



ISSN 1913-9004 (Print)
ISSN 1913-9012 (Online)

International Business Research

Vol. 10, No. 7, July 2017

Canadian Center of Science and Education®

INTERNATIONAL BUSINESS RESEARCH

An International Peer-reviewed and Open Access Journal for Business Research

International Business Research is an international, double-blind peer-reviewed, open-access journal. IBR is published by the Canadian Center of Science and Education in both print and online versions. IBR aims to promote excellence through dissemination of high-quality research findings, specialist knowledge, and discussion of professional issues that reflect the diversity of this field.

The scopes of the journal include:

Business
Marketing
Management
Finance
Economics
Accounting

The journal is included in:

EconBiz; EconLit
ECONIS; ERA
Google Scholar
JEL; RePEc
SHERPA/RoMEO
Ulrich's; ZBW

Open-Access Policy

We follow the Gold Open Access way in journal publishing. This means that our journals provide immediate open access for readers to all articles on the publisher's website. The readers, therefore, are allowed to read, download, copy, distribute, print, search, link to the full texts or use them for any other lawful purpose. The operations of the journals are alternatively financed by publication fees paid by authors or by their institutions or funding agencies.

Copyright Policy

Copyrights for articles are retained by the authors, with first publication rights granted to the journal/publisher. Authors have rights to reuse, republish, archive, and distribute their own articles after publication. The journal/publisher is not responsible for subsequent uses of the work.

Submission Policy

Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the authorities responsible where the work was carried out. However, we accept submissions that have previously appeared on preprint servers (for example: arXiv, bioRxiv, Nature Precedings, Philica, Social Science Research Network, and Vixra); have previously been presented at conferences; or have previously appeared in other "non-journal" venues (for example: blogs or posters). Authors are responsible for updating the archived preprint with the journal reference (including DOI) and a link to the published articles on the appropriate journal website upon publication.



The publisher and journals have a zero-tolerance plagiarism policy. We check the issue using the plagiarism prevention tool and a reviewer check. All submissions will be checked by iThenticate before being sent to reviewers.



This is an 'Open Access' journal published under a creative commons license. You are free to copy, distribute, display, and perform the work as long as you clearly attribute the work to the authors.

IBR accepts both Online and Email submission. The online system makes readers to submit and track the status of their manuscripts conveniently. For any questions, please contact ibr@ccsenet.org.



Online Available: <http://ibr.ccsenet.org>

EDITORIAL TEAM

EDITOR-IN-CHIEF

Rafael Hernandez Barros, Universidad Complutense de Madrid, Spain

ASSOCIATE EDITORS

Ahmad Mahmoud Ahmad Zamil, Prince Sattam bin Abdulaziz University, Saudi Arabia

Giuseppe Granata, Univeristy of Cassino and Southern Lazio, Italy

Manlio Del Giudice, Link Campus University, Italy

Michaela Maria Schaffhauser-Linzatti, University of Vienna, Austria

Olszak Celina, University of Economics in Katowice, Poland

Wing-Keung Wong, Asia University, Taiwan, Province of China

EDITORIAL ASSISTANT

Kevin Duran, Canadian Center of Science and Education, Canada

EDITORIAL BOARD MEMBERS

Abderrazek Hassen Elkhaldi, Tunisia

Abedalqader Rababah, Oman

Ajit Kumar Kar, India

Alina Badulescu, Romania

Alina Cristina Nuta, Romania

Alireza Athari, Iran

Amaresh C. Das, USA

Amran Awang, Malaysia

Anca Gabriela Turtureanu, Romania

Andrea Carosi, Italy

Anna Paola Micheli, Italy

Antonella Petrillo, Italy

Antônio André Cunha Callado, Brazil

Arash Riasi, USA

Ashford C Chea, USA

Aurelija Burinskiene, Lithuania

Badar Alam Iqbal, Switzerland

Badar Nadeem Ashraf, China

Behrooz Gharleghi, Malaysia

Benjamin James Inyang, Nigeria

Brian Sheehan, Australia

Bruno Marsigalia, Italy

Carlo Alberto Magni, Italy

Chemah Tamby Chik, Malaysia

Claudia Isac, Romania, Malaysia

Cristian Marian Barbu, Romania

Emilio Congregado, Spain

Eva Mira Bolf Kováč, Slovakia

Ewa Ziemba, Poland

Fabio De Felice, Italy

Fabrizio Rossi, Italy

Federica Caboni, Italy

Fevzi Esen, Turkey

Florin Ionita, Romania

Foued Hamouda, Tunisia

Francesco Ciampi, Italy

Francesco Scalera, Italy

Gengeswari Krishnapillai, Malaysia

Georgeta Dragomir, Romania

Gianluca Ginesti, Italy

Gilberto Marquez-Illescas, USA

Giovanna Michelin, Italy

Giuseppe Russo, Italy

Grzegorz Strupczewski, Poland

Grzegorz Zasuwa, Poland

Guillaume Marceau, France

Hanna Trojanowska, Poland

Heather Cooper Bisalski, USA

Herald Ivan Monis, India

Huijian Dong, USA

Hung-Che Wu, China	Monika Wieczorek-Kosmala, Poland
Ionela-Corina Chersan, Romania	Muath Eleswed, USA
Ivo De Loo, Netherlands	Munther Barakat Alnimer, Jordan
Iwona Gorzen-Mitka, Poland	Murat Akin, Turkey
Jabbouri Imad, Morocco	Nasim Saadati, India
Janusz Wielki, Poland	Nermine Magdy Atteya, USA
Jing Cheng, USA	Nitin Simha Vihari, India
Joanna Katarzyna Blach, Poland	Odemir Vieira Baêta, Brazil
Jolita Vveinhardt, Lithuania	Onur Köprülü, Turkey
Jorge Mongay-Hurtado, Spain	Özcan Işık, Turkey
Karen Gulliver, USA	Ozgur Demirtas, Turkey
Kherchi Ishak, Algeria	Pascal Stiefenhofer, United Kingdom
Ladislav Mura, Slovakia	Philippe Van Cauwenberge, Belgium
Leo Franklin, India	Priyono Pri Priyono, Indonesia
Luisa Helena Pinto, Portugal	Prosper Senyo Koto, Canada
Mahdi Shadkam, Malaysia	Radoslav Jankal, Slovakia
Malgorzata Koszewska, Poland	Rafuiddin Ahmed, Australia
Mansour Esmaeil Zaei, India	Raphaël Dornier, France
Manuela Rozalia Gabor, Romania	Riccardo Cimini, Italy
Marcelino José Jorge, Brazil	Roberto C. da R. Miranda, Brazil
Maria do Céu Gaspar Alves, Portugal	Romana Korez Vide, Slovenia
Maria João Guedes, Portugal	Rosa Lombardi, Italy
Marta Joanna Ziđkowska, Poland	Roxanne Helm Stevens, USA
Maria J. Sanchez-Bueno, Spain	Sam C Okoroafo, USA
Maria Madela Abrudan, Romania	Sang-Bing Tsai, China
Maria Teresa Bianchi, Italy	Serhii Kozlovskiy, Ukraine
Maryam Ebrahimi, Iran	Sumathisri Bhoopalan, India
Mihaela Simionescu (Bratu), Romania	Tamizhjothi Kailasam, India
Miriam Jankalova, Slovakia	Tariq Tawfeeq Yousif Alabdullah, Iraq
Miroslav Iordanov Mateev, UAE	Terrill L. Frantz, China
Mithat Turhan, Turkey	Tu Anh Phan, Viet Nam
M. Muzamil Naqshbandi, UAE	Valeria Stefanelli, Italy
Modar Abdullatif, Jordan	Valerija Botric, Croatia
Mohamed A. R. Salih, Saudi Arabia	Vassili Joannides, Australia
Mohamed Rochdi Keffala, Tunisia	Vincent Grèzes, Switzerland
Mohammad Sadeghi Khansari,	Vinit Parida, Sweden
Mohsen M. Khiabani, Malaysia	Wejdene Yangui, Tunisia
Mongi Arfaoui, Tunisia	Yan Lu, USA

CONTENTS

The Effect of Low Morale and Motivation on Employees' Productivity & Competitiveness in Jordanian Industrial Companies	1
<i>Osama Samih Shaban, Ziad Al-Zubi, Nafez Ali, Atalla Alqotaish</i>	
Managing DMOs through Storytelling: A Model Proposal for Network and Value Co-creation in Tourism	8
<i>Silvia Gravili, Pierfelice Rosato, Antonio Iazzi</i>	
Comparing Mediation Role of Cultural Intelligence and Self-Efficacy on the Performance of International Business Negotiation	22
<i>Nong Thi Hong Lam, Shu-Yi Liaw</i>	
"The Role of Domestic Tourism in Supporting the National Economy, from the Point View of Employers" Field Study on Aqaba Economical City	34
<i>Hanem Rajab Ibrahim Al-Darwesh</i>	
Social Network Theory and Management of the Sub-supply Network in Complex Sectors	46
<i>Filomena Izzo</i>	
CREMOR: CREDibility Model on Online Reviews-How people Consider Online Reviews Believable	56
<i>Patrizia Grifoni, Fernando Ferri, Tiziana Guzzo</i>	
Construction of a Strategic Business Process Reengineering Model: Empirical Research on the After-sale Service Process of SH	67
<i>An-Shin Shia, Bau-Jung Chang</i>	
Multivariate Analysis by Using Quantification Method II on a Questionnaire Investigation for Rare Sugars	84
<i>Yasuo Ishii, Hiromasa Takeyasu, Daisuke Takeyasu, Kazuhiro Takeyasu</i>	
Identification, Priorization and Management of Professional Football Clubs' Stakeholders	99
<i>Nicolas Cicut, Sandra Montchaud, Vincent Millereux, Pierre Dantin</i>	
The B2Com Relationship: An Empirical Study of the Measure of Relationship Quality in a Business-to-Community Relationship	118
<i>Oluyomi Abayomi Osobajo, David Moore</i>	
Export Effect of China's Outward FDI: Provincial Panel Data Analysis	148
<i>Xiaohui Wang</i>	
Organizational Commitment-Rewards Relationship and its Change in Japanese Companies in China	155
<i>Keisuke Kokubun</i>	
An Application of the CHAID Algorithm to Study the Environmental Impact of Visitors to the Teide National Park in Tenerife, Spain	168
<i>Flora Maria Diaz-Perez, M "Bethencourt-Cejas</i>	
The Consumer, the Consumed, & the Devastated: A Longitudinal Study of Jordanian Consumers	178
<i>Mohammad Ibrahim Obeidat</i>	
Reviewer Acknowledgements for International Business Research, Vol. 10, No. 7	185
<i>Kevin Duran</i>	

The Effect of Low Morale and Motivation on Employees' Productivity & Competitiveness in Jordanian Industrial Companies

Osama Samih Shaban¹, Ziad Al-Zubi¹, Nafez Ali¹, Atalla Alqotaish¹

¹Faculty of Economics & Administrative Sciences, Al-Zaytoonah University of Jordan, Amman, Jordan

Correspondence: Osama Shaban, Faculty of Economics & Administrative Sciences, Al-Zaytoonah University of Jordan, P.O. Box 130, 11733, Amman, Jordan.

Received: April 26, 2017

Accepted: May 17, 2017

Online Published: June 7, 2017

doi:10.5539/ibr.v10n7p1

URL: <https://doi.org/10.5539/ibr.v10n7p1>

Abstract

The current study aims to examine the effect of low morale and motivation on employees' productivity and competitiveness. Low productivity and loss of competitiveness are outcomes of low morale and low motivation and may sometimes lead to further undesired symptoms such as absenteeism and sabotage. A questionnaire was designed to achieve the purpose of this purpose, and it was distributed to selected accounting and management employees working in different Jordanian business environments. The number of questionnaires analyzed were (276) questionnaires. Resolution data were analyzed using the statistical program Smart PLS (Partial Least Square). The study concluded that low morale and low motivation affect productivity and competitiveness, and it also recommends that management should work on increasing productivity by increasing employees' satisfaction through re-engineering systems and processes and providing incentives, education and training.

Keywords: low morale, low motivation, productivity, competitiveness, Jordanian industrial companies

1. Introduction

In general, high morale leads to high productivity; but there is not always a positive correlation between the two. Close supervision, time studies, and scientific management can be applied in order to reach a high level of productivity, but sometimes, we can reach a high productivity by low morale. However, it is doubtful whether this combination can last (Rao, 2007). Renis Likert explains different combinations of morale and productivity viz: high morale and low productivity; high morale and high productivity; low morale and high productivity; and low morale and low productivity (Likert, 1932). We can say that managers have to work for improving the morale of their employees, as high morale makes for a better working environment, and it helps the organization to attain its goals easily.

Organizations want its employees to be more productive. But will motivation be enough to get things done? And what motivates our behavior? Employees are considered the most important resources, and the winning card in the hands of management. Low productivity may be traceable to poor employee motivation. The success and effectiveness of any firm depend to a large extent, on how well employees are motivated. Theories of human resource management, as well as theories of motivation, suggest that motivated employees tend to be more creative and productive, and it is wise for any management to use these theories in order to increase productivity and competitiveness (Stephen, 2014).

Competition can be defined as a contest between individuals or groups where they strive to attain and reach particular goals (Ryckman & et al., 2009). The concept of competitiveness has been linked to early socialization processes between parents and children. Parents often teach individualism to their children and this is often characterized by making distinctions between themselves and others (Collier et al., 2010). Motivation and competitiveness go hand in hand. Individuals who are extremely motivated are also extremely competitive as they know the way and the means to accomplish their goals. On the other hand, other individuals use competition in a negative way. These individuals use competition selfishly to achieve their goals without considering the consequences to themselves and others (Collier et al., 2010).

Society places great emphasis and pressure on competition. There is a controlling focus on being competitive and successful (Ryckman & et al., 2009). This kind of focus can cause low intrinsic motivation as individuals may feel lost between the ways (please confirm) and the gains. This concept is known as the hidden cost of

reward; that is, reward is having the opposite effect on the individual. So, instead of motivating them to win, it causes them lower intrinsic motivation (Abuhamdeh & Csikszentmihaly, 2009).

The current research problem focuses on how low morale and motivation of employees, who feel they are not being recognized as valuable contributors to the system, and hence get no rewards for the good work that they do, may lead to low productivity, loss of competitiveness, and sometimes, further undesired symptoms such as absenteeism and sabotage.

In order not to lose focus of the study's importance, the current research is going to cover all aspects of low morale and motivation and their effects on productivity and competitiveness. These two important aspects are attributed to employee's negative psychology. From the researchers' point of view, these two factors are very important and are worth discussing.

The objectives of the current study aim to examine the effect of low morale and motivation on employee's productivity and competitiveness. This research will try to attain the following objectives:

- 1- To stand on the causes of low morale and motivation;
- 2- To point out the effect of low morale and motivation on employee's productivity and competitiveness.

2. Literature Review

Morale is an elusive quality which involves feelings, emotions, attitude and perception towards the organization and its members. Positive morale is usually characterized by discipline, confidence and willingness to perform.

Low morale can be attributed to many factors such as job insecurity, lack of fair compensation policy, uncertain business conditions, and excessive outsourcing practices. Low morale affects company income, productivity, financial competitiveness and organizational objectives (Sauermaun & Cohen, 2008). Low morale is an outcome of managerial behavior where managers address their employees from a top-down command and refuse to communicate directly on workplace issues (Sauermaun & Cohen, 2008). This kind of communication results in a gap between employees and managers, which in turn leads to employee distrust, disrespect, and reduction of morale and workforce motivation (Chungsup & et al., 2012). Low morale also causes employees to lose interest, especially when managers don't appreciate their efforts and the tasks performed (Zeynep & Huckman, 2008). A costly indicator of low morale is high employee turnover. This happens when employees leave their jobs because they feel unhappy and have no incentives to stay. The negative effect of employee turnover is disconcerting because of its great implication both on financial and on productivity levels. Financially means the company has to hire new employees either with payment of higher salaries or by additional recruiting expenses. At the production level, the employees who leave will take with them the knowledge, skills and ability that helped contribute to the goals, profit and performance of the organization (Lee & Liu, 2009).

Absenteeism is another costly indicator of low morale. Unjustified absenteeism increases cost and decreases productivity (Abbot, 2003). According to an article in 'The Leading Edge', "dissatisfied employees who are discontented with their bosses can have a high price tag". (Abbot, 2003). Management should work on controlling the effects of low morale through the understanding of their employees' potentials and their core work processes, understanding their abilities, enriching employees' job and recognizing their achievements (Ngambi, 2011).

The second perspective of this study is motivation. Motivation has been the core of many studies. Some studies earlier carried out in the eighties and nineties of this century have discussed this concept extensively. Mitacheel (1982), and Steers & Peter (1983), Baron (1991) stated that motivation is the internal process that activates, guides and maintains behavior (Steers & Porter, 1983). At the beginning of the twentieth century, other researchers such as Buchanan & Huczynski (2004), stated that motivation is "the cognitive decision making process through which goal directed behavior is initiated, energized, directed and maintained" (Buchanan & Huczynski, 2004). Butler & Rose (2011) defined motivation as the course of movement, the inspiration behind activity, and the feeling within an individual that makes him want to achieve personal need or expectation (Butler & Rose, 2011). Recently Osabiya (2015) defined motivations as "the driving force within individuals by which they attempt to achieve specific goal in order to fulfill some needs or expectations" (Osabiya, 2015).

Achieving sustained high levels of performance is usually the aim of every organization. Employees are considered the main tools of such aimed performance, and motivation is considered the means to achieve such performance. In other words, high attention should be given to methods of motivating individuals in order to achieve the desired goals.

The current research study links motivation with productivity. It indicated a positive correlation between motivation and the level of productivity in many organizations. Companies that use motivation to enhance a higher level of productivity are considered world class and compete globally, and this in-turn creates sustained competitiveness (Stephen, 2014). Also, researches indicate that a person who is motivated works hard, sustains a pace of hard work, and has self-directed behavior to achieve the desired goals. On the other hand, low motivation with low productivity is often considered a problem. To fully understand motivation, studies state that, there are two types of motivation: extrinsic and intrinsic. Extrinsic motivation concerns tangible, real rewards that are received by the employees, while intrinsic motivation is built inside the person and is natural to him (Bulter & Rose, 2011). According to the individual's psychology, there is an inherent set of needs through which an individual can be satisfied through rewards for his work performance (Ozturk, 2012).

The other element concerning this study is productivity. Productivity is defined as the effective and efficient utilization of all resources; material, labor, capital, information and time (ILO, 2017). Low productivity is indicated through many signs which include poor quality of domestic outputs, lack of competitiveness of products in international markets, shortages of skills, low production technology, poor industrial relations, and poor human resource management. Research findings indicate that there is a link between motivation and productivity in the industrial sector. When an employee's needs are met, it means that he derives satisfaction from the job and eventually, this creates a motivated employee (Nwasike, 1991). All motivation theories tend to support the idea that a motivated worker willingly uses his ability in a constructive way to accomplish the tasks assigned to him. A motivated employee's work attitude is wholesome and tends toward high performance and productivity (Stephen, 2014).

In General, high motivation and high morale lead to high productivity as it was mentioned in the introduction of this research paper. However, there is not always a positive correlation between them. Close supervision, time studies, and scientific management can be applied in order to reach a high level of productivity, Renis Likert as it was stated earlier, mentioned different combinations of morale and productivity: high morale and low productivity; high morale and high productivity; low morale and high productivity; and low morale and low productivity. Managers have to work for improving the morale of their employees, as high morale makes the work a better working environment, and it helps the organization to attain its goals easily (Likert, 1932).

The final element of the study variables is competitiveness. As earlier stated, motivation and competitiveness go hand in hand together, competition is found in all aspects of life; even among brothers and sisters. Competition has a great impact on the motivation of an individual. Some individuals use competition in a positive way. They use it in order to gain personal growth and to help themselves in reaching their potential goals. Other individuals use competition in a negative way. They use competition selfishly to achieve their goals without considering the consequences on themselves and others (Collier et al., 2010). Individuals who are extremely motivated are also extremely competitive as they know the way and the means to accomplish their goals.

3. Method

The primary data needed for the study objectives were collected through a survey conducted among different Jordanian industrial companies. The total listed industrial companies in Jordan are 64 companies, with a total of 580 employees working at different managerial levels. The research study sample size is 295 employees which were determined using the sample size formula at 95% confidence level, and 4% confidence interval, and a total of 580 employees which constitute the study population.

A questionnaire designed for this purpose was distributed randomly to the working employees taking part in actions and activities that has to do with carrying out businesses in their companies in November 2015, as well as to different managerial levels. The number of valid questionnaires analyzed was 276 out of 295 distributed which constitute 93.5% of total questionnaires distributed. The questionnaire was designed to feature 24 questions, with 9 questions specifically on low morale, 8 questions specifically on low motivation, and finally, 7 questions specifically on productivity and competitiveness. Resolution data were analyzed using the statistical program Smart PLS.

Quantitative data were collected using self-administered questionnaires, in which the employees were asked to state the likelihood (on a 5-point scale: [5] strongly agree; [4] agree; [3] neutral; [2] disagree; [1] strongly disagree).

Other Data was collected from secondary sources. Secondary data is collected from articles published by the well-known periodicals, books, and dissertations.

3.1 Statistical Analysis

The Statistical Package for Social Sciences- Smart PLS was applied in analyzing the data received; Statistical Analysis tools include the followings:

1. Descriptive Statistics, mainly frequencies and percentages, were used to analyze sample characteristics according to job, educational level, professional certificates, and experience.
2. Correlation, Inter-correlation, Regression, and Path Coefficient were used to analyze and describe study variables from a statistical point.
3. Reliability Test using Cronbach’s Alpha was used to test the reliability of the scale.

3.2 Research Design

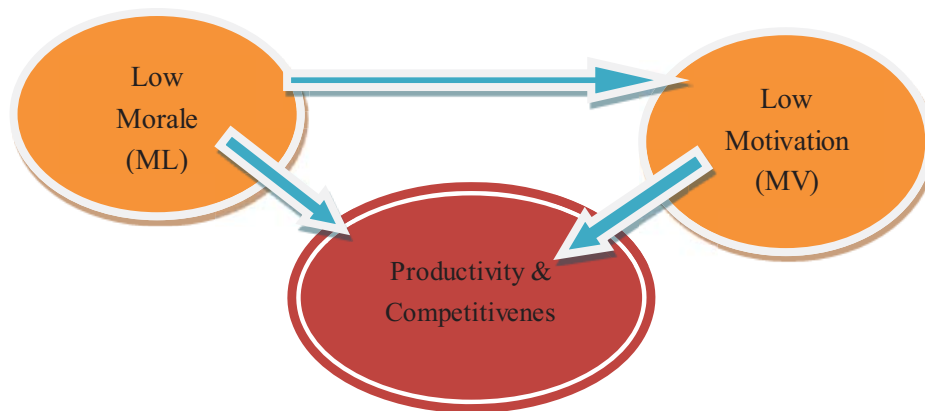


Figure 1. Research Design

The research design is formed out of three main elements that constitute the research design. The Model in Figure-1 shows the effect of low morale and low motivation on the Productivity and Competitiveness.

3.3 Study Hypothesis

- H1: Low morale has an effect on low motivation.
- H2: Low morale has an effect on Productivity and Competitiveness.
- H3: Low motivation has an effect on Productivity and Competitiveness.

3.4 Data Analysis and Findings

3.4.1 Reliability Test

Cronbach’s Alpha was used to test the internal reliability of the measurement instrument. According to Uma, Sekrran a Cronbach's Alpha of 0.60 or higher is considered acceptable (Sekrran, 2003). As shown in Table 1 the Cronbach’s Alphas (α) ranged from 0.692 to 0.916, thus establishing the reliability of the survey questionnaire. It is obvious that all values of alpha are acceptable and relatively high. This indicates that for each measurement of a variable, the items are correlated and hence highly consistent. Table 1 shows the Cronbach's Alpha for each scale:

Table 1. Cronbach’s Alpha

	Cronbach's Alpha
Low Morale	0.825959
Low Motivation	0.692194
Productivity & Competitiveness	0.916212

3.4.2 Sample Characteristics

74% of the respondents were males and 26% were females; most of them were between the ages of 26 and 45 years. Most respondents had an average experience of more than 5 years. 67% of the respondents were Office Clerks, 19% Deputy Managers, 9% Heads of departments, and, finally, 5% were executive managers. 70% of the respondents had Bachelors’ degree, and the remaining 30% had other degrees. Demographic data is shown in Table 2.

Table 2. Demographics Data for the Research Study

Variable	Group	Frequencies	%
Sex	Male	204	74
	Female	72	26
Total		276	100%
Age	Less than 25 years	46	17
	From 26 years—35 years	82	30
	More than 36 years—45 years	88	32
	More than 46 years	60	21
Total		276	100%
Professional Certificate	Bachelors' Degree	192	70
	Other Degree	84	30
Total		276	100%
Job Title	Executive	16	5
	Head of Department	24	9
	Deputy Manager	52	19
	Office Clark	184	67
Total		276	100%
Experiences	Less than 5 years	28	9
	From 6 years – 10 years	112	41
	More than 11 years – 15 years	90	33
	More than 16 years	46	17
Total		276	100%

3.4.3 Smart PLS Results

The structural model results are shown in Exhibit 2. Examining the path coefficients, the numbers in Table 3 enable us to determine that Low Morale has the strongest effect on Low Motivation (0.985), followed by Low Morale on Productivity and Competitiveness (0.354). The effect between Low motivation and Productivity and Competitiveness was (0.630). The results further show that the relationship between the three variables is statistically significant. Based on their path coefficient scores, it would appear that the influence of Low Morale and Low Motivation on Productivity and Competitiveness is significant. However, it seems very unlikely that the hypothesized path relationship between Low Motivation and Productivity and Competitiveness which is (0.354) is relatively weak compared to path relationship between Low Morale and Low Motivation (0.985), and Low Morale on Productivity and Competitiveness (0.630) but still significant. This is as the findings of Smart PLS rule explains that the path Coefficient is significant if it is above 0.015.

Table 3. Path coefficient

Path coefficient	Low Morale	Low Motivation	Productivity & Sustainability
Low Morale		0.985097	0.354857
Low Motivation			0.630448
Productivity & Competitiveness			

The table above (please confirm this) shows the outcomes of R Square which represents the proportion of variation in the responses that is explained by the original model using predictor values from the test data. Moreover, the three constructs explain between 57% to 66% percent of the variance of the endogenous latent construct Low motivation ($R^2 = 0.570$), and endogenous latent construct Productivity and Competitiveness ($R^2 = 0.664$). According to R square results, it is considered moderate. Table 4 illustrates the R-square results

Table 4. R square

	R Square
Low Morale	
Low Motivation	0.570416
Productivity & Competitiveness	0.664157

The convergent validity assessment is associated with the Average Variance Estimated (AVE) value. The evaluation of validity criterion in table 5 illustrates that the AVE values of Low Morale (0.531), Low Motivation (0.508), and Productivity and Competitiveness (0.701) are all above the cutoff point of 0.50. Therefore, all reflective constructs demonstrate high levels of convergent validity (Fornell & Larcker, 1981). Figure 2 illustrates THE Smart PLS results as a whole.

Table 5. AVE

	AVE
Low Morale	0.531549
Low Motivation	0.508221
Productivity and Competitiveness	0.701575

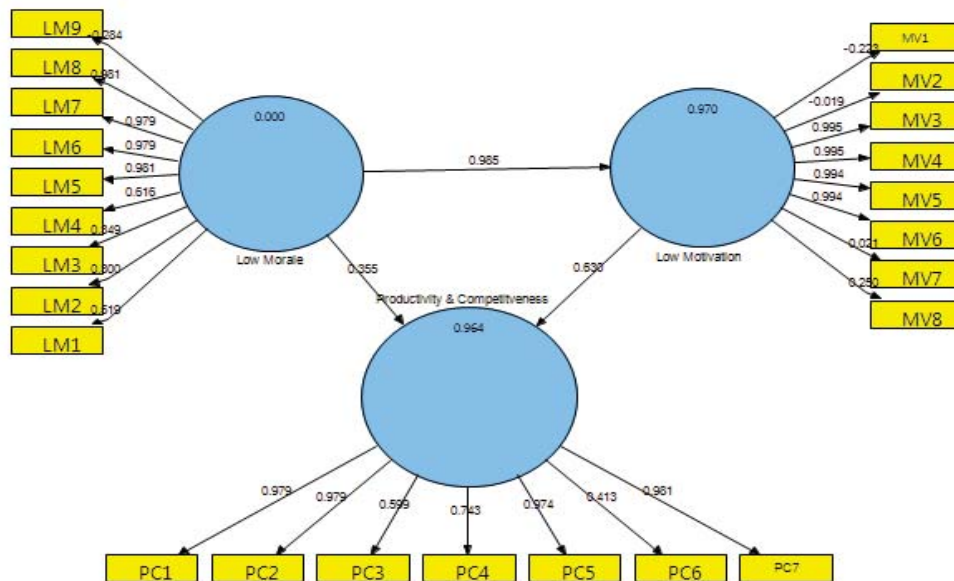


Figure 2. Model Results

4. Conclusions & Recommendations

4.1 Conclusions

The results show that the relationship between the three variables is statistically significant. Based on their path coefficient scores, it would appear that the influence of Low Morale and Low Motivation on Productivity and Competitiveness is significant, so the research hypothesis stating that Low Morale and Low Motivation affects Productivity and Competitiveness and makes on limiting its consequences.

The Real cause behind low employee morale can include uncertain business conditions, limited upward rewards, job security issues, lack of fair compensation policy, and excessive outsourcing policy.

4.2 Recommendations

- Management should ensure a positive work environment which encourages confidence, discipline, and willingness to perform the job in the best possible manner.
- Management should also work on strong and sustained compensation policies that bridge the gap between the payrolls of the employees.
- Management should work on increasing productivity by increasing employees' satisfaction through re-engineering systems and processes, providing education and training.
- Encouraging practices that focus on learning of personal development competitive attitudes.

References

- Abbot, J. (2003). Does Employee Satisfaction Matter? A Study to Determine Whether Low Employee Morale Affects Customer Satisfaction and Profits in the Business to Business Sector. *Journal of Communication Management*, 7(4), 333-339. <https://doi.org/10.1108/13632540310807467>
- Abuhamdeh, S., & Csikszentmihalyi, M. (2009). Intrinsic and Extrinsic Motivation Orientation in the Competitive Context: An Examination of Person-Situation Interactions. *Journal of Personality*, 77(5). <https://doi.org/10.1111/j.1467-6494.2009.00594.x>
- Bucharan, D., & Huczynski, A. (2004). *Organization Behavior: An Introductory Text* 5th ed., Harlow: FT/Prentice Hall.
- Bulter, M., & Rose, E. (2011). *Introduction to Organizational Behavior*, 1st Ed. London IPD.
- Chungsup, L., Jarrod, S., Robin, H., & Laura, L. P. (2012). *Staff Morale & Burnout: Prevention and Possible Solutions*. The Office of Recreation & Park Resources, University of Illinois: Department of Recreation, Sport & Tourism.

- Collier, S. A., Ryckman, R. M., Thornton, R., & Gold, J. A. (2010). Competitive Personality Attitudes and Forgiveness of Others. *The Journal of Psychology*, 144, 535-543. <https://doi.org/10.1080/00223980.2010.511305>
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.2307/3151312>
- Henry, S., & Wesley, M. C. (2008). What Makes Them Tick? Employee Motives and Firm Innovation NBER. Paper No. 14443.
- Lee, H. W., & Liu, C. H. (2009). The Relationship among Achievement Motivation, Psychological Contract and Work Attitudes. *Social Behavior and Personality*, 37, 321-328. <https://doi.org/10.2224/sbp.2009.37.3.321>
- Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 22(140), 1-55.
- Ngambi, H. C. (2011). The Relationship Between Leadership and Employee Morale in Higher Education. *African Journal of Business Management*, 5(3), 762-776.
- Nwasike J. (1991). Increasing Productivity in the Nigerian Public Sector. Proceeding of a National Conf. on Productivity Abuja.
- Osabiya, B. J. (2015). The Effect of Employees' Motivation on Organizational Performance. *Journal of Public Administration and Policy Research*, 7(4), 62-75. <https://doi.org/10.5897/JPAPR2014.0300>
- Ozturk, E. O. (2012). Contemporary Motivation Theories in Educational Psychology and Language Learning: An overview. *The International Journal of Social Sciences*, Vol.3, No.1 pp 33-46.
- Rao, V. S. P. (2007). Human Resource Management. 2nd Ed. D.P. House, New Delhi. P203.
- Ryckman, R. M., Thornton, B., & Gold, J. A. (2009). Assessing Competition Avoidance as a Basic Personality Dimension. *The Journal of Psychology*, 143(2), 175-192. <https://doi.org/10.3200/JRLP.143.2.175-192>
- Steers, R. M., & Porter, L. W. (1983). Motivation and Work Behavior. 3rd Ed. New York: McGraw-Hill.
- Stephen, I. D. (2014). Using Motivating Theories to Enhance Productivity in Cement Manufacturing Companies in Nigeria: An Overview. *The International Journal of Social Sciences*, 20(1).
- Uma, S., (2003). Research Method for Business: A Skill Building Approach. 7th Edition, John Wiley and Sons, New York; 2003.
- Zeynep, T., & Robert, S. H. (2008). Managing the Impact of Employee Turnover on Performance: The Role of Process Conformance. *Organization Science*, 19(1), 56-68. <https://doi.org/10.1287/orsc.1070.0294>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Managing DMOs through Storytelling: A Model Proposal for Network and Value Co-creation in Tourism

Silvia Gravili¹, Pierfelice Rosato² & Antonio Iazzi²

¹Marketing Department, Troisi ricerche srl, Bari, Italy

²Department of Management and Economics, University of Salento, Lecce, Italy

Correspondence: Silvia Gravili, Marketing department, Troisi Ricerche srl, via de Rossi 57, Bari, Italy.

Received: April 20, 2017

Accepted: May 31, 2017

Online Published: June 7, 2017

doi:10.5539/ibr.v10n7p8

URL: <https://doi.org/10.5539/ibr.v10n7p8>

Abstract

The rise of new business models based on shared content and experience has required tourism destinations to adopt appropriate tools for the construction and promotion of their identity based on sociality, emotions, interaction and connectivity. The aim of this paper is to analyse actors, actions, processes and relations related to the adoption and development of storytelling practices in tourism destination management, analysing critical aspects linked to the generation of content and the narration of territories. As an attempt to understand the processes of innovation and value-creation underlying the development of storytelling in destination management (“destination telling”), the Service Dominant Logic, and the actor-network theory interpretative framework have been adopted. The study was conducted following the qualitative methodology of multiple case studies. In view of the interviews and the analyses conducted, Destination Telling preconditions, contents, managerial criteria and outcomes have been identified, in reference to each of the three stages (“planning”, “narration” and “assessment”) the process has to be split. Finally, managerial implications for an involving construction and sharing of stories to happen have been examined and discussed.

Keywords: collaborative practices, destination management, destination marketing, DMO, network, storytelling, tourism destination, value co-creation

1. Introduction

In managerial literature, tourist destination is defined as a geographical space in which exists an «accumulation of tourist resources and attractions, infrastructure, equipment, service providers, other support sectors and administrative organizations, whose integrated and coordinated activities provide customers with the experiences they expect» (Wang, 2011, p. 2), that is to say: an appealing sum of products, services and activities variously arranged in a geographically defined space but recognised as a unified offer by the tourist’s experience of it (Franch, 2010).

In these terms, destination management strategies are called to predict the development of “offers” or, better, “value propositions” that create a total experience for the customer. In fact, the transformation of *product economies* first into *service economies* and then into *experience economies* (Vargo & Lush, 2014), the characterisation of the contemporary era as a *data-intensive age* (Gerlitz & Helmond, 2013) and the rise of the mobile channel, with personalization and peer-to-peer travel services being the main disruptors (Lucarelli & Olof Berg, 2011), are all made such an experience to be actively constructed by each tourist, through personalized interaction.

In more detail, a new tourist can be identified, who creates value not only for him/herself and the company, but also for other customers as he/she often shares his/her travel experience in online social networks (Shaw, Bailey, & Williams, 2011). This, in turn, has marked the rise of business models based on continuously reconfigurable collaborative relationships and networking, leading to a significant reassessment of the role of the brand from a question of “image” to one of “relationships”, from “control” to “collaboration”. Namely, from a “*lovemark*” (Roberts, 2005), understood as “something that is loved” in that it is the expression of precise inspirational values, the brand has evolved into a “*wikibrand*” (Moffit & Dover, 2012), i.e. “something in which one participates”, an incontrovertible sign of interaction and integration with the consumer, able to bring benefits in terms of distinctiveness, profitability, and the ability to develop innovation and make people live memorable

experiences (Prebensen, Chen, & Uysal, 2014).

When viewing tourism in this light, customers become co-producers in the tourism experience as they are not merely interested in buying the product but also buying the stories behind the product (Woodside & Megehee, 2010).

In this regard, it is of interest to observe that McCabe and Foster (2006, p. 196) recognised that «tourist experiences are essentially ‘stories’ about events, places and people», while Chronis (2012, p. 445) noted that a story «transforms an otherwise indifferent space into [an] attractive tourist destination».

In order to reach this goal, and to face the ever-increasing competitive pressures, such a destination is expected to be constantly active and resilient; smarter in defining a well thought-out wikibranding strategy; more open and connected with its stakeholders; and more skilful in drawing on its brand assets as a lever for creating value and winning loyalty by means of participation and engagement. Hence there is a need to use creativity and experiences as a source of differentiation (Tan, Kung, & Luh, 2013), and to promote tourism destinations’ identity by such means as sociality, emotions, interaction and connectivity (Russo Spina, Colurcio, & Melia, 2013).

Today, Destination Management Organizations (DMOs) are increasingly adopting storytelling – or «the interactive art of using words and actions to reveal the elements and images of a story while encouraging the listener’s imagination», according to the definition by the National Storytelling Network (2011) – in order to involve, entertain and activate the participation of actual and potential visitors. However, to the authors’ knowledge, the managerial literature has considered storytelling only by emphasising its connection to product development (Von Hippel, 1986), the provision of memorable experiences (Mossberg, 2008; Martin & Woodside, 2011; Campos, Mendes, Oom do Valle, & Scott, 2015), which also serves to build customer satisfaction (Prebensen, Kim, & Uysal, 2016) and customer loyalty (Lichrou, O’Malley, & Patterson, 2008).

The processes and ways in which storytelling contributes to the development of a tourism destination are still poorly studied, as are the effects of the joint construction of a story in terms of increasing the capacity of a destination’s stakeholders for cooperation. As a result, the issue of modelling storytelling in destination management and linking it to the marketing outcomes remains a challenge for researchers.

Based on such considerations, this paper aims to: a) study the key factors and practices of storytelling in destination management, analysing critical aspects relating to content generation and place narration by both managers and users; b) test the hypothesis that the application of storytelling to destination management activities (what we refer to here as “*destination telling*”) could represent a fundamental managerial tool not only outside but also within the destination itself, as it supports the construction of the destination identity and enhances the stakeholders’ capacity for cooperation; c) model destination telling managerial practices, by identifying the actors, actions, processes and relations linked to the generation of content and the narration of territories by both managers and users. To this end, the value co-creation perspective (Prahalad & Ramaswamy, 2004; Cabiddu, Lui, & Piccoli, 2013; Roseira & Brito, 2014) and Service-Dominant Logic (Lusch & Vargo, 2006; Grönroos, 2008; Polese & Di Nauta, 2013) are adopted, and combined with the actor-network theory interpretative framework (Latour, 2005; Lugosi & Erdélyi, 2009; Van der Duim, Ren, & Jóhannesson, 2013).

2. Managing Stories and Networks for Value Co-creation

Ever since the studies of “organizational sagas” (Clark, 1972) and “epic myths” (Mitroff & Kilmann, 1975), narration has been considered one of the oldest and most effective devices for the creation, interpretation and consolidation of identity, used by companies and individuals to confer sense and meaning on one’s experience (Barthes, 1964). Indeed, on the one hand, by means of clarification, narration makes the participants’ knowledge and experiences explicit (Snowden, 2001) and sets out common interpretative coordinates for events, choices and behaviours, which in turn construct new forms of organisational knowledge that are able to orient people’s acts. On the other hand, by means of disseminating knowledge, narration influences the development of networks (Cross & Parker, 2004), subjecting the organization’s relational capital to an analytical process that allows the identification of the most successful managerial practices (Mossberg, Therkelsen, Huijbens, Björk, & Olssen, 2010), guarding against the threat of oblivion (Bruner, 1991).

Developing as multi-authorial and de-institutionalised forms of communication that are able to integrate cognitive and emotional elements (Chronis, 2012), when applied to the business context (i.e. the DMO), stories come to life in an iterative “dialogic loop” (Kent & Taylor, 1998), in which the public of reference are not mere recipients in a one-directional process, but actors that participate in the construction of (*destination*) *conversations*, which are designed to both identify and represent the culture, values, habits and traditions of the

community living in it (i.e. the destination), in a symbolic but original way (Lugosi, 2014). That is to say, to stimulate the development of a representative, distinctive and attractive identity (Woodside, Sood, & Miller, 2008) that can also be perceived as “authentic” by potential customers (i.e. visitors) (Wang, 1999). This has the purpose of:

- a) capturing the attention, conferring a distinctive personality on the organization (i.e. the destination) brand (Crouch & Ritchie, 1999), while making it highly desirable and memorable (Chronis, 2005);
- b) involving the participants, in that they immerse the narrators in the stories of their characters, with whom they identify (Tussyadiah, Park, & Fesenmaier, 2011);
- c) prompting the readers to act (i.e. to visit) on their own initiative, enabling a highly personalised experience of the product (i.e. the destination offer) (Suvantola, 2002);
- d) favouring the development of emotional “loyalty” connections that can act positively on the consumer’s memory (McGregor & Holmes, 1999) and on his/her ways of learning, by stimulating expectations with regard to the outcome of the story (Denning, 2006);
- e) making customers “delight” in and achieve deeply satisfying levels of sense making (Pera, 2014).

In these terms, the participatory narration of experiences while living the destination (the proper trigger of storytelling) can be analysed through the *collaborative innovation* perspective, which has been widely discussed by both marketing and managerial literature (Franke, von Hippel, & Schreier, 2006; Fuller, Jawecki, & Muhlbacher, 2007). A perspective where the distinction between “producers” or “active players” and “consumers” or “passive audiences” disappears, as value is not only created by the seller who delivers it to the buyer.

Rather, in most cases it is co-created by both parties through collaborative processes that involve the access to mutual resources and capabilities as well the coordination of such resources and capabilities (Grönroos, 2011; Day, Fawcett, Fawcett, & Magnan, 2013). A perspective in which all the actors who participate in the process of value creation (companies, employees, consumers, social partners and all other parties with an interest in sharing operationally available resources each according to their specificities and needs) are no longer seen as mere suppliers of goods and services, but as systems, constellations, or networks of resources and expertise working together, with a view to mutual exchange and benefit. Then, the act of narrating, or reading, or sharing stories makes the consumer (i.e., the visitor) the key player in the value-creation process (Payne, Storbacka, & Frow, 2008), while (DMO) managers have the task to support it and foster with adequate services, by leveraging the deep knowledge of the product/service (i.e. the destination) while in use by the consumer and, therefore, by leveraging his experience, history, and location.

As tourism destinations are characterized by multi-scalar and multi-level stakeholder networks - including destination management organizations (DMOs), public administration at municipality or regional level, public and private attractions, various types of tourism-related service providers and actual storytellers, all of them with different interests and agendas - managing such inter-organizational relations has proven crucial (Therkelsen & Halkier, 2010).

However, in order to reach this goal, participation is a necessary but not sufficient condition: as highlighted by the Service Dominant Logic (Vargo & Lusch, 2004), value is the result of both “operant” and “operand” resources, which have to be combined through commitment, integration, and mutual communication, in a holistic perspective.

It arises the need to ensure the broadest possible consensus and to make stakeholders acknowledge the legitimacy of the destination management’s actions (Wang, 2011), which in turn leads to new opportunities and a greater level of effectiveness, which would not have been achieved by the stakeholders acting alone (Bramwell & Lane, 2000). In detail, stories create conversations that highlight, by means of metaphor, the destination’s tangible and intangible assets (Iazzi, Rosato, & Gravili, 2015), making it possible to find innovative managerial solutions and combine profitability with sustainability (Carrubbo, Moretta Tartaglione, Di Nauta, & Bilotta, 2012), understood as the safeguard of the cultural heritage and values of the destination and its residents (Ryan, 2002; Alkier, Milojica, & Roblek, 2015).

In fact, storytelling enables the destination’s stakeholders and residents to rethink their experiences and actions, reconstructing their meaning to share the same vision and values, and highlighting their potential for development in accordance with a common interpretative approach (Rasmussen, 2005). This in turn generates trust and commitment (Barone & Fontana, 2005), encourages cooperation (Herskovitz & Crystal, 2010), makes potential visitors group the lived or liveable experiences into themes (Pine & Gilmore, 1998), and creates a tourist offer that will be perceived as a rich but unified range of products/services (Bramwell & Lane, 2000),

eliminating any distortions and/or discrepancies (Hsu, Dehuang, & Woodside, 2009).

In this perspective, the application of storytelling to destination management (what we refer to as “destination telling” – DT) consists of seeking and fostering social and emotional interaction and connectivity (Papadatos, 2006), which leverage participatory processes even from a Service-Dominant perspective and makes activities such as collaborative projecting and “content communitying” the preferred channels for the construction of a common ethos, able to spread rapidly through different social circles.

3. Methodology

As an attempt to understand the processes of innovation and value-creation underlying the development of storytelling in destination management, as well as to analyse the actors, actions, processes and relations linked to the generation of content and the narration of territories by both managers and users, the actor-network theory interpretative framework (Latour, 2005; Lugosi & Erdélyi, 2009; Van der Duim, Ren, & Jóhannesson, 2013) has been adopted.

The conceptual framework and other extended issues relating to DT have been developed based on previous theory as well as multiple interviews with destination staff, business representatives and (online) community members at four destinations in Italy, in accordance with a multiple case study qualitative approach (Yin, 2013).

To this end, after a preliminary literature review, an on-desk survey of all (20) Italian DMOs was undertaken, looking at cases of DT practices. This survey revealed that not all the (12) monitored projects could be considered suitable exemplars; then, each of them was evaluated in detail, specifically assessing:

- a) the degree of innovation (Novelli, Schmitz, & Spencer, 2006; Aquilani & Abbate, 2015);
- b) the ability to highlight the potential of tools based on Web 3.0 (Ferrari, 2015);
- c) the ability to develop long-term horizontal participatory processes (Bailey & Koney, 2000; Saxena, 2005);
- d) the ability to integrate on- and off-line promotional activities (Fog, Budtz, Munch, & Blanchette, 2011).

The performance of each criteria was measured on a 5-point Likert scale (1 = very poor, 5 = very good), in order to compare DT processes' effectiveness against competitors.

However, it would be problematic if the performance results were aggregated and used directly as a measure of DT effectiveness, because variance exists in the degree of complexity associated with them. As a solution, the degree of complexity was rated, based on managerial literature, on a 5-point Likert scale (1 = not complex at all, 5 = very complex), in order that the more complex criteria applications to be weighted more compared with their less complex counterparts. Then, the effectiveness score in each criteria was finally calculated by using the product of the rated value of performance and complexity (i.e. effectiveness = performance × complexity), and a rank was obtained.

