategic Management at the School of Business Management (SBM), Universiti Utara Malaysia (UUM). Currently, he is the Dean of School of Business SBM, College of Business. Besides teaching at undergraduate and postgraduate levels, he is also actively involved in research activities. He also supervises a number of PhD students in the area of strategic management. To date he has published few books in strategic management and a number of journal articles in the field of strategic management and management.

Maria Fernanda Pargana Ilhéu exercises her lectureship at Lisbon's School of Economics and Management (ISEG). She is also Coordinator of ChinaLogus – Business Knowledge & Relationship with China, at ISEG. Prof. Ilhéu is graduated in Economics at ISCEF (now ISEG), is post-graduated in Marketing and Export Management at the Cambridge Institute of Massachusetts, got Master's degree in Strategic Management at Lisbon's Higher Institute of Business and Labor Sciences (ISCTE), and a European Doctorate degree in Business Administration and Marketing at the University of Seville. She is presently President of the New Silk Road Friends Association a Portugal's Belt & Road Think Tank. Prof. Ilhéu lived in Macau in South China 18 years, executing roles of great responsibility in both the private and public sectors; in addition she also lecture at Macau University in part-time regime from 1982 till 1996.

Rabindra Jena is presently working as a Professor (IT & Analytics) at Institute of Management Technology, Nagpur, India. He has degrees in M.Sc, M.Tech (Computer Science & Engineering) and PhD from Indian Institute of Information Technology and Management, Gwalior, India. He has more than 18 years of experience in teaching and research. He has more than 75 research publications in various refereed international journals/conferences. He is the editor of International Journal of Innovative Research in Science and Technology (IJIRST), IMT Case Journal and Guest editor of journal of repute.

Ajeya Jha is heading the Department of Management Studies at Sikkim Manipal Institute of Technology (SMIT) since February 2000. In addition to having post-graduate and doctoral degrees in Business Administration, he possesses graduation and post graduation in Pharmaceutical Sciences also. He is a fellow of International Society of Management. He has a rich and diverse industrial experience of 15 years (includes launching two green-field projects), teaching 21 years and with NGO 8 months. He has authored 15 books, 10 book-chapters, 130 papers, 200 articles of common interest; has presented 45 papers in national and international seminars/ conferences and has delivered over 50 invited speeches. He has coordinated about 50 Management Development Programmes/Workshops and has been a resource person for numerous MDPs and workshops. He has organized 5 international and 2 national level conferences/seminars. He was a member, core committee of 14th National Children's Science Congress held at Sikkim (2007). Further, he has successfully undertaken 6 projects for UNESCO, Indo-Canada Environment Facility, Department of Science and Technology, Government of India, Development Alternatives and World Wide Fund for Nature-India.

Lee Khai Loon is a Senior Lecturer and Head of Programme (Business Engineering) in Faculty of Industrial Management (FIM), Universiti Malaysia Pahang (UMP). He is specialized in supply chain management, technology management and operation management. He holds a Doctor of Philosophy (PhD) in Supply Chain Management and Bachelor Degree in Technology Management. He has 6 years of industrial experience and 3 years of teaching undergraduate and postgraduate experiences. He is also a chartered member of The Chartered Institute of Logistics and Transport (CIMLT) Malaysia and the Professional Technologist in Malaysia Board of Technologists (MBOT)."

Chunpei Lin is an Associate Professor, School of business administration, Huaqiao University, received a doctorate in management from South China University of Technology, focusing on innovation and entrepreneurship in emerging economies.

Ashoka M. L. is working as faculty in Department of Post Graduate Studies in Commerce, University of Mysore, Manasagangothri, Mysore. Having 21 years of teaching experience and also Research guide in University of Mysore since 2006. Participated and presented various research articles in the national and international level conferences and seminars and also published articles in the peer reviewed journals.

Bruno Mascitelli is an associate professor in European studies. He is also a Jean Monnet chair. He is an author of numerous books and papers and is a leading scholar in Australia.

About the Contributors

Jaya Rani Pandey is currently working as Assistant Professor at Sikkim Manipal Institute of Technology since January 2008. She holds masters degree in Economics and also in Business administration. She is awarded with PhD on a topic related to Pharmaceutical marketing. She has 6 papers to her credit and which have been published in peer-reviewed national and international journals. She has co-authored Two books. She is also an investigator in a project funded by All India Council for Technical Education.