With this model, if for instance one DT project performs fairly well only in with complex criteria, its overall effectiveness score should not be very high from the perspectives of value co-creation processes or available (operand and operant) resources allocation effectiveness. In comparison, project implementing more complex applications should obtain high effectiveness scores. In detail, the latter were obtained from the following regions: Emilia Romagna, Puglia, Umbria and Friuli Venezia Giulia.

A series of in-depth interviews (about two hours each) with different managers of the DMOs promoting the specific projects of interest, as well as with among-industry representatives and both online and offline community members were conducted, in order to identify relationships, functions and challenges arising from the development of DT projects, as well as to test the hypothesis that the application of storytelling to destination management activities could represent a managerial tool not only outside but also within the destination itself. The interviews were transcribed, codified, and analysed. Data saturation (Glaser, 2002) was achieved after conducting in-depth interviews with 7 DMO managers and 30 among-industry representatives, online and offline community members over a four-week period (see Table 1).

Table 1. Sample description

	Stakeholder Sector	Position	Age
1	Regional DMO	Director	45
2	Regional DMO	Director	40
3	Regional DMO	Social Media Manager	30
4	Regional DMO	Community Manager	32
5	Regional DMO	Social Media Manager	35
6	Regional DMO	Social Media Manager	30
7	Regional DMO	Director	43
8	Accommodation (hotel)	Social Media Manager	38
9	Accommodation (holiday farm)	Social Media Manager	33
10	Accommodation (hotel)	Owner	36
11	Accommodation (holiday farm)	Director	31
12	Accommodation (hotel)	Director	50
13	Accommodation (Convention service)	Owner	53
14	Accommodation(b&b)	Social Media Manager	51
15	Incoming	Director	48
16	Incoming	Owner	46
17	Incoming	Owner	49
18	Attractions	Director	46
19	Attractions	Director	41
20	Attractions	Communication Manager	39
21	Arts and culture (archeological park)	Director	52
22	Arts and culture (museum)	Social Media Manager	43
23	Arts and culture (museum)	Director	57
24	Arts and culture (museum)	Content Manager	35
25	Events organization	Artistic Director	44
26	Events organization	Social Media Manager	33
27	Events organization	Owner	49
28	Events organization	Social Media Manager	29
29	Non-profit	Director	37
30	Non-profit	Social Media Manager	33
31	Retail	Owner	61
32	Retail	Director	54
33	Travel blogger		37
34	Travel blogger		31
35	Travel writer		43
36	Press agent		56
37	Travel Journalist		44

Then, a conceptual framework of Destination Telling was drawn up, in order to make explicit the contribution of storytelling to the broader process of tourism destination management. In detail, the theoretical model was defined by three major constructs (besides an analysis of DT contents in themselves), with the emphasis on the nature and dynamics of DT marketing. These include: (i) the *activation* construct, which refers to those elements without which the narrative, social and environmental conditions for stories to flow could not be delineated; (ii) the *stage* construct, which captures the actors, dynamics and infrastructure of DT processes; and (iii) the *outcome* construct, which describes the consequences of DT activities.

Finally, managerial implications for an involving construction and sharing of stories to happen were examined and discussed.

This ensured consistency with the objectives of the study and provided substantial clues to the nature of the phenomena, even with reference to their ground, accuracy, and generalization (Eisenhardt & Graebner, 2007).

4. Destination Telling: A Conceptual Framework

The results of the interviews conducted show that DT, as a form of narration, is characterised by multiplicity and interactivity, which both involve all the key elements of textuality – themes, characters, tools and resources - and by a high degree of dynamism and inclusivity in the creation and use of what is narrated, which always makes “the teller” and “the reader” switch their roles, in a deeply empathic loop.

This is achieved via the development of a collaborative process that is both broad and deep, informal and among equals, but does, however, require the presence of an “authority” that guides it from a long-term perspective. The absence of such an authority may result in a more limited willingness among narrators and readers to engage in dialogue – an essential condition if narration is to succeed.

In this regard, DMO management is called upon to act as catalyst and facilitator: on the one hand, it has to gather

the demands of the destination’s stakeholders (i.e. Operators, Residents, and Public Institutions), activating participatory processes founded on listening; on the other, it has to create platforms for the involvement of the stories’ potential “readers”, as well as for the management of relations and feedback. And it is precisely the development of these platforms, characterised by a high level of transmediality (Jenkins, 2006), which enables the management to encourage participation in the narrative process, to activate dialogue among various authors and readers, and thereby to participate itself in the narration as a proper actant (Figure 1).

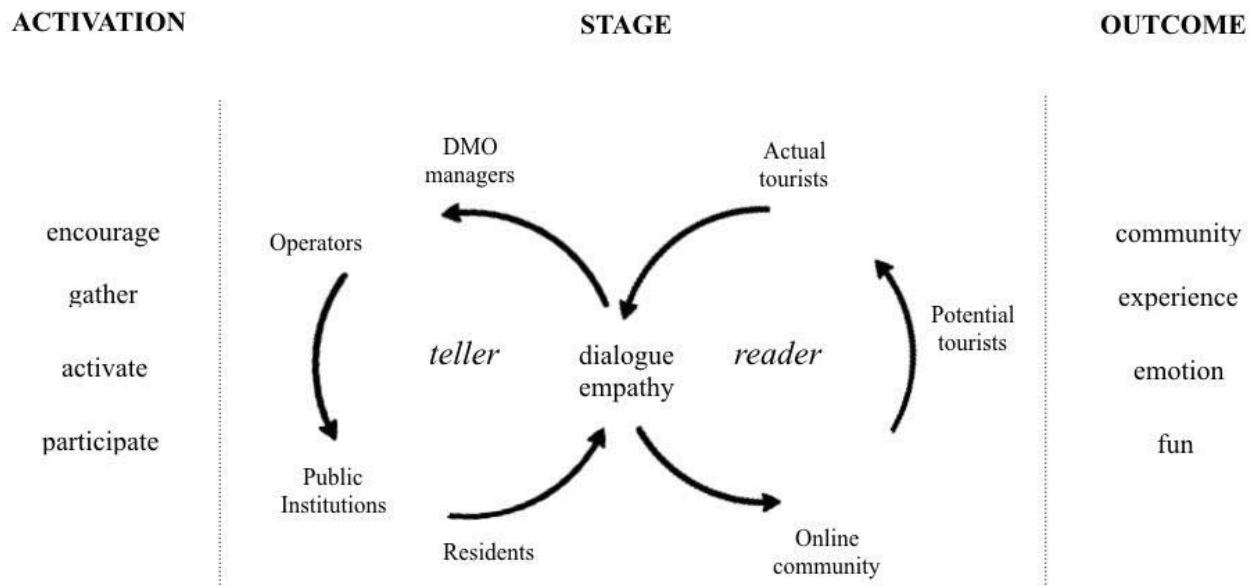


Figure 1. Destination telling dialoguing loop: actors and relations

Indeed, DT aims at the construction, around the destination, of an *ecosystem of meaning*, where each subject involved in the shared narration of content and services – a narration that, as a matter of fact, acts as a proper form of planning – suggests a possible way of experiencing the destination itself, potentially exploitable in terms of promotion and marketing.

Both DMO managers and community members agree that the process that leads to the construction of such an ecosystem consists of three essential stages (planning, narration and assessment of results) and it cannot begin without first meeting certain fundamental requirements, including:

- a) the adoption of an attitude of honesty and respect for the ideas thus gathered (an attitude which is strongly required by online community tellers and readers), recognising the creative contribution of each of the participants in the narration, which starts with the realisation that they are the ones who confer rhetorical force on the story, in that they infuse their personal stories, motivations and choices.
- b) the creation of empathy, which allows the management of the destination to draw on the storytellers’ collective intelligence, with the aim of generating innovation, providing increasingly memorable experiences and thereby maintaining the competitiveness of the destination itself (Tung & Ritchie, 2011).

During the planning phase, the objectives of the storytelling activity and the theme of the story to be told are identified, the narrative framework (e.g. characters, media, timing, literary genres, etc.) is set (Note 1), strategies to attract and maintain interest are drawn up (this, because of the secondary role played by incentives of an economic nature), the *servicescape* is established (Booms & Bitner, 1981), and the key players who are able to activate the growth – both sequential and intertwined – of the narrative units are identified. Destination managers do this by selecting, on the basis of the destination’s resources, the most interesting ideas to propose, with the aim of suggesting, during the narration phase, new points of view and/or relations between characters, thereby prompting the storytellers to deploy special narrative effects that can draw the interest of readers and induce them to keep reading. It is via this growth that ideas proposed by some users are taken up and developed by others, making use of the pleasure that people feel when cultivating their own interests and transmitting to others the results of their intuitions.

Listening carefully to the passions, interests and needs of current and potential consumers is also useful, from DMO managers’ and business operators’ perspectives, for identifying first and foremost the *conditions of*

credibility of the narration and, subsequently, the narrative cores that are most compelling for the public. It is on these that the narrated stories will be developed by means of a series of touch points that can positively influence the perceptions, actions and relations between storytellers.

However, in order for this to happen, the “authority” that makes the narration flow from a long-term perspective needs to be aware of the bidirectional, multi-modal, modular, authentic and non-extemporaneous nature of DT, as properly managerial criteria.

- *Bidirectionality* refers to the situation in which the destination manager and the tourist (current and/or potential) continuously exchange the roles of reader and (co)author, sender and recipient of the message.
- *Multimodality* is the case in which each user, like a modern *bricoleur* (Levi-Strauss, 1964), can – at any time, on the basis of his or her specific needs and interests – recreate the touch points on which the narration is based, and can thereby experience the destination’s resources in a highly-personalised way. It is therefore not a question of a merely “additive” activity or one that affects only the narrative forms and structures, but of a different system of signifying that is able to make full use of the transmedial dimension via which the narration develops, and to create narrative sub-plots, designed for particular niches of consumers/readers.
- *Modularity* is an expression of the shift away from the canonical scheme, which is linear and mono-authorial. In contrast, with modular narration, each story takes shape as the result of a broader sequence of stories. As the narration proceeds, the individual tales of the users are configured as separate objects that can also be selections, adapted and combined to meet the need for a personalised aesthetic experience.

This enables us to better understand the notion of *authenticity*, as the narrated stories construct tools for the effective representation of the self (Kim & Jamal, 2007). This is also shown by the fact that the narrators rarely use pseudonyms, choosing rather to appear in the stories in which they are characters with their own names. In this sense, participation in the narration is «easily at hand and simple to use» [Lundby (2008), p. 4], because it draws directly from one’s own personal experience; the act of narrating one’s lived experiences thus becomes one of the preferred ways of attributing meaning to a mass of available information, as well as a way of constructing – fulfilling from the recreational point of view – a universe of meanings that are shared by the members of the community, which is then defined precisely in these terms.

However, DMO managers and operators agree that the effectiveness of this activity is closely dependent on careful planning (hence its *non-extemporaneous nature*), which is also necessary in order to reduce the risks arising from the redistribution, in accordance with the principles of democratic empowerment, of processes that were once the exclusive prerogative of destination management, which could then lead to the loss of full control over the destination’s identity.

The actual launch of the narration enables the content of the six Ws (D’Autilia, 2013) – Who, What, Where, When, Why and While – to be made explicit, so as to amuse and intrigue narrator and reader alike, and above all to make them feel emotions by deploying the following strategies identified by Fontana (2011):

- *Penetration*, understood as the ability of the narration to enter the readers’ lives;
- *Multiplicity*, i.e. the plurality of communicative channels and media on which the narration is provided;
- *Construction of a world* that is able to become an integral part of the “real” one;
- *Extractability*, understood as allowing the reader, via the story and its characters, to identify new lines of development of his or her own identity;
- *Seriality*, which means that the segments of stories that constitute the main narration can be opened up, closed and reopened, not only within the same medium but also between different media;
- *Subjectivity*, i.e. inducing the reader to see the story through the eyes of a character, in order to obtain a greater identification with what is being narrated;
- *Performance*, understood as the activation of a community around the narrated object.

Thanks to the immediacy, apparent simplicity and originality of the story, the words, images and sounds through which the narration unfolds thus become the expression of the culture, ethics and values – in addition to the past relational investments – of the destination’s internal (typically: the DMO, the public and private operators, the community of residents) and external (the current and potential tourists, as well as the communities of users already active online that often act as “catalysts”) stakeholders.

It is precisely these aspects that makes it necessary to conduct a systematic and neutral survey, in order to determine the degree to which the story has actually involved the users and supported the DMO in the pursuance of the desired goals. So, the assessment phase is based on such activities as the analysis of conversations, ethnographic observations, mapping of social graphs and influencers, and measurement of engagement, whose results will then be shared among the destination's internal stakeholders.

For these reasons, the monitoring must be conducted by the DMO in compliance with the principles of *transparency* (seen in the clarity of the criteria and the tools used to verify effectiveness and efficiency in the pursuance of the desired benefits), *meaningfulness* (i.e. the relevance to strategic decision-making of the parameters used for assessment), *reliability* (manifested in the adoption of clear, objective and verifiable assessment parameters), *circularity* (i.e. dissemination of the results of monitoring to all the actors of the DMO) and the *continuity* (or constant periodicity) of the surveys.

Therefore, in view of the interviews and the analyses conducted, Destination Telling can be systematized as described in Table 2. In detail, preconditions, contents, managerial criteria and outcomes are identified, in reference to each of the three stages ("planning", "narration" and "assessment") the process has to be split.

Table 2. An integrative framework for destination telling management

	STAGES		
	<i>Planning</i>	<i>Narration</i>	<i>Assessment</i>
PRECONDITIONS	<ul style="list-style-type: none"> • Honesty • Respect • Empathy 	<ul style="list-style-type: none"> • Immediacy • Simplicity • Originality 	<ul style="list-style-type: none"> • Neutrality • Systematicness • Willingness to share
CONTENTS	<ul style="list-style-type: none"> • Objectives • Resources • Key-players • Touch point • Conditions of credibility 	<ul style="list-style-type: none"> • Who • What • Where • When • Why • While 	<ul style="list-style-type: none"> • Conversations • Social graphs • Influencers • Engagement
MANAGERIAL CRITERIA	<ul style="list-style-type: none"> • Bidirectionality • Multimodality • Modularity • Authenticity • Non-extemporaneity 	<ul style="list-style-type: none"> • Penetration • Multiplicity • Construction of a world • Extractability • Seriality • Subjectivity • Performance 	<ul style="list-style-type: none"> • Transparency • Meaningfulness • Reliability • Circularity • Continuity
OUTCOMES	<ul style="list-style-type: none"> • Narrative framework • Engagement strategy • Servicescape 	<ul style="list-style-type: none"> • Stories • Common values • Shared ethos 	<ul style="list-style-type: none"> • Service experience • Visibility • Destination image

In these terms, and in order to strengthen destination identity while promoting it significantly to a wider audience, DMOs should focus their storytelling strategies on the integrative framework and not on single encounters, tailoring marketing actions to specific stages in a DT management process.

5. Managerial Implications

We have described DT as a multi-authorial process that, by creating a proper ecosystem of meaning, can provide the DMO with elements of knowledge useful for consolidating the value of the destination brand from the perspective of co-creation. In fact, if stories get «the brand to work coherently and consistently because [...] pull together pieces of a picture into a more emotional and meaningful whole» [Douglas (2009), p. 23], this is particularly true when we consider that a tourism destination is a complex entity driven not just by competitive dynamics with regard to the world outside it (the destination vs. its competitors), but also by those practices which, in a context of co-opetition, develop within it (Wang & Fesenmaier, 2007).

Therefore, it is increasingly necessary to develop managerial actions based on the understanding of the informal, collaborative and network dimensions underlying the narrative process, an additional aim of which is to configure participatory models of governance that are based on flexible structures, in which information flows easily, in a framework of continuous learning. This, by transversally applying, in each of the essential stages (*planning*, *narration* and *assessment*) the construction and sharing of the stories, consists of a proper storytelling management, which may be understood in three ways:

- *interaction management*, here defined as the ability to develop horizontal and collaborative processes among all subjects potentially involved in the narrative project;

- *content management*, understood as the ability to make the best use of the storytelling skills of the narrators, with the aim of increasing the emotional link with the destination itself by making the stories about the destination attractive and compelling;
- *crisis management*, seen in the ability to respond in a personal, rapid and effective way to all claims and/or comments that might damage the destination’s brand value, in order to neutralise any negative word-of-mouth publicity and prevent such judgements being repeated in the future.

As observed, DT can act as an innovative, relevant and effective management tool not only in reference with the relationship between destination as a whole and its external stakeholders, but also in defining relationships among all the different kind of subject working within it.

In particular, when appropriately governed by the DMO, these practices allow to enhance the contribution of the various stakeholders in enhancing destination identity and, in this way, in strengthening the sense of belonging of each person involved in the process of destination development.

Indeed, by emphasising the elements of interactivity, involvement and participation implicit in narrative practices, it is possible to develop long-term inclusive and collaborative behaviours that are able to increase the brand’s online recognisability, fuelling viral word-of-mouth phenomena, as reflected by the interviews conducted. From the content of these stories it is also possible for the management to draw more specific indications concerning the needs, desires, expectations and experiences of their targets of reference (both internal and external), which they can make use of when it comes to the construction of the integrated tourism product, enhancing the distinctiveness and competitiveness of the destination.

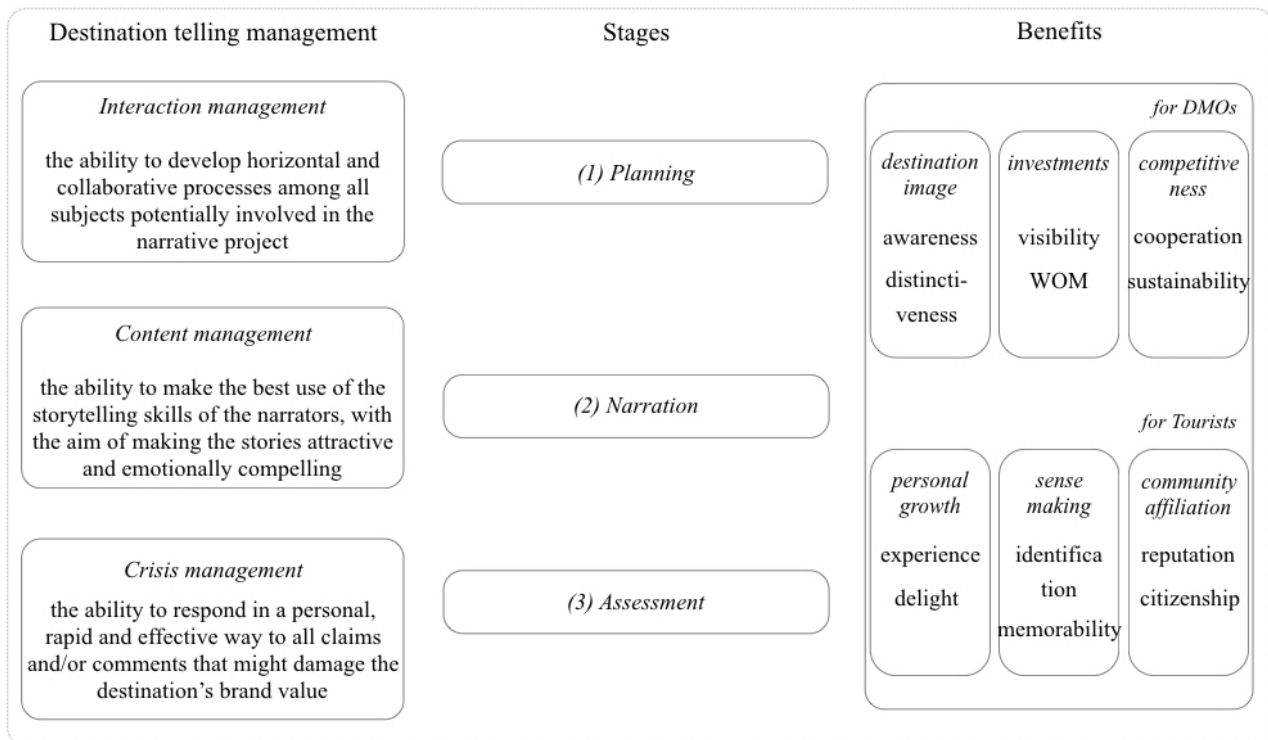


Figure 2. Destination telling management, stages and benefits

In this sense, the shared construction of stories favours the development of lasting relationships, which can boost operational efficiency in relations with stakeholders, even at the intersectoral level. In fact, the analysis conducted clearly shows that one of the elements that most strongly influences the contribution of DT to a broader process of destination development is precisely the nature of the relations that are established between the public and private actors operating within it.

In addition, stories provide a real framework within which to aggregate the entire destination offer, guaranteeing comprehensibility, uniformity and consistency to all the promotional and marketing activities developed by the various subjects operating in the DMO. In these terms, while one of the main objectives of the adoption of DT practices is to provide a more intense and richer user experience of the destination, it is also true that the shared development of stories helps to perpetuate and safeguard its cultural and environmental heritage.

Finally, it must not be forgotten that today's always-connected travellers seek information and assistance not only before, but even during their trips. This results in a shift of focus for tourism operators from the time of the booking to that of the travel and staying, in order to become mobile travel assistants. Then, through DT DMOs can offer consumers versatile and culturally appropriate experiences, both online and offline, not only by showing the multitude of travel options, but also by offering – through stories – trusted reviews and accurate local information.

In these terms, DT acts as a value co-creation catalyst at all stages of the buying process, including post-purchase, which supports both the DMO and storyteller in the pursuance of the desired benefits. On the basis of the data collected, with regard to destination, such benefits can be assigned to three macro-categories: the construction or consolidation of the destination's image, with due consideration of de-seasonalisation; its visibility, given the reduced investment in communication (compared to the budget necessary for a traditional media campaign); and the construction of a user service/experience that is increasingly fulfilling and memorable. On the other hand, through participation in the narration process, customers are supported in their personal growth, in achieving deeply satisfying levels of sense making, and in gaining reputation and credibility in community affiliation, by feeling like proper citizens (Figure 2).

6. Conclusions

The analyses conducted allowed to depict a conceptual framework of Destination Telling where subjects, relations, and operational logic are identified, in order to ensure effectiveness and efficiency in its application in terms of destination management.

In detail, they have shown that the application of these tools can become useful to destination management practices both in the relationship with external stakeholders, and in the key of innovative communication and relationships with internal stakeholders, as they strengthen those aspects of destination identity building and promotion which are at the base of the whole enhancement processes.

The adoption of storytelling in the overall destination management plan will on the one hand support the marketing information system, making it possible to obtain useful information on the development of a distinctive destination identity in real time, as well as identify and satisfy the needs of current and potential tourists by providing memorable experiences. On the other hand, it will help to consolidate collaborative practices among the stakeholders of the DMO, as it is a tool for integrating the various experiences of the actors in the destination, which works thanks to the sharing of interpretative schemes that are able to positively influence commitment, climate and motivation and, consequently, the level of service offered.

This paper represents a fresh attempt at expanding the framework on destination marketing and management. Conventional research usually focuses on developing tools and techniques to understand and approach consumer markets, then places the emphasis on the external environments for tourism destinations. However, in the tourism context, the destination products are produced in such a way that different elements are assembled at the time of consumption in order to provide the total customer experience, then require a value-creation network based on simultaneous coordination and cooperation among various (both operand and operant) stakeholders, who have to work together harmoniously in order to achieve a common goal. As such, successful DT practices entail a profound understanding of the critical aspects in the collaboration process, which is a possible future research perspective in order to improve the model developed here.

Moreover, limitations lie mainly in the risk of restricting the observation to certain experiences of storytelling which, while partly justified by the exploratory nature of the research, reduce its generalisation. It is therefore expected that the results of the interviews and, more importantly, the frameworks proposed, will broaden their informational basis, through a study of the structural data pertaining to the network of interactions that stories generate, which would also make reference to consumer perceptions, the results of individual projects and the consequences of storytelling practices for destination performance.

References

- Alkier, R., Milojsica, V., & Roblek, V. (2015). A holistic framework for the development of a sustainable touristic model. *International Journal of Markets and Business Systems*, 1(4), 366-387. <https://doi.org/10.1504/IJMABS.2015.074213>
- Aquilani, B., & Abbate, T. (2015). Open innovation through customers: open innovation intermediary services supporting firms. An exploratory study. *International Journal of Markets and Business Systems*, 1(3), 244-259. <https://doi.org/10.1504/IJMABS.2015.073533>
- Bailey, D., & Koney, K. M. (2000). *Strategic Alliances Among Health and Human Services Organizations*.

- London: Sage Publications. <https://doi.org/10.4135/9781483328546>
- Barone, M., & Fontana, A. (2005). *Prospettive per la comunicazione interna e il benessere organizzativo. Appartenere, integrarsi e comunicare nell'organizzazione che cambia*, Milano: Franco Angeli.
- Barthes, R. (1964). Rhetoric of the Image. *Communications*, 37-51.
- Booms, B. H., & Bitner, M. J. (1981). Marketing strategies and organization structures for service firms. *Marketing of Services*, 25(3), 47-52.
- Bramwell, B., & Lane, B. (Eds.) (2000). *Tourism collaboration and partnerships: Politics, practice and sustainability* (Vol. 2), Clevedon: Channel View Publications.
- Bruner, J. (1991). The narrative construction of reality. *Critical Inquiry*, 1-21. <https://doi.org/10.1086/448619>
- Cabiddu, F., Lui, T. W., & Piccoli, G. (2013). Managing value co-creation in the tourism industry. *Annals of Tourism Research*, 42, 86-107. <https://doi.org/10.1016/j.annals.2013.01.001>
- Campos, A. C., Júlio Mendes, J., Oom do Valle, P., & Scott, N. (2015): Co-creation of tourist experiences: a literature review. *Current Issues in Tourism*, 1-32. <https://doi.org/10.1080/13683500.2015.1081158>
- Carrubbo, L., Moretta, T. A., Di Nauta, P., & Bilotta, A. (2012). A service science view of a sustainable destination management. *China-USA Business Review*, 11(11), 1017-1035.
- Chronis, A. (2005). Co-constructing Heritage at the Gettysburg Storyscape. *Annals of Tourism Research*, 32(2), 386-406. <https://doi.org/10.1016/j.annals.2004.07.009>
- Chronis, A. (2012). Tourists as story-builders: Narrative construction at a heritage museum. *Journal of Travel & Tourism Marketing*, 29(5), 444-459. <https://doi.org/10.1080/10548408.2012.691395>
- Clark, B. R. (1972). The organizational saga in higher education. *Administrative Science Quarterly*, 17(2), 178-184. <https://doi.org/10.2307/2393952>
- Cross, R. L., & Parker, A. (2004). *The hidden power of social networks: Understanding how work really gets done in organizations*. Cambridge: Harvard Business Press.
- Crouch, G. I., & Ritchie, B. J. R. (1999). Tourism, competitiveness, and societal prosperity. *Journal of Business Research*, 44(3), 137-152. [https://doi.org/10.1016/S0148-2963\(97\)00196-3](https://doi.org/10.1016/S0148-2963(97)00196-3)
- D'Autilia, V. (2013). While. La sesta W del web journalism. *H-Ermes Journal of Communication*, 1(1), 155-172.
- Day, M., Fawcett, S., Fawcett, A., & Magnan, G. (2013). Trust and Relational Embeddedness: Exploring a Paradox of Trust Pattern Development in Key Supplier Relationships. *Industrial Marketing Management*, 42(2), 152-165. <https://doi.org/10.1016/j.indmarman.2012.12.004>
- Denning, S. (2006). Effective storytelling: strategic business narrative techniques. *Strategy & Leadership*, 34(1), 42-48. <https://doi.org/10.1108/10878570610637885>
- Douglas, K. (2009). The power of story. *Campaign*, 4, December.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and Challenges. *Academy of Management Review*, 50(1), 25-32. <https://doi.org/10.5465/AMJ.2007.24160888>
- Ferrari, S. (2015). Marketing Strategies in the Age of Web 3.0. In T. Issa, & P. Isaias, P. (Eds.), *Artificial Intelligence Technologies and the Evolution of Web 3* (pp. 307-324). Pennsylvania: Hershey.
- Fog, K., Budtz, C., Munch, P., & Blanchette, S. (2011) *Storytelling: Branding in practice*. Frederiksberg: Springer Science & Business Media.
- Fontana, A. (2011). Lo story-factor d'impresa. *L'impresa – Rivista italiana di management*, 52(7-8), 104-108.
- Franch, M. (2010) *Marketing delle destinazioni turistiche*. Milano: McGraw Hill.
- Franke, N., von Hippel, E., & Schreier, M. (2006). Finding Commercially Attractive User Innovations: A Test of Lead-User Theory. *Journal of Product Innovation Management*, 23(4), 301-315. <https://doi.org/10.1111/j.1540-5885.2006.00203.x>
- Fuller, J., Jawecki, G., & Muhlbacher, H. (2007). Innovation Creation by Online Basketball Communities. *Journal of Business Research*, 60(1), 60-71. <https://doi.org/10.1016/j.jbusres.2006.09.019>
- Gerlitz, C., & Helmond, A. (2013). The like economy: Social buttons and the data-intensive web. *New Media & Society*, 15(8), 1348-1365. <https://doi.org/10.1177/1461444812472322>
- Glaser, B. G. (2002), Conceptualization: on theory and theorizing using grounded theory. *International Journal*

- of Qualitative Methods*, 1(2), 1-31. <https://doi.org/10.1177/160940690200100203>
- Greimas, A. J. (1984) *Del senso II. Narratività, modalità, passioni*. Bologna: Bompiani.
- Grönroos, C. (2008). Service logic revisited: who creates value? And who co-creates?. *European Business Review*, 20(4), 298-314. <https://doi.org/10.1108/09555340810886585>
- Grönroos, C. (2011). A Service Perspective on Business Relationships: The Value Creation, Interaction and Marketing Interface. *Industrial Marketing Management*, 40(2), 240-247. <https://doi.org/10.1016/j.indmarman.2010.06.036>
- Herskovitz, S., & Crystal, M. (2010). The essential brand persona: storytelling and branding. *Journal of Business Strategy*, 31(3), 21-28. <https://doi.org/10.1108/02756661011036673>
- Hsu, S. Y., Dehuang, N., & Woodside, A. G. (2009). Storytelling research of consumers' self-reports of urban tourism experiences in China. *Journal of Business Research*, 62(12), 1223-1254. <https://doi.org/10.1016/j.jbusres.2008.11.006>
- Iazzi, A., Rosato, P., & Gravili, S. (2015). Competitive processes in tourism destinations: the role of intangible assets. *International Journal of Management Cases*, 17(4), 134-148.
- Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. New York: New York University Press.
- Kent, M. L., & Taylor, M. (1998). Building dialogic relationships through the World Wide Web. *Public Relations Review*, 24(3), 321-334. [https://doi.org/10.1016/S0363-8111\(99\)80143-X](https://doi.org/10.1016/S0363-8111(99)80143-X)
- Kim, H., & Jamal, T. (2007). Touristic quest for existential authenticity. *Annals of Tourism Research*, 34(1), 181-201. <https://doi.org/10.1016/j.annals.2006.07.009>
- Latour, B. (2005). *Reassembling the social: An introduction to actor-network-theory*, Oxford: Oxford University Press.
- Levi-Strauss, C. (1964). *Il pensiero selvaggio*. Milano: Il Saggiatore.
- Lichrou, M., O'Malley, L., & Patterson, M. (2008). Place-product or place-narrative(s)? Perspectives in the Marketing of Tourism Destinations. *Journal of Strategic Marketing*, 16(1), 27-39. <https://doi.org/10.1080/09652540701794429>
- Lucarelli, A., & Olof Berg, P. (2011). City branding: a state-of-the-art review of the research domain. *Journal of place management and development*, 4(1), 9-27. <https://doi.org/10.1108/17538331111117133>
- Lugosi, P. (2014). Mobilising identity and culture in experience co-creation and venue operation". *Tourism Management*, 40(February), 165-179. <https://doi.org/10.1016/j.tourman.2013.06.005>
- Lugosi, P., & Erdélyi, P. (2009). From marketing to market practices: assembling the ruin bars of Budapest. In A. Fyall, M. Kozak, L. Andreu, J. Gnoth, & S.S. Lebe (Eds.), *Marketing innovations for sustainable destinations: Operations, interactions, experiences* (pp. 299-310). Home Close, Oxford: Goodfellows Publishers.
- Lundby, K. (2008). *Digital storytelling, mediatized stories: Self-representations in new media*. Bern: Peter Lang Publishing.
- Lusch, R. F., & Vargo, S. L. (Eds.) (2006). *The Service-Dominant Logic of marketing*. Armonk, NY: M.E. Sharpe.
- Martin, D., & Woodside, A. G. (2011). Storytelling research on international visitors: Interpreting own experiences in Tokyo. *Qualitative Market Research: An International Journal*, 14(1), 27-54. <https://doi.org/10.1108/13522751111099319>
- McCabe, S., & Foster, C. (2006). The role and function of narrative in tourist interaction. *Journal of Tourism and Cultural Change*, 4(3), 194-215. <https://doi.org/10.2167/jtcc071.0>
- McGregor, I., & Holmes, J. G. (1999). How storytelling shapes memory and impressions of relationship events over time. *Journal of Personality and Social Psychology*, 76(3), 403-419. <https://doi.org/10.1037/0022-3514.76.3.403>
- Mitroff, I. I., & Kilmann, R. H. (1976). On organization stories: An approach to the design and analysis of organizations through myths and stories. In R.H. Kilmann, L.R. Poundy, & D.P. Slevin (Eds.). *The management of organization design* (Vol. 1, pp. 189-207). New York: North Holland.

- Moffit, S., & Dover, M. (2012). *Wiki brands. Reinventa il business nell'era della partecipazione*. Milano: Franco Angeli.
- Mossberg, L. (2008). Extraordinary Experiences through Storytelling, *Scandinavian Journal of Hospitality and Tourism*, 8(3), 195-210. <https://doi.org/10.1080/1502250802532443>
- Mossberg, L., Therkelsen, A., Huijbens, E. H., Björk, P., & Olssen, A. K. (2010) *Storytelling and destination development*. Oslo: Norden Nordic Innovation Centre.
- National Storytelling Network. (2011). *What is Storytelling?* Retrieved from <http://www.storynet.org/resources/whatisstorytelling.html>
- Novelli, M., Schmitz, B., & Spencer, T. (2006). Networks, clusters and innovation in tourism: A UK experience". *Tourism Management*, 27(6), 1141-1152. <https://doi.org/10.1016/j.tourman.2005.11.011>
- Papadatos, C. (2006). The art of storytelling: how loyalty marketers can build emotional connections to their brands. *Journal of Consumer Marketing*, 23(7), 382-384. <https://doi.org/10.1108/07363760610712902>
- Payne, A. F., Storbacka, K., & Frow, P. (2008), Managing the co-creation of value. *Journal of the Academic Marketing Science*, 36, 83-96. <https://doi.org/10.1007/s11747-007-0070-0>
- Pera, R. (2014). Empowering the new traveller: Storytelling as a co-creative behaviour in tourism. *Current Issues in Tourism*, 1-8.
- Pine, J., & Gilmore, J. H. (1998). Welcome to the experience economy. *Harvard Business Review*, 76(4), 97-107.
- Polese, F., & Di Nauta, P. (2013). A viable systems approach to relationship management in SD logic and service science. *Business Administration Review*, 73(2), 113-129.
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of interactive marketing*, 18(3), 5-14. <https://doi.org/10.1002/dir.20015>
- Prebensen, N. K., Chen, J. S., & Uysal, M. (2014). *Creating experience value in tourism*, Boston: Cabi. <https://doi.org/10.1079/9781780643489.0000>
- Prebensen, N. K., Kim, H., & Uysal, M. (2016). Cocreation as Moderator between the Experience Value and Satisfaction Relationship. *Journal of travel research*, 55(7), 934-945. <https://doi.org/10.1177/0047287515583359>
- Rasmussen, L. B. (2005). *The narrative aspect of scenario building. How story telling may give people a memory of the future*, New York, NY: Springer-Verlag.
- Roberts, K. (2005). *Lovemarks. Il futuro oltre i brands*. Milano: Mondadori.
- Roseira, C., & Brito, C. (2014). Managing Value Co-Creation through Interfaces with Suppliers. *International Business Research*, 7(4), 11-30. <https://doi.org/10.5539/ibr.v7n4p11>
- Russo, S. E., Colurcio, M., & Melia, M. (2013). Storytelling and web communication. *Mercati e competitività*, 1, 97-117.
- Ryan, C. (2002). Equity, management, power sharing and sustainability: Issues of the 'new tourism'. *Tourism Management*, 23(1), 17-26. [https://doi.org/10.1016/S0261-5177\(01\)00064-4](https://doi.org/10.1016/S0261-5177(01)00064-4)
- Saxena, G. (2005). Relationships, networks, and the learning regions: case evidence from the Peak District National Park. *Tourism Management*, 26(2), 277-289. <https://doi.org/10.1016/j.tourman.2003.11.013>
- Shaw, G., Bailey, A., & Williams, A. (2011). Aspects of service-dominant logic and its implications for tourism management: Examples from the hotel industry. *Tourism Management*, 32(2), 207-214. <https://doi.org/10.1016/j.tourman.2010.05.020>
- Snowden, D. J. (2001). Simple but not Simplistic: the Art and Science of Story. *Strategic Communication Management*, 4, 1-7.
- Suvantola, J. (2002) *Tourist's Experience of Place*. Farnham: Ashgate Publishing.
- Tan, S. K., Kung, S. F., & Luh, D. B. (2013). A model of 'creative experience' in creative tourism. *Annals of Tourism Research*, 41, April, 153-174. <https://doi.org/10.1016/j.annals.2012.12.002>
- Therkelsen, A., Halkier, H., & Jensen, O. B. (2010). Branding Aalborg: Building Community or Selling Place?. In G. Ashworth, & M. Kavaratzis (Eds.), *Towards Effective Place Brand Management*. Cheltenham, UK: Edward Elgar Publishing. <https://doi.org/10.4337/9781849806398.00014>

- Tung, V. W. S., & Ritchie, J. R. B. (2011). Exploring the essence of memorable tourism experiences. *Annals of Tourism Research*, 38(4), 1367-1386. <https://doi.org/10.1016/j.annals.2011.03.009>
- Tussyadiah, I. P., Park, S., & Fesenmaier, R. (2011). Assessing the Effectiveness of Consumer Narratives for Destination Marketing. *Journal of Hospitality & Tourism Research*, 35(1), 64-78. <https://doi.org/10.1177/1096348010384594>
- Van der Duim, V. R., Ren, C., & Jóhannesson, G. T. (2013). Ordering, materiality and multiplicity: enacting ANT in tourism. *Tourist Studies*, 13(1), 3-20. <https://doi.org/10.1177/1468797613476397>
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68, 1-17. <https://doi.org/10.1509/jmkg.68.1.1.24036>
- Vargo, S. L., & Lusch, R. F. (eds) (2014). *The Service-dominant logic of marketing. Dialog, debate and directions*, London: Routledge.
- Von Hippel, E. (1986). Lead Users: A source of Novel Product Concepts. *Management Science*, 32(7), 791-805. <https://doi.org/10.1287/mnsc.32.7.791>
- Wang, N. (1999). Rethinking authenticity in tourism experience. *Annals of Tourism Research*, 26(2), 349-370. [https://doi.org/10.1016/S0160-7383\(98\)00103-0](https://doi.org/10.1016/S0160-7383(98)00103-0)
- Wang, Y. (2011). Collaborative Destination Marketing: Principles and Applications. In Y. Wang, & A. Pizam (Eds). *Destination Marketing and Management – Theories and Applications* (pp. 259-283). London: CAB International. <https://doi.org/10.1079/9781845937621.0259>
- Wang, Y., & Fesenmaier, D. R. (2007). Collaborative destination marketing: A case study of Elkhart county, Indiana. *Tourism Management*, 28(3), 863-875. <https://doi.org/10.1016/j.tourman.2006.02.007>
- Woodside, A. G., Sood, S., & Miller, K. E. (2008). When consumers and brands talk: Storytelling theory and research in psychology and marketing. *Psychology & Marketing*, 25(2), 97-145. <https://doi.org/10.1002/mar.20203>
- Woodside, A. G., & Megehee, C. M. (2010). Advancing consumer behaviour theory in tourism via visual narrative art. *International Journal of Tourism Research*, 12(5), 418-431.
- Yin, R. K. (2013). *Case study research: Design and methods*, Sage Publications, London.

Notes

Note 1. The roles of the characters and the system of relations between them are generally defined by applying the classic model by Greimas (1984), which can be analysed as the result of the tension between a Subject - typically the Tourist, an Object of value - his/her needs, expectations, experiences, an Opponent - often consisting of obstacles of an economic nature or a time limit, and the Helper - a role generally played by the DMO, which in this way enables the fulfilment of a dream.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Comparing Mediation Role of Cultural Intelligence and Self-Efficacy on the Performance of International Business Negotiation

Nong Thi Hong Lam¹, Shu-Yi Liaw²

¹Department of Tropical Agriculture and International Cooperation, National Pingtung University of Science and Technology, Taiwan

²Management College, Computer Centre, National Pingtung University of Science and Technology, Taiwan

Correspondence: Shu-Yi Liaw, Management College, Computer Centre, National Pingtung University of Science and Technology, Taiwan.

Received: May 13, 2017

Accepted: June 2, 2017

Online Published: June 7, 2017

doi:10.5539/ibr.v10n7p22

URL: <https://doi.org/10.5539/ibr.v10n7p22>

Abstract

The study examines the direct and mediating effects of personality factors of Vietnamese negotiators on international business negotiation performance. The theory is developed regarding the three elements: Quality of communication experience, cultural intelligence and negotiation self-efficacy. This study found that quality of communication experience has a strongly positive impact on the performance. Cultural intelligence and negotiation self-efficacy have strongly mediating effects on the performance. Additionally, cultural intelligence and negotiation self-efficacy have reciprocal positive effects. Overall, this study concludes that the tested personality factors have a significance effect on the performance of Vietnamese negotiators in international business negotiation. Therefore, negotiators should focus on enhancing more experience in communication, this is vital and the first priority factor which negotiators need to gain and improve. Furthermore, they have to improve their level of cultural intelligence through accumulating more cultural knowledge and behavior interaction with unfamiliar cultural backgrounds. Cultural intelligence appears to be an indispensable factor in an international context which helps negotiators to deal with cultural barrier issues effectively. Finally, negotiation self-efficacy is important to obtain a better performance which will be ameliorated along with the support of quality of communication experience and cultural intelligence.

Keywords: quality of communication experience, cultural intelligence, negotiation self-efficacy, international business negotiation performance, negotiators

1. Introduction

With today's global economic integration, companies are extending their frontier beyond the domestic market and accessing international markets. This irreversible trend has brought companies from many different parts of the world to do business with each other, making international business negotiation a requisite for companies. In the context of international business, negotiation is accentuated by the importance of culture and cultural differences which has significantly impact on the outcome (Angelmar & Stern, 1978), because international business negotiation involves at least two or more parties coming from different cultural backgrounds (Liu & Liu, 2006), it is common to observe that negotiators come from different countries with different cultural values and beliefs which they usually bring to negotiating tables. Those cultural variations can cause challenges for the involved negotiators from the first to the last stage of the negotiation. On the one hand, the cultural differences might limit the opportunities to improve the benefits for involved parties and bring conflicts and misunderstandings to the negotiating table (Liu & Liu, 2006). Furthermore, they affirmed that cultural difference cause the intricateness and paradoxicalness for the international business negotiation table, McCall and Warrington (1989) added that the problems of conflict resolution and changing of behavior for the benefit of another has become even more complex. An explanation that, besides the complexity of conflicting interests, the negotiators have to face challenges by their own different personalities, values, attitudes, way of expressing interesting messages, a way of handling the negotiations and so forth. Moreover, it was pointed out by Ghauri (1983) that the main reason for the complex is that many eventful issues have to be managed by negotiators that primarily do not know each other very well, notably who have different cultural backgrounds. Hence, the negotiators play a paramount importance role, they are the decisive factors in the success of the negotiation.

Particularly, the personality factors of the negotiators have profound effects on their performance, because they will influence the negotiation performance by their own experiences, confidence and skills in intercultural context (Ghuri & Usunier, 2003).

Increased awareness of the personality factors which has significantly impacted on negotiators' performance in international business negotiation context allows negotiators to develop and improve their strengths and capabilities, predispose negotiators for successful performance and work globally in the intercultural context. Furthermore, awareness of personality factors reveals as to what characteristics of negotiators can be selected and trained upon in order to maximize the chances of reaching the optimal agreements in negotiation that traverse cultural borders. In this paper, three personal elements are explored: Quality of communication experience, cultural intelligence and negotiation self-efficacy, moreover, their reciprocal relationship is also examined.

There has been a growth in researches focused on international negotiation in recent years and there are many books written to guide negotiators around the world on "how to negotiate with..." which attempt to provide universal tactics regarding negotiation. "To step into another culture needs knowledge about that culture, but evens more it needs ability to think and feel from that cultural perspective" (Wenzlaff, 2008). There is still a gap in the literature regarding on negotiators' characteristics, especially how quality of communication experience impacts on international business negotiation performance with the mediation effects of cultural intelligence and negotiation self-efficacy. Furthermore, existing research on negotiation mostly focus on developed countries, there are exhaustive studies on personal negotiators and international business negotiation for developing countries, especially Vietnam. Therefore, this study addressed the gap in terms of figuring out the profile of Vietnamese negotiators and how the differences in their profile impacts on their performance in international negotiation, investigating on how quality of communication experience, cultural intelligence and negotiation self-efficacy effects on negotiators' performance as well as their mutually effect relationship at a point. A convergence of three personality factors has been set up in a series multiple mediation model which have not been developed in the previous research.

2. Literature Review

2.1 International Business Negotiation Performance

International business negotiation is "unique", fundamentally falling into two categories: Stage models of the negotiation process and behavior motivated by cultural concerns (Fayerweather and Kapoor's, 1976), and broad international frameworks or schemata. The process model for all cultures keys on the purpose and nature of negotiators' successive interaction (Graham, 1987), which includes four phases of non-task sounding; task related information exchange, persuasion, and concession and agreement. For the broad international frameworks, Fayerweather and Kapoor (1976) underscore the "wide variety of environments" in international business. This framework includes: the negotiation situation, functional areas, four Cs (common interests, conflicting interests, compromise, and criteria for undertaking negotiation), the environment (political, economic, social and cultural system) and the perspective (that is the broad factors like the previous negotiation experiences which influence the negotiation at hand). A conceptual paradigm of international business negotiation have been set by Tung (1988), hence the paradigm comprises of the negotiation context, negotiators' characteristics, strategic selections and process, and the negotiation outcome. Eventually, McCall and Warrington (1989) has studied and described the international or intercultural business negotiations from an interaction perspective as they offer the notion that the whole conceptual base of problem-solving, conflict resolution, change agent and decision-making skills within the international business interaction should be considered through the negotiation function. By using the idea of negotiation and the interpersonal interaction, it is feasible to conceptualize the output of marketing planning in the international markets in terms of mutual agreements that have to be negotiated. Finally, a theoretical contribution of various domains such as social psychology, social anthropology, sociology, political science and business administration can be traced. Those different disciplines have been developed in order to describe a negotiating model. The model can be explained as follows: International business negotiation is a complexity task, then in this situation each evolved parties always hope about a success negotiation, that is negotiation outcome. A negotiation outcome is the result of the interaction with the partners (Thompson, 1990). Usunier (1996) identified five outcome orientations that vary among different cultures, these include partnership, contract, profit, winning and the time expectations of the negotiation, and the outcome is evaluated by negotiation performance, usually based on a continuum of success to failure.

2.2 The Quality of Communication Experience Impacts on the International Business Negotiations Performance

In the context of international negotiation, the ability to communicate effectively across culture is critical. All of

the information sharing, emotional expressing or conflicts dealing will be tackled by communication process. Liu et al. (2010) has proposed an important personality factor which influences negotiation that is quality of communication experience (QCE). QCE is defined as a multi-dimensional construct which consists of three elements: clarity, responsiveness, and comfort that the individual experiences during social interaction. First, clarity is the level of understanding of the meaning being communicated and will reflect on the cognitive aspect of the communication experience. Second, responsiveness refers to the behavioral aspect of the communication experience and it indicates the norm of coordination and reciprocity of an individual experiencing an interpersonal interaction. They further explained that the coordination and reciprocity present the synchronization of speech pattern, respond to the inquiring of information and explicit empathy to the other parties' emotions. Therefore, responsiveness in interaction is essential for all sides at the negotiating table to avoid unfulfilled expectations as well as conflicts among negotiators' communication. Thirdly, comfort is the condition of positive affect of ease and pleasantness when interacting with each other. Therefore the comfort experienced by communicators reflects the affective aspect of communication. QCE construct is particularly salient and it plays a significant role in intercultural interaction, international business negotiation is in there (Liu et al., 2010). In that, the high degree of clarity that negotiators interpret through the information exchange leads to better economic outcomes (Adair et al, 2004; Pruitt, 1981). Adair et al. (2001) explained that with a high level of clarity, negotiators will be more understanding about the other parties' position, interests, preferences, priorities, resources and capabilities. These help negotiators to find out the optimal option, set up the general ground with other parties, coming up with an integrative solution which achieves their economic outcome. The research of Weingart et al. (1990) and Weingart et al. (1993) have indicated that when negotiators are responsive to each other, they are more likely to achieve better economic outcomes and be more satisfied with the negotiation. Furthermore, with responsiveness to each other, the trust is built through the cooperation among parties would enhance their satisfaction with the negotiation. Finally, Adair et al. (2004) also pointed out that high comfort level to be experienced during negotiation influences the economic gain. With comfort, the comfortable atmosphere surrounding the negotiation is created, giving the negotiators more motivation to carry out their task. Consequently, with a high level of QCE, negotiators will achieve better performance in international business negotiation.

Hypothesis (H₁): Quality of communication experience has a positive impact on the international business negotiations performance.

2.3 The Mediating Role of Cultural Intelligence

Cultural intelligence (CQ) is an individual's capacity to function and manage effectively in culturally diverse settings (Early & Ang, 2003). This concept has become an important orientation in the context of global organizations with increasingly diverse workforce as well as work settings.

Ang and Dyne (2008) have proposed CQ as a mediator of the relationship between distal individual characteristic (such as personality traits, worldviews, demographic and biographical differences) and intercultural effectiveness. A list of research which prove CQ as a strong mediator in intercultural performance are: Ward and Fischer (2008) whose about international exchange students in New Zealand has shown that CQ is mediator between personality traits (cultural empathy, open-mindedness) and flexible general adjustment. Dyne et al. (2008) who indicated that CQ mediates the effects of international experience on international leadership potential of cultural diverse participants of an executive development program (Ang et al., 2015). In this study, we apply mediator CQ and propose that it has a mediation effect between QCE and performance of international business negotiation. CQ is learning capability through cross cultural interactions (Nguyen et al., 2009), so from repeated international negotiation and experience in cross cultural interaction, negotiators gain more and more knowledge of culture and they know how to interact appropriately in unfamiliar cultures. Therefore, we propose the hypothesis as following:

Hypothesis (H₂): Cultural intelligence is a mediator of the relationship between quality of communication experience and international business negotiation performance.

2.4 The Mediating Role of Negotiation Self-efficacy

Negotiation self-efficacy (NS) is developed by O'Connor and Arnold (2001) as it refers to one's confidence in his or her ability to perform successfully in the task of negotiation. This concept has become one of the most important factors in negotiation. It is especially essential for negotiators to drive the negotiation to a success. Locke et al. (1984) have pointed out that individuals with low self-efficacy choose lower goals, meanwhile goals level definitely influence the negotiation performance (Huber & Neale, 1987). And the evidence has indicated that low self-efficacy individuals tend to have less persistence when they encounter set-backs and easily to give

up or stop their efforts prematurely (Miles & Maurer, 2012). Those behaviors are highly essentials for negotiation. Liu et al. (2010) has found that QCE has positively impact on NS. In the context of international business negotiation, negotiators are very easy to be nervous, frustrated or unable to interpret the information as well as lost their ability to express their preferences or priorities to other parties. This can cause anxiety and uncertainty for negotiators. Stephan and Stephan (1995) had pointed out that anxiety causes the feeling uneasy or apprehensive about what might happen, in that uncertainty entails the inability to interpret, predict or explain the other side's feelings, attitudes and behavior (Berger & Calabrese, 1975). This directly impact the communication experience (Gudykunst, 1995). Eventually, when the anxiety is high, people tend to fall back to simplistic information processing such as stereotypes, and the high uncertainty makes people not confident enough to dealing with other side's expressions in term of feelings, attitudes, and behavior. This makes negotiators less confident about themselves. Then, with high uncertainty and anxiety in international negotiation, negotiators may drive the communication to a failure because of misinterpretation and misunderstanding. Adair et al. (2001) also stated that negotiators, who had experienced the intercultural interaction, will be more confident especially when their degree of clarity is high, and the comfort appears among the parties. Hence, their confident is increased, and as O'Connor and Anold (2001) have found out that with a high level of NS, negotiators are able to perform the negotiation task better and gain successful performance. A hypothesis is as following:

Hypothesis (H₃): Negotiation self-efficacy is a mediator of the relationship between quality of communication experience and international business negotiation performance.

Earley (2002) argued that individuals have a high level of cultural intelligence will be more confident of their knowledge and capabilities to dealing with cultural barriers smoothly as well as perform their negotiation task with their international encounters successfully. CQ has appeared to become an efficient mediator (Ang et al., 2015). As the theories indicates that CQ has mediation effects between inborn basic processes such as personality, cognitive ability and a number of dimensions performance (Oolders et al., 2008). CQ is proposed to have an influence on NS of a negotiator and it can lead to a better performance. Because, with sufficient knowledge about other parties' cultural and the system of culturally specific, negotiators can adapt to the unfamiliar cultural backgrounds intimately and effectively. This creates a better feeling for negotiators during the interaction, and it makes negotiators more confident to perform the reactions and behaviors well which satisfied other parties.

Furthermore, based on the above discussion, we have indicated that QCE of negotiators experiencing during the previous negotiation will increase the level of CQ of negotiators. Because through repetition times of participating in international business negotiation, negotiators will gain more knowledge about culture, furthermore, they feel more comfort with the negotiation and especially they are very clear about the expressing appropriate behaviors to adapt effectively to parties' culture. This creates a friendly negotiation atmosphere and leads to a better performance of negotiators. Briefly, a high level of QCE will drag up the level of CQ, then increases the level of NS and finally leads to a high performance. This study proposes hypothesis H₄ below:

Hypothesis (H₄): Cultural intelligence has a positive impact on negotiation self-efficacy, which leads to greater performance of international business negotiation.

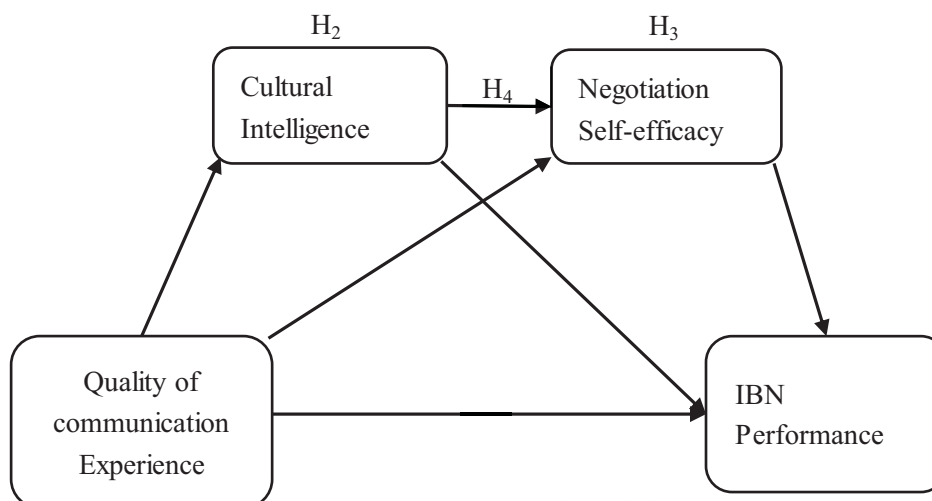


Figure 1. Research Model

3. Methodology

This study was designed as an experimental research which applies questionnaires as an instrument to collect data from 188 respondents in the two important areas in Vietnam – The key economic Zone North and South in Vietnam. The collected data were analyzed by descriptive, one-way ANOVA and path analysis methods. The Sobel test is an approximate significance test for the indirect effect, involving the computed ratio of path coefficient of mediation path to its estimated standard error (Preacher and Hayes, 2008). SPSS and AMOS version 22 were used for analysis procedure.

3.1 Measurement

There are four variables in the study. First, performance of international business negotiation is the dependent variable in the model. The performance in negotiation refers to the outcome of the negotiation in terms of partnership, profit, contract, winning and time orientation which vary among cultural differences, usually based on a continuum of success to failure (Usunier, 1996). The performance in negotiation is important and is influenced by various factors. In this study, the performance of international business negotiation is used as a measure of negotiators' personal performance the negotiating in an international context through three factors: quality of communication experience, cultural intelligence and negotiation self-efficacy. Second, quality of communication experience is the independent variable in the model which is a vital element for the negotiator in dealing with the exchange information, preferences, priorities, emotions, conflicts and attitudes during the negotiation. QCE tests the clarity, responsiveness and comfort of negotiators during the international negotiation process. Third, cultural intelligence is played as a mediator in the model of this study. CQ measures the cognitive, behavioral and motivational of negotiators in the intercultural context. Specifically, how one understands other parties' culture, how one can manage and adapt effectively to the diverse cultural situation. Finally, negotiation self-efficacy refers to the confidence of an individual in doing the negotiation task is a needed and essential factor of any negotiator. NS plays as a mediator in the model; it tests the level of confidence of the negotiator in doing the task of negotiation in the international context.

3.2 Questionnaire Design

This study used closed-ended questionnaires with multiple choice questions. The questionnaire consists of two sections: section 1 – Respondents' personal information and section 2 – main questions. Section one: Including 6 items about the detailed information of the respondent's profile such as gender, age, current position, living region, and type of industry and the time of taking part in international business negotiation. Section two: The main content pertains to negotiators characteristics which are divided into four sections that are: Negotiation self-efficacy consists of 5 items, quality of communication experience involves 6 items, cultural intelligence includes 16 items and international business negotiation performance comprises 9 items, overall 36 items. Those items was measured by 7 – point Likert scale (1 = strongly disagree, 7 = strongly agree) with higher score indicating the higher level of NS, QCE, CQ and performance. (Detailed measurement is shown in appendix).

3.3 Respondents

The study was conducted in Vietnam and focusing on two key economic zones: First, the key economic zone in North Vietnam, this zone involves the provinces of Northern Delta and Northeast regions. Second, the key economic zones in South Vietnam, it is also known as Southeast region (ASEAN, 2012). These two key economic regions are the dynamic economic centers and importance economic engines of this country. Similar to many other Asia countries, Vietnam's culture is high context culture, so one of the features of this context culture is that Vietnamese people pay attention in determining social status (Brett et al., 1998). Then people from this cultural tend to send a high social status as a representative to take part in an important event, especially international business negotiation. Therefore, the target sample of this study is in a high social status.

As this study applied the path analysis, so the sample size in this study was based on the research of Kline (2005) which has guided that a desirable goal is to have the ratio of the number of cases to the number of free parameters be 20:1 or a 10:1 ratio. This study requires minimum 140 respondents. The questionnaire was delivered to respondents by email, through companies and directly contact to the respondents. Twelve invalid responses were deleted and the data was analyzed with a total of 176 responses (88 responses in North and South individually).

4. Results and Discussion

Cronbach's α values were calculated to test the internal consistency of the indicators above 0.9 which are higher than recommended value 0.70 (Hair, 2010). Therefore, all constructs were internally consistent and reliability.

4.1 Descriptive Analysis

Generally, most of the Vietnamese negotiators are young (under 30 years old), the majority of them are working in the field of higher education (34.1%). Regarding their experience in international business negotiation, the result showed that Vietnamese negotiators are still less of experienced, the statistic indicated that most of them had from 1 to 3 times negotiating with Eastern and Western parties. It can be explained that because most Vietnamese negotiators in this study are of a young age, they have just embarked on their career.

4.2 Respondents' Profile Impacts on Performance of International Business Negotiation

An overview of the impact of respondents' profile on international business negotiation performance has been presented in Table 1. Gender and living area between North or South of Vietnamese negotiators do not have any significance effect on their performance in international business negotiation. Meanwhile, their age and their time of participating in negotiation play a strong impact on their performance. Specifically, the more senior they are, the better performance they achieve, in this study, we found that group of 41-60 years old did the best in international business negotiation ($M = 6.02$). Next, the more experiences they had, the better performance they attain. This is easy to understand when they have experienced, they are more clearly about what they need to do, how to respond, how to perform effectively.

Table 1. Variance of Respondents' Profile to Performance

Variables		M	SD	F	p	Post Hoc tests
Gender	(1) Female	5.79	0.98	0.88	0.35	
	(2) Male	5.72	0.97			
Ages	(1) Under 30	5.27	1.05	12.98	0.00*	(1) < (2,3)
	(2) 31 – 40	5.94	0.78			
	(3) 41 – 60	6.02	0.76			
Areas	(1) North	5.69	1.02	0.59	0.45	
	(2) South	5.59	0.93			
Times	(1) 1 – 3 times	5.31	1.02	11.18	0.00*	(1) < (2,3)
	(2) 4 – 7 times	5.91	0.87			
	(3) More than 8 times	6.06	0.66			

Note: * $p < 0.05$

This finding indicates that along with Vietnamese negotiators' seniority, they gained more experiences in work as well as full knowledge and professional capability which can help them in dealing with counterparts. Furthermore, their experiences in coordination with other parties combine with their skills have a strongly positive effect when they come to an international business negotiation. Additionally, with more international experiences (more than 8 times) negotiators have the ability to translate their multicultural skills into knowledge in order to be more effective in the outcome. Therefore they definitely achieve great performance.

4.3 Path Analysis

An overview of correlations between independent variables is provided in Table 2. Generally, the correlations among variables are moderately positive ($r > 0.6$) (Gerber & Kristin, 2005). This result indicated that with moderately correlation relationship among the variables, those variables are good to continue for hypotheses analysis.

Table 2. Correlation Matrix

	NS	QCE	CQ	P
Negotiation Self-efficacy (NS)	1			
Quality of Communication Experience (QCE)	0.786**	1		
Cultural Intelligence (CQ)	0.675**	0.661**	1	
Overall Performance (P)	0.665**	0.683**	0.708**	1

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

4.3.1 The Direct Effect of Quality of Communication Experience on Performance

In the initial hypothesis, this proposed that quality of communication experience has strongly positive impact on the performance of negotiators in international business negotiation. Figure 2 showed that QCE has total effect on performance ($c = 0.65$, $t = 12.35$ ***), when adding the mediators (Figure 3), QCE decreases its effect on performance ($c' = 0.28$, $t = 3.43$ ***), but it still maintains the positively and significantly impacts on international business negotiation performance, so hypothesis H_1 is supported by this research.

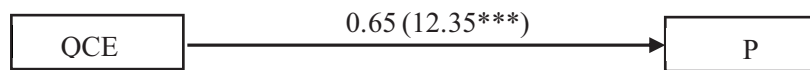


Figure 2. The result of direct effect

The QCE is a very important factor for negotiators in determining the success in the intercultural negotiation context. So, it suggests that negotiators should gain more experience and skill in communication, as it is emphasized by Lewicki, Minton and Saunders (2000) that “communication is the heart of negotiation” which has expressed the role of good communication in the negotiation context. Because, communication is the essential tool for sharing the information, expressing the priorities and preferences, showing the emotional and attitudes, and resolving the conflict during the negotiation. Therefore, improving the communication experience is essential and enhances a good quality in communication experience through enriching the cognitive knowledge to be more clarify, express the responsibility and maintain the comforting environment in international negotiation is very necessary for each of negotiator.

4.3.2 Multiple Mediation of Cultural Intelligence and Negotiation Self-efficacy

The results are mixed with regard to the indirect effects of cultural intelligence and negotiation self-efficacy on the performance.

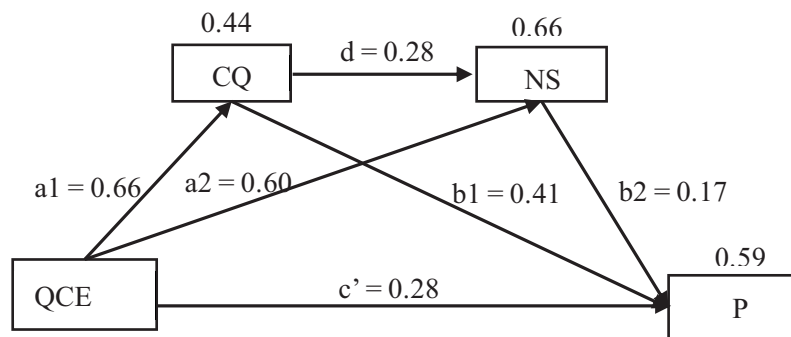


Figure 3. The results of mediation model

Table 3. Sobel Test of Indirect Effects

Path	Coefficient	Se	Coefficient	Se	Sobel - z
QCE → CQ → P (Ind1)	0.66 (a ₁)	0.05 (Sea ₁)	0.41 (b ₁)	0.74 (Sea ₂)	5.29**
QCE → NS → P (Ind2)	0.60 (a ₂)	0.07 (Sea ₂)	0.17 (b ₂)	0.07 (Se (b ₂))	2.01*

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The Sobel test was done to assure that CQ has mediation effects in the model, the result yielded as $z = 5.29^{**}$, indicated that H_2 was supported. It also can be seen in the Figure 3 that CQ has $R^2 = 0.44$. It means CQ has influence with strength prediction of the overall the model is 44.0%. This result implies that the great performance can be achieved through a high level of cultural intelligence. To meet the negotiation expectations and becoming effective negotiators in global context, each individual must be enrich the cross-cultural competencies. Vietnam as a high-context culture background, it hard for Vietnamese negotiators to respond effectively to parties that come from the low-context cultural background if they do not have sufficiently knowledge and practice for the reaction. Therefore, in the international negotiation context, not only understanding about other cultures, but the negotiators also needs to be able to act in accordance with that culture. It suggests that gaining knowledge about culture and getting familiar with other cultures in order to respond appropriately are of paramount importance for international negotiators. And then, a high level of cultural intelligence will help negotiators to deal with the aforementioned problems effectively and bringing the good impression and satisfaction for their counterparts.

Regarding H_3 , the Sobel test was also obtained which produced $z = 2.01^*$, indicated that H_3 was supported. Additionally, NS has $R^2 = 0.66$ (Figure 3). This means that NS has influence with strength prediction of the overall the model is 66.0%. NS has not been examined as a mediator in the previous research. Therefore, this study has found out a new mediator which has mediation effect in intercultural context. The finding means that the performance of negotiators can be improved through the high level of negotiation self-efficacy.

The path $QCE \rightarrow CQ \rightarrow NS \rightarrow P$ are significant, hypothesis H_4 was supported. This result illustrates a good

relationship between QCE and performance of international business negotiation through the two mediators CQ and NS. With a high QCE, the level of CQ of negotiators will be increased positively and then CQ will intensify the level of NS, and finally, the great performance will be made. This finding also suggests that, along with a good QCE which a negotiator has gained, they should enrich their CQ and practice their Self-efficacy in Negotiation. The higher cultural intelligence and negotiation self-efficacy, the greater performance will be achieved. And then, for the final dependent construct performance has R^2 values of 0.59 (Figure 3). It indicates that the mediating variables (CQ and NS) have influence with strength prediction of the overall the model is 59.0%, meanwhile 41.0% (Vietnamese negotiators) influenced by other factors or variables which not available in the model such as language ability, personality skills and working experiences.

4.3.3 The Comparison of Indirect Effects

Table 4. Paths Comparison of Indirect Effects

Mediator	Point Estimate	Product of Coefficients		Bootstrapping			
		SE	z	Percentile 95% CI		Bias Corrected 95% CI	
				Lower	Upper	Lower	Upper
Indirect							
Ind1	0.256	0.057	4.491	0.168	0.356	0.162	0.359
Ind2	0.029	0.014	2.071	0.001	0.053	0.009	0.060
Ind3	0.097	0.049	1.979	0.001	0.203	0.004	0.213
TOTAL	0.382	0.081	4.716	0.260	0.513	0.267	0.535
Indirect effect contrast							
Ind1 vs Ind2	0.227	0.063	3.603	0.134	0.343	0.118	0.332
Ind1 vs Ind 3	0.159	0.080	1.987	0.009	0.317	0.002	0.317
Ind2 vs Ind3	-0.068	0.032	-2.125	-0.171	-0.001	-0.179	-0.002

Note: Ind1 = QCE → CQ → P

1.000 bootstrap samples

Ind2 = QCE → CQ → NS → P

BC: Bias Corrected

Ind3 = QCE → NS → P

Briefly, all of the indirect effect of communication experience and performance through cultural intelligence and negotiation self-efficacy as well as through two mediators simultaneously are significant because no zero is contained in the intervals in percentile 95% CI or Bias Corrected 95% CI method. To see the difference among indirect effects, we look at “indirect effect contrast” in the Table 4. Based on the result of Ind1 vs Ind2, we can claim that Ind1 do the stronger mediation effect of quality of communication experience on performance than ind2 (of 0.134 to 0.343, BC 95% CI of 0.118 to 0.332). Second, between Ind1 and Ind3, the result from Percentile 95% CI shows 0.009 to 0.317 and BC 95% CI is 0.002 to 0.317 which means that Ind 1 has greater mediation effect than Ind3. Third, the comparison of the pair Ind2 and Ind3 yields as: Percentile 95% CI is -0.171 to -0.001 and BC 95% CI is -0.179 to -0.002, it reflects that Ind2 has weaker mediation effect than Ind3. Finally, we have the comparison of the three indirect effects as: Ind1 > Ind3 > Ind2. This result indicates that: Firstly, cultural intelligence plays an important and strongest mediation effect on the relationship of quality of communication experience and performance. In the international context, high level of cultural intelligence appears as very important factor for each individual, therefore improve and enhance rich knowledge about culture of other countries are extremely essential. High level of cultural intelligence helps negotiators understand the norms, values, behaviors, habits and customs and translate that knowledge into appropriate attitude and respond which might satisfy and impressive partner. Secondly, when negotiators process a high level of cultural intelligence, their negotiation self-efficacy will be dragged up. Then negotiators will have a good performance when they have high level of cultural intelligence and negotiation self-efficacy at the same time to support for them. Finally, international negotiators need to improve their negotiation self-efficacy.

5. Conclusions

This study investigated the impact of QCE on performance of international business negotiation with two mediators: CQ and NS of Vietnamese negotiators. The finding found that majority of Vietnamese negotiators are young and their experience in international negotiation are less. Therefore, they still need to improve their specialty, knowledge and gain more experience from practical. Quality of communication experience has a direct impact on the performance. With a high level of QCE, the negotiators will obtain greater performance in international business negotiation.

CQ and NS have the significant mediating role on the relationship between QCE and negotiation performance. The performance can be achieved greater, more successful and satisfying through a high level of CQ and NS. In addition, with a higher level of CQ, NS is also being increased. This study recommends that negotiators should

pay attention, improve and gain a high level of QCE, CQ and NS in order to attain satisfying and successful performance in performance of international business negotiation. In the previous researches, cultural intelligence has been explored to be a mediator in international interaction, however negotiation self-efficacy has not been examined before, therefore in this study negotiation self-efficacy has been proved to be a mediator in this line. This finding will fulfill this gap and contribute for the negotiation literature in term of negotiators' characteristic. The negotiators always play a paramount important role in the success of the negotiation. Indeed, as of yet, culture and negotiation literature has revealed as to what characteristics of negotiators can be selected or trained upon in order to maximize the chances of reaching the optimal agreements in negotiation that traverse cultural borders. Therefore, taking an insightful look into the characteristics of negotiators has significance in selecting and training potential negotiators. Furthermore, it helps negotiators to be aware of the weakness as well as strengthens so as to adjusting and improving their ability in cross cultural context. As it is pointed out that the performance of negotiation in international context depends on the competence of negotiators. Vietnamese negotiators are expected to strengthen their personal competence in cross-cultural communication, knowledge, behaviors and self-efficacy to be more effective and professional in executing the negotiation task successful.

Culture intelligence is the strongest vital mediator on the relationship between communication experience quality and performance. Following the mediation effect of cultural intelligence, promoting their negotiation self-efficacy and then lead to high business negotiation performance. Finally, the mediating role of negotiation self-efficacy is less significant effect among others two indirect effects. Therefore, with sufficiently negotiation self-efficacy, negotiators will be more calm, comfortable and confident to share information, express priorities and preferences, handle problems during the negotiation, so that negotiators will perform their task satisfactory and successfully. In the previous researches, quality of communication experience, cultural intelligence and negotiation self-efficacy have been examined independently. However in this study, a convergence of these three personality elements in one model has been done. This study has found a close and reciprocal relationship among these factors which has provided a new model in international negotiation field.

This study has provided a useful reference for international negotiator, especially Vietnamese in terms of exploring the personality factors: quality of communication experience, cultural intelligence and negotiation self-efficacy to their performance which have not been examined in the previous academic researches. Basing on the finding of this study, Vietnamese negotiators should improve their quality of communication experience, which has come as the first factors for each individual. With high level of QCE, negotiator will be more clarity with the communicated information, respond at the accurately time and create a good atmosphere for the negotiation. Negotiators can improve their QCE in their working place from the real seminar, meeting or working with their customers. Through many discussions from the real situations, negotiators can enhance more skills in communication, then they also can improve the quality of the communication as well, they are master in exchange the information, respond to information in effectively and indeed way, furthermore they will be more comfortable to create a good communication environment. Second, enhance their level of cultural intelligence and negotiation self-efficacy which is a dispensable factor for negotiators to do the task in intercultural, international and global context. Negotiators can improve their level of cultural intelligence in various ways. They should learn about the knowledge of culture of many others countries through media channels such as internet, newspapers and books. Accumulating the knowledge of culture initiatively will help negotiators be more confident in performing and interacting. Moreover, learning cultural knowledge from experiences and surrounding environment are very perfect way for negotiators, then they can practice their respond to the unfamiliar culture. Additionally, negotiators should understand their parties before they come to the negotiation as where the party comes from, which cultural background they are, and so then negotiators can have a good preparation. People tend to be more confident about the thing they are master, so that with a good knowledge about culture negotiators will be more confident in performing in international context, the best performance will be done and least to a satisfaction and success at the end of the negotiation.

However, there are some limitations and suggestions can be obtained from this study. Firstly, this study has focused on examining three personality factors for Vietnamese negotiators, however apart from quality of communication experience, cultural intelligence and negotiation self-efficacy in this study, there might be still have other personality factors such as: languages ability, which impact on every single negotiators. Therefore, future researches are hoped to exploring more personality factors for Vietnamese negotiators, so that they can take seriously consideration to develop and accomplish them in order to achieve more great performance in the upcoming international business negotiations. Secondly, this study has collected the sample from two most important regions in Vietnam where the business negotiation happens regularly, however the quantity of respondents was somehow limited, especially the subject in the age from 30 to 50 years old, along with the

subject who had more than 8 times of participating in international business negotiation were less of number due to the difficulties in approaching them. Future research is suggested to try to get more respondents with those subjects in order to show more result about the characteristic and other important factors affecting performance of international business negotiation.

References

- Adair, W. L., Brett, J. M., Lempereur, A., Okumura, T., Shikhirev, P., Tinsley, C. H., & Lytle, A. L. (2004). Culture and negotiation strategy. *Negotiation Journal*, 20, 87-100. <https://doi.org/10.1111/j.1571-9979.2004.00008.x>
- Adair, W. L., Okumura, T., & Brett, J. M. (2001). Negotiation behavior when cultures collide: The U.S and Japan. *Journal of Applied Psychology*, 86, 371-385. <https://doi.org/10.1037/0021-9010.86.3.371>
- Ang, S., & Dyne, V. L. (2008). Handbook of cultural Intelligence: Theory, Measurement and Application. Antecedents of Four-Factor Model of Cultural Intelligence. *London and New York: Routledge*.
- Ang, S., Dyne, L. V., & Tockstuhl, T. (2015). Cultural Intelligence: Origins, Conceptualization, Evolution and Methodological Diversity. In M. J. Gelfand, C. Y. Chiu, and Y. Y. Hong (eds), Handbook of Advances in Culture Psychology: *Oxford University Press*.
- Angelmar, R., & Stern, L. W. (1978). Development of a Content Analytic System for Analysis of Bargaining Communication in Marketing. *Journal of Marketing Research*, 15, 93-102. <https://doi.org/10.2307/3150404>
- ASEAN. (2012). Overview. Association of Southeast Asian Nation. Retrieved 18 December 2015. From <http://www.asean.org/asean/about-asean/>
- Brett, J. M., & Okumura, T. (1998). Inter-and Intercultural negotiation: U.S and Japanese negotiators. *Academy of Management Journal*, 41(5), 495-510. <https://doi.org/10.2307/256938>
- Earley, P. C. (2002). Redefining interactions across cultures and organization: Moving forward with cultural intelligence. *Research in Organizational Behavior*, 24, 271-299. [https://doi.org/10.1016/S0191-3085\(02\)24008-3](https://doi.org/10.1016/S0191-3085(02)24008-3)
- Earley, P. C., & Ang, S. (2003). Cultural Intelligence: Individual interactions across cultures. *Stanford, California: Stanford University Press*.
- Fayerweather, J., & Kapoor, A. (1976). Strategy and negotiations for the international corporation. *International Business Review*, 18(2), 20-22. <https://doi.org/10.1002/tie.5060180210>
- Gerber, S. B., & Kristin, V. F. (2005). Using SPSS for Windows: Data analysis and Graphics. *New York: Springer*, 1-228.
- Ghauari, P. N., & Usunier, J. C. (2003). International Business Negotiations. *The Netherlands: Elsevier Ltd* (2).
- Ghauri, P. N. (1983). Negotiating International Package Deals – Swedish firms and Developing countries. *Almqvist and Wiksell, Stockholm*.
- Graham, J. L. (1987). A Theory of Inter-organizational Negotiations. *Research in Marketing, Greenwich, CT, JAI Press Inc*, 163-183.
- Gudykunst, W. B. (1995). Anxiety/Unceintainty management (AUM) theory: Current status. In R. L. Wiseman (ed), Intercultural communication theory (8-58). *Thousand Oaks: Sage*.
- Hair, J. F. (2010). *Multivariate data analysis*. NJ, USA: Pearson College Division.
- Huber, V. L., & Neale, M. A. (1987). Effects of self- and competitor goals on performance on an interdependent bargaining task. *Journal of Applied Psychology*, 72(2), 197-203. <https://doi.org/10.1037/0021-9010.72.2.197>
- Kline, R. B. (2005). Principles and Practice of Structural Equation Modeling (2nd ed.). New York, Guilford.
- Lewicki, R. J., Barry, B., Saunders, D., & Minton, J. (2003). Negotiation. *McGraw Hill, New York*.
- Liu, L. A., Chua, C. H., & Stahl, G. (2010). Quality of Communication Experience: Definition, Measurement, and Implications for Intercultural Negotiations. *Journal of Applied Psychology*, 95(3), 469-487. <https://doi.org/10.1037/a0019094>
- Liu, W., & Liu, A. L. (2006). Cultural Intelligence in International Business Negotiation. *SSRN Electronic Journal*, 8-18. <https://doi.org/10.2139/ssrn.905460>
- Locke, E. A., Frederick, E., Lee, C., & Bobko, P. (1984). Effect of Self-efficacy, goals, and task strategies on task

- performance. *Journal of Applied Psychology*, 69, 241-251. <https://doi.org/10.1037/0021-9010.69.2.241>
- McCall, J. B., & Warrington, M. B. (1989). *Marketing by Agreement: A Cross-Cultural Approach to Business Negotiation*. John Wiley and Sons Ltd, Chichester.
- Miles, E. W., & Maurer, T. J. (2012). Advancing validity of self-efficacy in negotiation through focusing at the domain level. *Journal of Occupational and Organizational Psychology*, 85, 23-41. <https://doi.org/10.1348/096317910X531744>
- Nguyen, K. Y., Dyne, L. A., & Ang, S. (2009). From Experience to Experimental Learning: Cultural Intelligence as a Learning Capability for Global Leader Development. *Academy of Management of Management Learning and Education*, 1-40.
- O'Connor, K. M., & Arnold, J. A. (2001). Distributive spirals: negotiation impasses and the moderating role of disputant self-efficacy. *Organizational Behavior and Human Decision Processes*, 84(1), 148-176. <https://doi.org/10.1006/obhd.2000.2923>
- Oolders, T., Chernyshenko, S. O., & Stark, S. (2008). Cultural Intelligence as a Mediator of Relationships between Openness to Experience and Adaptive Performance. In S. Ang and L. V. Dyne (eds), *Handbook of Cultural Intelligence: Theory, Measurement and Applications*. London and New York: Routledge.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, 40(3), 879-891. <https://doi.org/10.3758/BRM.40.3.879>
- Pruitt, D. G. (1981). Kissinger as a traditional mediator with power. In J. Z. Rubin (ed), *Dynamics of third party intervention: Interdisciplinary perspectives on international conflict*. New York: Praeger, 136-147.
- Stephan, W. G., & Stephan, C. (1995). Intergroup anxiety. *Journal of Social Issues*, 41, 157-176. <https://doi.org/10.1111/j.1540-4560.1985.tb01134.x>
- Thompson, L. (1990). The Influence of Experience on Negotiation Performance. *Journal of Experimental Social Psychology*, 26, 528-544. [https://doi.org/10.1016/0022-1031\(90\)90054-P](https://doi.org/10.1016/0022-1031(90)90054-P)
- Tung, R. (1988). Toward a Conceptual Paradigm of International Business Negotiations. In R. Farmer (ed), *Advances in International Comparative Management*. Greenwich CT, JAI Press Inc, 203-219.
- Usunier, J. C. (1996). *Cultural Aspects of International Business Negotiations: Negotiations*. Oxford Press.
- Weingart, L. R., Bennett, R. J., & Brett, J. M. (1993). The impact of consideration of issues and motivational orientation on group negotiation process and outcome. *Journal of Applied Psychology*, 78, 504-517. <https://doi.org/10.1037/0021-9010.78.3.504>
- Weingart, L. R., Thompson, L. L., Bazerman, M. H., & Carroll, J. S. (1990). Tactical behavior and negotiation outcomes. *International Journal of Conflict Management*, 1, 7-31. <https://doi.org/10.1108/eb022670>
- Wenzlaff, K. (2008). Youth, Culture, Negotiation and Politics. *Asian Europe Journal*, 5(4), 573-579. <https://doi.org/10.1007/s10308-007-0138-y>

Appendix. Variables and items included in the questionnaire

Variables	Items	Measurements	Sources
Quality of Communication Experience (CQE)	CQE1	I understood what the other side was saying	Liu et al., 2010
	CQE2	We clarified the meaning if there was a confusion of the message exchanged.	
	CQE3	The conversation ran smoothly without any uncomfortable silent moment or I did not notice any uncomfortable silent moments.	
	CQE4	When the other side raised questions or concerns, I tried to address them immediately.	
	CQE5	I felt comfortable interacting with the otherside	
	CQE6	The other side seemed comfortable talking with me.	
Negotiation Self-efficacy (NS)	NS1	I consider it easy to negotiate with foreigner counterpart.	Miles & Maurer, 2012
	NS2	I can respond to my counterpart easily during negotiation	
	NS3	I consider that I have the ability to negotiate with foreigner counterpart.	
	NS4	I consider that I can negotiate with foreigner counterpart fluently.	
	NS5	Overall I have confidence in negotiating with foreigner counterpart.	
Cultural Intelligence (CQ)	CQ1	I am conscious of the cultural knowledge I use when interacting with counterpart from different cultural backgrounds.	Ward & Fischer, 2008
	CQ2	I am conscious of the cultural knowledge I apply to cross-cultural interactions.	
	CQ3	I adjust my cultural knowledge as I interact with counterpart from a cultural unfamiliar to me.	
	CQ4	I check the accuracy of my cultural knowledge as I interact with counterpart from difference culture.	
	CQ5	I know the legal and economic systems of counterpart cultures.	
	CQ6	I know the religious beliefs of counterpart culture.	
	CQ7	I know the rules (e.g., vocabulary, grammar) of other languages	
	CQ8	I know the rules for expressing non-verbal behaviors in counterpart culture.	
	CQ9	I enjoy interacting with counterpart from different cultures.	
	CQ10	I enjoy living in cultures that are unfamiliar to me.	
	CQ11	I am confident that I can socialize with locals in a culture that is unfamiliar to me.	
	CQ12	I am sure I can deal with the stresses of adjusting to a culture that is new to me.	
	CQ13	I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it.	
	CQ14	I change my non-verbal behavior when a cross-cultural interaction requires it.	
	CQ15	I vary the rate of my speaking when a cross-cultural situation requires it.	
	CQ16	I alter my facial expressions when a cross-cultural interaction requires it.	
Performance of International Bussiness Negotiation (P)	P1	Future agreements between parties are likely to happen.	Usunier, 1996
	P2	Potential future relationship between parties is strengthened.	
	P3	The joint mutual gains are shared between parties after the negotiation.	
	P4	Parties obtain the efficiency of the result after the negotiation: the party gains cost-effective outcomes.	
	P5	The outcome is parity after the negotiation: each party obtains equal gains (50-50).	
	P6	Parties are very satisfaction with the result.	
	P7	Parties complete transaction very smoothly (i.e. an agreement is signed).	
	P8	Level of performance afterward: an achievement of work under the agreement.	
	P9	I obtain the self monetary gain after the negotiation	

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

"The Role of Domestic Tourism in Supporting the National Economy, from the Point View of Employers" Field Study on Aqaba Economical City

Hanem Rajab Ibrahim Al-Darwesh¹

¹Aqaba College, Al Balqa Applied University, Aqaba, Jordan

Correspondence: Hanem Rajab Ibrahim Al-Darwesh, Aqaba College, Al Balqa Applied University, Aqaba, Jordan.

Received: May 19, 2017

Accepted: June 6, 2017

Online Published: June 7, 2017

doi:10.5539/ibr.v10n7p34

URL: <https://doi.org/10.5539/ibr.v10n7p34>

Abstract

The research dealt with the role of internal tourism in supporting the Jordanian economy, considering that Aqaba is a special case that represents an important part of the Jordanian domestic tourism. The problem of the research was to answer the following questions: Is Aqaba area characterized as an attractive tourist destination? Is Aqaba special economic zone authority (ASEZA) contributes to increase the Jordanian national income? Is the lack of infrastructure considers an obstacle to the development of domestic tourism in Aqaba? The data collected through the questionnaire were consisted of 30 paragraphs using the forth Likert scale.

The importance of the research lies in its benefits to the decision makers of (ASEZA) in avoiding some of the obstacles and pitfalls that face employers and tourists. Data were collected from employers in Aqaba by using simple random sampling. Analytical descriptive methods, standard deviations, percentages, and T-tests were used. The results of the research showed that there are special characteristics that promote the internal tourism in Aqaba. It concluded that (ASEZA) plays a large role in promoting the internal tourism to Aqaba through tourism awareness and through providing the infrastructure and metadata. In contrast, the research found obstacles that hinder the internal tourism to Aqaba, and the high cost of tourism was one of them. The research recommended the need to intensify the planned advertisements and promotions according to the tourist seasons, establish extra parking spaces and hotel rooms, and conduct other researches that represent the tourist's opinion themselves.

Keywords: analytical descriptive methods, Aqaba Special Economic Zone Authority (ASEZA), domestic tourism, forth Likert scale

1. Introduction

Jordan has a distinctive strategic location bestowed from Allah, as a gift giving it a competitive advantage in the several tourist areas from extreme north to extreme south, which may not be available in another country. Several successive civilizations revolve on Jordan, their marks stand as a witness until today, and Jordan is a gate for Islamic victories and on the Jordanian territory, great historical battles took place such as Yarmouk, Mu'tah and Pella. Jordan also has a lot of shrines and Islamic and Christian holy places, it embraces the remains of distinguished companions along its land, and it is rich in resorts and spas in different areas which characterized as a unique geographical diversity.

Aqaba takes up a distinctive position on the Jordan tourist map, as well as its economic importance for being the only marine port which connects Jordan to the world via the red sea. Besides, it considers as an important starting point for Jordan visitors coming to it across the sea to explore the historical and archaeological monuments in the south Jordan regions, such as Petra, Wadi Rum, Thana biosphere, and other locations, where areas closeness and distances shortness between Aqaba and those places allow visitors to spend more time visiting it.

But there are some important obstacles that stand in the face of the internal tourist movement to Aqaba, such as absence of development plans, poor infrastructure and metadata, and lack of coordination among various relevant parties.

It is possible to say that the hypothesis of this research suggests that Jordan in general and Aqaba in particular,

bles with strategical tourist potentials that could achieve significant financial surpluses and plentiful social returns, remarkably human resources development, employment opportunities achievement, and tourism investment attraction with the condition of putting a strategic plan to promote Aqaba internally for the purpose of attracting more Jordanian visitors.

2. Research Problem

The internal tourism in the present time represent a significant economical activity that countries compose to develop for being an economical resource that contributes to the increase in the national income. Tourism activity in the Hashemite Kingdom of Jordan becomes the concern of development plans strategies in the Kingdom for the purpose of investing the tourist potentials, and directing residents to the domestic tourism. Aqaba zone possess a variety of tourist potentials, but in spite of the importance and the ability of these potentials to provide an active tourist activity, it haven't invested in a development way, and the efforts in the tourist development field haven't lived up to the optimization of tourist potentials in the Aqaba zone, not only in the area of infrastructure services that serve the tourist development, but also in the field of studies and researches that call attention to the possibilities and potentials of Aqaba zone as a tourist area. In light of this, the research tries to put emphasis on the Aqaba zone tourism potentials in the human, cultural, and natural fields, highlight those potentials, highlight Aqaba tourist role in the development of the Jordanian economy, provide employment opportunities, local community development, and the needs of Aqaba for fundamental infrastructure and overhead to serve the tourism sector. This research comes to put emphasis on the Aqaba zone tourism potentials for the goal of integration between the kingdom areas in the tourism field. Therefore, researcher can formulate the research questions as follows:

Does Aqaba zone differentiate with natural potentials at distinctive characteristics that help the tourism attraction?

What are the roles of commissariat region of (ASEZA) in developing tourism at economic Aqaba city?

What are the obstacles of internal tourism development at Aqaba zone?

3. Research Importance

The importance of this research return to its focus on an important tourist resource in the Hashemite kingdom of Jordan, which is Aqaba zone, where its location makes it a central region in terms of tourism, despite its far distance from the capital of Amman, and it has an important role in advancing the development acceleration. Therefore, this research came to highlight the tourism potentials that Aqaba region possess and haven't been utilized so far, which will contribute in providing a clear vision for those who have interest in the tourism development affairs, especially in the present time, where the tourism activity attain a great attention by (ASEZA), the tourism ministry, the tourism development board, and the tourism and travel offices, as well as attract the tourism investment, especially domestic or internal tourism to this region, and recover it economically and socially. Table 1, refer to the several potentials that Aqaba city acquire, such as hotels, restaurants, car rental offices, diving centers, water sports, and many others. The table shows numbers and types of those potentials which deserve total support from all parties.

Table 1. The internal tourism potentials for the economic Aqaba city during the period (2010-2016)

Years	Hotels	Tourism agencies	Tourism restaurants	Car rental offices	Tourism shops	Diving centers	Water sports	Overall employment
2010	2.583	200	1.664	38	65	48	125	4.723
2011	2.583	200	1.664	38	77	48	125	4.735
2012	2.719	177	1.664	38	82	48	125	4.853
2013	2.735	153	1.664	38	82	48	125	4.845
2014	2.753	156	1.664	38	82	48	125	4.866
2015	2.753	156	1.664	38	82	48	125	4.866
2016	2.753	156	1.664	38	82	148	255	5.096

Source: Ministry of tourism and antiquities (2016).

Table 1 refer to the number of internal tourism potentials in Aqaba for the year (2016), and are as follows: hotels (2753), tourism agencies (156), tourism restaurants (1664), car rentals offices (38), tourism gift shops (82), diving centers (148), and water sports (255). All of those could benefit from the results of this research and imitate the other companies and centers that hosted tourism activities in Aqaba, and therefore, promote the internal tourism to Aqaba and raise the national income level.

4. Research Goals

This research aims for the following:

1. Identify the most important natural potentials of Aqaba economical zone regarding the tourism attractions.
2. Identify the roles of the commissariat region authority of Aqaba Special economic zone in the tourism development of Aqaba economical city.
3. Identify the most important obstacles that face the internal tourism development of Aqaba economical city.