Madhushree S. is working as Assistant Professor in Department of PG Studies in Commerce, SDM College(Autonomous), Ujire from 2014. Participated and presented various research articles in the national and international level conferences and seminars and also published articles in the peer reviewed journals.

Saibal Kumar Saha (UGC NET Qualified) holds a first class Master's degree in MBA and a first class Bachelor's Degree in Electronics and Communication Engineering. He has 7+ years of experience and has worked in MNCs like Cognizant Technology Solutions and Tata Aig Life. He has served National Institute of Technology - Silchar, Jyotirmoy School of Business – Kolkata, University of Technology and Management - Shillong and is presently working as Assistant Professor at Sikkim Manipal Institute of Technology - Majitar, India.

Abhijit Sarkar is an Asst. Professor, SMIT (Constituent College of SMU) MBA, UGC-NET Qualified, Pursuing PhD Research Interest: Heavy Trucks, Market Segmentation, Network Dynamics in the trucking industry.

Rakesh T.S. is working as Assistant Professor in Department of Commerce, SDM College(Autonomous), Ujire from 2008. Participated and presented various research articles in the national and international level conferences and seminars and also published articles in the peer reviewed journals.

Chi Fong Tang, a current student of the Master of Social Sciences in Macao Studies program at the University of Macao. Besides, he has already received degrees in the form of the Master of Arts in Chinese Studies (Issues in Contemporary China) from the Chinese University of Hong Kong and a Bachelor of Business Administration in Marketing from the Macao Polytechnic Institute. His academic interests include urban development studies and sustainable heritage studies.

Harsh V. Verma, Professor (Marketing), Faculty of Management Studies, University of Delhi. He has published over thirty research papers and five books. One of his books titled 'Services Marketing: The Strategies for Success' won DMA-ESCORTS book of the year award in 1993. His last book is titled 'Branding Demystified: From Plans to Payoffs' which is published by Response Books (Sage) 2010. The earlier books include 'Services Marketing: Text and Cases, Pearson Education, 2011. 'Brand Management: Text and Cases, Excel Books, 2012, 'Managing a Service Business Successfully (Global Business Press, 1995). He is also a corporate trainer and conducted training programs for several Indian and multinational companies in the area of marketing. His latest book is titled 'Marketing', published (2015) by Oxford University Press.

Fedora Wijaya is a graduate of Binus Business School, Bina Nusantara University. She is currently working for Blibli, an e-commerce company based in Jakarta, Indonesia.

Yenchun Jim Wu (PhD, University of Michigan) is Distinguished Professor of Graduate Institute of Global Business and Strategy, College of Management at National Taiwan Normal University, Taiwan. His papers have appeared in *Academy of Management Learning and Education*, *Sloan Management Review*, *IEEE Transactions on Engineering Management, Information & Management*, *Computers in Human Behavior*, *Computers & Education*, *Behavior & Information Technology*, *International Journal of Operations & Production Management*, *Supply Chain Management*, *Management Decision*, *Journal of the American Society for Information Science and Technology*, *International Journal of Physical Distribution & Logistics Management*, *International Journal of Logistics Management*, *European Journal of Operational Research*, *International Journal of Production Economics*, *Transportation Research Part A, D & E*, and *Technological Forecasting and Social Change*. His research interests include supply chain management, technology management, and Innovation & Entrepreneurship, Social Media.

Donghun Yoon is currently a Senior Researcher and Team Leader in the Seoul Center, Korea Basic Science Institute. His research areas of interest include management information system, network system, RFID, basic science, research equipment, national large research facilities, science and technology policy, information and communications technologies, R&D strategy, IC-Card and technology diffusion theory. He received his PhD from Graduate School of Media and Governance, Keio University of Japan. He worked for Samsung and the Keio Research Institute at SFC, Keio University of Japan before joining Korea Basic Science Institute. He was awarded 2018 Albert Nelson Marquis Lifetime Achievement Award and was selected 2018 Marquis Who's Who in the World for his contribution to the academic research. He is an Editor-in-chief of *International Journal of R&D Innovation Strategy* and an International Editorial Review Board of three international academic Journals, *International Journal of Operations Research*, *Information Systems and Innovations in Information Systems for Business Functionality and Operations Management*, and *International Journal of Asian Business and Information Management*.

Minghao Zhang holds a Bachelor in Marketing from Macao Polytechnic Institute, and is a graduate student at the Graduate School of Education, Waseda University in Japan. He also a lecturer at the Senior High School, Waseda University. His research interests include regional study, multicultural education, and education of sustainable development.

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