5. Research Hypotheses

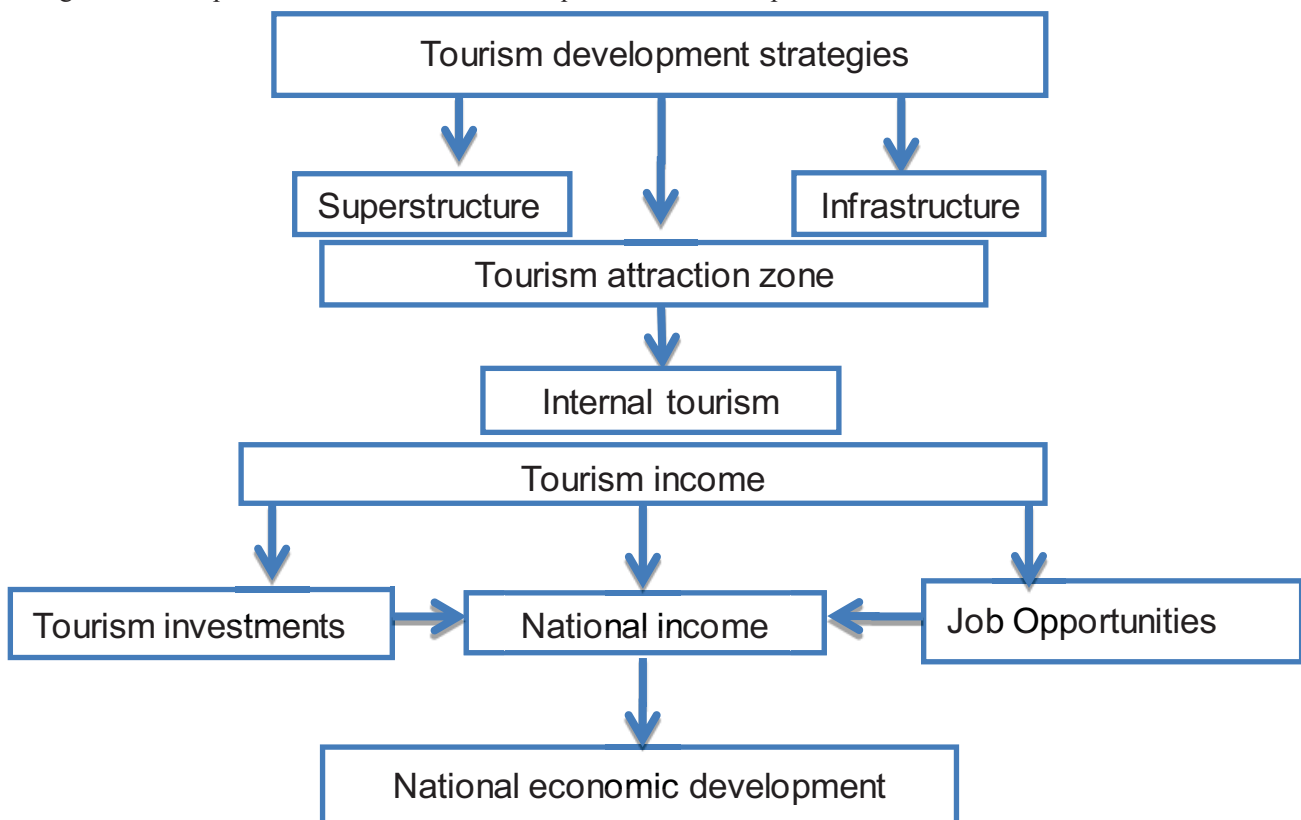
1. Aqaba economical zone differentiate with a number of natural potentials regarding the tourism attractions.
2. The roles of commissariat region authority of Aqaba Special economic zone participate in the tourism development of Aqaba economical city.
3. There are a number of obstacles that faces the internal tourism development of Aqaba economical city.

6. Theoretical Framework and Previous Studies

6.1 Theoretical Framework

Tourism represents an important resource from the resources and economics of many world countries, and the goals of tourism tangle with other sectors goals. Therefore, most of the world countries are dedicated to focus on the development of tourism for their economical impact on the various fields. The concerns about tourism in the Hashemite kingdom of Jordan start early, as recognition of this sector significance in the economical development of the country. The recent development plans cared about tourism and gives it a large importance, therefore a tourism development board was created at the state level, and on the Aqaba level a special commission of tourism was allocated in recognition of this sector's impact on the gross domestic product (GDP), balance of payments, providing job opportunities, and local community development. Figure 1 demonstrate the expected economic effects from the Jordanian tourism development, particularly the Aqaba region as a tourism attraction that leads to a tourism spending which require providing multiple economic fields, most importantly the investment in the tourism sector which serves the national economy.

Figure 1. The expected economic effects from Aqaba tourism development



Source: researcher design

It shows from the previous figure that tourism development require the utilization of tourism potentials, and perhaps the most important of those are economic, environmental and cultural aspects and historical legacy

which result from it an effective tourism projects, a matter that leads to tourism attractions, (GDP) increase, and jobs opportunities availability which helps in making a comprehensive development.

6.1.1 Domestic Tourism in Jordan

The specialized Jordanian studies in the tourism field indicate that the domestic tourism in the developed countries forms about (90%) of the total tourism activity in these countries, meaning that foreign tourism pose only (10%) from the overall tourism activity. While, the domestic tourism in Jordan contributed to only (7%) from the overall tourism activity over the past decade (Bathatho, 2012, p. 21), and it's an indication that the domestic tourism in Jordan at its lowest, which requires redoubled efforts to increase the percentage of internal tourism contribution in support of tourism activity inside of Jordan. Revitalizing domestic tourism needs to combine all efforts, and attract the large numbers of citizens who are waiting from the operators of tourism promotion an offers and privileges to reduce the choice of turning to foreign tourism.

In this perspective, the ministry of tourism in the past few years headed to focus on the direction of internal tourism development through spreading the tourism awareness among the citizens about the tourism attractions of the Kingdom. The ministry launched in early October, 2012, a promotional and advertising campaign in cooperation with the tourism sector seeking to endorse and encourage domestic tourism, besides bringing the necessary investments by providing the tourism products and programs that meet the desire of citizens and local tourist who prefers the same day tourism on the overnight, and also the prices included in the campaign will be affordable by the citizens and will include all the tourism spots and locations in the Kingdom.(Ministry of tourism, 2012).

In this direction, Aqaba can be considers a rich and an attractive area for local, regional, and international investments. Aqaba is a first class tourism area, where travelers and tourists comes to it from all over the world, and internal tourism plays an important role in motivating the economical movement to Aqaba. In terms of importance, the golden triangle provinces in the South (Aqaba, Rum, and Petra) consider the second most important tourism region after Amman. Aqaba consider a major tourism center for leisure tourism, trade, and recently for conferences, and it is one of the most prominent attractive locations for internal or domestic tourism. (Bathatho, 212, P. 7).

In recent years, the regiments of Jordanian visitors to Aqaba become increasing by the day, and particularly in the holiday seasons and school holidays, and due to the tourism being an important economic resource and financial source for the treasury, decision makers in Aqaba requires to work on creating an investment environment adequate with the Aqaba tourism and economic location, and the return of economical and social benefits on the homeland and the Jordanian citizens.

6.1.2 The Importance of Internal Tourism

Tourism from an economic perspective is a productive sector that plays an important role in increasing the national income, and a source for providing employment opportunities, human resources development, and local community service. In this topic, a survey at the department of statistics on local tourism in 2008, showed that the number of trips by families residing in Jordan reached (1209.231), which divided into two type of trips: the one-day trips amounted to (951) thousands at (78.6%) from the total number of local tourism trips, and the overnight trips amounted to (259) thousands, which represented a (21.4%) of the overall trips. The survey showed that (57%) from the one-day trips were for relaxation and vacation spending purposes, about (32%) to visit relatives and friends, about (8%) for school and university trips, (2%) for shopping, and less than (2%) for the rest. The overall tourism expenditure on those trips amount to (61.4) million JDs, the spending on the overnight trips amount to (32.7) millions approximately, forming a (53.3%) from the total tourism expenditure, but for the one-day trips, the overall expenditure amounted to (28.7) millions JDs, forming a (46.7%) from the total tourism expenditure. The survey results shows that Aqaba governorate received and treated a percentage of (38%) from the overnight trips, and Aqaba governorate also took the first rank in the expenditure volume at percentage of (38%) from the tourism expenditure (Department of statistics, 2008).

In the same prospective, opinion polls indicates that local tourist prefer the one-day tourism (78%) on the overnight (21%) (Addustour newspaper, 2010). Aqaba is the destination of the one-day tourists for the Jordanian visitors, forming (53%) of the total domestic tourism, especially on weekends and holidays, and also the visitors coming from Amman governorate forms (51%) from the overall visitors to Aqaba (PKF Jordan-Iraq, 2015, p.9).

The importance of domestic tourism can be represented in several aspects, and the most important one are: increase citizens ' awareness of the tourism importance to their country, including stunning natural attraction locations, historical and ancient monuments, and heritage sites, in order to deepen the national identity be longing,

expand and increase the local communities interaction with the tourism attraction constituents, potentials, and locations. It will follow that, directing the attention and caring about the tourism environment characteristics and maintaining the cleanliness and the maintenance of the tourism sites. (Bathatho, 2012, p. 21).

Regardless of what was referred to previously regarding the importance of domestic or internal tourism in supporting the tourism activity, but the studies and reports highlight the numerous obstacles and problems that still interrupting the purposeful efforts to develop the prospects of domestic tourism in Jordan, which concentrate in the following points:

A. Reduce the per capita income rates and the living standards of Jordanians, which limit their abilities to spend on tourist activities, the large size of the Jordanian families, which reaches an average of about six persons increases the difficulties for saving and spending on activities, facilities, and tourism services. Although, there are the cultural constraints and obstacles that represented in the poor desire of citizens to visit the archaeological and historical monuments and areas. These constraints are associated with the poor cultural and tourism awareness about the significance of these tourism sites, landmarks, and attractions, add to that the limited and poor diversity of targeted tourism and recreational programs and activities for the different categories of the Jordanian society, in addition to the weaknesses of necessary incentives and promotional benefits to motivate the domestic tourism movement (Bathatho, 2012, p. 21).

B. The absence of the internal tourism marketing strategy to Aqaba: despite having a written strategy for marketing Aqaba tourism, but what's written differ from the actual, there is no clear strategy for marketing tourism to Aqaba. In addition, there are no clear marketing objectives, and also there is no consistency between the tourism marketing strategy and the actual market of (ASEZA). The reality confirms the existence of a strategic gap between what is needed to be achieved and what is actually achieved (Al-Ayman, 2013, p.50).

C. Hotel room quantities shortness: there is an urgent need for additional hotel rooms at Aqaba to ensure attracting greater number of tourists to visit it, knowing that the number of hotel rooms in Aqaba amount approximately to (4200) guestrooms, distributed on the one-star, and five star hotels. This limited capacity of hotels stand as a challenge to the tourism sector in Aqaba, The availability of large number of hotel rooms will enhance the operations of tourism promotion and will activate the domestic tourism, especially within the tourism promotion programs of the golden triangle (Alghad daily newspaper, 2015).

D. Shortness in the tourism services and weakness in the infrastructure and metadata (ultra-structure): Aqaba city visitors find almost no parking for their vehicles during the holidays, and vacations. Aqaba becomes very crowded in these periods which create obstacles in front of the Aqaba internal movement, and also the increasing number of visitors who sleep on pavements or sidewalks due to the lack of hotel rooms, particularly the classified three stars gives a negative appearance and indications on the movement of domestic or internal tourism. In addition, the limited parks and the crowded beaches of visitors along the city, as well as the traffic jamming are all considers an obstacles and constraints which officials must find appropriate solutions to them, in order to make Aqaba attractive and comfortable city for visitors.

6.2 Previous Studies

The Internal tourism studies gained great importance by researchers, stakeholders, and concerned parties due to their active role in increasing and improving the country's economic growth rates.

On the local level, the research of Bathatho (2012) aimed to illustrate the social and economic importance of Jordan's tourism sector, as well as displaying the central role of the tourism sector in directing and leading the Jordanian economy, and identifying the most important missed opportunities in the tourism sector, whether in the area of tourism development, investment, education, or other fields. The research also aimed to identify the required methods for restoring these lost opportunities through operational programs that will contribute to the advancement of Jordanian tourism industry.

The research arrived to several results, the most important are: the competitive capability of the Jordanian tourism sector suffered many obstacles, it is a necessity to lessen the applied regulations to allow the tourism transportation to work within and between the tourism sites, equipped it with the latest technological equipment in the sector, and also meets the tourists needs in the target markets. The research also found that tourism investment in Jordan is still at large part of it conventional, where it lacks the tourism therapeutic and educational investments, as well as the exhibitions, and conferences tourism, all kinds of different sports tourism, the desert, and the environment tourism.

In connection with the domestic tourism promotion in the developed countries, Maqableh research (2005) concluded that the most important factors contributed to the promotion of domestic tourism were site and place attractiveness,

spending the holidays with families, friends, and relatives, and benefits from quotations or price discounts.

In a research conducted by the department of statistics (2008), which targeted the analytical report for the results of the local tourism survey in Jordan, the research concluded that the number of tourism trips for the one-day visitors were around (951) thousands at (78.6%) from the overall number of local tourism trips, and the number of overnight trips amounted to (259) thousands at (21.4%) of the overall number of tourism trips. In regard to the overall expenditure, it amounted to about (61.4) million JDs., the tourism expenditure on holidays and recreational trips was in first place, with about (40) million JDs from the overall tourism expenditure, spending for the purpose of relatives and friends visit came second with about (16) million JDs, while spending for shopping amount to about (3) million JDs only. The research also found that Aqaba governorate welcomes and treats (38%) from the overnight trips, and the tourism expenditure in Aqaba came to (38%) from the overall tourism expenditure.

In relation to the competitive indications in the tourism field, the research of Dupeyras & MacCallum (2013) emphasized that understanding the country's competitiveness in tourism is one of the key considerations of policies and decision makers. The research seeks to divide the competitive indications in tourism into the following four indicators: indicators for measuring the tourism performance, indicators for monitoring the ability of the tourism area to provide quality and competitive tourism services, indicators for watching the attractiveness of the tourism area, and indicators for monitoring the responsiveness of policy makers to the available economic opportunities. The research found a number of major indicators to measure the competitive capability in the tourism field: consider the tourism GDP as a primary indicator for the tourism competitiveness, domestic tourism revenues per visitor, number of overnight stays in the various areas, and labor productivity in the field of tourism services.

Research performed by Al-Ayman (2013), the researcher aimed through it to evaluate the tourism marketing strategies at ASEZA, which was adopted by the authority in the period (2005-2010), and reached a number of results, the important one are: unclear tourism marketing strategy, unclear goals, as well as the lack of consistency between the tourism marketing strategy and the actual market for Aqaba Special economic zone. The research also found that tourism marketing strategy gap was largely caused by the inadequate budgets allocation to support tourism, in order to achieve the desired effect level, as well as lack of market researches and poor tourism promotion, therefore the decisions were based on personal assumptions rather than market researches.

7. Research Methodology

In order to achieve the previous research objectives, and arrive to the best methods and ways to highlight what Aqaba area possess of tourism potentials, as well as identify the most important obstacles that stand in the way of achieving an effective tourism development in Aqaba economic city, the researcher will rely on the following scientific methodologies:

Inductive method: for the purpose of examining and extrapolating some of the previous writings and studies related to the research topic, and how to benefit from them in solving the problem of the research.

The comparative method: for the purpose of comparing between the contributions of the other studies related to the research topic by standing at the findings and results, and how to benefit from them in overcoming the problem of the research.

Descriptive method: for the purpose of describing, explaining, interpreting, and analyzing the applied research results that the researcher will perform to test the research hypotheses and to verify the test results.

8. Research Population and Sample

The research population represented in all employers who work in tourism field, such as hotels, tourist agencies, restaurants, car rental offices, eastern artifacts shops, diving centers, and water sports for the year 2016, and table 2 represents the research society for the years (2011-2016):

Table 2. Number of Tourism Activities in Aqaba

Years	Hotels	Tourism & agencies	Tourism restaurants	Car rental offices	Tourism shops	Diving centers	Water sports	Overall events (activities)
2011	55	40	124	12	41	9	3	284
2012	55	35	124	12	41	9	3	279
2013	59	30	124	12	41	9	3	278
2014	63	34	124	12	41	9	3	286
2015	64	34	124	12	41	9	3	287
2016	64	34	124	12	41	26	6	307

Source: Ministry of tourism and antiquities (2016).

It perceives through table 2, that number of hotels (64), tourism agencies (34), restaurants (124), car rentals

offices (12), Tourism shops (41), diving centers (26), and water sports (6), totaling (307) firms. A stratified random sample of them at (10%) had been classified in the order of (6, 3, 12, 1, 4, 3, 1), where the research tool was distributed on (34) of them, (32) were returned, and (2) were excluded after establishing that the respondents answered it without reading or interest.

8.1 Data Collection Methods

To complete the theoretical framework of the research, the researcher depended in the data collection process on several sources, such as books, literatures, Arabic and foreign periodicals, and the special publications of the Jordanian ministry of tourism and archaeology, as well as the researches of Arabic and foreign conferences, university letters, theses, and dissertations, and the international information network (Internet). In regard to the field research, the researcher also depended on the questionnaire as a tool to identify the availability of natural potentials for the economic Aqaba area as a tourism attractions, as well as the role of (ASEZA) commissariat in the development of tourism at Aqaba economic city, and finally level of obstacles that faces internal tourism development in Aqaba economic City.

8.2 Research Tool

Researcher relied for data collection on the use of the questionnaire list method, where researcher has developed a questionnaire for this research and distributed it on the individuals concern with response to them totaling (34), and was received by hand-see supplement number (1). The questionnaire contains three main parts, the first part includes (14) articles covered the natural potentials of Aqaba economic area with relation to the tourism attractions, the second part contained (9) articles that addressed the role of (ASEZA) commissariat in the development of tourism at Aqaba economic city, and the third part contained (7) articles included the constraints and obstacles that faces the internal tourism development at Aqaba economic city, as shown in table 3:

Table 3. The three parts of questionnaire related to research sample

Part	Field	Articles for measuring variables
First part	Natural potentials of Aqaba economic area related to tourism attractions.	1-14
Second part	Role of (ASEZA) commissariat in the development of tourism at Aqaba economic city.	15-22
Third part	Constraints and Obstacles facing the internal tourism development at Aqaba economic city.	23-30

In regard to the drafting of the research questionnaire, the researcher relied on the fourth Likert scale (strongly agree, agree, disagree, strongly disagree), and these answers were given the grades (4, 3, 2, 1) respectively, as shown in the table 4, where the arithmetic mean of (2) had been adopted to analyze the results.

8.3 Statistical Operational Methods

Researcher unloaded and analyzed questionnaire through the statistical package for social sciences (SPSS) software, and relied also on a number of statistical methods to analyze data, such as percentages and frequencies, Pearson correlation coefficient for measuring articles truthfulness, Cronbach alpha test to see the consistency of the articles on the questionnaire, Spearman-Brown formula for consistency, and the one sample average T-test.

8.4 Research Limitations

Spatial boundaries: the research was limited to Aqaba city and the tourism business and commercial firms available in it, such as hotels, restaurants, and various shops.

Temporal boundaries: the research limited to the time period of the tool distribution on the month of May, where a lot of tourists will come to the city, due to the mild weather at this time of the year.

Human limits: the research was identified by one social type represented in the employers.

Objective limits: subject of the research specified by the economic impact of domestic tourism only, and didn't cover the other effects which might result from the domestic tourism, such as social, political, or any other effects that may result from it.

9. Result Analysis and Discussion

In this part of the research, the researcher will display the results of the research, according to the following:

First: the internal consistency of the research fields:

To research the interaction between the three areas or fields, the correlation coefficients were calculated between these areas to show the impact of each one on the other, and the results according to table 4 were as follows:

Table 4. Pearson correlation coefficients between the averages of the three areas (and the level of statistical significance for each)

		First field	Second field	Third field
First field (National income increase)	Pearson coefficient	1	0.46*	0.18
	Significant level		0.01	0.35
	Number of samples	30	30	30
Second field (ASEZA) role	Pearson coefficient	0.46*	1	-0.34
	Significant level	0.01		0.07
	Number of samples	30	30	30
Third field (Constraints and obstacles)	Pearson coefficient	0.176	- 0.34	1
	Significant level	0.35	0.07	
	Number of samples	30	30	30

* Means that the correlation coefficient between the two variables is statistically significant at a level less than (0.05).

It noticeable from table 4 above that the correlation coefficient between the first and second field was positive with (0.46) at statistical significance level of (0.01), but the correlation between the first and the third field was also positive with (0.18) at statistical significance level of (0.35), while the correlation coefficient between the second and third fields came negative with (-0.34) at significance level of (0.07).

Then the limitation coefficients were calculated between the first field on the one side and the second and third fields on the other side, and the results were (0.21), (0.11) respectively.

Second: the natural potentials of Aqaba economic area with relation to the tourism attractions:

Table 5 refers to the descriptive statistical results of the research sample opinions about the natural potentials of Aqaba economic area related to tourism attractions, thereon it is noticeable that the first article "the commercial traffic or movement increases on the weekend and on the tourism seasons." got the highest arithmetic mean at (3.13) out of (4), or (78%) from the commercial employers believe that Aqaba owns a large potentials for the internal tourism which usually concentrate on the weekend and tourist seasons. Researcher believes that taking this article the lead in this area is an evidence on the truthfulness and practicality of the research, and this indicates that Aqaba possess the factors needed for the internal tourism attractions which would enrich the national economy and raise the Jordanian national income level. But the reason for obtaining article (12): "commercial slogans launch by (ASEZA) leads to an increase in the internal tourism (scatter the sand with gold.....)" the lowest arithmetic mean at (1.87) out of (4), or only (46%), may be the non-arrival of sufficient publicity or advertisement of such slogans to the recipients in other provinces, the lack of continuity to launch such slogans by (ASEZA), or the emptiness of these slogans from the real and true substance that may achieve. The arithmetic mean for the whole domain or field reached (2.62) out of (4), or (65%), it is acceptable percentage that indicate the existence of natural potentials of Aqaba economic area related to tourism attractions, and in turn proves the acceptance of the research first hypothesis.

Table 5. Descriptive statistics for the natural potentials of Aqaba economic area related to the tourism attractions

Article number	Article	Arithmetic mean	STDEV	Seq.	T-value
1	Commercial traffic increases on weekends and tourism seasons.	3.13	0.78	.000	22.114
2	There are special preparations on weekends to greet visitors.	2.63	0.76	.000	18.857
3	Concentrate on one type of product on weekends and tourism seasons.	2.47	0.68	.000	19.826
4	Jordanian tourists get treated better than the Arab tourist.	2.47	0.94	.000	14.417
5	Demand for labor increases on weekends and tourism seasons.	2.37	0.76	.000	16.947
6	Demand on goods led to an investment expansion.	2.57	0.77	.000	18.166
7	Demand on hotel rooms increases over the weekends and tourist seasons.	3.10	0.66	.000	25.658
8	Public traffic increases on weekends and tourist seasons.	3.10	0.66	.000	25.658
9	Movement of booking tourism buses increases on weekends and tourist seasons.	3.03	0.67	.000	24.847
10	Local populations are positively influenced by increasing the tourism movement on weekends and tourist seasons.	2.63	0.81	.000	17.835
11	The tourism movement increases in winter due to the mild weather.	1.97	0.81	.000	13.320
12	Commercial slogans launch by (ASEZA) leads to an increase in the internal tourism (scatter the sand with gold.....).	1.87	0.78	.000	13.174
13	Jordanian tourists return to Aqaba more than once per year.	2.83	0.87	.000	17.750
14	Most of the tourism groups makes Aqaba part of their journey, for being one of the tourism golden triangle cornerstones (Petra, Rum, Aqaba).	2.47	0.97	.000	13.882
General level for the articles (1-14)		2.62	0.87	.000	-5.347

Third: roles of (ASEZA) commissariat in the development of tourism at Aqaba economic city.

Table 6 indicates the results of the research sample descriptive statistics related to the role of (ASEZA) commissariat in the development of tourism at Aqaba economic city. Therefore, article (15) "Tourism movement in Aqaba needs more organizations and arrangements" found to receive the highest arithmetic mean at (3.30) or (83%). It is a very high percentage which decision makers in (ASEZA) must be aware of, due to the fact that organization process is the most important point in the success of any administrative action or work, therefore it must be reconsidered by directing and organizing the flow of internal tourism. Researcher sees that poor organization and arrangement may be due to the weakness of tourism awareness represented in delivering papers, publications, booklets, and brochures that identify and determine the locations and prices of tourist areas, apartments, hotels, or restaurants. All of this leads to lack of organization and the positioning of internal tourism only in the city center, for some reasons or another, and the poor organization also leads to traffic jams that limit the movement of people inside the city.

However, article (22) of this field: "ASEZA offer facilities in regard to the process of getting licenses and renewing them" got the lowest arithmetic mean at (1.60), or (40%). Researcher sees two points of view for this issue, the first is against the procedures of (ASEZA) which employers sees as obstructive and disruptive to the tourism attractions, and as a result they hinder any increase in the national income, and the second view is about insuring the availability of the essential conditions in all tourism firms, in order to provide a superior services to the tourists. The arithmetic main for the domain or field as a whole came to (2.07) out of (4) or (51.7%), which is a medium degree of support to the research sample, about the expected role of (ASEZA) commissariat contribution to the development of tourism at Aqaba economic city, which in turn proves the acceptance of second research hypothesis.

Table 6. Descriptive statistics for the role of (ASEZA) commissariat in the development of tourism at Aqaba economic city

Article number	Article	Arithmetic mean	STDEV	Seq.	T-value
15	Tourism in Aqaba needs additional organization and coordination.	3.30	0.95	.000	18.980
16	(ASEZA) commissariat perform sufficient role to promote internal tourism to Aqaba.	1.73	0.83	.000	11.470
17	(ASEZA) commissariat performs the required procedures to encourage the internal tourism to Aqaba.	1.93	0.91	.000	11.673
18	(ASEZA) commissariat ensures that facilities are available to the Jordanian tourists (baths, showers, and clubs).	2.00	0.91	.000	12.042
19	(ASEZA) commissariat believes in conducting opinion polls about the internal tourism to Aqaba.	1.73	0.91	.000	10.465
20	Tourists show some complaints about the exiting procedure from the custom areas.	2.83	0.99	.000	15.747
21	(ASEZA) commissariat provides facilities to dealers regarding the entry and exit of goods from and to Aqaba.	1.67	0.71	.000	12.836
22	(ASEZA) commissariat offer facilities in the licensing and renewal processes.	1.60	0.72	.000	12.105
23	(ASEZA) commissariat provides brochures, and guidebooks with illustration about the commercial and tourism sites in Aqaba.	1.83	0.79	.000	12.687
	General level for the articles (15-23)	2.07	1.02	.000	-11.097

Fourth: obstacles that face the internal tourism development in Aqaba economic city.

Table 7 indicates the results of the descriptive statistics for the research sample about "the obstacles that face the internal tourism development in Aqaba economic city", it is noticeable that article (27) "Aqaba needs an additional parking lots" received the highest arithmetic mean at (3.40) or (85%) of employers believes, and this align with the researcher's point of view in the hypothesis number (3) emerging from this question, which supports that Aqaba needs immediate infrastructure and ultra-structure, where parking lots consider a real problem in Aqaba markets due to shortness in the specified parking or the absence of them in some of the important areas that have large shops and stores clustered together which are visited frequently by tourists and local populations, and draw the attention of (ASEZA) commissariat to develop the appropriate solutions to this problem.

While article (25) "Dealing with the Jordanian tourist better than dealing with the foreign tourists" got the lowest arithmetic mean at (2.20) or (55%) of employer believes, where they see that dealing with the foreign tourists better than dealing with the Jordanian tourists. Researcher sees that the solution to this problem will be at

distributing educational bulletin and brochures, and hire tourist guides in the crowded tourism areas to guide the tourists to their destinations.

Followed by the article (30) " The Jordanian tourists high cost limit their desires to come to Aqaba" which got an arithmetic mean of (3.20) or (80%) from employers sees that the high cost of tourism to Aqaba limit the desires of Jordanian visitors to come to Aqaba. Researcher believes this to be an abuse and exploitation of the internal tourism, and to solve this problem, authorities must follow and control all the tourism facilities and firms, and make sure to display the price list of tourism services in a prominent place for everyone to see and follow. The arithmetic mean for the whole domain or field is (2.87) of (4) or (71.7%), which is a high supporting percentage for the research sample about the existence of several constraints and obstacles that faces the internal tourism development at Aqaba economic city, which in turn proves the acceptance of the third research hypothesis.

Table 7. Descriptive statistics of obstacles that faces the internal tourism development at Aqaba economic city

Article number	Article	Arithmetic mean	STDEV	Seq.	T-value
24	The prices of products increase on weekends and tourism seasons.	2.23	0.77	.000	15.807
25	Dealing with Jordanian tourists better than dealing with foreign tourists.	2.20	0.89	.000	13.590
26	Aqaba needs an additional hotel rooms.	2.90	0.88	.000	17.953
27	Aqaba needs additional parking lots.	3.40	0.67	.000	27.603
28	Aqaba needs an additional promotions and advertisements.	3.23	0.73	.000	24.329
29	Local population act negatively to the increase in tourism movement in weekends and tourism seasons.	2.90	0.88	.000	17.953
30	High costs of Jordanian tourists limit their desires to come to Aqaba.	3.20	0.76	.000	23.028
	General level for the articles (24-30)	2.87	0.92	.000	-11.097

10. Research Results

The research arrived to several results, the most important are as follow:

1. Research results showed that Aqaba economic zone differentiate with many natural potentials related to the tourism attractions, which was approved by the results of the research concerning the motivation of business and commercial movement on weekends and tourism seasons, which would enrich the national economy and raise the level of Jordanian national income, and this calls for to proofing the research first hypothesis.
2. Research results showed that the expected role of (ASEZA) commissariat in tourism development at Aqaba economic city needs additional enhancements and strengthening, especially in regard to the organization of the tourism movement in the region. Researcher believes that poor organization may be due to weak tourism awareness represented in the distribution of newspapers, brochures, and guidebooks which shows and specifies the locations and prices of the tourism areas, apartments, or restaurants, all of this leads to a lack of organization and the positioning of internal tourism only in the city center, and this calls for accepting the research second hypothesis.
3. Research results showed several obstacles that face the internal tourism development in Aqaba economic city, perhaps the most important are: lack of parking spaces to serve tourists inside Aqaba city, limited hotel rooms in Aqaba city, and the high cost of internal tourism to Aqaba city, and this calls for accepting the research third hypothesis.

11. Recommendations

Through the research results, researcher can recommends the following:

1. Increase the level of tourism awareness by (ASEZA) brochures, and guidebooks that will be distributed on tourists, and through supported tourism programs.
2. The continuous work on introducing the promotional presentations for tourists at the local, Arab and world levels in order to develop the internal tourism in Aqaba zone.
3. Work on providing, preparing, and creating the infrastructure and the superstructure at the Aqaba region to greet and entertain the tourists, especially in the formal holidays, tourism seasons, and weekends, such as increasing hotel suite, apartments, number of car parking, restaurants, etc).
4. Follow-up on all of the tourist facilities and firms, and check the price list regularly to work on promoting tourism, and so not exploiting tourists.

References

- Addustour newspaper. (2010). Great activity of domestic tourism and vogue for external. report of Jamal Khalifa, 15/11/2010.
- Al-Ayman, M. (2013). Tourism Marketing Strategy Case Study: Aqaba Special Economic Zone (ASEZA). *International Business and Management*, 6(1), 47-50. Available online at www.cscanada.net.
- Alghad daily newspaper. (2015). website, report of Ahmed Al-Rawashdeh, date of publication, 15/5/2015.
- Bathatho, I. (2012). Regain lost opportunities in the Jordanian tourism sector. economic and social report, research submitted to the Jordanian economic and social council, social and economic report, 2012, under the Jordanian strategic plan for the advancement of the national economy – tourism sector – During the period (2013-2018), page 7.
- Department of statistics, reports. (2008). <http://web.dos.gov.jo>. <https://doi.org/10.1787/5k47t9q2t923-en>
- Dupeyras, A., & MacCallum, N. (2013). Indicators for Measuring Competitiveness in Tourism. OECD-Organization for Economic Co-operation and Development papers, available online at www.oecd.org.
- Maqableh, K. (2005). The promotion of domestic tourism in the developing countries, analytical research of Jordanian experience from the point of view of a group of Jordanian tourists to Petra. *Dirasat magazine*, 32(3).
- PKF, International Limited Network. (2015). Market Overview Aqaba- Jordan September 2015, Accountant & Business Advisors, Available online at <http://www.pkf.com/pkf-offices/europe-middle-east-and-India/Jordan/pkf-jordan-amman-amman>
- The Jordanian ministry of tourism site.

Appendixes: Questionnaire appendix

Dr. ----- Mr. / Mrs. -----

Major: ----- Work Field: -----

Researcher performs a study entitled: "The Role of Domestic Tourism in Supporting the National Economy, from the Point of View of Employers"Field Study on Aqaba Economical City

Kindly please fill out the questionnaire, thank you for your corporation.

		Strongly agree	Agree	Disagree	Strongly disagree
1st field					
1	Commercial traffic increases on weekends and tourism seasons.				
2	There are special preparations on weekends to greet visitors.				
3	Concentrate on one type of product on weekends and tourism seasons.				
4	Jordanian tourists get treated better than the Arab tourist.				
5	Demand for labor increases on weekends and tourism seasons.				
6	Demand on goods led to an investment expansion.				
7	Demand on hotel rooms increases over the weekends and tourist seasons.				
8	Public traffic increases on weekends and tourist seasons.				
9	Movement of booking tourism buses increases on weekends and tourist seasons.				
10	Local populations are positively influenced by increasing the tourism movement on weekends and tourist seasons.				
11	The tourism movement increases in winter due to the mild weather.				
12	Commercial slogans launch by (ASEZA) leads to an increase in the internal tourism (scatter the sand with gold.....).				
13	Jordanian tourists return to Aqaba more than once per year.				
14	Most of the tourism groups makes Aqaba part of their journey, for being one of the tourism golden triangle comerstones (Petra, Rum, Aqaba).				
2nd field					
15	Tourism in Aqaba needs additional organization and coordination.				
16	(ASEZA) commissariat perform sufficient role to promote internal tourism to Aqaba.				
17	(ASEZA) commissariat performs the required procedures to encourage the internal tourism to Aqaba.				
18	(ASEZA) commissariat ensures that facilities are available to the Jordanian tourists (baths, showers, and clubs).				
19	(ASEZA) commissariat believes in conducting opinion polls about the internal tourism to Aqaba.				
20	Tourists show some complaints about the exiting procedure from the custom areas.				
21	(ASEZA) commissariat provides facilities to dealers regarding the entry and exit of goods from and to Aqaba.				
22	(ASEZA) commissariat offer facilities in the licensing and renewal processes.				
23	(ASEZA) commissariat provides brochures, and guidebooks with illustration about the commercial and tourism sites in Aqaba.				
3rd field					
24	The prices of products increase on weekends and tourism seasons.				
25	Dealing with Jordanian tourists better than dealing with foreign tourists.				
26	Aqaba needs an additional hotel rooms.				
27	Aqaba needs additional parking lots.				
28	Aqaba needs an additional promotions and advertisements.				
29	Local population act negatively to the increase in tourism movement in weekends and tourism seasons.				
30	High costs of Jordanian tourists limit their desires to come to Aqaba.				

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Social Network Theory and Management of the Sub-supply Network in Complex Sectors

Filomena Izzo¹

¹Department of Economic, University of Campania "Luigi Vanvitelli", Capua (CE), Italy

Correspondence: Filomena Izzo, University of Campania "Luigi Vanvitelli", Capua (CE), Italy.

Received: April 28, 2017

Accepted: June 9, 2017

Online Published: June 12, 2017

doi:10.5539/ibr.v10n7p46

URL: <https://doi.org/10.5539/ibr.v10n7p46>

Abstract

Studies on complex product development have seen different improvement approaches to achieve shorter product development lead times and higher return on investment. Complex product development still lack on the 'better, faster and cheaper' paradigm for efficient communication and information exchange flow process. This paper aims at understanding how the critical interdependent techniques are managed in the sub-supply network of a complex sector such as Business Aviation Industry. Thus, the aim is to envisage the best practice approach for technical communication networks among these systems-design teams and also how the bottlenecks existing could be effectively and efficiently addressed to enhance collaborative industrial supply-chain management network competitive advantage.

This paper employing social network theory propose information flow process toward enhancing an industrial sustainable competitive advantage. From a methodological point of view, the research is based on a single case study, a questionnaire was used to collect data for the level of communication network from Business Aviation supply chain network.

The outcome of the research highlights how communication in the sub-supply network significantly influences the attention the teams pay to the organization of the critical interdependent techniques. Moreover this research identifies an effective and efficient communication is sees as the driver for effective organization management, which need enhancement for industrial competitive advantage. Finally, the research carried-out undoubtedly gives a considerable contribution in understanding critical and complex issues in the relationships in sub-supplying in Business Aviation Industry.

The outcome could be further developed by extending the interviews to the businesses involved in the sub-supply chain.

Keywords: sub-supply network, social network theory, business aviation, complex products, organization theory

1. Introduction

The airplane has such characteristics that businesses are stimulated to adopt a collaborative outlook (Izzo, 2009), including huge complex products such as jet engines, marine, automobile (Maier et al., 2008; Hsu and Wallace, 2007; Addo-Tenkorang and Eyob, 2012). From an organizational point of view, the manufacture of an airplane forces a business to assign each interdependent technical component to a team, also referred to as *design team*. The *team* is responsible for the planning, development, production of the sub-system, and the integration of the sub-system with other components to guarantee the proper operation of the overall product/system (Clark & Fujimoto, 1991). Moreover, this must be in an efficient and effective manner (Gligor and Holcomb, 2012, 2014; Gligoret et al., 2013; Kampstraet et al., 2005; Musa et al., 2014; Maier et al., 2008; Hsu and Wallace, 2007; Addo-Tenkorang and Eyob, 2012; Chandra and Grabis, 2007; Childerhouse and Towill, 2011).

The interface between the components defines the *interdependent techniques* among the design teams. Building an effective collaboration between independent teams is one of the main challenges in the production of a complex product (Thompson, 1967; Galbraith, 1973; Smith and Eppinger, 1997; Mihmet et al., 2003; Sosa et al., 2004; Tenkorang and Helo, 2017). Though the attention (attention meaning the observation, the coding, the interpretation and the focus on time and effort the design teams dedicate to identifying and solving problems – Ocasio, 1997) on the interdependent techniques is crucial for the development of a complex product (Humphries et al., 2007; Puvanavarman et al., 2009; Min et al., 2005; Tsanos et al., 2014), the design teams often ignore, or

pay little attention to, a large number of interdependent techniques during the development of the product (Sosa *et al.*, 2004, 2003).

It is inevitable that some interdependent techniques are overlooked, given the limited cognitive capacity of the economic agents (Simon, 1947; Ocasio, 1997). However, ignoring those critiques can have serious consequences on a business. In respect to this, numerous studies show the negative effects caused by a lack of attention placed on the critical interdependent techniques. For example, in the research on the industry of semi-conductors carried-out by Henderson and Clark (1990), they stress how new interfaces between existing components, which were often ignored by design teams, determined the loss of the businesses' dominant position. Furthermore, in the automobile industry, Ford and Firestone suffered great losses due to inadequate management of the interfaces between the design of the tires and the dynamics of the vehicles of the Ford Explorer (Pinendo *et al.*, 2000). In the aerospace industry, Airbus suffered significant delays during the production of its A380 and, consequently, losses caused by the lack of attention placed on several critical interfaces between the electrical system and the fuselage (Gumbel, 2006; Hollinger and Wiesmann, 2006).

Industrial and institutional benchmarking for *best practice* competitive advantage in terms of effective and efficient enterprise communication network relationships can never be over-emphasized (Min *et al.*, 2005; Humphries *et al.*, 2007; Puvanasvaran *et al.*, 2009; Tsanos *et al.*, 2014). Moreover, it is imperative that organizations are capable of responding to any changing parameters concerning new/complex product development, and this must be done in an efficient and effective manner (Gligor and Holcomb, 2012, 2014; Gligor *et al.*, 2013).

Despite the importance interdependent techniques can have in the development of a complex product, little is known of the factors that have an effect on the teams' attention. In other words, the question is, *Why are some teams better than others in managing critical interdependent techniques? Should the reason be attributed to the characteristics of the components of the product and/or methods of communication?*

According to Geunes *et al.* (2002) for sustaining enterprise supply chain competitive advantage in industrial organizations need them to implement new strategies based on collaboration with their supply chain network partners and make use of information technology systems and internet-based services. According to Puvanasvaran *et al.* (2009) communication is very important in organization management. Therefore, in generic terms, an effective and efficient communication network is a vehicle to function in a competitive economic network (Le Vassan, 1994; Wartner, 1985; Worley and Doolen, 2006). However, communication itself is influenced by many different interlinking factors. Thus, the methodology employed in this paper is a single-case study approach - Piaggio Aero Industries -, and the paper presents the communication factors in systems design teams.

Shown below is the theoretic framework of reference, followed by the methodology, the results and the conclusion.

1.1 Theoretical Background

Regarding the factors that have effects on the *attention* of the teams, recent research (Sosa *et al.*, 2004), starting from the contributions of the *development of the product* (Ulrich, 2004) and of the *social network theory*, shows that both the *architecture of the product* (architecture meaning, 'The scheme by which the function of a product is allocated to physical components. Architectures are characterized by a higher or lower degree of modularity' - Ulrich, 2004:419), as well as the *network communication*, influence the *attention* the teams place on the management of the critical interdependent techniques.

Understanding how the *architecture* of the product and the *communication* between the teams in the network can influence the success of the development of a product (Le Vassan, 1994; Warten, 1985; Worley and Doolen, 2006; Simatupang and Sridharan, 2005; Tsanos *et al.*, 2014; Vollman *et al.*, 2005), allows the *system integrator* (the system integrator is the business which assembles the parts and produces the complex product) to make better decisions regarding which components require particular attention during the *design* process. Therefore, taking into consideration the implications for other decisions that are relevant, such as *outsourcing*, *off-shoring* and the management of the life-cycle of the single components.

Regardless of the focus, the studies on the *development of the product* coincide with the results of *research on R&D* (Allen, 1977; Brown and Eisenhardt, 1995), which point out the need of intense communication to handle the *attention* of the various *design teams* in the critical interdependent techniques.

Organizational studies inspired by the *social network theory* (Sosa *et al.*, 2003, 2004), have dwelt on, in particular, the methods through which the communication of the networks can help or harm the capacity of the

actors in collaborating with other interdependent entities.

Empirical facts show that this ability is strengthened by reciprocal *trust* and by the *collaborative nature* of the members of the network; trust seems to be essential in order to improve communication and the team's performance (Ahuja, 2000; Obstfeld, 2005; Coleman, 1990; Maier *et al.*, 2008).

Based on the studies of the *sociological approach* (Coleman, 1990; Granovetter, 1985), several researchers have emphasized the role of the *communicative structure* in the network, in the ability of the actors to collaborate in complex tasks (Gargiulo and Benassi, 2000).

In summary, more studies (Allen, 1997, De Meyer and Mizushima, 1989; Jaffe *et al.*, 1993; Keller and Holland, 1983; Van den Bulte and Moenaert, 1998) on the communication processes in R&D context describing how increasing distance between team members reduced the chances of two team members communicating about technical matters. However, little theoretical understanding of the correlation factors that influence communication in complex product development has been published.

Therefore, the importance of technical communication in collaborative complex engineering design and delivery process is indisputable. However there is no good or well-defined consensus on how to coordinate, or, at best, streamline their organizational 'best practice' operations to improve and enhance an industrial competitive advantage. In this research paper, a communication network is defined as the cognitive and social network process by which technical information or data are transmitted and exchange effectively and efficiently among complex engineering systems-design teams in an industrial enterprise manufacturing supply chain management.

Thus, the aim is to envisage the best practice approach for technical communication networks among these systems-design teams and also how the bottlenecks existing could be effectively and efficiently addressed to enhance collaborative industrial supply-chain management network competitive advantage.

The results offer insights for researching and managing communication networks across systems-design teams' interfaces. It so makes clear, how directly and/or indirectly linked factors influence technical communication networks among systems-design teams in complex engineering design and delivery. The factors which this research paper identifies, which directly or indirectly influence technical communication among complex engineering product system-design teams are based on person interview and questionnaire employed of data collection used in this research. The factors identified (Addo-Tenkorang and Helo, 2017; Addo-Tenkorang, 2014; Addo-Tenkorang *et al.*, 2014) in the research include:

1. frequency in communication among various design teams;
2. importance of design teams' technical communication for network complex product development;
3. level of collaboration among various design teams;
4. the level of mutual trust among various design teams.

These factors identified to have also been highlighted in Maier *et al.* (2008), they observed 27 factors common across all industrial studies, forming the basis for exploring correlations between factors influencing communication in network complex product development.

The networks that are set as the know-how communication circuits, promote effective learning, collaboration among partners and *attention* to interdependence, only when there are relationships based on trust and, eventually, supported by formal limits (Doz, 1979; Pisano, 1990; Badaracco, 1991; Padula, 1998).

In light of the possible lack of balance in instruction, in the different contracting power of the parties involved and in the risks that can harm the relationship (e.g., violation of industrial secrets; speculative behavior) and generate costs, the only method used for coordination that is truly efficient in governing the transactional interdependence that is generated by the network is *trust*. Where trust is intended as – the expectation of predictable behavior, fair and cooperative – (Soda, 1998:82).

Trust strengthens in time and with experience and is based on interpersonal relationships that reinforce the information channels and develop multiple opportunities for interaction (sociological prospective). Time and experience represent decisive factors in order to establish the level of trust in a relationship and thus, the stability and intensity.

It is, therefore, obvious that trust does not exist in itself, but is built on daily and repeated behavior of the various actors and, as such, develops within an enduring and incremental evolutionary cycle (Lorenzoni, 1997; Larson, 1992; Gerlach, 1992; Ring and Van De Ven, 1992; Thompson, 1967).

Trust is also (in economics) the result of a cost-benefit analysis thus the actors choose whether to be

collaborative or opportunistic based on a calculation of financial convenience. Consequently, trust also depends on the evaluation of the incentives underlying the cooperative relationship (Hill, 1990).

The mechanisms that are commonly appealed to in promoting trust in networks are linked to the *sharing of information* and to the promotion of *common norms and cultures*. The sharing of direct and indirect information breaks down barriers to the sharing of knowledge and simplifies collaboration in complex activities (Ahuja, 2000; Obstfeld, 2005).

The widespread interaction among members of the network could also facilitate the spreading of norms and common culture, reducing the impact of competitive and motivational obstacles to cooperation (Reagans and McEvily, 2003; Oh *et al.*, 2004). Such a culture could promote the free flow of complex information and knowledge that is often essential in order to reach superior performance (Hansen, 1999).

In light of the previous considerations, the following propositions are advanced:

P1: The sub-supply network in the BA sector is characterized by an intense communication technique.

P2: The sub-supply network in the BA sector is characterized by a mutual vision of the project.

P3: The relationship between the knots in the sub-supply network in BA are enduring and stable.

P4: The great intensity in communication, the sharing of the project and the stability of the relationships in the sub-supply network in the BA sector significantly influences the attention the teams place on the handling of critical interdependent techniques.

This case study research paper presents a network of factors, which influence supply chain management technical communication networks. The following section below (Methodology) utilizes an industrial use case example in terms of the data collection and analysis approach adopted to simulate the technical communication of an industrial case study.

2. Method

This research analyzes the relationships that are established between the integrator and the airframe sub-suppliers since they are the most critical factors as they are more complex to manage because not very modular.

From the methodological point of view, the research is based on the analysis of a case-study, helping investigation of a specific complex phenomenon (Eisenhardt, 1989; Easton 1995; Dubois and Araujo, 2004; Yin, 1989, 2003, 2009, 2012). In particular, interviews were carried-out with the Research and Development Department of Piaggio Aero Industries.

In supporting the outcome of the interviews, reference was also made to the outcome of research carried-out on the same subject matter in the aerospace sector (Hira and De Oliveira, 2007; Achon and Klassen, 2007; Green *et al.*, 2005; Bales *et al.*, 2004; Esposito, 1996; Badaracco, 1991; Allen, 2000; Izzo, 2009).

In the opinion adopted, namely the *social network theory*, the teams represent the *knots* in the network and the communication technique between them represents the *bonds* of the network. This research analyzes the intensity of *technical communication* between teams, that is, between the integrator and its sub-suppliers.

The communication technique is seen as a *flow of technology* among the various knots in the network. Flow of technology means the assets incorporated in different components, as listed below (The Technology Atlas Team, 1987):

1. Machines – technology incorporated in the objects, components, instrumentation and systems;
2. Professionalism – technology incorporated in the people, i.e., the human know-how, ability and experience jointly;
3. Information – incorporated technology in the form of ideas and information reported in manuals, articles, memos and in any other form of written documentation;
4. Organizational Rules – incorporated technology in the form of organizational procedures and bonds.

A closed-ended questionnaire was used in order to provide a suitable list of responses (Robson, 2011; Mellenbergh and Adèr, 2008). The questionnaire used in this research paper was designed and structured in order to study the intensity of the *communication technique* between the integrator and the sub-suppliers of the airframe. In particular, interviewees were asked to express an opinion (high, average, low) on the following channels:

1. Flow of raw material;

2. Transfer of predefined components and parts;
3. Supply of equipment to the sub-supplier for specific problems;
4. Visits and suggestions made by the integrator;
5. Collaboration at the start of the commission;
6. Written documents;
7. Meetings at the client's;
8. Visits by the integrator to verify the status of the order;
9. Suggestions made by the client for the adoption of the quality control system;
10. Direct intervention by the integrator in order to improve the quality control system.

In addition to the close-ended questionnaires, there was open-ended questionnaire and interview to also capture relevant empirical data for the evaluation, validation and reliability analysis of the case study and questionnaire used. A face to face interview and open-ended questions were administered to manager of the Research and Development Department of Piaggio Aero Industries.

3. Results

The Business Aviation (BA) industry, as the aeronautical one in general, is very complex. This can be attributed to the complex system of the product – the aircraft. The relationships that characterize this industry can be distinguished by two types: *inter-domain and infra-domain* (Esposito, 1996; Vicari, 1991; Izzo, 2009).

The first are stipulated among businesses in different industrial sectors. The second, instead, among businesses strictly in the aeronautical sector. The businesses that strictly belong to the aeronautical sector are producers of thrusters (engineers), producers of equipment and avionics and the integrators.

The integrator is the one that:

- a) Manufactures the aircraft,
- b) Designs the aircraft,
- c) Decides what, how and how much to produce,
- d) Chooses which businesses to involve in the project,
- e) Organizes the flow of the parts, components and systems,
- f) Assembles and markets the aircraft,
- g) Saves all the information relating to the product for immediate access of each component's history at any time,
- h) Designs and produces even part of the airframe,
- i) Manages the relationship with the final client and is legally responsible for the aircraft.

During production of the airframe, the integrator uses a network of sub-suppliers. It is this type of relationship that is studied in this research, as it is more complex since it has little space for modularity.

In making management decisions in the production cycle, the integrator manages a serious *trade-off*. On one hand, resorting to external sources generates benefits tied to the access of specialized expertise. On the other hand, the need to dominate the interdependent techniques that characterize the development of the complex product (the aircraft) pushes towards developing inside expertise of the technology of the components.

Another problem regards the breakdown of the tasks in the planning, aimed at the management of the complex technical problems and the allocation of such tasks, directed at identifying the organizing units that are internal and external to the business (the teams).

In other words, the integrator divides the entire product (the aircraft) in systems and components, where the interface between the components defines the interdependent techniques among the teams. As emphasized in literature, to build an effective collaboration among independent teams is one of the main challenges in the development of a complex product.

The interview revealed that the interaction between the airframe sub-suppliers and the integrators can only be partially expressed by a general model, which has to be tested through the simulation, the construction of prototypes and by trial and error where implicit learning and expertise play an extremely important role.

The production of an aircraft involves a long sequence of processes, each one of which is chosen by a high standard set of possibilities. The relationship between the processes in their sequence can only be partially known. The interview revealed that the relationships in the sub-supply chain are intense not only at the start of the order. For example, through written documents and collaboration in the initial stage of the order, but also in the successive phases like through periodic visits.

The written documents through which the sub-supplying businesses receive the design and details of a commission from the integrator represent one of the main channels of circulation of technology. The great use of the channel “visits and suggestions” and “collaboration at the start of the commission” show that the sharing of technology is intense both in the initial production phase as during the entire period of the relationship.

Moreover, the system integrator shares information with suppliers on the vision project, and on common norms and cultures at the beginning of the relationships, in order to simplify collaboration in complex activities.

Due to the complexity of the relationships the system integrator limits the number of suppliers to have direct relationships with, using exclusively certified suppliers, capable of being independent, that is, able to produce complex components, to manage their own network of sub-suppliers and establish long-term relationships with them.

From the contractual point of view, the bond between the client and the sub-supplier generally does not provide for long-term written contracts and the short-term ones seem to be somewhat rare. Rather, the relationship is often ruled by a continual succession of orders which do not provide for a true and real contract, but a contractual structure based on reciprocal experience and trust.

The interview shows that the main factor in market competition in the sub-supply sector is quality, while the price remains a less relevant factor. Participation, trust and the reciprocal involvement positively influence the teams' *attention* in handling the critical interdependent techniques, thus improving the individual and overall performance.

4. Discussion

The outcome of the research shows that the integrator bases the productive organization on a planned network, or rather, participates from the conception of the project as the characteristics of the product require long-term cooperative relationships.

The network that is established is a *centralized* one since the reporting system responds to specific strategic objectives of the “central” business, i.e., the integrator.

The organization being assessed, establishing itself on the convergence of different businesses in a single aggregate, towards the fulfillment and use of synergies, requires a combined effort in bonding with planning and control processes by all the partners involved in the network. Finally, the clear strategic design that is generated through the performance of the common objectives, promotes coordination of the decisions that are made within each network unit.

The participation, involvement, the trust in the network of sub-suppliers in this sector, satisfy one of the main institutional tasks of businesses in aeronautics – produce a top quality and reliable product.

The outcome of the research emphasizes that communication in the sub-supply network significantly influences the *attention* the team has in handling critical interdependent techniques.

The research undoubtedly constitutes a significant contribution in understanding critical and complex situations in relationships in sub-supplying in this sector. The outcome could be further developed by extending the interviews to the businesses involved in the sub-supply chain. This paper employing social network theory propose information flow process toward enhancing an industrial sustainable competitive advantage. In particular, this research identifies an effective and efficient communication is sees as the vehicle for effective organization management, which need enhancement for industrial competitive advantage.

The main limitation is is attributable to the fact that this research doesn't give information on type and structure of a team's organization impact the communication network, it could be a suggestion for further research.

Finally, interesting aspects to be explored in future research are: *how communication can be systematically improved? And how technology and technological capabilities could improve communication?*

References

- Achon, S., & Klassen, R. D. (2007). Supply chain management and environmental technologies: the role of integrator. *International Journal of Production Research*, 45(12), 401-423. <https://doi.org/10.1080/00207540600597781>
- Addo-Tenkorang, R. (2014). *Conceptual framework for large-scale complex engineering-design & delivery processes: a case of enterprise SCM network activities and analysis*. Doctoral dissertation, Faculty of Technology, Department of Production, University of Vaasa, ACTA, WASAENSIA 301, Industrial Management 36.
- Addo-Tenkorang, R., & Eyob, E. (2012). Engineer-to-order: a maturity concurrent engineering best practice in improving supply chains, in Eyob, E. and Tetteh, E.G. (Eds), *Customer-Oriented Global Supply Chains: Concept for Effective Management*, Chapter 7, IGI Global – Information Science Publications, 112-122. <https://doi.org/10.4018/978-1-4666-0246-5.ch007>
- Addo-Tenkorang, R., & Helo, P. T. (2017). Analysis of enterprise supply chain communication networks in engineering product development. *The International Journal of Logistics Management*, 28(1), 1-29. <https://doi.org/10.1108/IJLM-12-2014-0204>
- Addo-Tenkorang, R., Helo, T. P., Kantola, J., & Takala, J. (2014). Tecnica communication in complex product-development activities: towards a sustainable competitive advantage perspective. *Proceedings of the 11th International Conference on Innovation and Management*, Vaasa.
- Ahuja, G. (2000). Collaboration networks, structural holes, and innovation: a longitudinal study. *Administrative Science Quarterly*, 45(3), 425-455. <https://doi.org/10.2307/2667105>
- Allen, T. J. (1977). *Managing the flow of technology*, Cambridge, MA: MIT Press.
- Allen, T. J. (2000). Architecture and communication among product development engineers. *Proceedings of the 2000 IEEE Engineering Management Society*, Albuquerque. <https://doi.org/10.1109/ems.2000.872493>
- Badaracco, J. L. (1991). *The knowledge link: how firms compete through strategic alliances*. Boston, MA: Harvard Business School Press.
- Bales, R. R., Maull, R. S., & Radnor, Z. (2004). The development of supply chain management within the aerospace manufacturing sector. *Supply Chain Management: an International Journal*, 9(3), 250-255. <https://doi.org/10.1108/13598540410544944>
- Brown, S. L., & Eisenhardt, K. M. (1995). Product development: past research, present findings, and future directions. *Academy of Management Review*, 2, 343-378.
- Chandra, C., & Grabis, J. (2007). *Supply Chain Configuration*, NY: Springer.
- Childerhouse, P., & Towill, D. R. (2011). Effective supply chain research via the quick scan audit methodology. *Supply Chain Management: An International Journal*, 16(1), 5-10. <https://doi.org/10.1108/13598541111103458>
- Clark, K. B., & Fujimoto, T. (1991). *Product development performance: strategy, organization and management in the world auto industry*. Cambridge, MA: Harvard Business School Press.
- Coleman, J.S. (1990). *Foundations of social theory*. Cambridge, MA: Belknap Press.
- De Meyer, A., & Mizushima, A. (1989). Global R&D management. *R&D Management*, 19, 135-146. <https://doi.org/10.1111/j.1467-9310.1989.tb00634.x>
- Doz, Y. L. (1979). *Government control and multinational strategic management*. NY: Praeger.
- Dubois, A., & Araujo, L. (2004). Research methods in industrial marketing studies. In Håkansson H., Harrison D. e Waluszewski A., *Rethinking marketing: developing a new understanding of markets*, John Wiley & Sons Inc., Chichester.
- Easton, G. (1995). Methodology and industrial networks. In Möller K., Wilson D.T., *Business marketing: an interaction and network perspective*, Kluwer Academic Publishing, Norwell (MA). https://doi.org/10.1007/978-94-011-0645-0_15
- Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *The academy of Management Review*, 14(4), 532-550.
- Espósito, E. (1996). *Le imprese ad alta tecnologia. il caso dell'industria aeronautica*. Napoli: Cuen.

- Galbraith, J. R. (1973). *Designing complex organizations*. MA: Addison-Wesley.
- Gargiulo, M., & Benassi, M. (2000). Trapped in your own net? network cohesion, structural holes, and the adaptation of social capital. *Organization Science*, *11*(2), 183-196. <https://doi.org/10.1287/orsc.11.2.183.12514>
- Gerlach, M. (1992). *Alliance capitalism: the social organization of Japanese business*. Berkeley: University of California Press.
- Gligor, D. M., & Holcomb, M. C. (2014). The road to supply chain agility: an RBV perspective on the role of logistics capabilities. *The International Journal of Logistics Management*, *25*(1), 160-179. <https://doi.org/10.1108/IJLM-07-2012-0062>
- Gligor, D. M., & Holcomb, M. C. (2012). Antecedents and consequences of supply chain agility: establishing the link to firm performance. *Journal of Business Logistics*, *33*(4), 295-308. <https://doi.org/10.1111/jbl.12003>
- Gligor, D. M., Holcomb, M. C., & Stank, T. P. (2013). A multidisciplinary approach to supply-chain agility: conceptualization and scale development. *Journal of Business Logistics*, *34*(2), 94-109. <https://doi.org/10.1111/jbl.12012>
- Granovetter, M. S. (1985). Economic action and social structure: the problem of embeddedness. *American Journal of Sociology*, *91*(3), 481-510. <https://doi.org/10.1086/228311>
- Green, S. D., Fernie, S., & Stephanie, W. (2005). Making sense of supply chain management: a comparative study of aerospace and construction. *School Construction Management and Economics*, *23*, 579-593. <https://doi.org/10.1080/01446190500126882>
- Gumbel, P. (2006). Trying to untangle wires. *Time*, October 16 (European Edition), 36-37.
- Hansen, M. (1999). The search-transfer problem: the role of weak ties in sharing knowledge across organization subunits. *Administrative Science Quarterly*, *44*(1), 82-111. <https://doi.org/10.2307/2667032>
- Henderson, R., & Clark, K. (1990). Architectural innovation: the reconfiguration of existing product technologies and the failure of established firms. *Administrative Science Quarterly*, *35*(1), 9-30. <https://doi.org/10.2307/2393549>
- Hill, C. W. L. (1990). Cooperation, opportunism and invisible hand: implication for transaction cost theory. *Academy of Management Review*, *15*(3), 500-513.
- Hira, A., & De Oliveira, L. G. (2007). Take off and crash: lessons from the diverging fates of the Brazilian and Argentine aircraft industries. *Competition & Change*, *11*(4), 329-347. <https://doi.org/10.1179/102452906X239501>
- Hollinger, P., & Wiesmann, G. (2006). House of conflict: how rivalries have disrupted the steep climb of Airbus. *Financial Times*, November 14, 13.
- Hsu, C., & Wallace, W. A. (2007). An industrial network flow information integration model for supply chain management and intelligent transportation. *Enterprise Information Systems*, *1*, 327-351. <https://doi.org/10.1080/17517570701504633>
- Humphries, A. S., Towriss, J., & Wilding, R. (2007). A taxonomy of highly interdependent, supply-chain relationships. *The International Journal of Logistics Management*, *18*(3), 385-401. <https://doi.org/10.1108/09574090710835129>
- Izzo, F. (2009). *Governance, struttura e vantaggio competitivo nei settori complessi: evidenze dalla Business Aviation Industry*. Padova: CEDAM.
- Jaffe, A., Trajtenberg, M., & Henderson, R. (1993). Geographic localization of knowledge spill-overs as evidenced by patent citations. *Quarterly Journal of Economics*, *108*, 577-598. <https://doi.org/10.2307/2118401>
- Keller, R. T., & Holland, W. E. (1983). Communications and innovations in research and development organizations. *Academic Management Journal*, *29*, 715-726.
- Larson, A. (1992). Network dyads in entrepreneurial settings: a study of the governance of exchange relationship. *Administrative Science Quarterly*, *37*, 76-104. <https://doi.org/10.2307/255941>
- Le Vassan, M. (1994). Effectiveness of communication in business. *Journal of Educational Research*, *4*(1), 35-47.

- Lorenzoni, G. (1997). Le reti interimpresa come forma organizzativa distinta. In A. Lomi, *L'analisi relazionale delle organizzazioni. Riflessioni teoriche ed esperienze empiriche*. Bologna: Il Mulino.
- Maier, A. M., Kreimeyer, M., Hepperle, C., Eckert, C. M., Lindemann, U., & Clarkson, P. J. (2008). Exploration of correlations between factors influencing communication in complex product development. *Concurrent Engineering: Research and Applications*, 16(1), 37-59. <https://doi.org/10.1177/1063293X07084638>
- Mellenbergh, G. J., & Adèr, H. J. (2008). Tests and questionnaires: construction and administration. In Adèr, H.J. and Mellenbergh, G.J. (Eds), *Advising on Research Methods: A Consultant's Companion*, (with contributions by D.J. Hand), Johannes van Kessel Publishing, Huizen, pp. 211-236.
- Mihm, J., Loch, C., & Huchzermeier, A. (2003). Problem-solving oscillations in complex engineering projects. *Management Science*, 46(6), 733-750. <https://doi.org/10.1287/mnsc.49.6.733.16021>
- Min, S., Roath, A. S., Daugherty, P. J., Genchev, S. E., Chen, H., Arndt, A. D., & Richey, R. G. (2005). Supply chain collaboration: what's happening? *The International Journal of Logistics Management*, 16(2), 237-256. <https://doi.org/10.1108/09574090510634539>
- Musa, A., Gunasekaran, A., & Yusuf, Y. (2014). Supply chain product visibility: methods, systems and impacts. *Expert Systems with Applications-An International Journal*, 41(1), 176-194. <https://doi.org/10.1016/j.eswa.2013.07.020>
- Obstfeld, D. (2005). Social networks, the tertiusiungens orientation, and involvement in innovation. *Administrative Science Quarterly*, 50(1), 100-130. <https://doi.org/10.2189/asqu.2005.50.1.100>
- Ocasio, W. (1997). Towards an attention-based view of the firm. *Strategic Management Journal*, 18, 187-206. [https://doi.org/10.1002/\(SICI\)1097-0266\(199707\)18:1+<187::AID-SMJ936>3.3.CO;2-B](https://doi.org/10.1002/(SICI)1097-0266(199707)18:1+<187::AID-SMJ936>3.3.CO;2-B)
- Oh, H., Chung, M., & La Bianca, G. (2004). Group social capital and group effectiveness: the role of informal socializing ties. *Academy of Management Journal*, 47(6), 860-875. <https://doi.org/10.2307/20159627>
- Padula, G. (1998). *Reti di imprese e apprendimento*. Milano: Egea.
- Pinedo, M., Sehasdri, S., & Zemel, E. (2000). *The Ford-Firestone case. Teaching case*. Department of Information, Operations and Management Sciences, Stern School of Business, NYU: NY.
- Pisano, G. (1990). The R&D boundaries of the firm an empirical analysis. *Administrative Science Quarterly*, 35(1), 153-176. <https://doi.org/10.2307/2393554>
- Puvanavar, P., Megat, H., Hong, T. S., & Razali, M. M. (2009). The role of communication process for an effective lean manufacturing implementation. *Journal of Industrial Engineering and Management*, 2(1), 128-152. <https://doi.org/10.3926/jiem.2009.v2n1.p128-152>
- Reagans, R., & McEvily, B. (2003). Network structure and knowledge transfer: the effects of cohesion and range. *Administrative Science Quarterly*, 48, 240-267. <https://doi.org/10.2307/3556658>
- Ring, P. S., & Van De Ven, A. H. (1992). Structuring cooperative relationship between organizations. *Strategic Management Journal*, 13, 483-498. <https://doi.org/10.1002/smj.4250130702>
- Robson, C. (2011). *Real World Research: A Resource for Users of Social Research Methods in Applied Settings*, Wiley, Chichester.
- Simatupang, T. M., & Sridharan, R. (2005). An integrative framework for supply chain collaboration. *The International Journal of Logistics Management*, 16(2), 257-274. <https://doi.org/10.1108/09574090510634548>
- Simon, H. A. (1947). *Administrative behaviour: a study of decision-making processes*. NY: The Free Press.
- Smith, R. P., & Eppinger, S. D. (1997). Identifying controlling features of engineering design iteration. *Management Science*, 43(3), 276-293. <https://doi.org/10.1287/mnsc.43.3.276>
- Soda, G. (1998). *Modelli e prospettive per una teoria del coordinamento*. Milano: Carocci.
- Sosa, M. E., Eppinger, S. D., & Rowles, C. (2004). The misalignment of product architecture and organizational structure in complex product development. *Management Science*, 50(12), 1674-1689. <https://doi.org/10.1287/mnsc.1040.0289>
- Sosa, M. E., Eppinger, S. D., & Rowles, C. M. (2003). Identifying modular and integrative systems and their impact on design team interactions. *Journal of Mechanical Design*, 125(2), 240-252. <https://doi.org/10.1115/1.1564074>

- Tenkorang, R. A., & Helo, P. T. (2017). Analysis of enterprise supply chain communication networks in engineering product development. *The International Journal of Logistics Management*, 28(1), 47-74. <https://doi.org/10.1108/IJLM-12-2014-0204>
- Thompson, J. D. (1967). *Organizations in action*, NY: MCGRAW-HILL.
- Tsanos, C. S., Zografos, K. G., & Harrison, A. (2014). Developing a conceptual model for examining the supply-chain relationship between behavioural antecedents of collaboration, integration and performance. *The International Journal of Logistics Management*, 25(3), 418-462. <https://doi.org/10.1108/IJLM-02-2012-0005>
- Ulrich, K. T., & Eppinger, S. D. (2004). *Product design and development* (3rd ed.). NY: MCGRAW-HILL.
- Van den Bulte, C., & Moenaert, R. K. (1998). The effects of R&D team co-location on communication patterns among R&D, marketing and manufacturing. *Management Science*, 44, S1-S19. <https://doi.org/10.1287/mnsc.44.11.s1>
- Vicari, S. (1991). *Le alleanze nei settori ad alta tecnologia*. Milano: EGEA.
- Vollman, T. E., Berry, W. L., Whybark, D. C., & Jacobs, F. R. (2005). *Manufacturing Planning and Control System for Supply Chain Management*, (5th ed.). NY: MCGRAW-HILL.
- Warten, L. T. (1985). *Technical Writing Purpose, Process and Form*. USA, CA: Wadsworth Publishing Company.
- Worley, J. M., & Doolen, T. L. (2006). The role of communication and management support in a lean manufacturing implementation. *Journal of Management Decision*, 44(2), 228-245. <https://doi.org/10.1108/00251740610650210>
- Yin, R. K. (2003). *Case study research - design and method*. Third Edition, Newbury Park: Sage Publications.
- Yin, R. H. (2012). *Application of Case Study Research*. Third Edition, Newbury Park: Sage Publications.
- Yin, R. K. (1989). *Case study research - design and method*, *Applied Social Research Methods Series*. vol. 5, Second Edition, Newbury Park: Sage Publications.
- Yin, R. K. (2009). *Case Study Research: Design and Methods: Applied Social Research Methods Series*. 4th ed., vol.5, Newbury Park: Sage Publications.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

CREMOR: CRedibility Model on Online Reviews-How people Consider Online Reviews Believable

Patrizia Grifoni¹, Fernando Ferri¹, Tiziana Guzzo¹

¹Institute for Research on Population and Social Policies, National Research Council, Italy

Correspondence: Fernando Ferri, Institute for Research on Population and Social Policies, National Research Council, Italy.

Received: April 20, 2017

Accepted: June 2, 2017

Online Published: June 12, 2017

doi:10.5539/ibr.v10n7p56

URL: <https://doi.org/10.5539/ibr.v10n7p56>

Abstract

The Internet is deeply changing how buyers and sellers interact in the marketplace. The Web enables consumers to be informed on their purchases both online and offline thanks to crowdsourced reviews. However, recent studies have found evidence that online consumers review could be not truthful as some users such as owners, competitors, paid users, sometimes post fake reviews. In this context the question of credibility is becoming more and more relevant in the Web 2.0 environment in which the concepts of social influence and electronic word of mouth are acquiring a great importance. The user's perception of online reviews can influence source credibility and the perception of the quality of a product/service, as well as the likelihood that someone will purchase the product/service. This study proposes a model that analyses elements that influence online information credibility and the impact of the perceived credibility on purchase intention.

Keywords: credibility, website quality, advisor credibility, customer perception

1. Introduction

With the development of Web 2.0 and the revolution in user-computer paradigm, represented by the user generated content - UCG, users are increasing their role of prosumers, i.e. producers and consumers providing more generally an added value in terms of information and services.

Moreover, with the development of social media like social networks, blogs, forums, a strong weight in influencing people behaviors is given by the other people opinions and suggestions, particularly in the case of consumers' decision. These tools are in fact, significantly changing the consumers-retailers relationship offering new potentialities not available in traditional channels and, facilitating user's collaboration and opinions' sharing (Guzzo, Ferri, & Grifoni, 2014a). Consumers can easily obtain information about products from a large and geographically dispersed population; the resulting electronic word of mouth and its easy access are increasingly important in affecting consumer's decisions. Consumers usually ask their friends or belonging social group opinions before making an online purchase, because they perceive a higher risk in this kind of purchases respect to traditional ones. (Ferri, Grifoni, & Guzzo, 2008). In this scenario the development of Digital Ecosystems and Internet are playing a crucial role, furtherly stimulating a development of on line marketing defining "symmetry of companies and consumers in their communication process" (Ferri et al., 2014). Indeed, consumers do not passively receive marketers' messages; they actively express their needs, preferences and choices and, ask their friends' opinions and read online reviews. The Web changed old models of word of mouth marketing based on one-to-one relationships, providing a model based on one-to-many amplification of key brand messages, information and reviews from customers (Caschera, Ferri, Grifoni, & Guzzo, 2009).

In an online marketplace, buyers rely heavily on reviews posted by other consumers. According to Li, Huang, Tan, & Wei (2013), 92% of online consumers read reviews before an online purchase. Several studies found that online reviews influenced consumers' decisions (Li et al., 2013; Park, Lee & Han, 2007). At the basis of this there is the matter of persuasiveness of the online reviews that is determined by credibility.

All these concepts are widely and successfully applied within the online travel communities. This is a virtual community where backpackers, globetrotters, and other people from all over the world join together using different online platforms to exchange information, experiences, and plans in their favorite pursuit travel. In fact, in the travel and tourist industry, Internet encouraged more and more people to join into virtual communities to

satisfy their needs, to fulfill their asking tips and suggestion before having a “real” travel. This aspect is very important because consumers search information and advices by real travelers to select the best option (Ferri et al. 2008). Users are aware that when they are visiting a business site they usually do not receive cons of a choice. This has produced the availability of Web sites where users share their own travel experiences with other tourists. In fact, usually they prefer to read reviews of other tourists that already visited a place. (Guzzo, D’Andrea, Ferri, & Grifoni, 2013). In this context the credibility has become a major concern in the current Web 2.0 environment in which the concepts of social influence and electronic word of mouth – eWOM are acquiring a great importance. Fan et al., (2013) found that the decision-making process of consumers is influenced by the information content received and, eWOM changes consumers’ attitude toward products and helps them to make purchase decisions.

Starting from these issues, this study introduces a theoretical model containing the elements that influence online information credibility and the impact of the perceived credibility on purchase intention.

The paper is organized as follows: in Section 2, the motivation of the study is explained. Section 3 introduces the methodology used in the study. In section 4, an analysis on credibility and the different variables considered in the model is provided. In section 5, the CREDibility Model on Online Reviews – CREMOR is described. Finally, section 6 concludes the paper.

2. Background

Tens of millions of consumers use the online travel forums and review sites to post and share their travel experiences, opinions and comments (Lee, Law, & Murphy, 2011). For example, Trip Advisor attracts more than 280 million visitors each month (Schoettle, 2014). Moreover, three quarters of consumers have consulted online reviews for their travel decisions (Yoo and Gretzel, 2008; Mauri and Minazzi, 2013). Web sites such as Amazon, TripAdvisor and Yelp depend on online reviews of consumers. Consumers are becoming more independent from intermediaries by searching on the Web destinations and reading information and comments of other users. They use online review to reduce uncertainty and perceived risk during online shopping. Werthner and Ricci (2004 p. 101) noted that “a new type of user is emerging, one who acts as his or her own travel agent and builds a personalized travel package”.

However, the online reviews written by wisdom of crowds sometimes could be not truthful, and sometime provide inaccurate or fraudulent information; sometimes they could not have been made by a crowd, and consumers could over-rate or under-rate a product or service for different motivations, such as:

- *Good reviews could be written by owners who post positive reviews about themselves to increase business.* For example: few excellent reviews and high ratings for hotels that have hundreds of very bad reviews, generally written by anonymous users with one or two reviews in their profile.
- *Bad reviews could be written by not real buyers, but by a person who wants to take the advantage of a bad review, such as competitors that post bad recommendations to reduce business from that company.* For example: in a hotel with hundreds of excellent ratings only few are extremely negative and generally written by anonymous users.
- *Reviews could be written by consumers paid by the merchants and/or by consumer review websites.* This aspect can influence the reviewer’s opinion. For example: excellent reviews written by anonymous reviewers who in their profile have only extremely positive reviews and generally acclaim owners and staff.
- *Bad reviews could be written by users who had a negative experience, or inexperience in buying similar products.* For example: some reviewers criticize some irrelevant aspects that actually don’t influence the quality of the hotel, because they don’t have parameters to judge a hotel because they never traveled. Furthermore it is evident that a hotel with two stars has different standard of a hotel with four or five stars. It depends on the preliminary choice of the hotel’s parameters.

Starting from these considerations there is the need to identify and analyse the elements that influence user credibility on online reviews to predict and explain consumer behavior in a rapidly changing environment.

Previous studies were in disagreement on the credibility of online information and its impact on consumer behaviour. According to some studies, online information is more credible than information from other more traditional media (Park et al. 2007; Senecal and Nantel, 2004) because the information is posted by experienced travelers, and then are credible sources (Gretzel, Yoo, & Purifoy, 2007; Park et al. 2007). According to others studies instead online information can be posted by any individual and therefore is less credible than other types of information sources (Litvin, Goldsmith & Pan, 2008; Mack, Blose & Pan, 2008; Magnini, 2011). Different

studies analysed in particular contents of reviews and the characteristics of reviewers. For example, the review content was judged by its readability that is to how easily the text could be understood by readers (Tausczik & Pennebaker, 2010). Some studies have underlined the importance of the source expertise and trustworthiness factors in determining credibility (Tseng and Fogg 1999; O'Keefe 2002; Pornpitakpan 2004; Yoo and Gretzel, 2008). Kusumasondjaja, Shanka, & Marchegiani (2012) found that the review valence and the reviewer's identity impact on the perception of credibility. Similarly Xie, Miao, Kuo, & Lee (2011) found that hotel reviews with reviewer's identity were perceived as being more credible. Also reviewer's travel experience plays an important role in credibility (Gretzel et al. 2007; Sidali, Schulze, & Spiller, 2009).

In this paper we take into account besides reviews and reviewer's characteristics (Advisor Credibility), other elements that are related to the credibility process, such as the Website Quality that provides information and, Customer Perception. Therefore, starting from literature evidences we consider three main elements: Advisor Credibility, Website Quality, and Customer Perception. In the next sections, these elements are analysed in detail from a review of the literature and, a theoretical model that systemizes them is proposed.

3. Method

In this study we used a deductive method drawing general assumptions derived from theoretical reflections. "The deductive approach follows the path of logic most closely. The reasoning starts with a theory and leads to a new hypothesis. This hypothesis is put to the test by confronting it with observations that either lead to a confirmation or a rejection of the hypothesis" (Snieder and Lerner, 2009, p.16).

We started formulating some assumptions (see section 3.1), then we carried out an analysis of literature to strengthen them. Finally, we built a theoretical model by introducing some variables related with credibility and social influence. Indeed, we focus this study on the different aspects of online credibility reviews for online purchases.

3.1 Assumptions

We started from the assumption that when people take a decision without a specific knowledge, usually just look at what others are doing and act accordingly. For example, people tend to behave and dress in a certain way because they feel that they are part of a whole.

Generally, people tend to consider more reliable and favorably welcome the opinion of people who know or are considered leaders or experts in that field. Moreover, the positive testimony of online reviews and other users' votes on the product they would like to buy is a strong persuasive element for promoting purchase. But, which are factors that determine if an online review is credible or not?

Starting from the previous examples, we assume that there are three main elements that act in the process of user's credibility and impact in influencing online purchases. These elements are related to:

- The Website that provides information: *Website Quality*, it includes Information Quality and Reputation/Brand.
- The person who writes the reviews: *Advisor credibility*, it includes Expertise of reviewer; Readability of reviews.
- The consumer that consults the reviews: *Customer perception*, it includes Perceived Trustworthiness, Consumer experience and satisfaction.

In the next section these assumptions are detailed providing the theoretical foundations for the model described in section 5.

4. Credibility

Credibility was defined as believability of information and its source (Hovland, Janis, & Kelley, 1953). It plays a crucial role in persuasion process. In information science, it is one of the criteria of relevance judgment used in the decision process to accept or reject retrieved information (Riehand Danielson, 2007). It depends on characteristics of persuasive sources, characteristics of the message structure and content, and perceptions of media (Metzger, Flanagin, Eyal, Lemus, & McCann, 2003). The positive characteristics of a message can enhance the perceived value of message information, and can increase the persuasiveness of the message (Rezaei, 2015; Mcallister, 1997). According to Fogg et al. (2003), credibility is related to a perception, then it depends on evaluation of people, then it is subjective.

In the tourism context, the concept of credibility assumes a great relevance due to the intangible nature of tourism products that don't allow evaluating before purchase and risks associated with decision making (Loda,

Teichmann & Zins, 2009; Ayeh, Au, & Law, 2013) examined travel consumers' perceptions regarding the credibility of user generated contents sources and how such perceptions may influence attitudes and intentions toward UGC utilization for travel planning. This study found the central mediating role of attitude and homophily as a critical determinant of both credibility and attitude.

According to different authors, the most relevant dimensions of credibility are trustworthiness, expertise and advisor credibility (Tseng and Fogg 1999; O'Keefe 2002; Pornpitakpan 2004; Yoo and Gretzel, 2008). Cheung, Sia & Kuan (2012) found that argument quality was the primary factor affecting the credibility of online reviews; other minor factors are source credibility and review consistency.

Which are elements that influence credibility process? In the next section the main elements: i) Website Quality, ii) Advisor Credibility, and iii) Customer Perception, are described in detail.

4.1 Website Quality

Website Quality is the most important element that affects online information credibility. In fact, the customers' perceptions of website quality positively impact their intentions to use a site (Chang and Chen, 2008) and directly affect purchase intentions (McKnight, Choudhury, & Kacmar, 2002).

According to Lin (2007) "website quality is a multi-dimensional construct comprising information quality, system quality, and service quality." Both information and system quality are defined from a technical perspective while service quality is defined from a customer-oriented perspective. The main variables that compose this element are: Information Quality and Reputation/Brand.

Information quality is related to usefulness, goodness, accuracy, currency, and importance (Rieh, 2002). These aspects are not always present in information, and then people ask themselves whether they can take information seriously. Information quality is a key aspect of online information credibility in order to make effective decisions on purchases. The advantage of online reviews is that they reduce the cost for search information supporting consumers in their decision making process. According to Gobinath and Gupta (2016) when there is information overload, that is abundant quantity of information or very high quality of information, it tends to decrease the decision effectiveness of the consumer. But also in the case in which information quality is below average it limits the effectiveness of the decision. Then, information of good quality is needed for users to make effective decisions.

Website brand is one of the fundamental variables that increases perceived trust and helps to maintain long-term customer relationships on the Internet (Hashim and Murphy, 2007). The brand is a symbol of a firm's name, which stands for the difference between other competitors. According to Chang and Chen (2008) there are two dimensions of website brand: website awareness and website image. Website awareness refers to awareness generated by a Website on the customers. People in fact think that a well-known website is more likely to complete their needs. Website image is defined instead as, "the perceptions about a website name as reflected by the website associations held in customer memory."

When brand reputation is good, it meets the predictability of customer and it can satisfy the customer's needs and helps to develop trust of customer on brand (Afzal, Khan, ur Rehman, Ali, & Wajahat (2010). Website brand has in fact an impact on consumer's trust then on their purchase intentions (Fam, Foscht, & Collins, 2004; Romaniuk and Sharp, 2003). For example, when customers intend to book online a hotel room, the hotels which provide high website quality and customers evaluations of brands will evoke more positive customers' trust toward the hotel website and facilitate their decision to purchase it (Chang et al., 2014).

4.2 Advisor Credibility

Another important element that affects online information credibility is Advisor Credibility. The main variables that compose this element are: Expertise of reviewer; Readability of reviews.

Expertise of reviewer is an important variable of Advisory Credibility. Expertise is "the perceived knowledge, skill, and experience of the source" (Fogg, 2003a, p. 124). It is related to the ability of a source to provide information both correct and valid, people trust information when sources have expertise (Rezaei, 2015). This capability can be technical-oriented or practical-oriented (Dunn and Schweitzer, 2005). Technical expertise is the skill related to a specialised knowledge required by writing comments towards a given product. Practical expertise is the skills gained from direct participation in related activities (e.g., an advisor who has tried a product or/and a service).

The limited availability of personal information makes difficult to identify whether an advisor is an expert or not. Information on advisors' identity such as real name, gender, location, nickname, hobbies and reputation helps

consumers' judgment (Park, Xiang, Josiam, & Kim, 2013; Forman, Ghose, Wiesenfeld, 2008; Ghose and Ipeirotis, 2011). Also the number of reviews written on a service or product can be an element that can create bias in the consumer's decision making.

Understanding is another important factor that affects consumers' credibility of online review. The readability is the degree to which a piece of text is understandable to readers based on its syntactical elements and style. Reviews with high readability, precise or easy to understand, are more reliable than reviews with low readability, that is, the review source is more credible.

4.3 Customer Perception

Customer Perception is an essential element in the credibility process. Variables that affect it are: Perceived Trustworthiness, Consumer experience and satisfaction.

Trustworthiness describes the receiver's confidence in a source's objectivity and honesty in providing information (Rezaei, 2015).

Trustworthiness of advisors' review is based on:

- Similarity: a buyer has an increased trust towards an advisor who has similar preferences and opinions into the same social group (Jindal, Liu, Lim, 2010; Ziegler and Golbeck, 2007).
- Social consensus: a review is perceived as correct if advisor has the same opinions of the majority of advisors (Zhang and Cohen, 2008).
- Social network: dishonest advisors (e.g., fake buyers' accounts), may share the same review behavioral pattern (Zhu, Zhang & Yu, 2011).

Reviews can be written by advisors that are able to assess a product critically or not then both by laypersons and experts. Different factors can influence the writing of a review. He can be paid by a seller to write positive or negative reviews, or he can be influenced by opinions of others reviewers (herd effect) (Sprecker, 2002; Zhang Bian & Zhu (2012). To overcome this issue some online marketplaces (e.g., Amazon, Taobao) enable buyers to visit profile information of advisors such as real name, location, nickname and hobbies. This information is useful for consumers' judgment of advisors' credibility. According to Kusumasondjaja et al. (2012), when the identity of the reviewer is disclosed, negative online review is more credible than a positive online review, while a positive online review leads to a greater initial trust than a negative review, when instead the identity of the reviewer is not disclosed, there is no significant difference.

Consumer experience in reading and evaluating online reviews, and satisfaction with a service and/or product, which consumers trusted reviews, are very important variables that affect a successful long-term relationship with online information credibility. Judgments are subjective and they can vary according to single attitude of reviewer. In this context the consumer experience is fundamental to evaluate reviews. For example a reviewer with low experience can give high ratings and the content of the review contains some aspects that for other consumers could be very critical and the rating could be very lower. Then it is very important to know how evaluate reviews.

Another important element to take into account is satisfaction. It is users' feelings about past online shopping experiences (Bhattacharjee, 2001). Chang, Cheung, & Lai (2005) define satisfaction as the consumer confirmation of expectations based on their experiences and the perceived usefulness from the initial use of an information system. It is a strong predictor of continuance to use than perceived usefulness because the effect of the latter decreases over the time (Devaraj, Fan, & Kohli, 2003). Zhou, Dai, & Zhang (2007) considered satisfaction as an extension to address the long-term continuance of online shopping. If people were satisfied from their previous experiences in reading online reviews are more likely to trust them.

5. Theoretical Credibility Model

This section describes the theoretical credibility model on the basis of the evidences from literature (summarized in table 1).

Table 1. Summary of analysed literature

Literature Review		
WEBSITE QUALITY (<i>Information Quality; Reputation/Brand</i>)	<p>Website quality is a multi-dimensional construct comprising information quality, system quality, and service quality. It positively impacts customers' intentions to use a site.</p> <p>Information quality is related to usefulness, goodness, accuracy, currency, and importance and it affects people to make decisions on purchases.</p> <p>Information overload or little information decreases the decision effectiveness of the consumer.</p> <p>Website brand impacts consumer's trust then their purchase intentions. It helps to maintain long-term customer relationships on the Internet.</p> <p>Website awareness and website image increase people trust because they think that a well-known website is more likely to complete their needs.</p>	<p>Lin, 2007; Chang and Chen, 2008.</p> <p>Rieh, 2002; McKnight et al. 2002.</p> <p>Gobinath and Gupta, 2016.</p> <p>Fam et al., 2004; Romaniuk and Sharp, 2003; Hashim and Murphy, 2007; Afzal et al., 2010.</p> <p>Chang and Chen, 2008.</p>
ADVISOR CREDIBILITY (<i>Expertise of reviewer; Readability of reviews</i>)	<p>People trust information when sources have expertise that is the ability of a source to provide information both correct and valid.</p> <p>The limited availability of personal information doesn't allow identify whether an advisor is an expert and influence consumer's decision making.</p> <p>The readability is related to understanding; high readability influences consumers' credibility of online review.</p>	<p>Rezaei, 2015.</p> <p>Kusumasondjaja et al. 2012; Park et al., 2013; Forman et al., 2008; Ghose and Ipeirotis, 2011</p> <p>Korfiatis, et al. 2012.</p>
CUSTOMER PERCEPTION (<i>Perceived Trustworthiness; Consumer experience; Satisfaction</i>)	<p>Trustworthiness describes the receiver's confidence in a source's objectivity and honesty in providing information.</p> <p>Trustworthiness is based on similarity (advisor who has similar purchase history and review opinions into the same social group).</p> <p>Trustworthiness is based on social consensus (advisor has the same opinions of the majority of advisors).</p> <p>Trustworthiness is based on social network (dishonest advisors, like fake buyers' accounts, may share the same review behavioral pattern).</p> <p>Consumer experience in reading and evaluating online reviews affects online information credibility</p> <p>Satisfaction is a variable that affects the long-term continuance of online shopping.</p>	<p>Rezaei, 2015.</p> <p>Jindal et al., 2010; Ziegler and Golbeck, 2007.</p> <p>Zhang and Cohen, 2008.</p> <p>Zhu et al., 2011.</p> <p>Sprecker, 2002; Zhang et al., 2012.</p> <p>Devaraj et al., 2003; Zhou et al., 2007.</p>

Starting from literature evidences, we consider the following three elements: i) *Website Quality*, ii) *Advisor Credibility*, iii) *Customer Perception* as variables that affect credibility process in online purchases.

Figure 1 shows the theoretical model that explains user's behavior and credibility process.

The CREMOR model is based on the idea that the process of credibility of online reviews is affected by different elements and variables as represented in figure 1. The model starts with the purchase intention that depends on the one hand from personal motivations of people and on the other by social influence from the circle of friends and contacts and within social networks environments that suggest doing the same purchase. Moreover if people have intention to purchase something ask for opinions to their contacts that have already purchased that product or service. When a user has intention to do an online purchase generally read online reviews written by other users. In this process three main elements have to be considered: 1) the Website that provides information: Website Quality, 2) the person who writes the reviews: Advisor Credibility and, 3) the consumer that consults the reviews: Customer Perception. The variables that compose these elements act as variables of input in the process of user's credibility. In particular, the variables concerning Website Quality to take into account in the process of credibility are: i) Information quality present in the Website that has to be useful, good, accurate, current, and important, and ii) Reputation of the Website and Brand that is related to website awareness and website image that affect customers' trust. Another important element to take into account is that related to Advisor Credibility, in particular: i) Expertise of reviewer, its knowledge, skill and ability of providing information both correct and valid, and ii) Readability of reviews based on their understanding. Last but not least, another important element is that concerning Customer Perception; the variables that compose it are: i) Perceived trustworthiness related to the consumer's confidence in a source's objectivity and honesty in providing information, ii) Experience of consumer in reading and evaluating online reviews and, iii) Satisfaction of past purchases by using the same Website for online reviews.

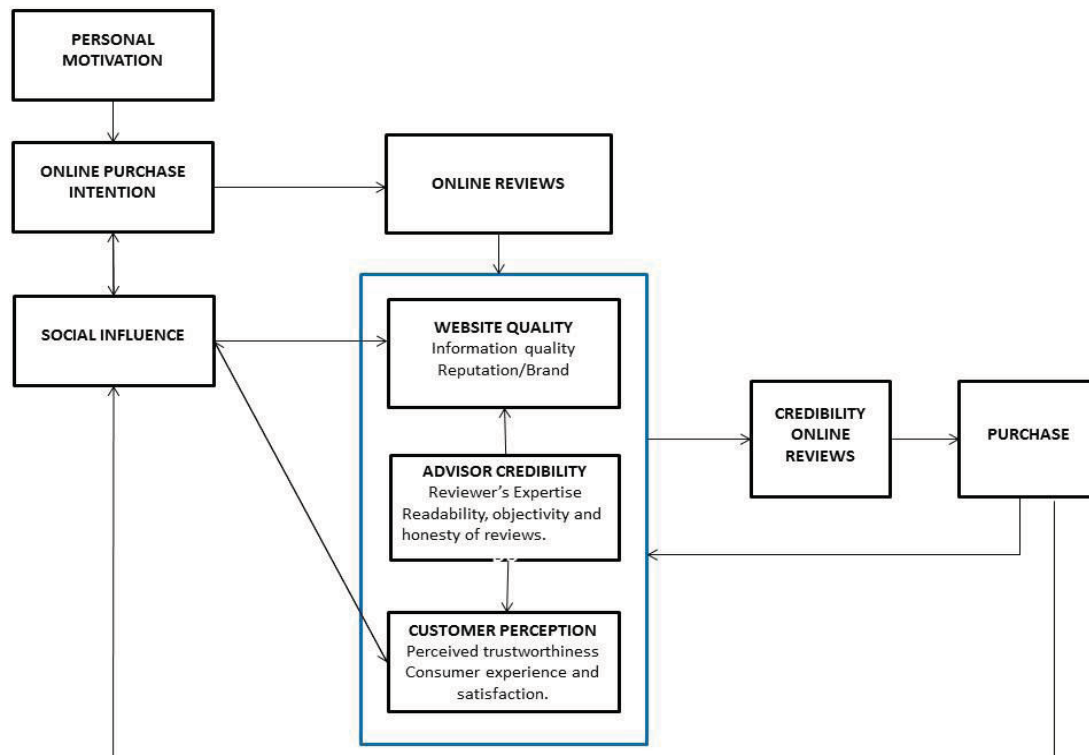


Figure 1. CREDibility Model on Online Reviews - CREMOR

Advisor Credibility is a central element because it influences both Website Quality and Customer Perception. That is, if reviews are well written and information provided from them is good, this increases the quality of Website. In the same time, the quality of reviews influences user's perception and credibility and then their behaviors. Moreover, Customer Perception is also affected by Social Influence, in fact, opinions of other people and in particular people of own social circle who people trust, are very important in the decision process. Consumers can really modify their opinions about products and/or services according to the social influence process, this process also impacts on knowledge diffusion about products and services (Ferri, Grifoni, & Guzzo, 2013; Guzzo, Ferri, & Grifoni, 2014b; Guzzo, Ferri, & Grifoni, 2016). Website Quality is also affected by Social Influence because reputation of a website depends on also by word of mouth of people.

All these elements affect the credibility process of online reviews then the resulting purchase. To the end of the process, when the consumer purchases he validate or not the previous process that led to him to perceive as credible the online reviews and in the same time influences other consumers on the basis of its experience, then the process restarts.

5. Conclusion

The paper, starting from some evidences of literature, proposes a theoretical model: the CREDibility Model on Online Reviews – CREMOR that introduces some variables affecting the process of online information credibility in the context of online purchases.

We assume that there are three main elements that act in the process of user's credibility and impact in influencing online purchases. These elements are related to 1) Website that provides information (*Website Quality*), 2) the reviewer that writes the reviews (*Advisor Credibility*), 3) the consumer that consults the online reviews (*Customer Perception*). The elements that act in the process of user's credibility and impact in influencing online purchase are:

- *Website Quality*: the quality of the media used is fundamental in the credibility process. In particular an important role is assumed by two variables: i) Information Quality that is the provided information that have to be useful, good, accurate, current, and important and ii) Reputation/Brand of the Web site that is related to website awareness and website image that affect customers' trust.

- *Advisor credibility*: the credibility of the reviewer is related to i) the expertise of the reviewer that is the knowledge, skill and ability of a source to provide information both correct and valid and ii) readability of reviews that is the understanding of a text based on its syntactical elements and style.
- *Customer Perception*: the perception of the consumer that consults the reviews is affected by the variables: i) Perceived Trustworthiness that is the consumer's confidence in a source's objectivity and honesty in providing information ii) Consumer experience in reading and evaluating online reviews and iii) satisfaction with a service and/or product, which consumers trusted reviews.

The sum of the previous variables acts on user's credibility and then on the online purchase.

The study carried out focuses on a theoretical model building, on the basis of a literature review. In a future study it will be tested by using data collected from a survey with a quantitative approach.

The CREMOR model has some practical implications. First, it contributes to a better understanding of the user's credibility process of online information provided by online reviews. Second, this model can be used for defining the marketing strategies of companies evaluating variables that influence people in the credibility process.

References

- Afzal, H., Khan, M. A., urRehman, K., Ali, I., & Wajahat, S. (2010). Consumer's trust in the brand: Can it be built through brand reputation, brand competence and brand predictability. *International Business Research*, 3(1), 43.
- Ayeh, J. K., Au, N., & Law, R. (2013). Do we believe in TripAdvisor? Examining credibility perceptions and online travelers' attitude toward using user-generated content. *Journal of Travel Research*. <https://doi.org/10.1177/0047287512475217>
- Bhattacharjee, A. (2001). Understanding Information Systems Continuance: An Expectation Confirmation Model. *MIS Quarterly*, 25(3), 351-370. <https://doi.org/10.2307/3250921>
- Caschera, M. C., Ferri, F., Grifoni, P., & Guzzo, T. (2009, April). Multidimensional visualization system for travel social networks. *Information Technology: New Generations, 2009. ITNG'09. Proceedings of the of the Sixth International Conference* (pp. 1510-1516). IEEE. <https://doi.org/10.1109/itng.2009.236>
- Chang, H. H., & Chen, S. W. (2008). The impact of online store environment cues on purchase intention: Trust and perceived risk as a mediator. *Online Information Review*, 32(6), 818-841. <https://doi.org/10.1108/14684520810923953>
- Chang, M. K., Cheung, W., & Lai, V. S. (2005). Literature Derived Reference Models for the Adoption of Online Shopping. *Information & Management*, 42, 543-559. [https://doi.org/10.1016/S0378-7206\(04\)00051-5](https://doi.org/10.1016/S0378-7206(04)00051-5)
- Cheung, C. M. Y., Sia, C. L., & Kuan, K. K. (2012). Is this review believable? A study of factors affecting the credibility of online consumer reviews from an ELM perspective. *Journal of the Association for Information Systems*, 13(8), 618.
- Devaraj, S., Fan, M., & Kohli, R. (2003). E-Loyalty: Elusive Ideal or Competitive Edge? *Communications of the ACM*, 46(9), 184-191. <https://doi.org/10.1145/903893.903936>
- Dunn, J. R., & Schweitzer, M. E. (2005). Feeling and believing: the influence of emotion on trust. *J Pers Soc Psychol*, 88(5), 736. <https://doi.org/10.1037/0022-3514.88.5.736>
- Fam, K. S., Foscht, T., & Collins, R. D. (2004). Trust and the online relationships: An exploratory study from New Zealand. *Tourism Management*, 25(2), 195-207. [https://doi.org/10.1016/S0261-5177\(03\)00084-0](https://doi.org/10.1016/S0261-5177(03)00084-0)
- Fan, Y. W., Yi, F. M., Yu, H. F., & Rwei, Y. L. (2013). Establishing the adoption of electronic word-of-mouth through consumers' perceived credibility. *International Business Research*, 6(3), 58. <https://doi.org/10.5539/ibr.v6n3p58>
- Ferri, F., Grifoni, P., & Guzzo, T. (2008). *Social Aspects of Mobile Technologies on Web Tourism Trend*. Handbook of research on mobile business: technical, methodological and social perspectives, 293-303.
- Ferri, F., Grifoni, P., & Guzzo, T. (2013). Factors determining mobile shopping. A theoretical model of mobile commerce acceptance. *International Journal of Information Processing and Management (IJIPM)*, 4(7), 89-101.
- Ferri, F., Grifoni, P., Caschera, M. C., D'Andrea, A., D'Ulizia, A., & Guzzo, T. (2014, September). An

- ecosystemic environment for knowledge and services sharing on creative enterprises. *Proceedings of the 6th International Conference on Management of Emergent Digital EcoSystems* (pp. 27-33). ACM. <https://doi.org/10.1145/2668260.2668308>
- Fogg, B. J. (2003). *Persuasive Technology: Using Computers to Change What We Think and Do*. Boston, MA: Morgan Kauffman Publishers.
- Forman, C., Ghose A., & Wiesenfeld, B. (2008). Examining the relationship between reviews and sales: The role of reviewer identity disclosure in electronic markets. *InfSyst Res*, 19(3), 291-313. <https://doi.org/10.1287/isre.1080.0193>
- Ghose, A., & Ipeirotis, P. G. (2011). Estimating the helpfulness and economic impact of product reviews: Mining text and reviewer characteristics. *IEEE Trans Knowl Data Eng*, 3(10), 1498-1512. <https://doi.org/10.1109/TKDE.2010.188>
- Gobinath, J., & Gupta, D. (2016). Online reviews: Determining the perceived quality of information. *Advances in Computing, Communications and Informatics (ICACCI), Proceedings of the International Conference* (pp. 412-416). IEEE. <https://doi.org/10.1109/icacci.2016.7732080>
- Gretzel, U., Yoo, K. H., & Purifoy, M. (2007). *Online Travel Review Study: Role and Impact of Online Travel Reviews*. Laboratory for Intelligent Systems in Tourism, Texas A&M University.
- Guzzo, T., D'Andrea, A., Ferri, F., & Grifoni, P. (2013, January). A framework to promote and develop a sustainable tourism by using social media. In *On the Move to Meaningful Internet Systems: OTM 2013 Workshops* (pp. 656-665). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-41033-8_83
- Guzzo, T., Ferri, F., & Grifoni, P. (2014a). ECA: An E-commerce consumer acceptance model. *International Business Research*, 8(1), 145. <https://doi.org/10.5539/ibr.v8n1p145>
- Guzzo, T., Ferri, F., & Grifoni, P. (2014b). *Social influence analysis*. In *Encyclopedia of Social Network Analysis and Mining* (pp. 1800-1807). Springer New York. https://doi.org/10.1007/978-1-4614-6170-8_186
- Guzzo, T., Ferri, F., & Grifoni, P. (2016). A model of e-commerce adoption (MOCA): consumer's perceptions and behaviours. *Behaviour & Information Technology*, 35(3), 196-209. <https://doi.org/10.1080/0144929X.2015.1132770>
- Hashim, N. H., & Murphy, J. (2007). Branding on the web: evolving domain name usage among Malaysian hotels. *Tourism Management*, 28(2), 621-624. <https://doi.org/10.1016/j.tourman.2006.09.013>
- Hovland, C., Janis, I., & Kelley, H. (1953). *Communication and persuasion: Psychological studies of opinion change*. New Haven, CT: Yale University Press.
- Jindal, N., Liu B., & Lim, E. P. (2010). Finding unusual review patterns using unexpected rules. *Proceedings of the 19th ACM international conference on Information and knowledge management*, ACM, New York, 1549-1552. <https://doi.org/10.1145/1871437.1871669>
- Korfiatis, N., Garcia-Bariocanal, E., & Sanchez-Alonso, S. (2012). Evaluating content quality and helpfulness of online product reviews: The interplay of reviews helpfulness vs. review content. *Electronic Commerce Research and Applications*, 11(3), 205-217. <https://doi.org/10.1016/j.elerap.2011.10.003>
- Kusumasondjaja, S., Shanka, T., & Marchegiani, C. (2012). Credibility of online reviews and initial trust. The roles of reviewer's identity and review valence. *Journal of Vacation Marketing*, 18(3), 185-195. <https://doi.org/10.1177/1356766712449365>
- Lee, H., Law, R., & Murphy, J. (2011) Helpful reviewers in TripAdvisor, an online travel community. *Journal of Travel & Tourism Marketing*, 28(7), 675-688. <https://doi.org/10.1080/10548408.2011.611739>
- Li, M., Huang, L., Tan C. H., & Wei, K. K. (2013). Helpfulness of online product reviews as seen by consumers: Source and content features. *Int J Electron Commer* 17(4), 101-136. <https://doi.org/10.2753/JEC1086-4415170404>
- Lin, H. F. (2007). The impact of website quality dimensions on customer satisfaction in the b2c e-commerce context. *Total Quality Management & Business Excellence*, 18(3), 363-378. <https://doi.org/10.1080/14783360701231302>
- Litvin, S. W., Goldsmith, R. E., & Pan, B. (2008). Electronic word-of-mouth in hospitality and tourism management. *Tourism Management*, 29(3), 458-468. <https://doi.org/10.1016/j.tourman.2007.05.011>
- Loda, M. D., Teichmann, K., & Zins, A.H. (2009). Destination websites' persuasiveness. *International Journal of*

- Culture Tourism and Hospitality Research*, 3(1), 70-80. <https://doi.org/10.1108/17506180910940351>
- Mack, R. W., Blose, J., & Pan, B. (2008). Believe it or not: credibility of blogs in tourism. *Journal of Vacation Marketing*, 14(2), 133-144. <https://doi.org/10.1177/1356766707087521>
- Magnini, V. P. (2011). The implications of company sponsored messages disguised as word-of-mouth. *Journal of Services Marketing*, 25(4), 243-251. <https://doi.org/10.1108/08876041111143078>
- McAllister, D. J. (1997). The second face of trust: Reflections on the dark side of interpersonal trust in organizations. *Res Negotiation Organ*, 6, 87-111.
- McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). The impact of initial consumer trust on intentions to transact with a web site: A trust building model. *The Journal of Strategic Information Systems*, 11(3), 297-323. [https://doi.org/10.1016/S0963-8687\(02\)00020-3](https://doi.org/10.1016/S0963-8687(02)00020-3)
- Metzger, M. J., Flanagin, A. J., Eyal, K., Lemus, D., & McCann, R. (2003). Credibility in the 21st century: Integrating perspectives on source, message, and media credibility in the contemporary media environment. *Communication Yearbook*, 27, 293-335. https://doi.org/10.1207/s15567419cy2701_10
- O'Keefe, D. J. (2002). *Persuasion: Theory and research*. Beverly Hills, CA: Sage.
- Park, D. H., Lee, J., & Han, I. (2007). The effect of online consumer reviews on consumer purchasing intention: the moderating role of involvement. *International Journal of Electronic Commerce*, 11(4), 125-148. <https://doi.org/10.2753/JEC1086-4415110405>
- Park, H., Xiang, Z., Josiam, B., & Kim H. (2013). Personal profile information as cues of credibility in online travel reviews. *Anatolia*, 25(1), 13-23. <https://doi.org/10.1080/13032917.2013.820203>
- Pornpitakpan, C. (2004). The persuasiveness of source credibility: A critical review of five decades' evidence. *Journal of Applied Psychology*, 34(2), 243-281. <https://doi.org/10.1111/j.1559-1816.2004.tb02547.x>
- Rezaei, S. (2015) Segmenting consumer decision-making styles (cdms) toward marketing practice: A partial least squares (pls) path modeling approach. *J Retail Consum Serv* 22, 1-15. <https://doi.org/10.1016/j.jretconser.2014.09.001>
- Rieh, S. Y. (2002). Judgment of Information Quality and Cognitive Authority in the Web. *Journal of the American Society for Information Science and Technology*, 53(2), 145-161. <https://doi.org/10.1002/asi.10017>
- Rieh, S. Y., & Danielson, D. R. (2007). Credibility: A multidisciplinary framework. *Annual Review of Information Science and Technology*, 41, 307-364. Medford, NJ: Information Today. <https://doi.org/10.1002/aris.2007.1440410114>
- Romaniuk, J., & Sharp, B. (2003). Measuring brand perceptions: Testing quantity and quality. *Journal of Targeting, Measurement and Analysis for Marketing*, 11(3), 218-229. <https://doi.org/10.1057/palgrave.jt.5740079>
- Schoettle, A. (2014). TripAdvisor is a new powerhouse in the hospitality industry. *Indianapolis Business Journal*. Retrieved from <http://www.ibj.com/articles/50146-tripadvisor-is-new-powerhouse-in-hospitality-industry>
- Senecal, S., & Nantel, A. (2004). The influence of online product recommendations on consumers' online choices. *Journal of Retailing*, 80, 159-169. <https://doi.org/10.1016/j.jretai.2004.04.001>
- Sidali, K. L., Schulze, H., & Spiller, A. (2009). The impact of online reviews on the choice of holiday accommodations. *Information and Communication Technologies in Tourism*, 87-98. https://doi.org/10.1007/978-3-211-93971-0_8
- Snieder, R., & Lerner, K. (2009). *The Art of Being a Scientist: A Guide for Graduate Students and their Mentors*. Cambridge University Press. <https://doi.org/10.1017/cbo9780511816543>
- Sprecker, K. (2002). How involvement, citation style, and funding source affect the credibility of university scientists. *SciComm*, 24(1), 72-97. <https://doi.org/10.1177/107554700202400104>
- Tausczik, Y. R., & Pennebaker, J. W. (2010). The psychological meaning of words: LIWC and computerized text analysis methods. *Journal of Language and Social Psychology*, 29(1), 24-54. <https://doi.org/10.1177/0261927X09351676>
- Tseng, S., & Fogg, B. J. (1999). Credibility and computing technology. *Communications of the ACM*, 42(5), 39-44. <https://doi.org/10.1145/301353.301402>

- Werthner, H., & Ricci, F. (2004). E-Commerce and Tourism. *Communications of the ACM*, 47(12), 101-105. <https://doi.org/10.1145/1035134.1035141>
- Xie, H., Miao, L., Kuo, P. J., & Lee, B. Y. (2011). Consumers' Responses to Ambivalent Online Hotel Reviews: The Role of Perceived Source Credibility and Pre-decisional Disposition. *International Journal of Hospitality Management* 30(1), 178-183. <https://doi.org/10.1016/j.ijhm.2010.04.008>
- Yoo, K. H., & Gretzel, U. (2008). The Influence of Perceived Credibility on Preferences for Recommender Systems as Sources of Advice. *Journal of IT & Tourism*, 10(2), 133-146.
- Yoo, K. H., & Gretzel, U. (2011). *Creating More Credible and Persuasive Recommender Systems: The Influence of Source Characteristics on Recommender System Evaluations*. In *Recommender Systems Handbook 2011*, edited by F. Ricci, L. Rokach, B. Shapira, and P. B. Kantor. New York: Springer, 455-477. https://doi.org/10.1007/978-0-387-85820-3_14
- Zhang, J., & Cohen, R. (2008). Evaluating the trustworthiness of advice about seller agents in e-marketplaces: a personalized approach. *Electron Commer Res Appl*, 7(3), 330-340. <https://doi.org/10.1016/j.elerap.2008.03.001>
- Zhang, Y., Bian J., & Zhu, W. (2012). Trust fraud: A crucial challenge for china's e-commerce market. *Electron Commer Res Appl*, 12(5), 299-308. <https://doi.org/10.1016/j.elerap.2012.11.005>
- Zhou, L., Dai, L., & Zhang, D. (2007). Online shopping acceptance model-A critical survey of consumer factors in online shopping. *Journal of Electronic Commerce Research*, 8(1), 41-62.
- Zhu, Y., Zhang, W., & Yu, C. (2011). Detection of feedback reputation fraud in taobao using social network theory. *International Joint Conference on Service Sciences (IJCSS)*. IEEE Computer Society Press, Washington, 188-192.
- Ziegler, C. N., & Golbeck, J. (2007). Investigating interactions of trust and interest similarity. *Decis Support Syst*, 43(2), 460-475. <https://doi.org/10.1016/j.dss.2006.11.003>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Construction of a Strategic Business Process Reengineering Model: Empirical Research on the After-sale Service Process of SH

An-Shin Shia¹, Bau-Jung Chang²

¹PhD candidate, PhD Program in Business, Feng Chia University, Taiwan

²Assistant Professor, Department of Business Administration, Feng Chia University, Taiwan

Correspondence: An-Shin Shia, PhD Program in Business, Feng Chia University, Taiwan.

Received: May 9, 2017

Accepted: June 8, 2017

Online Published: June 19, 2017

doi:10.5539/ibr.v10n7p67

URL: <https://doi.org/10.5539/ibr.v10n7p67>

Abstract

For the past decade, business process reengineering (BPR) has gradually evolved from a revolutionary principle, which provided enterprises with methods to eliminate problems, into a set of management approaches for enterprises to face unpredictable and uncontrollable circumstances. This study puts forward an integrated model, strategic business process reengineering model, which focuses on analysis of the three stages of BPR, and explores how BPR develops into competitive advantage with strategic basic factors – positioning, unique activities, trade-offs and fit. The authors undertake SH, a famous Taiwanese brand of small appliance, for case study and analysis. The research results show that the process reengineering activities held after strategic positioning should be improved through unique activities and trade-offs, such as technology-oriented, cross-departmental labor integration and trade-offs, cross-departmental rotation and talent cultivation, and cross-organizational support for channel manufacturers in their training of technicians. During the activities, mutual fit would lead to a set of behavior system, where construction plays an essential role, as it is difficult to imitate in competitive advantage.

Keywords: process reengineering, strategic positioning, competitive advantage, participation-styled observation, small appliance industry

1. Introduction

Enterprises adopting process reengineering is an international phenomenon that has grown rapidly in the past decade (Hammer, Hershman & Wilson, 2010). Enterprise process management must be comprehensive, and enterprise process reengineering (BPR) promotes implementation methods designed to achieve significantly enhanced effects (Tenne & DeToro, 1997). During certain periods, enterprises can make great improvements and progress in their processes (Frank, 2006), while reducing customers' complaints, reaction time, response errors, and production and service time (Tai & Huang, 2007). Moreover, process reengineering makes enterprises more adaptable to the future space of survival and development (Champy, 1995). According to the investigation of Deloitte from 1995 to 1999, about 70% of big wholesalers in North America and Europe intentionally or unintentionally promoted BPR. Therefore, BPR is regarded as an approach for enterprises to address problems (Hammer et al, 2010) and a key to maintain a vigorous and sustainable enterprise (Hammer, 1990).

Nevertheless, some scholars believed that the success rate of process reengineering, as proposed by Hammer and Champy (1993), was lower than 50% (McNurlin & Sprague, 1998). Many empirical researches showed that enterprises often adopt the labor reduction measures of BPR to improve themselves and regain/enhance organizational functions. However, after labor reduction, the remaining employees are still in an unstable situation, which lowers work efficiency, results in the loss of core employees, and leads to an inadequate number of employees for organizational operation (McKinley, Sanchez & Schick, 1995; Shah, 2000); worse still, it influences the learning network, learning ability, and innovation of the organization (Fisher & White, 2000; Cascio, 2002). Meanwhile, in the process of labor reduction, 74% of senior managers noticed large negative influence, including demoralization and decline in trust and productivity, and found that labor reduction had negative influence on the performance of many enterprises (Chen and Hsia, 2001). Moreover, layoffs affect a large number of families, to result in social unrest (Sun, 1994; Mckee Ryan & Kinicki, 2002). This shows that there are still many problems in the implementation of BPR, which aims to address problems and create competitive advantages. Porter (1996), a strategy master, also pointed out that BPR can significantly improve the

efficiency of an organization, and only by adopting strategic positioning can an enterprise maintain or enhance its competitive advantages. Thus, how to create competitive advantages from the strategic positioning of a command elevation point to process reengineering in detail is an issue that has never been studied to date. For that reason, the author proposes the strategic process reengineering model, integrates strategic positioning with BPR, and delves into the development of SH, a Taiwanese company of small appliances as the case study.

Established in 1981, SUNHOW appliance marketing company (SH) is the subject of discussion in this study. It's belongs to the small Household Electrical Appliance Manufacturing Industry (small appliance). The "small appliance" of SH include electronic pots, dish driers, juicers, electric fans, hair dryers, ovens, electric irons, microwave ovens, soybean milk machines, and coffee makers. Professional and famous Taiwan manufacturers or brands include Sunpentown (STP), TCY, Jyebao (JB), Jinkon (JK), and Supa fine (SF) (Baidu Data Research Center, 2017). Although appliances can be classified into large and small appliances according to their size and electricity consumption, most research in the academic community of Taiwan concentrates on the appliance industry (Large and small appliance) (Tsai, 2004; Chang, 2005; Chuang, 2009; Chen, 2010; Chen, 2012). Small appliance are daily necessities of all families, but they are often neglected by researchers in academic circles because of their ordinariness, which is why the author has chosen to study the small appliance industry. With emphasis on the small appliance industry, this study discusses SH, a famous and representative manufacturer in the small appliance industry of Taiwan, and conducts interviews with the peer managers of various professional manufacturers and brands, such as STP, TCY, JB, JK, and SF, in order to collect information for comparative analysis.

Due to the impact of an unfavorable environment in recent years, about 50,000 small and medium enterprises in Taiwan have gone bankrupt since the 2008 financial tsunami in the US, including 3,567 factories and 43,936 companies (Tan, 2008). The scale of the European debt crisis, which erupted less than three years ago, is 12 times greater than that of the financial tsunami. If the crisis is not mitigated, its influence will be far greater than that of the financial tsunami (Chang, 2011). Under the impact of such an unfavorable environment, professional small appliance manufacturers of small and medium enterprises adopted BPR by reducing employees and salaries, and offering no-salary vacations to survive. During the period, most manufacturers cancelled their after-sale service departments and implemented various strategies, such as outsourcing and process reengineering, to respond to the crisis; nonetheless, the small appliance industry is changing. The fact that only SH adopted process reengineering without reducing employees, and integrated strategic positioning with BPR is an issue worthy of discussion.

The case study of SH incorporates unique activities into BPR and constructs the cross-departmental mutual support process, which significantly reduces the costs caused by the idle time of the departments, and thus, undertakes organizational reform without employee reduction. Cross-departmental work rotation refers to the position transfer of employees among different departments of the organization during a period of time (Bennett, 2003). Through such work rotation, employees can familiarize themselves with the works of the different departments/positions of the company, meaning they can have more efficient communication when collaboration among different positions and departments is required. The scale of position, the planning of a rotation route, and the professionalism and complexity of the works – are all factors that must be considered in rotation. As different units are involved in rotation, the rotation positions of the units should be highly correlated, and the candidates should be familiar with the workplace and required skills; the complexity of the work in cross-departmental rotation is higher than that in a single unit. In Japan, work rotation is commonplace, and wholesalerse focuses on the cultivation of all-round talents. Hence, both employees and managers have the opportunity to rotate their work. However, work rotation is extremely difficult, as it involves different professions in different departments (Alex, 2003). Most importantly, SH incorporates technology-oriented strategic positioning in its BPR. Through cross-departmental integration of the business, accounting, storage, delivery, and after-sale service departments, SH recruits employees according to their professional skills related to "electronics, electric work, and electric machinery". In this way, SH has gradually developed the abilities to focus on professional electric maintenance skills (technology-oriented), integrate other departments, and hold mutual support activities among different organizations, i.e. mutual influence between two separate activities, in order to create high-level fit among departmental activities.

According to the abovementioned, the research objective of this study is to explore the development of the strategic BPR model by observing, analyzing, recording, and deducing the evolution of SH, and discuss the adaptability of the model through the case study. The after-sale service of SH dominates process reengineering, and integrates it into strategic positioning to organize key activities, such as cross-organizational and cross-technological department support. Moreover, it creates profits from the idle time of the departments, in order that the organization can take different and practical actions, such as after-BPR labor reduction, without

reducing its employees. In addition to providing reference and guidance for the future implementation of BPR for small appliance practitioners and other enterprises with similar conditions, this study offers suggestions regarding adjustments to the methods enterprises adopt to undertake service process reengineering, with the hope that enterprises, under the framework of strategic thinking, can enhance organization efficiency and differentiation themselves to sharpen their competitive advantages and achieve permanent operations.

2. Literature Review

The study is based on the implementation procedures and methods of process reengineering, as proposed by BPR masters, such as Hammer and Champy (Hammer, 1990; Hammer & Champy 1993; Lowenthal, 1994; Kettinger, 1997). Starting with the definition and development of the concept of BPR, the author summarizes the types and procedures of BPR, as well as Porter's strategic positioning model, and incorporates the strategic basic elements of positioning, unique activities, trade-offs, and fit into BPR.

2.1 Enterprise Process Reengineering

In the Harvard Business Review, Hammer (1990) pointed out that the greatest challenge of the concept of re-engineering was to remove non-value added work, rather than making work automatic through science and technology. From four perspectives – re-position, re-organization, re-system, and re-vitalizing, he argued that enterprises must promote re-engineering; process consists of a series of activities or events that will surely lead to certain expected results. In fact, process is the operation method, work structure, or the logical situation of the development of objects (Weng, 2007). Hammer (2010) reiterated that process was important for enterprises to survive in disorder, and pointed out that the method to finish tasks plays an essential role in the success of enterprises in a world full of drastic changes. To become quicker, better, and more valuable, enterprises must well design their management processes and procedures in all aspects, including marketing, procurement, financial affairs, manufacturing, and after-sale service, in order to reduce costs and increase output. Re-engineering, as put forward by Hammer, is to review the processes of the organization from the perspective of customers, and all departments must make adjustments according to the redesigned process; hence, it is comprehensive reengineering. In addition, Hammer pointed out that BPR is the fundamental re-thinking, as well as the radical processes of work renovation, which aim to attain dramatic improvement in the factors used to measure performance, including cost, quality, service, and speed (Hammer & Champy, 1993). In activities, enterprises make use of resources to complete a series of rational and relevant tasks to accomplish certain achievements. In general, such a process combination based on the commercial trade system comprises two features – customer-included and cross-organizational (Davenport & Short, 1990). By adopting BPR, enterprises can make significant improvements and progress in processes within a certain period of time (Frank, 2006). Moreover, they will be able to reduce customer complaints, reaction time, and response errors, and thus, shorten the time for production and service (Tai & Huang 2007). BPR is basically a philosophy of performance improvement (El Sawy, 2001), and is a promoter of enterprise improvement (Venkatraman, 1994). For the past decade, since being put forward, BPR has created a heated wave of enterprise process improvement.

In short, enterprise processes are intended to achieve different management- or operation-related objectives, and process design reflects managers' views on management; different managers lead according to different management objectives and diverse process designs (Chu, 2010). Great changes to internal and external environments makes it difficult for enterprises to control their existing operations, thus, they must conduct fundamental re-thinking and thorough reforms of the work processes to maintain or reestablish their advantages through the "BPR" project.

2.2 Procedures of BPR Implementation

Based on the scope, angle, and angle extension of different industries, scholars have put forward many concepts and ideas about enterprise process innovations that have captivated global attention. After such concepts and ideas were put into practice, they were deeply discussed and followed by enterprises. Against such a backdrop, many methods of process reengineering have come into being, and of all these methods, the four-stage BPR implementation method, as proposed by Hammer (See Figure 1), attracts the greatest attention (Hammer & Champy, 1993).

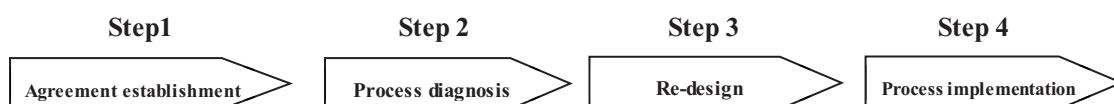


Figure 1. Procedures of BPR Implementation

Source: Hammer and Champy, 1993

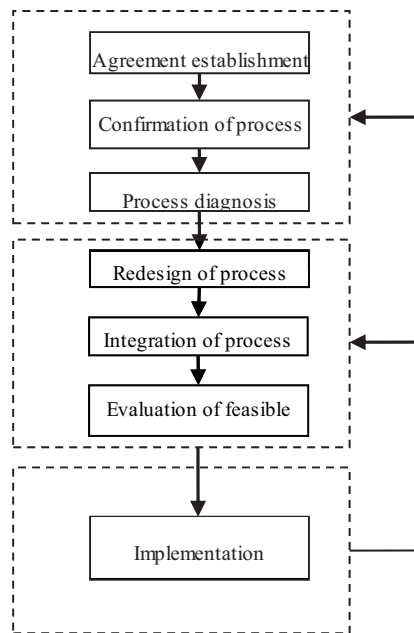


Figure 2. Three Stages of BPR Implementation

The study summarizes the implementation procedures and methods of process reengineering, as proposed by a large number of scholars (Hammer, 1990; Lowenthal, 1994; Kettinger, 1997; Wu, 1999; Harmon, 2007). In general, the main structure of the research procedure and method is divided on the basis of Hammer's four-stage BPR implementation method, as mentioned above; therefore, this study induces the scholars' main procedures and methods of introducing BPR, and puts forward the set of procedures and methods adopted by SH during BPR implementation, which includes three strategic stages and seven steps (See Figure 2), and serve as the analytical basis for the follow-up and strategic positioning integration of this study.

According to previous studies, many scholars regard process reengineering as an effective weapon to confront drastic changes to the environment and to solve crises. However, process reengineering, as advocated by Hammer and Champy (1993), had a success rate of merely 30-50% and about 50% of unfulfilled achievements (McNurlin & Sprague, 1998), as there are few analytical tools for the redesign of actual business processes. According to some universal observations, BPR would not lead to the expected results, as it is a time-consuming and high-cost method with unpredictable results (Limam, Reijers & Ounnar, 2009). Some doubt that BPR is accurate, and believe that actions must be taken to improve it (Davenport & Stoddard, 1994), which shows that there are still many problems in BPR-based competitive advantages. Porter (1996), a strategy master, pointed out that BPR can significantly improve or enhance the efficiency of an organization, and that enterprises must adopt strategic positioning to maintain or enhance their competitive advantages to distinguish themselves from their competitors. Only by doing so, he says, can enterprises really stand out in competition. Strategy is a strategic plan based on the trade-offs. of directions. Created by unique and valuable positioning, strategy involves a series of different activities; in the process of making a trade-offs. effective in competition, the nature of strategy is to choose what should not be done and integrate various enterprise activities (Porter, 1998). The author believes that enterprises with complete processes, but without strategic positioning; or those with complete strategic positioning, but without complete processes, will affect their reform. Hence, this study integrates strategic positioning with BPR.

This study uses Porter's positioning development elements, meaning unique activities and trade-offs., to explain the architecture from a horizontal perspective; while the observations of BPR from a vertical perspective are based on the three-stage BPR development model, as summarized in previous studies, they are used to analyze the structure and form of the case in the BPR development stages. Meanwhile, the author combines these two aspects to develop a conceptual structure (See Figure 3). By analyzing the unique activities of process reengineering, and selecting the best fit, as integrated by the mutual support process of the activities in the strategic action system in the case study, this study aims to help enterprises create competitive advantages and a profit-earning model that cannot be imitated by their competitors.

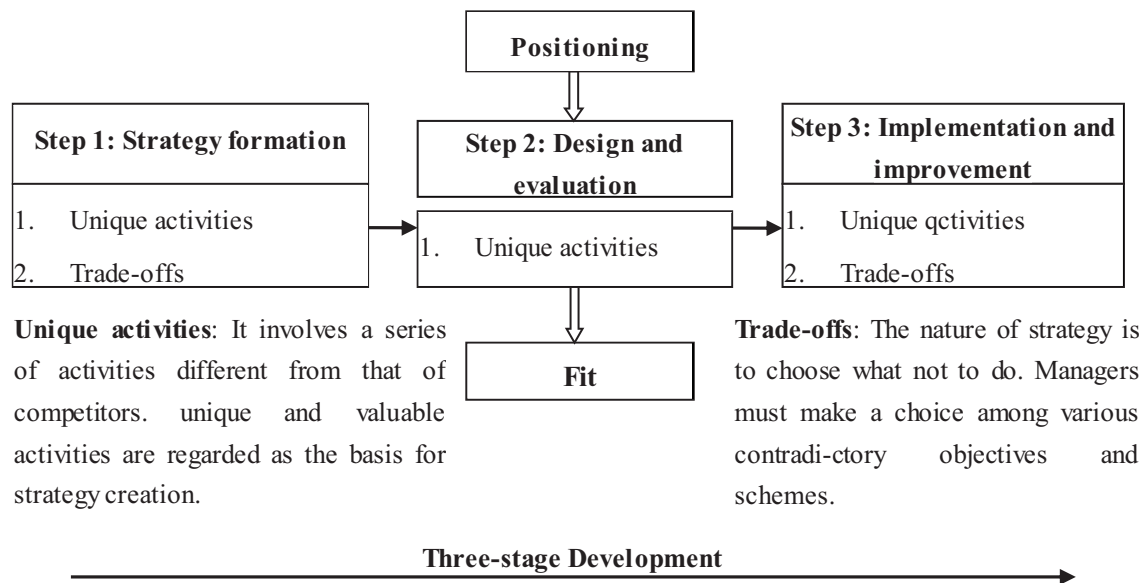


Figure 3. Conceptual Framework

2.2.1 Positioning

Strategic positioning is the source of uniqueness and serves as the trade-offs of positioning in competition to maintain strategic positioning.

According to the form of the case, this study focuses on the above three roots of enterprise strategic positioning: (1) based on product type: choose the products/service types, rather than enterprises choosing customer groups; (2) based on demand: the services meet the customer needs of most specific groups; (3) based on access: isolate the access channels of customers (Porter, 1996), or adopt some of them, and then, choose and develop the strategic positioning of SH features.

2.2.2 Unique Activities and Trade-offs of the Three-stage BPR

The nature of strategy is to choose what to do, thus, it is necessary to make a trade-offs to maintain consistent positioning. In the case where the development strategy is incorporated into BPR, the development takes on the form and structure that have gradually evolved through the three stages.

1) Step 1: Unique activities and trade-offs in the stage of strategy formation

In the initial stage of implementation, emphasis should be placed on managers' agreement on BPR, the conceptual proposition, and training for employees. When implementing the unique activities and trade-offs. of BPR in this stage, managers would conduct random reviews of the contradictory objectives and schemes to make a trade-offs.; however, design incompatibilities, including excessive or inadequate design, would fracture its value (Porter, 1996). In this case, enterprises must make a trade-offs. among the activities to maintain the consistent direction of positioning.

2) Step 2: Unique activities and trade-offs in the stage of design and evaluation

In the second stage, the external activities of cross-organizational access to customers will be gradually integrated with BPR.

In this stage, strategic positioning covers the demands of internal and external customers, and analyzes the diagnosis of the enterprise's operational processes; moreover, it designs and evaluates the technical tools suitable for enterprises and organizations, and incorporate them through the process of redesign. To connect cross-departmental and cross-organizational activities, the organization constantly holds interpersonal, cross-departmental, and cross-organizational activities, integrates them with the new processes for unique activities and trade-offs., and focuses on the activities that facilitate the company to the outside world. Through development, improvement, and adjustment, it establishes a connection and forms a channel featuring cross-organizational access to customers. Lambert and Cooper (2000) believed that the core enterprise process integration among departments, self-supplies, services, the original manufacturers of information, and ultimate users created comprehensive benefits both inside and outside.

3) Step 3: Unique activities and trade-offs in the stage of implementation and improvement

The third stage focuses on the final evaluation and makes a trade-offs. regarding the extended unique activities and trade-offs., in order that the organization will be able to introduce technology into cross-departmental and cross-organizational activities, and thus, fulfill the strategic objective of mutual support among activities in the stage. After the three-stage positioning, the original organization, which consists of the separate activities of the departments, gradually develops into one with unique activities featuring mutual support among departments and interactions with external channel manufacturers. Deriving from technology-oriented talent cultivation, the activities of mutual support among different departments and organizations can reduce the idle time generated from the separate operations of the departments, and thus, reduce costs, due to the “cross” mutual support activities in the final stage of BPR implementation (the 3rd stage in Figure 1). Moreover, they can equip the organization with the competitive advantages that will enable it to beat its competitors in differentiation and cost after the final stage of positioning.

2.2.3 Fit

After the design and implementation of the activities that integrated uniqueness and trade-offs. in the three-stage development, the gradual adjustment of the processes of mutual support among some activities turn the mutual influence among the activities into a strategic action system, where the mutual fit among the activities becomes the source of competitive advantages in an intensified manner.

Regarding the significance of fit, the mutual influence among some activities creates strong fit among the activities of different departments. For instance, the improvement of after-sale service will make it easier for the business workers in the business department to negotiate with clients. While the mutual influence among some activities can increase general benefits, there is also a need to include SH in the uniqueness and trade-offs. activities of positioning to form valuable fit. There are three types of valuable fit: (1) consistency among activities; (2) mutual enhancement among activities; (3) mental optimization (porter, 1996), which can be integrated, as they are exclusive to each other. This study chooses the one suitable for SH according to the case, and explores the fit of “mutual enhancement among activities”.

3. Research Method

To realize the research objective, this study adopts two methods of information collection: (1) participative observations; (2) in-depth interviews with channel clients and competitive peer managers of access service. Due to the issue of the collection of case information, this study chooses SH, a company, which has served the author for over 20 years, and records the important findings of BPR implementation into the observation record, which is the most important source of information.

3.1 *The Participative Observation Method*

One of the authors served SH for 20 years, the author engaged in long-term participation in the formulation of policies regarding business marketing, the distribution of internal human resources, fees for parts, charging standards (channels and consumers), and the after-sale service station. Moreover, the author engaged in communication and coordination with the external channel manufacturers, and thus, became familiar with after-sale service and the details of reform. In the reform of each stage, the author collects, summarizes, and compares the details regarding the operational models, after-sale service guarantees, charging standards, after-sale service routes, service stations, and the home delivery services of competitive peer companies.

3.2 *In-depth Interviews with Channel Members*

Starting from January 2012, this study adopts the convenient interview method to interview the channel practitioners of small appliances (See Table for details about the 77 respondents). Through interviews, the author collects information regarding the needs of channel members in purchasing and after-sale service, as well as information regarding the reform of competitors. The sample selection of respondents is based on diversity and differentiation. In addition, the author made some adjustments to the reference standards of various issues, including business policy, after-sale service outsourcing, proprietary information, participation of channel manufacturers, provision of parts, charging standards for maintenance, acceptable maintenance terms, the demands and charges for home deliveries, and after-sale service satisfaction. Moreover, the interviewer is very familiar with the service operation mechanism.

Table 1. Respondent

Differentiation	Service unit	Channel clients		Service unit	Competitive peers	
		Number	Title		Number	Title
Variety store	Carrefour	7	Director & supervisor	STP	1	Manager Chen
	RT-MART	7	Manager & supervisor	TCY	1	Manager Chen
	Geant A-MART	6	Manager & supervisor	JB	1	General manager Liu
Chain	National electronics	1	Assistant manager ruan	JK	1	Manager Chu
Wholesaler	Wholesaler	31	Owner	SF	1	Vise president Wu
Consumer	Consumer	25	Consumer			
Interview time	From January 2012 to February 2016					

4. Background and Development of the BPR Implementation of SH

Established in 1981, in its initial stage, “SUNHOW(SH)” focused on small appliances, however, with the rise of variety stores in the 1980s. In the 1990s, it entered a stage of vicious and fierce competition, and mainstream channel variety stores followed the trend. In competition featuring the survival of the strong and the elimination of the weak, and the top 3 variety stores – Carrefour, RT-MART, and Geant A-MART, controlled the channel advantages to become the mainstream stores, gradually depriving the channel suppliers of various brands in the small appliance industry of the ability to negotiate price. The cost advantage of Taiwanese enterprises disappeared with Taiwan’s entry into the WTO in 2002. Consequently, manufacturers transferred their production lines to Mainland China, resulting in low-priced products of declining quality. As mentioned above, the small appliance industry requires good after-sale service to have the feature of order. In comparison with technology- and service-oriented industries, such as large appliances, computers, and automobiles (See Table 2), the after-sale services of small appliances are large in number and low in charge. High-cost services and operations have always been a difficult issue for the industry to solve; and despite the rapid growth in performance, the significant increase in the cost of after-sale service becomes a heavy burden for manufacturers, which alarms industry operators.

Table 2. Difference between Large and Small Appliance and Computer Industries in After Service

Industry	Service manner	Volume	Price	Charge	Quantity of sale	Demand on home delivery
Small appliance	Service center & channel station	Medium and small	Low	Low	Huge	Medium
Large appliance	Service center & home delivery	Large	High	High transportation fee	Large	High
Computer	Service center & home delivery	Medium	High	High Transportation fee	Large	High
PS	The average fee for the after-sale service of small appliance is NT100, while the number is over NT1,000 for large appliance and computers					

The after-sale service of small appliances usually refers to a series of services after products or services are sold to consumers, including product introduction, delivery, installation, debugging, maintenance, technical training, and home delivery. The after-sale services of the industry include: (1) install and debug products for consumers; (2) provide technical guidance regarding the usage of products, and according to the needs of consumers; (3) guarantee the supply of maintenance parts; (4) provide maintenance service; (5) handle the repair, replacement, and return of products; (6) handle the letters, visits, and questions of consumers. Moreover, service involves collecting consumers’ views regarding the quality of products through various methods, and making timely improvements according to the situation (MBAlib, 2017).

Under the influence of the financial storm and economic recession of 2008, To survive in the face of the great pressure caused by business loss, various brands in the small appliance industry reduced employees and salaries, and adopted no-salary vacations. Some even cancelled their after-sale service departments and addressed the crisis with various strategies, such as outsourcing and process reengineering. General Manager Liu of JB stated “In face of a harsh environment, the first step is to reduce expenditures for survival. Specifically, outsourcing service departments can bring the immediate effect of cost reduction and alleviate the pressure caused by business loss. However, all current small appliance outsourcing of companies are self-employed entrepreneurs, who lack a complete service system and scale, and focus all attention on profit. In addition to the limited number of outsourcing by company, the low quality of service has resulted in a declining number of orders from channel clients. Currently, it is the best choice. General Manager Huang in Shan hao, a service outsourcing of company,

also discussed his problems and measures, “Although the after-sale service of many small appliance brands is outsourced, it is still hard to define the routes of cruise service because of the large number of products and the inability to provide main parts in time. At present, parts and products beyond the maintenance period are listed as priorities in maintenance service. It is not because of technology nor ability, but the too slow supply of parts and the too low subsidies.” Also outsourcing their after-sale service, Manager Chan of TCY and Manager He of STP shared a similar view, “Reducing expenditures through outsourcing is indeed a necessary measure. Although the after-sale service is like that of proprietors who try hard to meet customer needs without considering the cost, and although we gradually lose the orders of the traditional channel clients, service outsourcing can temporarily stop current business loss.”

General Manager Hsu of SH said, “In the economic recession, when all our competitors took protective measures, it was a good chance for us to improve the company in the market. Providing we improve our after-sale service and continue to meet customer needs, we will get the orders of channel manufacturers. How to reduce the increasing cost of after-sale service is a problem we continue to focus on. Apart from increasing our service efficiency, we can adopt a reform to reduce the cost; on top of success, we need to undertake a reform that is hard to be imitated by our competitors.”

In December 2009, the author was asked to establish a reform project team. After collecting suggestions and ideas from the departments at different meetings, and interviewing the channel clients, the author identified the urgent problems to be solved, including: the waste of the idle time of the departments, the unfixed time of after-sale cruise service, the inability to meet customer demands for delivery of repaired after-sale service products within three days, and the ineffective control over the orders of the traditional channel wholesalers and appliance shop, which often circulated among competitors. Assistant Manager Guo and Vice President Zheng voiced their questions during the discussion, “Currently, those manufacturers who have resorted to outsourcing are reducing their employees. Any reform will provoke wide anxiety that productivity will decline prior to reform.” Bewildered, General Manager Hsu said after the meeting, “The employees in different departments could imperceptibly improve their marketing abilities by supporting the sales of variety stores, so why can’t these departments support the After-sale Service Department or support each other to reduce the idle labor in different departments? We could encourage employees to support the sales of variety stores after work, when there were no adequate numbers of salespeople in the sale period, so why can’t we cultivate the employees in terms of after-sale service?” These questions began to ignite SH mental reform, which switched from business orientation to technology orientation.

5. Research Analysis and Results

Based on the long-term participative observations of the SH case, the author summaries the interview data and displays the strategic items of BPR implementation (See Figure 4), as follows:

5.1 Positioning

After positioning and trade-offs., SH chose to implement strategic BPR and activities different from the after-sale service outsourcing of other small appliance brands, such as STP, TCY, JB, JK, and SF, who are also SH’s main competitors, in order to provide unique and valuable combinations. By gradually constructing unique activities and trade-offs. of the three-stage technology-oriented operation. The various unique activities and trade-offs, which took shape in the process aimed to construct separation from the “customer access channel” positioning of competitors, and transformed the traditional business-oriented operation model into technology-and after-sale service-oriented positioning.

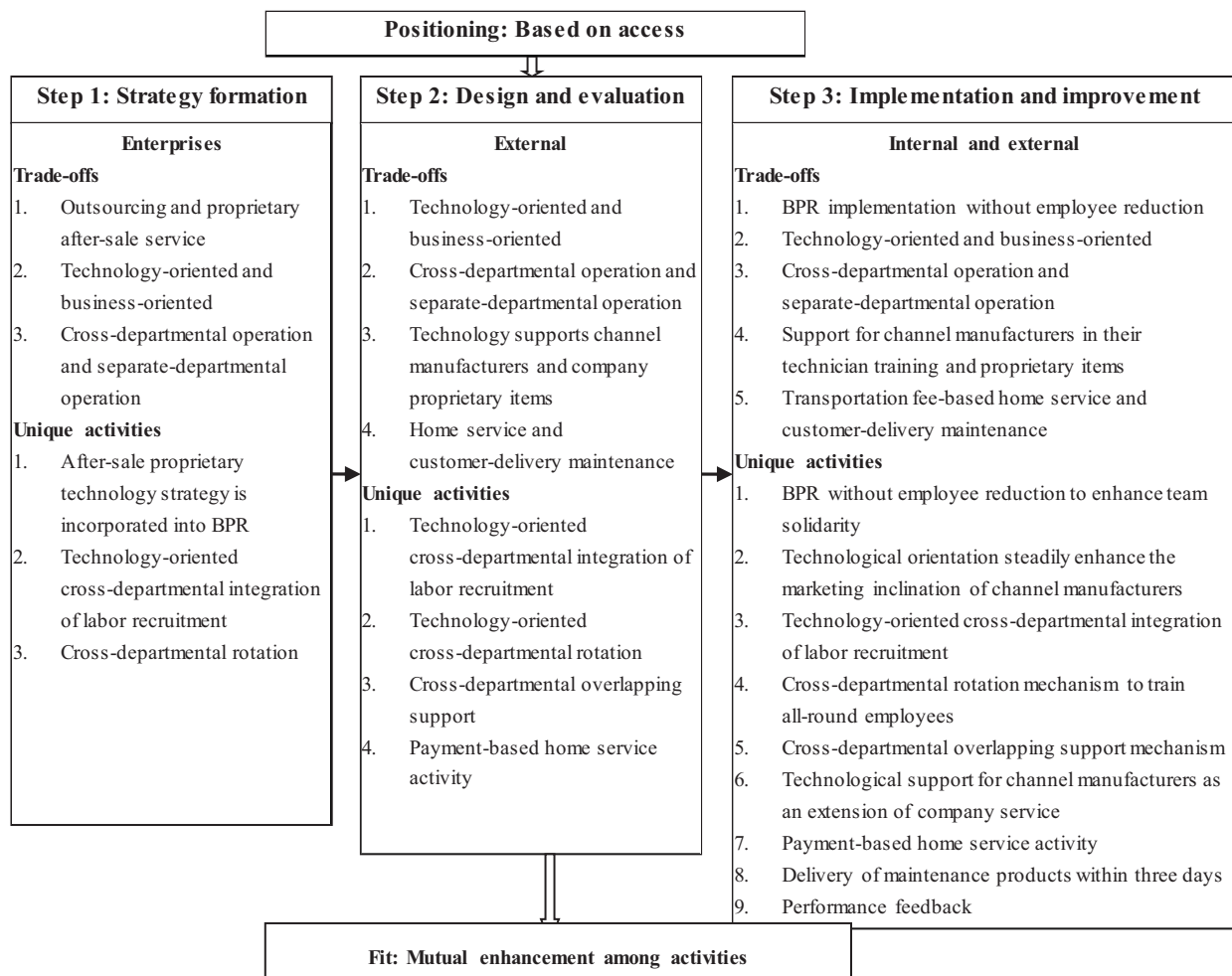


Figure 4. Strategic BPR Implementation Process of SH

5.2 Promote the Unique Activities and Trade-offs in the Three Stages of BPR

5.2.1 Step 1: Unique Activities and Trade-offs in the Stage of Strategy Formation

Due to its long-term response to environmental changes, the organization became capable of implementing BPR-integrated strategic positioning. After completing their work, the internal employees in all departments assisted with sales in the stores. To encourage all other departments to help professional technology departments to develop their technology-oriented rotation ability, the SH case developed their cross-departmental rotation ability by recruiting talents with technical strength in the After-sale Service Department and encouraged the Storage and Transportation Department to accumulate experience and ideas, and thus, developed various core capabilities and formed strategies different from that of their peers. After the unique activities and trade-offs., it began to integrate the important starting points of BPR implementation. SH found that its peers began to reduce their employees after they outsourced their after-sale service. To overcome resistance, as caused by the anxiety among the employees in the implementation of reform.

1) Unique activities

In the development stage of the initial phase of implementation, the following activities were held according to the internal discussions and demands of the channel clients: the implementation of technological orientation and business orientation; the implementation of BPR and after-sale service outsourcing; cross-departmental integration and departmental separate operation. These unique and trade-offs. activities were taken as the basis for development and reform. Finally, after defining the objectives of process and strategic positioning, and undertaking a series of trade-offs. and decision-making activities, SH adopted (1) BPR implementation; (2) technological orientation and cross-departmental integration orientation; (3) cross-departmental and separate-departmental work models. Become an extension of the evaluation and implementation of important strategic positioning in the next stage.

2) Trade-offs

After the initial phase of BPR implementation, the complete business objectives and execution strategies of the organization must be presented, and after this stage, SH had clear and key topics for strategic positioning. After the above activities, such as cross-departmental integrated recruitment of talents with professional techniques, the reform concept of strategic BPR took shape. Through communication and coordination, SH gradually established team trust and agreement, confirmed the consistent process objectives of the departments, and incorporated the above unique activities into the process diagnosis to form the actual execution procedure.

5.2.2 Step 2: Unique Activities and Trade-offs in the Stage of Design and Evaluation

The unique activities in the initial stage of development were constantly and appropriately promoted in this stage, and the scheme of constructing cross-departmental mutual support was extended. These activities included technology- and business-oriented. After confirming the unique activities projects to be implemented, SH gradually combined strategic positioning activities projects according to the deduction of process objectives, redesigned the processes to be consistent with objective operations, and integrated them. Finally, the SH selected the most feasible scheme as the original version of strategic BPR with scheduled execution.

1) Unique activities

The unique activities in this stage are based on the strategic objective concepts of technology-oriented operations, which took shape in the early stage of BPR implementation, and are used to evaluate the main items of strategic positioning in the current stage. Finally, the following unique activities factors must be checked: BPR implementation, technology-oriented cross-departmental overlapping support, and payment-based home delivery service. Moreover, unique activities were actually enacted in this stage.

2) Trade-offs.

The trade-offs. in this stage are based on the important factors of strategic positioning, which took shape in the initial phase of BPR implementation in the previous stage. After integrating and extending these ideas into the evaluation of the current stage, the BPR objectives are fulfilled according to the organization, which implemented the listed strategic ideas into the key factors of strategic BPR. After this stage, BPR enters the step of actual implementation.

5.2.3 Step 3: Unique Activities and Trade-offs in the Stage of Implementation an Improvement

In the third stage, all possible benefits from the unique activities are measured to make decisions regarding the implementation of BPR without employee reduction, in order to reinforce team solidarity and increase performance feedback. The progress of the implementation of the BPR system is based on constant adjustments and continual improvements that target the final strategic objectives. In the final development stage of BPR, analysis of the changed elements of strategic positioning is, as follows:

1) Unique activities

After the strategic positioning activities in this stage, BPR implementation without employee reduction is used to enhance team solidarity, technology-oriented cross-organizational support for channel manufacturers, and payment-based home delivery service. These regular and periodic unique activities, as derived from feasibility testing, can gradually increase the influence of mutual support of specialized technologies among different organizations and departments, and gradually facilitate the evaluation of BPR implementation without employee reduction.

2) Trade-offs

The trade-offs. activities in this stage refer to the selection of strategic positioning schemes in constant contradiction, which includes the removal of the BPR employee reduction mechanism, business-oriented operations, the lack of support for channel manufacturers to train technicians, and other incompatible activities. Here, trade-offs. is based on the interests of the organization, the channel clients, and specialized technology-oriented cross-departmental mutual support. In order to effectively reduce the idle time of some departments and gradually improve the mutual connection mechanism among organizations and departments.

After the strategic positioning activities in this stage, strong executive force is still required to ensure that the unique activities projects can be connected to the process of design. By the end of the third stage of BPR, SH had transformed itself from a concept of strategic positioning into an actual differentiated organization. The switch from business orientation to after-sale service orientation, the cross-department mutual support ability, the cooperation featuring the integration of after-sale service and external channel manufacturers, the steady enhancement of the marketing inclination of channel manufacturers, and the transformation of channel

manufacturers into an extension of the services of the company, are all the achievements of BPR implementation.

5.3 Fit – Mutual Enhancement among Activities

5.3.1 From Strategic Positioning and Integration to SH’s Activities System

From strategic positioning to integration, SH adopted BPR to accelerate the reception and maintenance of after-sale products. Meanwhile, it collaborated with the external cooperative channel clients of wholesalers business/service, and established overlapping support for the idle labor of the departments, which are the key factors to enhance convenience, increase flexibility, and reduce costs.

The main activities implemented by SH: Increased Access of Service and Service Stations of Channel Manufacturers (IASS), Diverse and Quick Response (DQR), Sharing of Profits and Preferential Price (SPP), Closer Cooperation and Contract-bound Advances from Channel Manufacturers (CBA), Alternative Usage of Cross- Departmental Labor (UCDA), and Intensive Cross-departmental Overlapping Cruise Service (ICDS). Other activities included: Self Delivery for Maintenance, Real-time Pickup and Prior Treatment Service (SDMRTP), Provide Agent Technician Training by Channel Manufacturers (ATCM), Logistic Delivery for Maintenance and Sharing of Fees (LDMSF), Provide Alternative in Case of Failed Delivery within the Planned Period (PAFD), Provide Transportation Fee-based Home Delivery (PTFHD), Provide Support for the Parts of Channel Manufacturers (SPCM), Delivery within Three Days (DTD), Serve Clients through Channel Manufacturers (SCM), Support and Performance Bonuses for Employees (SPBE), Technology- oriented cross-organizational labor recruitment (TCOLR), Comprehensive Talent Cultivation (CTC), Enhance the Usage of Idle Time among Departments(EUITD), Enhance the Marketing Inclination of Channel Manufacturers (EMICM), and Integrate Internal and External Resources (IIER).

These activities supplemented each other, and through the mutual support of the process system (See Figure 5) and the increased efficiency of the After-sale Service Department, the Business Department quickly solved problems regarding after-sale service, which attracted an increasing number of orders and contributed to faster delivery. All such activities created fit among the unique activities, as well as a highly connected activities chain, which is difficult for competitors to imitate (Porter, 1996). The strategic fit features mutually supplemented activities that immediately created competitive advantages and a profit-earning model for SH.

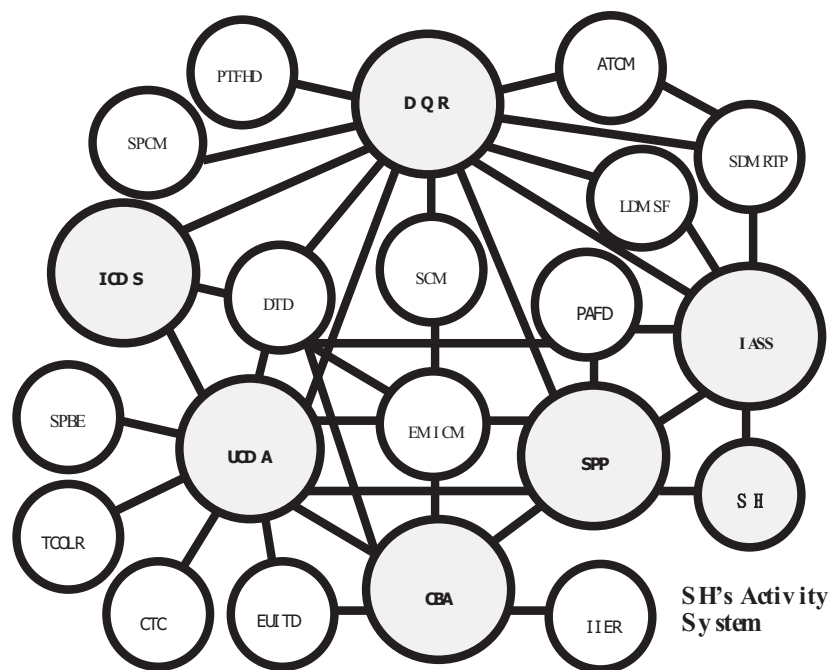


Figure 5. SH’s Activities System

5.3.2 Fit Constructs an Organization Difficult to Imitate

Organizations can gain the capital required for labor development, clustered knowledge, skills, capabilities, and other features (KSAOs) (Ployhart, Weekley & Baughman, 2006). Initially, while the organization may have to pay more to invest in labor, the recovery of the cost includes an increase in productivity, more work for employees, and/or specific knowledge and skills of the organization (Van Iddekinge, Ferris, Perrewé, Blass, & Heetderks, 2009).

Nowadays, many jobs are mobile, with frequent changes to some duties. In general, organizations tend to recruit those who possess basic abilities, including strong adaptation and problem-solving abilities, and can contribute to organizational success in different roles (Lepak & Snell, 1999). Therefore, SH applied specialized technology-oriented cross-departmental training to develop mutual support abilities in the new cross-department process, which greatly reduced the idle time of its departments. Enterprises have special knowledge and skills to facilitate employees' work, inform employees of their duties, and improve productivity (Hatch & Dyer, 2004). According to the concept of resource foundation, special knowledge and skills, the experience of training and development, and specific labor capital are most likely to create competitive advantages, as they are valuable, unique, and difficult to imitate.

During BPR implementation, this study explored BPR according to Porter's argument that strategic positioning can increase competitive advantages. In the three-stage development, this study incorporated unique activities and took trade-offs. integration as the strategic action system, in order that the "Fit" could create the mutually supplementary and supportive processes of activities that could constantly generate competitive advantages.

5.4 Result – Differences and Benefits after the Introduction of BPR

5.4.1 Effect of the Introduction Stage – Internal Differences of the SH

Before the Introduction of BPR

1) Employee reduction during reform caused anxiety among employees

While most peers adopted outsourcing in their reform to quickly reduce costs, the employees became anxious about employee reduction, which seriously affected the operations of the company. In comparison with its peers, the SH case did not reduce its employees during the reform, which significantly reduced the risk of causing anxiety among the staff.

2) The departments were separate and could not support each other

Despite the overlapping business routes of visiting clients, the departments could not assist each other, and thus, quickly failed to meet the needs of clients. If the departments increased their employees, costs would rise; in cross-departmental support and coordination, the limited professionalism of the employees made it difficult to achieve the cross-departmental mutual support process, which led to the separate performances of the departments and rigid operations.

3) The idle time of the departments were not fully used

The operations of the company were based on the separate works of the functional departments. After finishing their work, employees had idle time.

4) The after-sale service departments were regarded as the source of funds

The company focused on the marketing and business departments, which buttressed other departments; in particular, the after-sale service departments were deemed as an endless source of funds.

After the Introduction of BPR

1) BPR implementation without employee reduction calmed employees

During organizational reform, uncertainties caused resistance from employees. In the initial stage of process reengineering, meetings were held to discuss the approaches and attitude the company should take to solve the crisis; in addition to keeping their employees, the company provided comprehensive training for employees as leaders with business/after-sale service and maintenance skills in the market, and connected cross-departmental support to relieve employees and gain employee support to promote BPR. In comparison, most peers and Wholesalersies in different industries adopted outsourcing and "reduced employees" to decrease costs, which often caused anxiety among employees and affected productivity.

2) Developed the ability to achieve mutual support among different departments

All departments switched their attention from business to technology in labor recruitment. After building a

foundation of “cross-departmental” rotation, the company “cultivated” their staff in a “comprehensive way”, constructed a mechanism featuring an active coordination process with the departments, and achieved mutual support among the departments according to needs. Due to the more “flexible” organizational operation, the departments no longer refused tasks with excuses related to professionalism, which increased the efficiency of internal operations.

3) Idle time was fully used

After the organization implemented BPR, the after-sale service technology-oriented cross-departmental coordination process created a mutual support mechanism. For example, when employees arrived at the office, the directors would provide cross-departmental coordinative support according to the business execution routes of the day. when visiting the clients of channel manufacturers, the Business Department would assist the Service Department transport products for maintenance or assist maintenance on site, thus, the idle time of the departments was adequately used.

4) Low-cost service and quick response

After integrating BPR with positioning strategies, SH began to develop the ability to achieve cross-departmental technological support. SH answered customers’ questions about technology on its website, charged transportation fees for home maintenance service, helped traditional wholesalers construct after-sale service systems, supported technician training, and sold after-sale service parts. All such measures enhanced efficiency through cross-departmental support. Meanwhile, it adopted a clear cross-departmental service route arrangement and cross-departmental labor support process (See Table 3), which significantly increased the participation of the staff, made organizational operations more flexible, and provided rapid response to customers, and thus, reached the goal of reducing costs.

Table 3. After-sale Service Route Arrangement and Cross-departmental Labor Support Process

Project/Day	Monday	Tuesday	Wednesday	Thursday	Friday
On-site service	A	B	C	D	D
Business department	B	C	D	D	A
Delivery department	E	E	E	E	E
Collection and return	D	D	A	B	C
Internal maintenance	D	A	B	C	D
Notes	1. Cross-departmental coordination can be achieved among on-site service, collection and return, and internal maintenance according to the routes 2. Channel manufacturers collect maintenance products on Mondays; maintenance is done on Tuesdays; products are returned on Wednesdays 3. Provide second-hand alternatives if home service is not finished on the day 4. Service route codes: Chiayi (A), Changhua (B), Nantou (C), Taichung (D), order cooperation (E)				

Table 4. Internal Differences after the Introduction of BPR

	Brand	Manner of reform	Mind of staff	Consideration on operation	Nature of work	Talent cultivation	Organizational operation	Participation of staff
Before	SH		Calmed down employees	Departments were separate	Business-oriented	Internal promotion & external employment	Rigid	Middle
	SH	BPR	Cross-departmental	Cross-department coordination	Technology-oriented	Comprehensive & internal promotion	Flexible	High
After	Outsourcing to peers	Outsourcing	Worry about layoff	Departments were separate	Business-oriented	Department & external employment	Rigid	Middle

5.4.2 Differences among Companies after the Introduction of BPR

Tables 5 and 6 show the differences between SH and its competitive peers in the small appliance industry before and after the reform according to the data collected in observations and interviews.

Table 5. Differences between SH and Its Peers after the Reform

Brand Project	SH (before)	SH (after)	STP	TCY	JB	JK	SF
Method of organizational adjustment	Proprietary	BPR	Outsourcing	Proprietary	Outsourcing	Proprietary	Outsourcing
Consideration on selection strategy	Department	Cross-department	Department	Department	Department	Department	Department
Training for channel technicians	No	Yes	No	No	No	Yes	No
Technology for clients	No	Yes	No	No	No	No	No
Cross-departmental rotation	No	Yes	No	No	No	No	No
Home service	No	Transportation fee	No	No	No	Large size charge	No
Channel service station	H, C, W	All-channel	H, C, W	H, C, W	H, C, W	H, C, W	H, C, W
Charge of channel (Discount % off)	H20/W30/C 15	H 20/W30/C 15	H20/W30/C15	Charge	Charge	Charge	Charge
Flexible labor distribution	No	Yes	No	No	No	No	No
Comprehensive talent cultivation	Department	Cross-departmental	Department	Department	Department	Department	Department
External technological support	Simple	Professional	No	No	Simple	No	Simple
Days for maintenance	3~6 days	3 days	3~6 days	3~6 days	4~6 days	3~6 days	3~6 days
Department-oriented operation	Business	After service	Business	Business	Business	Business	Business
Labor adjustment	Department	Cross-departmental	Employee-reduction	Department	Employee reduction	Smaller	Smaller
Proportion of channel business(%)	H72/C 9/W19	H53/C14/W3 3	H61/C12/W27	H67/C15/W18	H72/C10/W18	H 63/C12/W25	H70/C 6/W14
P S	All-channel clients: Hypermarkets(H); Chain stores(C); Wholesalers (W), Stores(S)						

Table 6. Differences between Competitive Peers after the Organizational Change

Brand Reform	SH	STP		TCY		JB		JK		SF			
		before	after	before	after	before	after	before	after	before	after		
Turnover/ billion TWD	7.9	11	12	9.8	4.7	5.4	8.3	9.5	5.1	5.7	6.3	7.9	
Business proportion %	Hypermarkets	70	61	56	72	67	66	72	82	77	73	80	
	Chain	12	14	13	13	15	15	12	10	13	14	5	6
	Wholesalers	18	25	31	15	18	19	16	8	10	13	22	14
Service efficiency / day	3~6	3	3~6	3~6	3~6	3~6	3~6	3~6	3~6	3~6	3~6	3~6	

5.4.3 Competitive Advantages after the Introduction of BPR

People often mix operation effect with strategy. To improve productivity, quality, and speed, enterprises have created many management tools and technologies, including model learning, outsourcing, BPR, and reform management. Normally, such measures can significantly improve operational effects, for instance, reducing problems in products, and developing better products and services earlier than others (Porter, 1996). Whether enterprises can stand out in competition depends on its activities, such as creation, production, marketing, delivery, and service, which can maintain its advantages. While visiting clients and training staff would initially increase costs, if an enterprise organizes activities that are more effective than that of its competitors, it will gain an advantage in costs. (See Tables 5 and 6). Meanwhile, as SH did not reduce employees during the reform, it showed responsibility for employees, and thus, improved its image. SH organized the above activities different from that of its competitors or similar organizations to create strategic positioning and competitive advantages.

6. Conclusion and Suggestions

During BPR implementation by SH, the author also found that the integration concept extended the development and evolution of BPR. Most previous studies concentrated on the role of the BPR model in organization reform; however, BPR alone is far from sufficient to equip an organization with competitive advantages. After selecting the elements of strategic positioning, SH organized unique activities, including BPR implementation without employee reduction, technology-oriented cross-departmental integrated labor recruitment, cross-departmental rotation talent cultivation, and cross-organization support for channel manufacturers to train technicians, which all helped SH construct cross-departmental and cross-organization mutual support processes, make full use of the idle time of the departments, and significantly reduced their operational costs. Additionally, they helped enhance

service efficiency, gradually regained the orders of lost channel manufacturers, and equipped SH with competitive advantages that are difficult to imitate.

The theoretical and practical significance of this study is, as follows: This study conducts in-depth discussions on the theoretical meaning of BPR, and shares a critical view with other integrated studies on strategic positioning, thus, deepening the understanding of strategic positioning and easing the lack of analysis of strategic positioning factors in the current industry. The mutual support process of unique activities is used to build a connection between external channel manufacturers and the various departments, such as the after-sale service department, the business department, and the storage and transportation department. These activities are mutually supplementary to form fit. A higher-level fit will bring more orders, quicker delivery and after-safe service response, and higher organizational performance (Lawrence & Lorsch, 1969), which will create a highly connected activity chain that is difficult to imitate (Porter, 1996). Practically, relevant technology-oriented operations in Taiwan and overseas, as well as experience in the promotion of automobile and computer projects, all show the high value of after-sale service in promoting technology- and service-oriented operations. However, as average works do not involve activities of specialized technology, cross-departmental rotation is very easy. If different specialized technologies are involved, cross-departmental rotation would be extremely difficult. Regarding three-stage strategic positioning, there must be long-term cross-departmental training and planning strategies that involve specialized technologies, adopt gradual cultivation, adjust various strategies to improve the process, and then, make trade-offs, to fulfill the ultimate objective of positioning. In industries that solve the issue of low operational value of after-sale services, managers must focus on technology for the integration of cross-departmental talent recruitment, in order to create positive influence on the rotation process of cross-departmental mutual support. An increasing number of enterprises are adopting reform to reduce costs without reducing employees, and thus, are maintaining their social responsibility, in order to achieve what would never have been attained through traditional reform. Therefore, providing different strategic positions during BPR observations, as well as different, more effective technology-oriented operation mechanisms, will create more value than depending only on the traditional operation based high value of after-sale service. The author suggests that small appliance manufactures in Taiwan should promote organizational reform, rather than reducing employees to reduce costs, in face of reform and development.

There are three limitations to this study. First, this study adopts the participative observation method for the case study, without comparing the case with other peer cases; in addition it includes research representativeness or prejudice, and lacks the basis for popularization of the differences between phenomenon and theory (Douglas, 1985). Second, although the author had many interviews with the partners and competitors of the case company, some explanations regarding BPR development may not be found in this study, which is the biggest limitation on the exploration into BPR-related topics. Third, while the author attempted to gain the best evidence through participative observations, the process was still imperfect. The analyzed events would attract different views due to different roles and positions, thus, it is difficult to achieve completely correct results. Therefore, future studies are suggested to increase the number of cases and identify the operational problems of enterprises from the perspective of the integration of BPR with strategic positioning. The author believes that this suggestion will deepen public comprehension of the formation and evolution of strategic BPR. Moreover, future researchers can obtain sufficient evidence and support through direct participative observations over a longer period.

References

- Alex, H. (2003, May 31). Workplace competitiveness, job rotation, leaving an alternative. *Cheer magazine* Retrieved from <http://www.cheers.com.tw/article/article.action?id=5024921>
- Baidu Data Research Center. (2017). *Home appliance analysis –The Small appliance*. Retrieved from <http://data.baidu.com/jiadian/jiadian5/part9.html>
- Bennett. (2003). Training Strategies for Tomorrow. *Bradford*, 17(4), 7.
- Cascio, W. F. (2002). *Strategies for responsible restructuring*. *Academy of Management Executive*, 16(3), 80-91. <https://doi.org/10.5465/AME.2002.8540331>
- Champy, J. (1995). *Reengineering Management: The Mandate for New Leadership*. Harpe Bessusin, New York.
- Chang, H. Y. (2011, October Issue). Three Worst Situations of the European Debt Crisis. *Common Wealth Magazine*, 482.
- Chang, Y. L. (2005). *Study on the Relationship among Competitiveness, Competition Strategy and Operation Performance in the Taiwanese Appliance Industry* (Unpublished master's Thesis), University of Yu Da, Miaoli, Taiwan.

- Chen, C. S., & Hsia, J. W. (2001). *Human resources management organizational downsizing*, the Asia-Pacific Education and Training Network. Retrieved from http://carryshen.tripod.com/content_hr4.htm
- Chen, C. Y. (2010). *Analysis of the Current Situation of the Taiwanese Appliance Industry*. Metal Center Industry Research Team, Appliance Industry Monthly report.
- Chen, G. H. (2012). *Analysis of the Competitiveness of Taiwan, Wholesalers and South Korea in the Appliance Industry*. (Unpublished master's Thesis) University of Fu Jen Catholic, New Taipei, Taiwan.
- Chuang, C. Y. (2009). *Case Study on the Competition Strategies of Taiwan Appliance Manufacturers under the Cross-strait ECFA*. (Unpublished master's Thesis) University of National Science and Technology, Taipei, Taiwan.
- Chu, J. M. (2010). *Study on the Analytical Methods of Enterprise Process*. (Unpublished master's Thesis). University of National Sun Yat-sen, Kaohsiung, Taiwan.
- Davenport, T. H., & Short, J. E. (1990). The New Industrial Engineering : Information Technology and Business Process Redesign. *Sloan Management Review*, 31(4), 11-27.
- Davenport, T. H., & Stoddard, D. B. (1994). Reengineering: Business Change of Mythic Proportions? *MIS Quarterly*, 121-127. <https://doi.org/10.2307/249760>
- Douglas, J. D. (1985). *Creative Interviewing*. California, CA: Sage.
- El Sawy, O. A. (2001). *Redesigning Enterprise Processes for e-Business*. New York, NY: McGraw-Hill.
- Fisher S. R., & White M. A. (2000). Downsizing in a learning organization: Are there hidden cost? *Academy of Management Review*, 25(1), 224-251. <https://doi.org/10.2307/259273>
- Frank, U. (2006). Improving Shared Service Implementation: Adopting Lessons From the BPR Movement. *Business Process Management Journal*, 12(2), 191-205. <https://doi.org/10.1108/14637150610657530>
- Hammer, M. (1990). Reengineering Work: Don't Automate, Obliterate. *Harvard Business Review*, 68(4), 104-112.
- Hammer, M., & Champy, J. A. (1993). *Reengineering the Corporation: A Manifesto for Business Revolution*. New York, NY: Harper Collins. [https://doi.org/10.1016/s0007-6813\(05\)80064-3](https://doi.org/10.1016/s0007-6813(05)80064-3)
- Hammer, M., Hershman, L. W., & Wilson, G. K. (2010). *Faster Cheaper Better – The 9 Levers for Transforming How Work Gets Done*. New York, NY: Crown Business.
- Hatch, N. W., & Dyer, J. H. (2004). Human Capital and Learning as a Source of Sustainable Competitive Advantage. *Strategic Management Journal*, 25, 1155-1178. <https://doi.org/10.1002/smj.421>
- Harmon, P. (2007). *Business Process Change: A Manager's Guide to Improving, Redesigning, and Automating processes*. (2nd ed.). San Francisco, SF: Morgan Kaufmann.
- Kettinger, W. J. (1997). Pragmatic Perspectives On The Measurement of Information Systems *Service Quality*. *MIS Quarterly*. <https://doi.org/10.2307/249421>
- Lambert, D. M., & Cooper, M. C. (2000). Issues in Supply Chain Management. *Industrial Marketing Management*, 29(1), 65-83. [https://doi.org/10.1016/S0019-8501\(99\)00113-3](https://doi.org/10.1016/S0019-8501(99)00113-3)
- Lawrence, P. R., & Lorsch, J. W. (1969). *Developing Organizations: Diagnosis and Action*. Reading, Mass: Addison-Wesley Publishing, 23-30.
- Lepak, D. P., & Snell, S. A. (1999). The Human Resource Architecture: Toward a Theory of Human Capital Allocation and Development. *Academy of Management Review*, 24, 31-48.
- Limam, M. S., Reijers, H. A., & Ounnar, F. (2009). Development of a Decision-Making Strategy to Improve the Efficiency of BPR. *Expert Systems with Applications*, 36(2), 3248-3262, 41(1).
- Lin, W. J. (2014). *Traditional Industries Project tutoring industry - Industry Overview and import and export analysis (Small appliance and yacht)*. Metal Industries Research & Development Centre. <http://www.slideshare.net/mirdc/20141023-42289535>
- Lowenthal, J. N. (1994). Reengineering the Organisation: A Step-by-Step Approach to Corporate Revitalization. *Quality Management Journal*, 1(3), 57-79.
- MBAlib. (2017). *After sales service*. Retrieved from <http://wiki.mbalib.com/zh-tw/%E5%94%AE%E5%90%8E%E6%9C%8D%E5%8A%A1>
- Mckee Ryan, F. M., & Kinicki, A. J. (2002). Coping job loss: a life-facet perspective. *International Review of*

- Industrial and Organizational Psychology*, 17(1), 1-29. <https://doi.org/10.1002/9780470696392.ch1>
- McKinley, W., Sanchez, C. M., & Schick, A. G. (1995). Organizational downsizing : constraining, cloning, learning. *Academy of Management Executive*, 9(3), 32-44. <https://doi.org/10.5465/ame.1995.9509210276>
- McNurlin, B. C., & Sprague, Jr. R. H. (1998). *Information Systems Management in Practice*. (7th, ed.). New Jersey, NJ: Prentice-Hall.
- Ployhart, R. E., Weekley, J. A., & Baughman, K. (2006). The Structure and Function of Human Capital Emergence: A Multilevel Examination of The Attraction–Selection – Attrition Model. *Academy of Management Journal*, 49, 661-677. <https://doi.org/10.5465/AMJ.2006.22083023>
- Porter, M. E. (1996). What is Strategy. *Harvard Business Review*, 74(6), 61-78.
- Porter, M. E. (1998). *On Competition*. Boston, BOS: Harvard Business School Press.
- Shah, P. P. (2000). Network destruction: The structural implications of downsizing. *Academy of Management Journal*, 43(1), 101-112. <https://doi.org/10.2307/1556389>
- Sun, B. T. (1994). Study on the Implementation Strategy and Influence of Organization Restructuring, *Personnel Monthly*, 19(3), 30-36.
- Tai, W. S., & Huang, C. E. (2007). The Relationship Between Electronic Business Process Reengineering and Organizational Performance in Taiwan. *The Journal of American Academy of Business, Cambridge*, 10(2), 296-301.
- Tan, S. C. (2008). *Association of Small and Medium Enterprises: 7,000 Small and Medium Enterprises Go Bankrupt Each Month*. Taipei, TP: Commercial Times.
- Tenner, A. R., & DeToro, I. J. (1997). *Process Redesign : The Implementation Guide for Managers*. Boston, BOS: Addison Wesley.
- Tsai, C. C. (2004). The Operation Positioning of Taiwanese Manufacturers – Based on the Development of the Appliance Industry in Major Countries. *Industrial Technology Research Institute IEK Systematic Energy Team*. ITRIEK-0453-S216(92).
- Van Iddekinge C. H., Ferris G. R., Perrewé P. L., Blass F. R., & Heetderks T. D. (2009). Effects of Selection and Training on Unit–Level Performance Over Time: A Latent Growth Modeling Approach. *Journal of Applied Psychology*, 94, 829-832. <https://doi.org/10.1037/a0014453>
- Venkatraman, N. (1994). IT –Enabled Business Transformation From Automation to Business Scope Redefinition. *Sloan Management Review, Winter*, 73-88.
- Weng, D. C. (2007). *Skills for Enterprise Process Management*. Taipei, TP: Xianye Enterprise Management Consulting Co., Ltd..
- Wu, K. L. (1999). *Drawing of Process Charts and Process Reengineering*. Taipei, TP: Ruilin Enterprise Management Consulting Co., Ltd.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Multivariate Analysis by Using Quantification Method II on a Questionnaire Investigation for Rare Sugars

Yasuo Ishii¹, Hiromasa Takeyasu², Daisuke Takeyasu³, Kazuhiro Takeyasu⁴

¹Yamato University, Japan

²Kagawa Junior College, Japan

³The Open University of Japan, Japan

⁴Tokoha University, Japan

Correspondence: Kazuhiro Takeyasu, College of Business Administration, Tokoha University, Shizuoka 417-0801, Japan.

Received: May 22, 2017

Accepted: June 12, 2017

Online Published: June 19, 2017

doi:10.5539/ibr.v10n7p84

URL: <https://doi.org/10.5539/ibr.v10n7p84>

Abstract

The Rare Sugars exist naturally and have many kinds (more than 50). They have good effect for health such as prevention of increasing the blood-sugar level after eating, suppression of fat accumulation, suppression of increasing the blood pressure, and anti-oxidative effect etc. It is in the spotlight for many people especially for those who are in the metabolic syndrome. There are few related papers concerning the marketing research and its utilization of this matter. In this paper, a questionnaire investigation is executed in order to clarify consumers' current condition and their consciousness, and to seek the possibility of utilizing the Rare Sugars. Fundamental statistical analysis, Multivariate Analysis by Using Quantification Method II are conducted based on that. Some interesting and instructive results were obtained.

Keywords: the rare sugars, consumer, multivariate analysis, quantification method II

1. Introduction

The Rare Sugars' study has launched on 1980th by Professor Takeshi Izumori (Kagawa University). The way to the mass production was developed by the method of enzymatic reaction. The International Society of Rare Sugars was established in 2001. Local government of Kagawa Prefecture comes to assist this research activity on this big innovation newly born in Kagawa Prefecture. The Rare Sugars have advantage that a blood-sugar level does not increase so much after eating, in spite of it being a sugar. And it also holds the upturn of the blood pressure. Therefore it is expected as a new functional material for the prevention of metabolic syndrome.

By the way, one kind of the Rare Sugar D-psicose has the following characteristics.

- ① a sweetening made by the natural starch
- ② non calorie and its sweetness is 70% to those of sugar
- ③ organoleptic property of coolness and sharpness in taste

Many medical research papers are published on the Rare Sugars as follows.

Analysis of the function of D-psicose; Hossain et al., 2011, Hayashi et al., 2010, Iida et al., 2010

Analysis of the function of D-allose; Yamada et al., 2012, Kajikawa et al., 2010, Hirata et al., 2009

On the other hand, these are few papers analyzed by the viewpoint from consumers. The Rare Sugars are good for the health and are sold in the market as a sweetening, seasoning or functional ingredient for food.

In this paper, a questionnaire investigation is executed in order to clarify the recognition level among consumers and to pursue the future possibility of the Rare Sugars. Such multivariate analysis as Quantification Method II is conducted.

The rest of this paper is organized as follows. In section 2, outline of the questionnaire investigation and its basic statistical results are exhibited. After that, Multivariate Analysis by Using Quantification Method II is performed in section 3, which is followed by the remarks of section 4.

2. Outline and the Basic Statistical Results of the Questionnaire Research

2.1 Outline of the Questionnaire Research

A questionnaire investigation is executed to the student of Kagawa Junior College in order to clarify the recognition level among consumers and to pursue the future possibility of the Rare Sugars. The outline of the questionnaire research is as follows. The questionnaire sheet is attached in Appendix.

- (1) Scope of investigation : Student of Kagawa Junior College
- (2) Period : April – June 2015
- (3) Method : Leave until called for
- (4) Collection : Number of distribution 186
 Number of collection 186 (collection rate 100.0%)
 Valid answer 186

2.2 Basic Statistical Results

Now, we show the main summary results by single variable.

(1) Basic characteristics of answerers

Q32. Sex

	Frequency	%
Male	19	11
Female	154	89
Total	173	100

Q33. Age

	Frequency	%
-19	139	80.3
20-19	33	19.1
30-19	0	0
40-49	0	0
50-59	1	1
60-	0	0
Total	173	100

Q34. Occupation

	Frequency	%
Student	171	98.8
Officer	0	0
Company Employee	0	0
Clerk of Organization	0	0
Independents	0	0
Part timer	0	0
Housewife	1	0.6
Not Filled in	1	0.6
Total	173	100

Q25. Do you take interest in a diet?

	Frequency	%
Think it very much	65	38.0
Slightly think so	52	30.4
Cannot say either	24	14.0
Slightly do not think so	15	8.8
Do not think so	15	8.8
Total	171	100

Q26. Are you careful for the health?

	Frequency	%
Think it very much	21	12.2
Slightly think so	64	37.4
Cannot say either	65	38.0
Slightly do not think so	15	8.8
Do not think so	6	3.5
Total	171	100

As is shown in the above-mentioned table, female students take the majority, therefore 70% of them have interest in diet and nearly half of them are careful for the health.

(2) Summary result for the main items

A. Q1 Do you know the Rare Sugars?

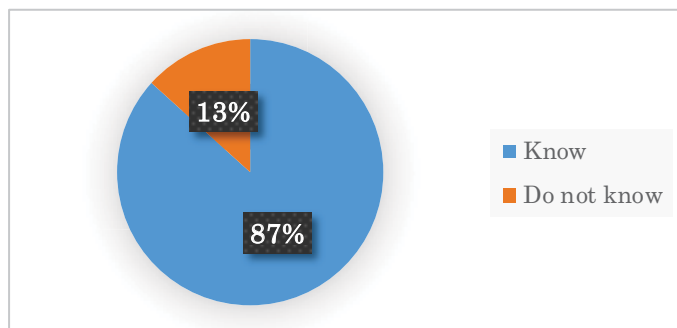


Figure 2.1. Q1 Do you know the Rare Sugars?

Nearly 90% of them knew the Rare Sugars.

B. Q6 Have you drunk or eaten the food in which the Rare Sugars are included?

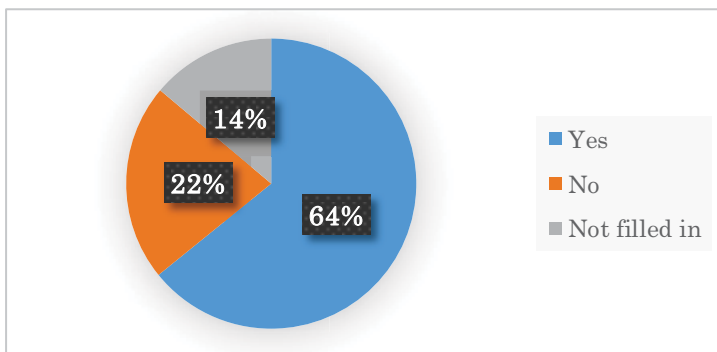


Figure 2.2. Q6 Have you drunk or eaten the food in which the Rare Sugars are included?

Nearly 2/3 of them answered that they have experienced the Rare Sugars.

C. Q7 Was the Rare Sugar effective after using it for more than one month?

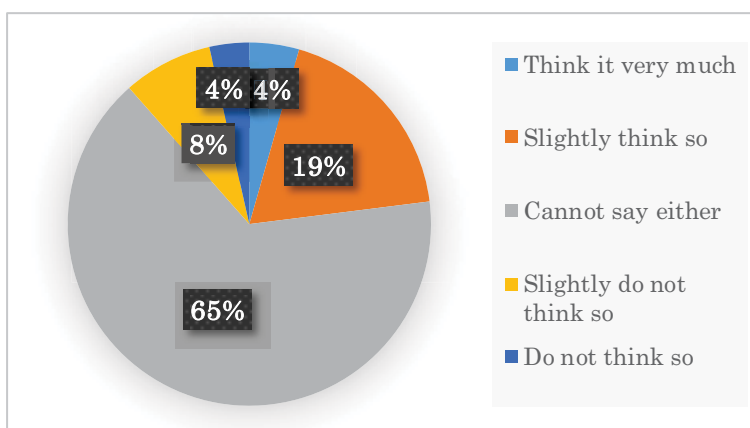


Figure 2.3. Q7 Was the Rare Sugar effective after using it for more than one month?

23% answered that the Rare Sugar was effective after using it for more than one month. On the contrary, 12 % said that it was not effective. While 2/3 have chosen “cannot say either”. They cannot grasp the distinct effect in the short time usage.

D. Q8 Do you want to try to eat or drink the food in which the Rare Sugar is included?

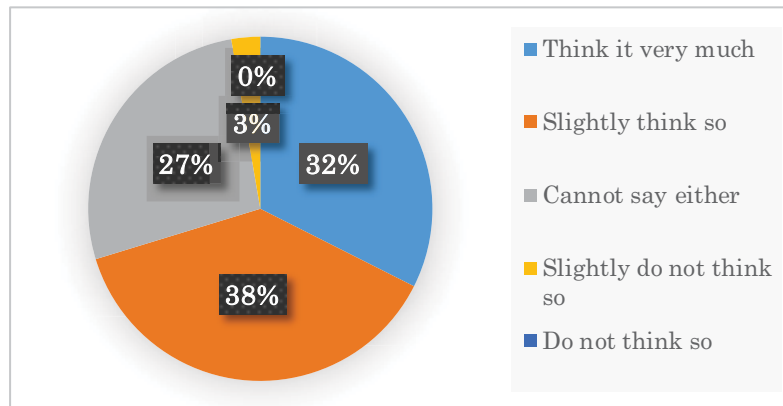


Figure 2.4. Q8 Do you want to try to eat or drink the food in which the Rare Sugar is included? Nearly 70% of them answered that they want to eat or drink the food in which the Rare Sugar is included.

E. Q10-15 How do you want to use the Rare Sugar?

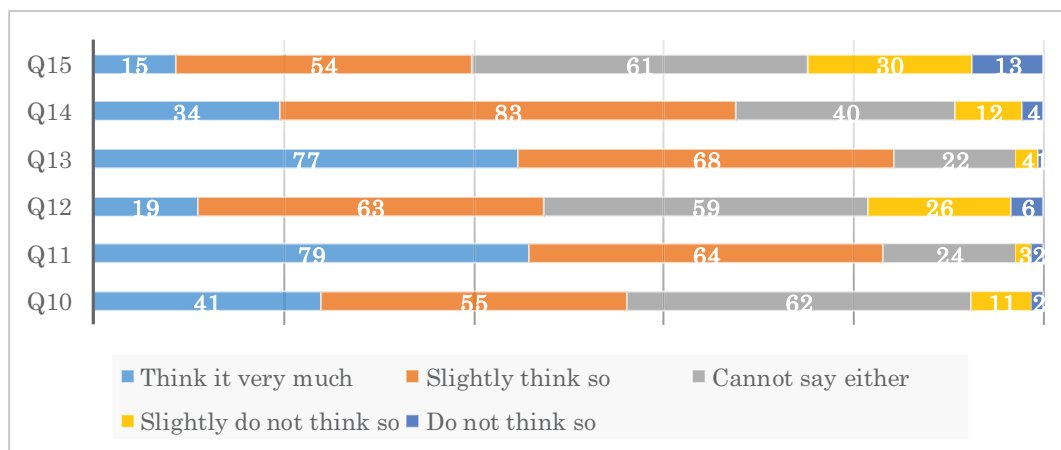


Figure 2.5. How do you want to use the Rare Sugar?

Consumers want to use the Rare Sugar in various aspects such as “as a supplement”, “can easily use it with a recipe”, “as a tool for treatment” and “in the cooking”.

F. Q16-22 Anxiety in using the Rare Sugar

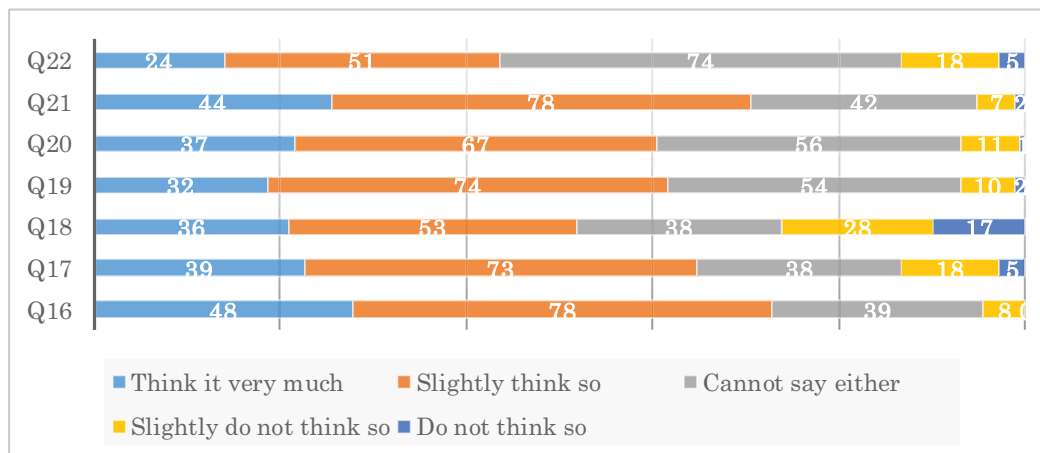


Figure 2.6. Q16-22 Anxiety in using the Rare Sugar

They feel anxiety in using the Rare Sugar because “Not so popular”, “Cannot find food in the shop”, “Seems to be expensive”, “Cannot have confidence that it is safe for anybody” and “Surrounding people do not use it so often”. These imply that the suppliers should dispatch much more information which removes the anxiety consumers hold.

3. Multivariate Analysis by Using Quantification Method II

Multivariate Analysis by Using Quantification Method II is conducted on the following six points.

- A. Q7:Q10-15
- B. Q8:Q10-15
- C. Q25:Q10-15
- D. Q25:Q16-22
- E. Q26:Q10-15
- F. Q26:Q16-22

3.1 Q7. Q10-15

Discrimination analysis by Quantification Method II is executed. Outer criterion is set Q7 “Was the Rare Sugar effective?”. Explanation variables are set for Q10-15 “How do you want to use the Rare Sugar?”.

Eigenvalue is exhibited in Table 3.1 and Wilks’ Lambda is exhibited in Table 3.2.

Table 3.1. Eigenvalue

Function	Eigenvalue	Variance (%)	Accumulation (%)	Canonical Correlation
1	.194 ^a	100.0	100.0	.403

Table 3.2. Wilks’ Lambda

Test	Wilks’ Lambda	χ^2	Degree of Freedom	Significance probability
1	.838	17.894	6	.007

From Table 3.1, canonical correlation coefficient is 0.403 and it is not so high. But from Table 3.2, Wilks’ Lambda is 0.838 and is 0.007 in Significance probability therefore it is statistically significant by 5 % significance level. Coefficient of standardized canonical discrimination function is exhibited in Table 3.3 and its graph is exhibited in Figure 3.1.

Table 3.3. Coefficient of standardized canonical discrimination function

	Function
	1
Q10	.948
Q11	-.072
Q12	.366
Q13	-.330
Q14	-.185
Q15	.277

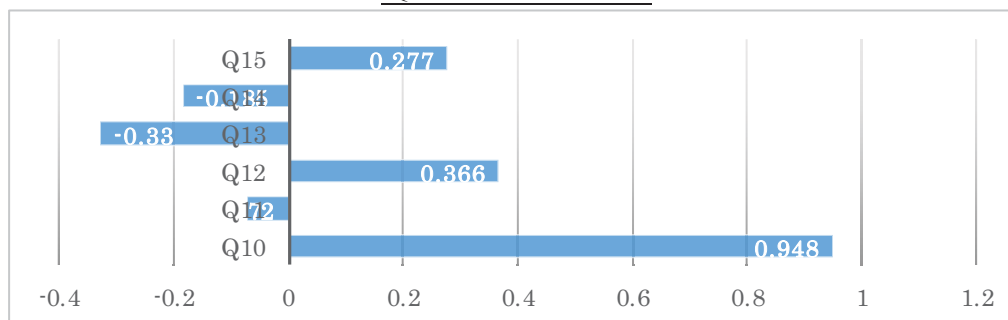


Figure 3.1. Chart of the Coefficient of standardized canonical discrimination function

From Table 3.3 and Figure 3.1, the biggest factor of contribution statistics concerning the effect of the Rare Sugar is Q10”Want to use it in cooking” and the next one is Q12” Want to use it as a seasoning”, which means “How to use it as a food”.

In Table 3.4, non-standardized coefficient of canonical discrimination function is exhibited. Discrimination function is exhibited in (3.1) based on this.

Table 3.4. Non-standardized coefficient of canonical discrimination function

Function	
1	
Q10	2.087
Q11	-.210
Q12	.731
Q13	-1.032
Q14	-.393
Q15	.570
(Constant)	-2.972

$$Z = -2.972 + 2.087Q10 - 0.210Q11 + 0.731Q12 - 1.032Q13 - 0.393Q14 + 0.570Q15 \quad (3.1)$$

In this case, Discrimination hitting ratio is 66.0% and nearly 2/3 is discriminated properly.

3.2 Q8: Q10-15 Eat or Drink the Food in Which the Rare Sugar is Included

Discrimination analysis by Quantification Method II is executed. Outer criterion is set Q8 "Want to eat or drink the food in which the Rare Sugar is included". Explanation variables are set for Q10-15 "How do you want to use the Rare Sugar?".

Eigenvalue is exhibited in Table 3.5 and Wilks' Lambda is exhibited in Table 3.6.

Table 3.5. Eigenvalue

Function	Eigenvalue	Variance (%)	Accumulation (%)	Canonical Correlation
1	.608 ^a	100.0	100.0	.615

Table 3.6. Wilks' Lambda

Test	Wilks' Lambda	χ^2	Degree of Freedom	Significance probability
1	.622	31.842	6	.000

From Table 3.5, canonical correlation coefficient is 0.615 and it is slightly high. But from Table 3.6, Wilks' Lambda is 0.622 and is 0.000 in Significance probability therefore it is statistically significant by 5 % significance level. Coefficient of standardized canonical discrimination function is exhibited in Table 3.7 and its graph is exhibited in Figure 3.2.

Table 3.7. Coefficient of standardized canonical discrimination function

Function	
1	
Q10	.758
Q11	.504
Q12	.040
Q13	.020
Q14	-.023
Q15	-.207

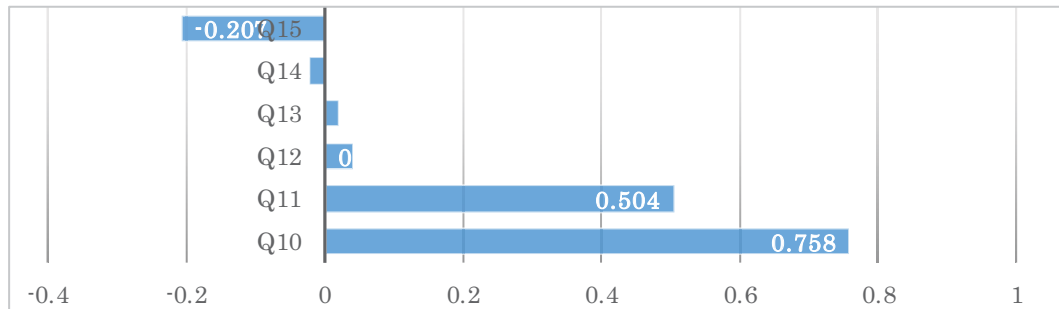


Figure 3.2. Chart of the Coefficient of standardized canonical discrimination function

From Table 3.6 and Figure 3.2, the biggest factor of contribution statistics concerning "Want to eat or drink the food in which the Rare Sugar is included" is Q10 "Want to use it in cooking" and the next one is Q11 "Can easily use it if there is a recipe", which means "Requirement for cooking".

In Table 3.8, non-standardized coefficient of canonical discrimination function is exhibited. Discrimination function is exhibited in (3.2) based on this.

Table 3.8. Non-standardized coefficient of canonical discrimination function

	Function
	1
Q10	1.787
Q11	1.272
Q12	.079
Q13	.051
Q14	-.050
Q15	-.413
(Constant)	-3.821

$$Z = -3.821 + 1.787Q10 + 1.272Q11 + 0.079Q12 + 0.051Q13 - 0.050Q14 - 0.413Q15 \quad (3.2)$$

In this case, Discrimination hitting ratio is 80.6% and it is rather high. More than 80 % is discriminated properly. Thus, contribution of the utilization of the Rare Sugar in cooking is high concerning the desire of eating or drinking food in which the Rare Sugar is included.

3.3 Q25: Q10-15 Interest in a Diet

Discrimination analysis by Quantification Method II is executed. Outer criterion is set Q25 "Do you take interest in a diet?". Explanation variables are set for Q10-15 "How do you want to use the Rare Sugar?".

Eigenvalue is exhibited in Table 3.9 and Wilks' Lambda is exhibited in Table 3.10.

Table 3.9. Eigenvalue

Function	Eigenvalue	Variance (%)	Accumulation (%)	Canonical Correlation
1	.130 ^a	100.0	100.0	.340

Table 3.10. Wilks' Lambda

Test	Wilks' Lambda	χ^2	Degree of Freedom	Significance probability
1	.885	19.854	6	.003

From Table 3.9, canonical correlation coefficient is 0.340 and it is low. But from Table 3.10, Wilks' Lambda is 0.885 and is 0.003 in Significance probability therefore it is statistically significant by 5 % significance level. Coefficient of standardized canonical discrimination function is exhibited in Table 3.11 and its graph is exhibited in Figure 3.3.

Table 3.11. Coefficient of standardized canonical discrimination function

	Function 1
Q10	.532
Q11	-.238
Q12	.331
Q13	.484
Q14	.443
Q15	-.070

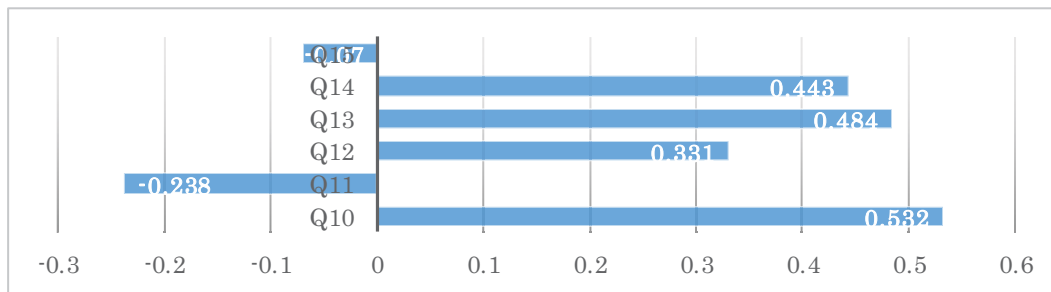


Figure 3.3. Chart of the Coefficient of standardized canonical discrimination function

From Table 3.11 and Figure 3.3, the biggest factor of contribution statistics concerning "Interest in a diet" is Q10 "Want to use it in cooking" and the next one is Q13 "Want to know where I can get information because I want to use it as a supplement", Q14 "Want to know the hospital where the Rare Sugar is used as a tool for treatment" which means that it is a factor concerning eating or drinking, supplement and treatment auxiliary chemicals.

In Table 3.12, non-standardized coefficient of canonical discrimination function is exhibited. Discrimination function is exhibited in (3.3) based on this.

Table 3.12. Non-standardized coefficient of canonical discrimination function

	Function 1
Q10	1.082
Q11	-.633
Q12	.672
Q13	1.367
Q14	.965
Q15	-.143
(Constant)	-4.465

$$Z = -4.465 + 1.082Q10 - 0.633Q11 + 0.672Q12 + 1.367Q13 + 0.965Q14 - 0.143Q15 \quad (3.3)$$

In this case, Discrimination hitting ratio is 68.9% and nearly 2/3 is discriminated properly.

Thus, contribution of the item "Want to use it in the cooking" is high concerning the utilization of the Rare Sugar.

3.4 Q25: Q16-22 Interest in a Diet

Discrimination analysis by Quantification Method II is executed. Outer criterion is set Q25 "Do you take interest in a diet?". Explanation variables are set for Q16-22 "Anxiety in using the Rare Sugar".

Eigenvalue is exhibited in Table 3.13 and Wilks' Lambda is exhibited in Table 3.14.

Table 3.13. Eigenvalue

Function	Eigenvalue	Variance (%)	Accumulation (%)	Canonical Correlation
1	.115 ^a	100.0	100.0	.321

Table 3.14. Wilks' Lambda

Test	Wilks' Lambda	χ^2	Degree of Freedom	Significance probability
1	.897	17.635	7	.014

From Table 3.13, canonical correlation coefficient is 0.321 and it is low. But from Table 3.14, Wilks' Lambda is 0.897 and is 0.014 in Significance probability therefore it is statistically significant by 5 % significance level. Coefficient of standardized canonical discrimination function is exhibited in Table 3.15 and its graph is exhibited in Figure 3.4.

Table 3.15. Coefficient of standardized canonical discrimination function

	Function 1
Q16	.436
Q17	.406
Q18	-.526
Q19	.458
Q20	.069
Q21	.271
Q22	-.003

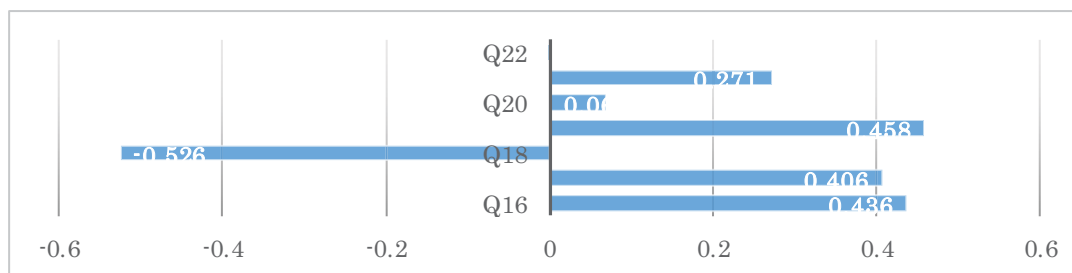


Figure 3.4. Chart of the Coefficient of standardized canonical discrimination function

From Table 3.15 and Figure 3.4, the biggest factor of contribution statistics concerning "Interest in a diet" is Q18 "Cannot grasp the concrete effect" and the next one is Q19 "Cannot have confidence that it is safe for anybody", Q16 "Not so popular", Q17 "Seems to be expensive" which means that it is a factor concerning the question while usage.

In Table 3.16, non-standardized coefficient of canonical discrimination function is exhibited. Discrimination function is exhibited in (3.4) based on this.

Table 3.16. Non-standardized coefficient of canonical discrimination function

	Function 1
Q16	.998
Q17	.862
Q18	-1.047
Q19	.967
Q20	.142
Q21	.604
Q22	-.005
((Constant))	-3.177

$$Z = -3.177 + 0.998Q16 + 0.862Q17 - 1.047Q18 + 0.967Q19 + 0.142Q20 + 0.604Q21 - 0.005Q22 \quad (3.4)$$

In this case, Discrimination hitting ratio is 65.5% and nearly 2/3 is discriminated properly.

Thus, contribution of the item that concrete effect of the Rare Sugar cannot be found is high concerning the interest in a diet.

3.5 Q26:Q10-15 Be Careful for the Health

Discrimination analysis by Quantification Method II is executed. Outer criterion is set Q26” Are you careful for the health?”. Explanation variables are set for Q10-15 “How do you want to use the Rare Sugar?”.

Eigenvalue is exhibited in Table 3.17 and Wilks’ Lambda is exhibited in Table 3.18.

Table 3.17. Eigenvalue

Function	Eigenvalue	Variance (%)	Accumulation (%)	Canonical Correlation
1	.108 ^a	100.0	100.0	.312

Table 3.18. Wilks’ Lambda

Test	Wilks’ Lambda	χ^2	Degree of Freedom	Significance probability
1	.902	16.632	6	.011

From Table 3.17, canonical correlation coefficient is 0.312 and it is low. But from Table 3.18, Wilks’ Lambda is 0.902 and is 0.011 in Significance probability therefore it is statistically significant by 5 % significance level. Coefficient of standardized canonical discrimination function is exhibited in Table 3.19 and its graph is exhibited in Figure 3.5.

Table 3.19. Coefficient of standardized canonical discrimination function

	Function 1
Q10	.587
Q11	-.397
Q12	.352
Q13	.345
Q14	.213
Q15	.314

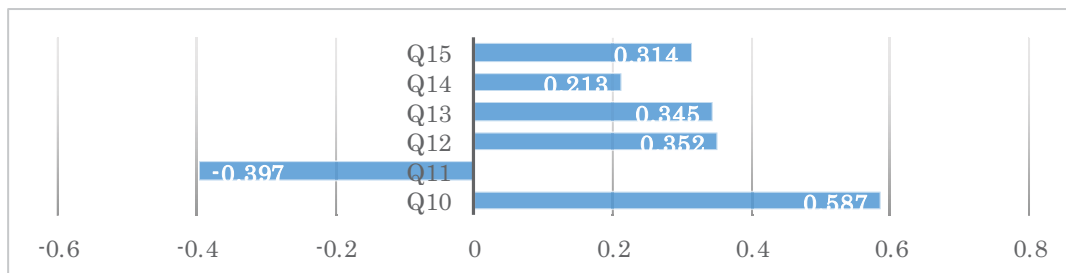


Figure 3.5. Chart of the Coefficient of standardized canonical discrimination function

From Table 3.19 and Figure 3.5, the biggest factor of contribution statistics concerning ” Be careful for the health” is Q10”Want to use it in cooking” and the next one is Q11” Can easily use it if there is a recipe”, Q12”Want to know where I can buy it because I want to use it as a seasoning”, Q13”Want to know where I can get information because I want to use it as a supplement”, which means “Cooking and supplement”.

In Table 3.20, non-standardized coefficient of canonical discrimination function is exhibited. Discrimination function is exhibited in (3.5) based on this.

Table 3.20. Non-standardized coefficient of canonical discrimination function

	Function 1
Q10	1.192
Q11	-1.058
Q12	.714
Q13	.960
Q14	.458
Q15	.651
(Constant)	-4.323

$$Z = -4.323 + 1.192Q10 - 1.058Q11 + 0.714Q12 + 0.960Q13 + 0.458Q14 + 0.651Q15 \quad (3.5)$$

In this case, Discrimination hitting ratio is 64.1% and nearly 2/3 is discriminated properly.

Thus, contribution of the utilization of the Rare Sugar to cooking is high concerning "Be careful for the health" therefore producer and seller are required to cope with this request.

3.6 Q26:Q16-22

Discrimination analysis by Quantification Method II is executed. Outer criterion is set Q26" Are you careful for the health?". Explanation variables are set for Q16-22 "Anxiety in using the Rare Sugar".

Eigenvalue is exhibited in Table 3.21 and Wilks' Lambda is exhibited in Table 3.22.

Table 3.21. Eigenvalue

Function	Eigenvalue	Variance (%)	Accumulation (%)	Canonical Correlation
1	.121 ^a	100.0	100.0	.329

Table 3.22. Wilks' Lambda

Test	Wilks' Lambda	χ^2	Degree of Freedom	Significance probability
1	.892	18.601	7	.010

From Table 3.21, canonical correlation coefficient is 0.329 and it is low. But from Table 3.22, Wilks' Lambda is 0.892 and is 0.010 in Significance probability therefore it is statistically significant by 5 % significance level. Coefficient of standardized canonical discrimination function is exhibited in Table 3.23 and its graph is exhibited in Figure 3.6.

Table 3.23. Coefficient of standardized canonical discrimination function

Function 1	
Q16	-.105
Q17	.206
Q18	-.161
Q19	.422
Q20	.078
Q21	.091
Q22	.666

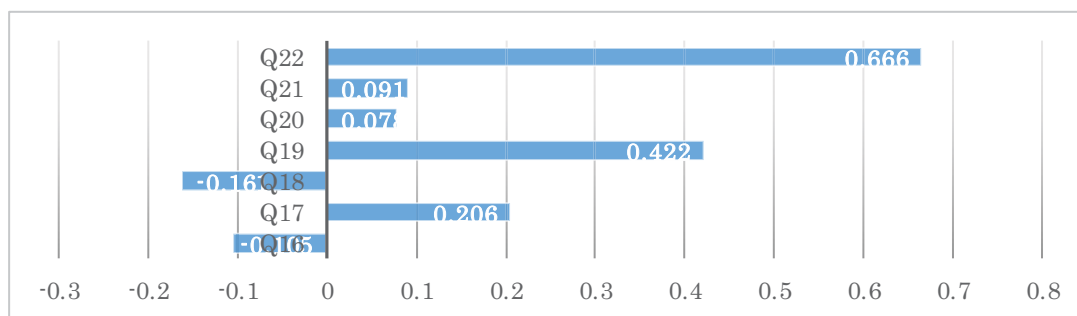


Figure 3.6. Chart of the Coefficient of standardized canonical discrimination function

From Table 3.23 and Figure 3.6, the biggest factor of contribution statistics concerning "Be careful for the health" is Q22"Cannot guess how I should use the Rare Sugar to what kind of cooking" and the next one is Q19" Cannot have confidence that it is safe for anybody", Q17"Seems to be expensive", which means "Effective cooking method, safety and economic efficiency".

In Table 3.24, non-standardized coefficient of canonical discrimination function is exhibited. Discrimination function is exhibited in (3.6) based on this.

Table 3.24. Non-standardized coefficient of canonical discrimination function

	Function 1
Q16	-.236
Q17	.435
Q18	-.322
Q19	.895
Q20	.162
Q21	.203
Q22	1.393
(Constant)	-3.707

$$Z = -3.707 - 0.236Q16 + 0.435Q17 - 0.322Q18 + 0.895Q19 + 0.162Q20 + 0.203Q21 + 1.393Q22 \quad (3.6)$$

In this case, Discrimination hitting ratio is 64.9% and nearly 2/3 is discriminated properly.

Thus, in order to make the Rare Sugar prevail to those who are careful for the health, uncomplicated communication of information is required.

4. Remarks

From the basic statistical results, nearly 90 % examinees know the Rare Sugar and nearly 2/3 of them have ate or drunk the food in which the Rare Sugar is included. 1/4 of examinees had an effect of the Rare sugar who have used it more than 1 month but 2/3 of them could not confirm the distinct effect. Nearly 70 % of examinees want to eat and drink the Rare sugar. Furthermore they want to use it as a “Supplement”, “Recipe”, “Tool for treatment” and “Cooking”. While the anxiety factors are “Not so famous”, “Rarely can be seen in shops”, “Economic efficiency”, “Safety”, and “Surrounding people do not use it so often”.

Therefore uncomplicated communication information is essential in order to make the Rare Sugar prevail.

By the analysis Quantification Method II, contribution of the factor “Want to use it in cooking” is high in discrimination of “Effect” and those of “Cooking” is high for the desire of drinking and eating in the future. Contribution of the factor as cooking and supplement is high in discrimination of “Interest in a diet”. Contribution of the factor “Concrete effect”, “Safety”, “Know well”, and “Question while using” are high for the doubt and anxiety during this case. Contribution of the factor “How to use the Rare Sugar in cooking” and “Enhancement of recipe” are high for the daily consciousness of health. Contribution of the factor “Effective cooking method” is high for the doubt and anxiety while in this case.

These knowledge would be an important and helpful information for the effort to prevail the Rare Sugar.

Further study on this should be performed such as text mining analysis.

5. Conclusion

The Rare Sugars exist naturally and have many kinds (more than 50). They have good effect for health such as prevention of increasing the blood - sugar level after eating, suppression of fat accumulation, suppression of increasing the blood pressure, and anti-oxidative effect etc. It is in the spotlight for many people especially for those who are in the metabolic syndrome. There are few related papers concerning the marketing research and its utilization of this matter. In this paper, a questionnaire investigation was executed in order to clarify consumers’ current condition and their consciousness, and to seek the possibility of utilizing the Rare Sugars. Fundamental statistical analysis, Multivariate Analysis by Using Quantification Method II were executed based on that.

From the basic statistical results, nearly 90 % examinees know the Rare Sugar and nearly 2/3 of them have ate or drunk the food in which the Rare Sugar is included. 1/4 of examinees had an effect of the Rare sugar who have used it more than 1 month but 2/3 of them could not confirm the distinct effect. Nearly 70 % of examinees want to eat and drink the Rare sugar. Furthermore they want to use it as a “Supplement”, “Recipe”, “Tool for treatment” and “Cooking”. While the anxiety factors are “Not so famous”, “Rarely can be seen in shops”, “Economic efficiency”, “Safety”, and “Surrounding people do not use it so often”.

Therefore uncomplicated communication information is essential in order to make the Rare Sugar prevail.

By the analysis Quantification Method II, contribution of the factor “Want to use it in cooking” is high in discrimination of “Effect” and those of “Cooking” is high for the desire of drinking and eating in the future. Contribution of the factor as cooking and supplement is high in discrimination of “Interest in a diet”. Contribution of the factor “Concrete effect”, “Safety”, “Know well”, and “Question while using” are high for the

doubt and anxiety during this case. Contribution of the factor “How to use the Rare Sugar in cooking” and “Enhancement of recipe” are high for the daily consciousness of health. Contribution of the factor “Effective cooking method” is high for the doubt and anxiety while in this case.

These knowledge would be an important and helpful information for the effort to prevail the Rare Sugar.

The effectiveness of this method should be examined in various cases.

Acknowledgements

The authors are grateful to all those who supported us for answering the questionnaire investigation.

References

- Hossain, M. A., Kitagaki, S., Nakano, D., Nishiyama, A., Funamoto, Y., Matsunaga, T., ... Tokuda M. (2011 Feb 4). Rare sugar D-psicose improves insulin sensitivity and glucose tolerance in type 2 diabetes Otsuka Long-Evans Tokushima Fatty (OLETF) rats. *Biochem Biophys Res Commun*, 405(1), 7-12. <https://doi.org/10.1016/j.bbrc.2010.12.091>
- Yamada, K., Noguchi, C., Kamitori, K., Dong, Y., Hirata, Y., Hossain, M. A., ... Yamaguchi, F. (2012 Feb), Rare sugar d-allose strongly induces thioredoxin-interacting protein and inhibits osteoclast differentiation in Raw264 cells. *Nutr Res*, 32(2), 116-123. <https://doi.org/10.1016/j.nutres.2011.12.010>
- Hayashi, N., Iida, T., Yamada, T., Okuma, K., Takehara, I., Yamamoto, T., ... Tokuda, M. (2010). Study on the postprandial blood glucose suppression effect of D-psicose in borderline diabetes and the safety of long-term ingestion by normal human subjects. *Biosci Biotechnol Biochem*, 74(3), 510-519. <https://doi.org/10.1271/bbb.90707>
- Iida, T., Hayashi, N., Yamada, T., Yoshikawa, Y., Miyazato, S., Kishimoto, Y., ... Izumori K. (2010). Failure of d-psicose absorbed in the small intestine to metabolize into energy and its low large intestinal fermentability in humans. *Metabolism*, 59(2), 206-214. <https://doi.org/10.1016/j.metabol.2009.07.018>
- Kajikawa, T., Tada, S., Kitanaka, A., Tokuda, M., Taminat, T., & Anly, J. (2010). Reactivity of rare sugar D-allose during glycation of human serum albumin. *Bio-Sci*, 33(3), 227-236.
- Hirata, Y., Saito, M., Tsukamoto, I., Yamaguchi, F., Sui, L., Kamitori, K., ... Tokuda M. (2009 May). Analysis of the inhibitory mechanism of D-allose on MOLT-4F leukemia cell proliferation. *J Biosci Bioeng*, 107(5), 562-568. <https://doi.org/10.1016/j.jbiosc.2008.12.021>

Appendix. Questionnaire about the Rare Sugars

◆Questionnaire about the Rare Sugars◆						2015/6/15
<p>The Rare Sugars exist naturally and have many kinds (more than 50). They have good effect for health such as prevention of increasing the a blood-sugar level after eating, suppression of fat accumulation, suppression of increasing the blood pressure, and antioxidative effect etc. It is in the spotlight for many people especially for those who are in the metabolic syndrome.</p>						
<p>Please select the appropriate item in each column.(Plural answers are allowed for Q2, 9, 24, 28. Select ①~⑤ in the right column for Q7, 8, 10-23, 25-27)</p>						
<p>1. We ask you about the Rare Sugars.</p>						
<p>1-1. Do you know the Rare Sugars?</p>						
Q1	① Know ② Do not know (⇒ Proceed to Q8 who has selected ② and answer until to the last.)					
<p>1-2. We ask you who have selected ①. Where did you know the Rare Sugar? [Plural answers are allowed]</p>						
Q2	① TV ② Magazine ③ Newspaper ④ Shop ⑤ Vending Machine ⑥ Seminar ⑦ Internet ⑧ Hear from another person ⑨ Miscellaneous ()					
<p>1-3. Do you know that the Rare Sugar has effect on obese prevention and/or diabetes prevention etc.?</p>						
Q3	① Know ② Do not know					
<p>1-4. Have you heard or used the syrup which includes Rare Sugar "Rare Sugar Sweet"?</p>						
Q4	① Heard ② Not heard					
Q5	① Used ② Not used					
<p>1-5. Have you drunk or eaten the food which includes the Rare Sugar?</p>						
Q6	① Yes ② No					
Q7	1-6. We ask you who have selected ① in Q6. Was the Rare Sugar effective after using it for more than one month?(⇒ Proceed to Q9)	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
Q8	1-7. We ask you who have selected ② in Q1, ② in Q6. Do you want to try to eat or drink the food in which the Rare Sugar is included?	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
<p>1-8. What kind of food do you want to eat if the Rare Sugar is included? [Plural answers are allowed]</p>						
Q9	① Cake ② Juice ③ Japanese food ④ Western food ⑤ Chinese food ⑥ Miscellaneous ()					
<p>1-9. How do you want to use the Rare Sugar?</p>						
Q10	a. I want to use it in the cooking.	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
Q11	b. I can easily use it if there is a recipe.	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
Q12	c. I want to know where I can buy it because I want to use it as a seasoning.	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
Q13	d. I want to know where I can get information because I want to use it as a supplement.	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
Q14	e. I want to know the hospital where the Rare Sugar is used as a tool for treatment.	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
Q15	f. I want to know how long I should use it in order to confirm the effectiveness.	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
<p>1-10. Do you have a question (doubt) or anxiety for the Rare Sugar?</p>						
Q16	a. It is not so popular.	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
Q17	b. It seems to be expensive.	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
Q18	c. I cannot grasp the concrete effect.	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
Q19	d. I cannot have confidence that it is safe for anybody.	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
Q20	e. Surrounding people do not use it so often.	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
Q21	f. I cannot find the food in the shop in which the Rare Sugar is included.	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
Q22	g. I cannot guess how I should use the Rare Sugar to what kind of cooking?	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
Q23	h. Miscellaneous ()	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
<p>1-11. Choose the drink that you are interested in. [Plural answers are allowed]</p>						
Q24	① Aoju ② US-1 (oral rehydration solution Drink for sports) ③ designated health drink ④ drink with the Rare Sugar ⑤ None ⑥ Miscellaneous ()					
Q25	1-12. Do you take interest in a diet?	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
Q26	1-13. Are you careful for the health?	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
Q27	1-14. Do you take interest in the designated health food?	① Think it very much	② Slightly think so	③ Cannot say either	④ Slightly do not think so	⑤ Do not think so
<p>1-15. Which method would be suitable for the Rare Sugar to become popular?</p>						
Q28	① TV CM ② Use Twitter, Facebook ③ Advertisement by the company ④ Spread the way of cooking ⑤ Sell candy with the Rare Sugar ⑥ Sell juice with the Rare Sugar ⑦ Restaurant at which the Rare Sugar is used in the cooking ⑧ Use it in the food at the hospital ⑨ Sell it as a supplement ⑩ Make promotion by utilizing famous sportsmen or entertainers ⑪ Miscellaneous ()					

2. What is your hobby? (Select only one in the right hand column)						
Q29	2-1. Playing Sports: ①Baseball ②Football ③Tennis ④Golf ⑤Miscellaneous ()	①Like it very much	②Slightly like it	③Ordinary level		
Q30	2-2. Watching Sports: ①Baseball ②Football ③Tennis ④Golf ⑤Miscellaneous ()	①Like it very much	②Slightly like it	③Ordinary level		
Q31	2-3. Drinking: ①Beer ②Wine ③Japanese wine-sake ④Japanese liquor-sioux ⑤Whisky ⑥Miscellaneous ()	①Like it very much	②Slightly like it	③Ordinary level		
3. We ask you questions about your current condition.						
Q32	3-1. Sex: ①Male ②Female					
Q33	3-2. Age: ①~19 ②20~29 ③30~39 ④40~49 ⑤50~59 ⑥More than 60					
Q34	3-3. Occupation: ①Student ②Officer ③Company employee ④Clerk of Organization ⑤Independents ⑥Part-timer ⑦Housewife ⑧Miscellaneous ()					
Q35	3-4. Address: ①Prefecture() ②City()					
Q36	3-5. What kind of lifestyle do you like?: ①Outdoor ②Indoor ③Not either					

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Identification, Priorization and Management of Professional Football Clubs' Stakeholders

Nicolas Cicut¹, Sandra Montchaud^{1,2}, Vincent Millereux¹, Pierre Dantin¹

¹Sport MG Performance, Aix Marseille Université, France

²CHERPA, Sciences Po Aix, France

Correspondence: Nicolas Cicut, Sport MG Performance, Aix Marseille Université, France.

Received: April 17, 2017

Accepted: May 19, 2017

Online Published: June 19, 2017

doi:10.5539/ibr.v10n7p99

URL: <https://doi.org/10.5539/ibr.v10n7p99>

Abstract

The aim of this paper is to analyze how professional football clubs manage relationships with their most important stakeholders and their multiple expectations in an efficient framework. Our analysis is based on a case study about 'Olympique de Marseille' (OM) – a recognized French club in Ligue 1 – from a participant observation. The period covers by the study mainly runs from 2004 to 2015. We adopt a two-step approach consisting first in identifying and prioritizing club stakeholders and then in analyzing the management set up for those who matter most. Stakeholders play an important part in the way club is managed, especially those defined as definitive given their power, legitimacy and urgency attributes. Relationships with the latter can take different forms from involvement to control. Moreover they do not always exist through pre-defined procedures insofar as a significant part of them remains informal. This study enriches the knowledge of the environment of professional football clubs by taking their stakeholders into account. Recommendations are made to improve their stakeholder management practices by considering the specific nature of each relationship, the importance of dialogue in the relationship, the articulation of the formal and informal dimensions of the relationship, the regularity of the relationship and the flexibility of the relationship.

Keywords: football clubs, stakeholders, management, case study, France

1. Introduction

The stakeholder theory developed by Freeman (1984) rests on the idea that managers within an organization must not only consider the shareholders expectations but also, and more broadly those of a variety of stakeholders. The latter correspond to groups or individuals who can affect or be affected by the achievement of the organization's objectives and thus contribute to define its overall performance. Freeman links the utility of a new managerial paradigm to the changes – internal and external – the firm must face. This approach offers very interesting analytical perspectives and is especially efficient in the study of various types of organizations, including professional football clubs. Changes experienced in the football area particularly justify the recourse to this approach. As mentioned by Senaux (2011), while initially clubs were non-profit associations with sports objectives, they are now commercial firms and football has become a merchandise. It appears that this new logic has not replaced but co-exists with the previous one. Added to this is the social function of football clubs (Sugden, 2002). The crossing of all these dimensions – sporting, economic and social – leads clubs to deal with a large number and a diversity of actors. This contributes to make club's governance more complex, hence the necessity of a stakeholder management.

The literature is interested in identifying the football clubs stakeholders (Boon, 2000; Meyssonier and Mincheneau, 2013), in prioritizing them in order to highlight those who « count » the most and to which managers have to give their utmost attention (Senaux, 2004, 2008) and in studying their management either in a general perspective of governance (Michie and Oughton, 2005), or more specifically with the study of a distinct stakeholder (Healy and McDonagh, 2013) or the treatment of a precise question related to social responsibility (Breitbarth and Harris, 2008; Walters and Chadwick, 2009; Walters and Tacon, 2010), to the construction of a stadium (Walters, 2011), to the creation of value (Paché and N'Goala, 2011), to the control of the clubs market value volatility (Sarikaya et al., 2012) or to information (Morrow, 2013). Most of these studies were focused on British clubs (Michie and Oughton, 2005; Walters and Chadwick, 2009; Walters and Tacon, 2010; Walters, 2011; Healy and McDonagh, 2013; Morrow, 2013). The other ones were based on French (Senaux, 2004, 2008) and

Turkish (Sarıkaya et al., 2012) clubs or on a broader sample of European (Paché and N'Goala, 2011) or World (Breitbarth and Harris, 2008) clubs.

Thus to the best of our knowledge, only Senaux (2004, 2008) studies French professional football clubs within an explicit stakeholder approach, but he considers a limited number of stakeholders and only performs their prioritization. In another work (2011), the author outlines the governance implications of institutional pluralism of football clubs but he does not provide a response to these implications; thus opening up new perspectives for future research on clubs' governance and management. Therefore the objective of our paper is to complete and enrich the analysis of the French professional football clubs' governance and management following Senaux' reflections. We will seek to provide answers to the following question: how can clubs manage relationships with their most important stakeholders whose expectations are multiple and varied in an efficient framework? To do this, we will begin with stakeholders identification and prioritization that constitutes a necessary preliminary step before looking at managerial aspects. Our analysis will be based on a case study. We chose 'Olympique de Marseille' (OM) which is the most successful French club (most national trophies and only French club to win the Champions League). OM also has the largest fan base and one of the biggest budgets in Ligue 1. The period covered by the study mainly runs from 2004 to 2015 and is prior to the change in ownership and management in 2016.

The rest of the article will be structured as follows. In the second part, we will present the general stakeholder approach. In the third part, we will focus on the applications of this analytical framework to football clubs. In the fourth part, we will specify our research objective given the existing literature and our methodology to fill literature gap concerning French football clubs. In the fifth and sixth parts, we will report our results and discuss them. We will first identify exhaustively professional football clubs' stakeholders and highlight those to which the clubs' managers should pay the most attention. Then we will analyze the relationships with those which are considered as the most important, characterize the management set up for them and make some managerial recommendations. In the seventh and last part, we make some concluding remarks.

2. The Stakeholder Approach

As mentioned in the introduction, the stakeholder¹ theory was developed by Freeman (1984) from the idea that managers must not only take into account the shareholders expectations, but more generally, those of a number of the organization's stakeholders. Stakeholders are defined as groups or individuals who can affect or are affected by the achievement of the organization's objectives. They must be considered because they are known to contribute, to varying degrees, to the determination of the overall performance. For Freeman, a new managerial paradigm has become necessary to cope with internal and external changes. This approach has had considerable further development. Two main (and necessarily linked) issues are addressed in the literature.

The first issue concerns the identification of the stakeholders (what actors should be considered as an organization's stakeholders, and what do they expect from it?) and their eventual prioritization (which stakeholder deserves special attention from the organization?) (Mitchell et al., 1997; Phillips, 2003a, 2003b). Several stakeholder classifications can be found in the existing literature. Here are some of them. Freeman (1984) considers stakeholders who are concerned by an internal change, i.e. who are considered as being part of the company main managerial vision (employees, owners, customers, suppliers) and those who are involved in an external change originating in the company's environment and affecting its capacity to adapt to internal changes (competitors, governments, consumer advocates, environmentalists, special interest groups, media). Besides, a distinction is usually made between internal stakeholders who remain within the company's boundaries (owners, directors, employees) and external stakeholders outside the company itself (competitors, consumers, governments, pressure groups, media, etc.) (Carroll and Näsi, 1997). Stakeholders are also called primary stakeholders if they have a contractual and formal relationship with the company and appear as essential to its survival (owners, employees, suppliers, clients) and secondary stakeholders for the other cases (competitors, other consumers, governments, pressure groups, media, etc.) (Carroll, 1991; Carroll and Buchholtz, 2000; Clarkson, 1995; Gibson, 2000; Weiss, 1994). We can further distinguish voluntary stakeholders who take a risk by establishing a particular relationship with the company, such as a financial or human investment, and

¹According to Freeman (1984), the term « stakeholder » was first used in 1963 during a communication at the Stanford Research Institute. The choice of the term revealed a wish to echo the traditional « stockholder » by indicating that other parties had a « stake » in the firm. However, the approach seems to originate in Dodd's (1932) and Barnard's (1938) studies who both underline the necessity to balance the competing interests of the firm participants so as to maintain their cooperation (Mercier, 2001).

involuntary stakeholders who are just exposed to the consequences of the company activities (Clarkson, 1994).

It is possible to go beyond a simple identification and a general classification by hierarchizing the stakeholders according to the degree of attention that must be given to them by the managers. In the literature, there are different prioritization models among which those of Eden and Ackermann (1998) and Mendelow (1991) based on criteria such as power and interest, this of Anderson et al. (1999) related to power and support/opposition, this of Mitchell et al. (1997) referring to the criteria of power, legitimacy and urgency. The latter is the most recognized in the academic community. Power refers to the fact that some stakeholders may lead managers to do something they would not have done otherwise (Dahl, 1957; Mitchell et al., 1997; Pfeffer, 1981; Weber, 1947). Three different types of power are distinguished according to how it is exercised: coercive power based on physical resources (force, violence or restraint), utilitarian power based on material and financial resources, and normative power based on symbolic resources (Etzioni, 1964). Legitimacy refers to a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions (Mitchell et al., 1997; Suchman, 1995; Weber, 1947). The social system in which legitimacy is obtained is a system with multiple levels of analysis: individual, organizational and societal (Wood, 1991). Urgency corresponds to the level of immediate attention required to answer some of the stakeholders' requests (Mitchell et al., 1997). It can be assessed through time sensitivity – the degree to which managerial delay in attending to the claim or relationship is unacceptable to the stakeholder – (Eyestone, 1978; Wartick and Mahon, 1994), and criticality – the importance of the claim or the relationship to the stakeholder – (Hill and Jones, 1992; Williamson, 1985). This leads to seven stakeholder categories according to the presence of one, two or three attributes (Figure 1)²: Stakeholders who have only one attribute are considered as « latent » and of low importance for managers. According to circumstances, they can be « dormant », « discretionary » or « demanding » stakeholders. Stakeholders that have two attributes are called « expectant » and are of moderate importance. They include « dominant », « dependent » and « dangerous » stakeholders. Stakeholders with the three attributes are considered as « definitive » and are postulated of high importance. Managers give priority to their claims and the decisions made necessarily take into account their expectations.

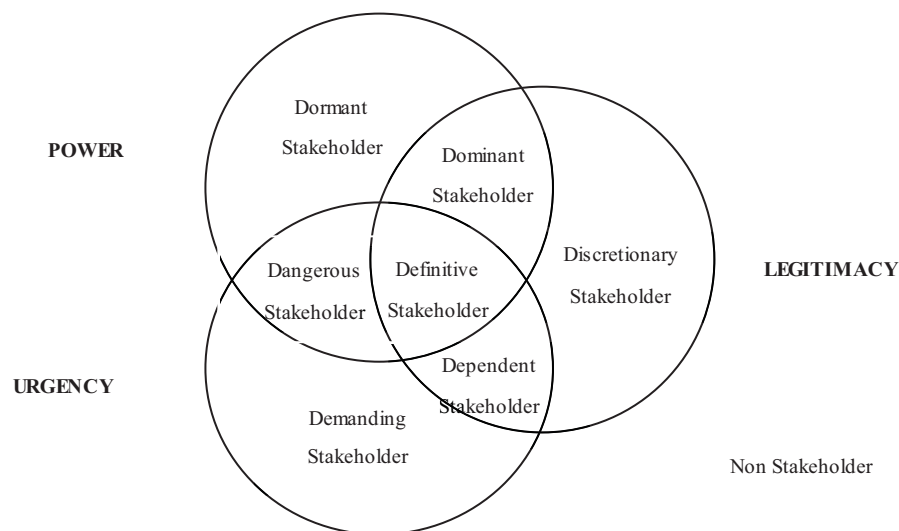


Figure 1. Stakeholder typology according to the presence of power, legitimacy and urgency attributes (source: Mitchell et al., 1997)

The other central issue is stakeholder management. The latter can take the form of risk management (labor input, regulations, etc.) to limit reputation damage or financial sanctions for example (Friedman and Miles, 2006). In a more positive way, stakeholders are viewed as important elements of company strategy, in gaining a competitive advantage and, *in fine*, to create value and performance (Freeman, 2006; Post et al., 2002). What is the best possible way to manage stakeholders? For Freeman (1984), good management rests on several basic principles

²For the authors, individuals or entities with none of these attributes are not stakeholders or simply potential stakeholders.

such as the managers capacity to take into account the firm's actions on its stakeholders as well as the potential effects of the stakeholders actions on the firm, their capacity to understand their expectations, behaviors and values and their context, to consider the firm mission, to study the firm relationships with the stakeholders, to analyze the way the firm's strategy takes stakeholders into consideration, or to balance the various stakeholders' interests through time. Stakeholder management therefore requires the conception of models to manage a number of actors, objectives and relationships in a strategic mode (Freeman and McVea, 2001). One should also note that this type of process can be undertaken in a broad perspective or for a specific issue as that of firm social responsibility (Freeman and McVea, 2001).

Svendsen (1998) insists on the possibility for firm leaders to set collaborative relationships with some stakeholders as important elements of general strategy. Bridoux and Stoelhorst (2014) consider that firms face stakeholders that are either reciprocal stakeholders, who do care about fairness, or self-regarding stakeholders, who only care about their personal payoffs and do not value fairness as such. For efficiency purposes in attracting, retaining, and motivating stakeholders to create value, the authors recommend a management focused on the fairness approach for reciprocal stakeholders and a management-based arm's-length approach for self-regarding stakeholders with high bargaining power. For Harrison and St John (1997), stakeholder management rests on a conception of partnership that implies communication, negotiation, contracts, relationship management and motivation management, with these entire aspects bond together by corporate strategy. The authors (1996, 1997) distinguish two basic postures for stakeholder management: « buffering » and « bridging ». The first contains the effects stakeholders have on the firm, notably by raising barriers between the firm and some of its external stakeholders. The latter consists in initiating a strategic partnership, which requires the recognition of common objectives and the lowering of the barriers around the organization. Partnership is proactive and based on interdependence. Low and Cowton (2004) highlight two central elements of a stakeholder management strategy: engagement and participation. The implementation of engagement mechanisms does not imply any influence on corporate governance nor any participation in the decision process. Participation is what allows some stakeholders to play a part in the decision making process. This could translate into the integration of stakeholders within a firm governance bodies. More precisely, Friedman and Miles (2006) define twelve types of practices: manipulation, therapy, informing, explaining, placation, consultation, negotiation, involvement, collaboration, partnership, delegated power and stakeholder control. If we consider the two extreme categories, manipulation aims at misleading the stakeholders and is characterized by a one-way dialogue and stakeholder control corresponds to the case where stakeholders have majority control on the decision process. For Walters (2011) who combines the approaches of Low and Cowton (2004) and Friedman and Miles (2006), the first seven categories highlighted by the latter constitute different degrees of engagement and the following five categories correspond to different levels of participation.

3. Applications of the Stakeholder Approach to Professional Football Clubs

The stakeholder approach has been used to study various types of organizations, including professional football clubs. These studies concern the two axes seen previously in the general literature: stakeholders identification and prioritization on the one hand, and stakeholder management on the other hand.

When stakeholders are mentioned in the literature on football clubs, these are often simply identified or hastily classified. For example, it is the case in Boon (2000) work concerning English clubs. The identified stakeholders are the Premier Football League, the Football Association, FIFA (Fédération Internationale de Football Association), UEFA (Union of European Football Associations), European clubs, employees, players and agencies, other clubs, fans/consumers, the community, commercial partners, media, broadcasters, the public, the government and review bodies. Another example is that of Meyssonier and Mincheneau (2013) concerning French clubs who distinguish primary (shareholders, players, spectators) and secondary stakeholders (Ligue de Football Professionnel (LFP), Fédération Française de Football (FFF), UEFA, local authorities, support association, amateur world) without relying on a solid method for prioritizing them. Indeed, the authors indicate only that primary stakeholders are those whose involvement in the club's life is required to some degree to attain success.

Senaux (2004, 2008) goes further by establishing a real prioritization of a number of French professional football clubs stakeholders from an accurate method. The study takes into account seven categories of stakeholders: shareholders, players, support association, professional league/federation, local authorities, spectators/supporters and TV channels/sponsors. Other stakeholders – media, players agents, the European Commission and the State – are simply mentioned and left aside for they are either considered as secondary and not so important, or considered as being taken into account more likely by the federation, the league or professional groups/associations. Based on the power, legitimacy and urgency criteria defined by Mitchell et al. (1997) and on

the interviews of different stakeholders – including clubs officers – for two Ligue 1 and one Ligue 2 clubs, the author concludes that, among the examined stakeholders, the most important ones – considered as unambiguously « definitive » –, towards which attention should be directed, are the shareholders and the players. Supporters can also be *a priori* definitive stakeholders but in some situations only dominant or dangerous (spectators are not qualified by the author). The league and the federation are considered as dormant, dominant or definitive stakeholders depending on situations. It is the same for the support association. Local authorities are classified as discretionary stakeholders and TV channels as dormant or dominant (sponsors are not qualified).

Some works studying professional football clubs from a stakeholder perspective tackle the management issue in a rather general way. For example, Senaux (2011) is interested in the implications of the development of a commercial logic in French professional football on club governance and management but does not, however, provide a response to these implications. For their part, Michie and Oughton's works (2005) on the governance of English football reveals that good governance requires that clubs communicate not only with their shareholders, but also with other stakeholders such as their employees, their clients, and local community representatives. The relationship with the supporters in particular is important and differs from the usual relationship between a firm and its clients. It rests on communication with supporters groups, supporters trusts, supporter-elected board directors or fan forums in order to favor their involvement.

Other studies adopt a managerial point of view by focusing on a specific type of stakeholder or on a specific issue. In the research led by Healy and McDonagh (2013), attention is focused on a single stakeholder through the study of a football fans virtual community in the case of Liverpool FC. Managers can encourage fans involvement by facilitating dialogue and collaboration in a desire to understand their expectations and to achieve objectives in a brand culture and value co-creation perspective.

Among works dealing with a specific issue, some of them focus on social responsibility. This is the case for Breitbarth and Harris (2008) for different types of sports organizations – professional football clubs, professional football leagues and federations – located in England, Germany, Japan and the United States. The authors present a conceptual model that describes the creation of value for external stakeholders: financial value (e.g., for television channels, sponsors and sporting goods manufacturers), cultural value (e.g., for local communities), human value (e.g., for non-governmental organizations) and reassurance value (e.g., for economic and political actors and the population). From the study of Charlton Athletic and Brentford football clubs which have established a charitable structure involved in socially responsible activities in the areas of health, education, social inclusion and community integration, Walters and Chadwick (2009) emphasize the strategic advantages (the removal of commercial and community tensions, reputation management, brand building, local authority partnerships, commercial partnerships, and player identification) that a football club can draw from the implementation of citizenship-orientated activities through a stakeholder engagement model based on the creation of a community trust model of governance. Walters and Tacon (2010) also focus their attention on how the concept of social responsibility can be implemented by sports organizations through stakeholder management strategies in the UK football industry. Starting from the identification of pertinent stakeholders, the authors examine the actions and responses of organizations as well as stakeholders.

On another subject, Walters (2011) studies how the English club, Arsenal FC, has established a stakeholder management model to deal with the construction of its new stadium – Emirates Stadium –. Based on resident consultations, a communication strategy, a Stadium Liaison Committee, a Stadium Management Plan, and supporter consultations, the management of the stadium construction showed the engagement of the club stakeholders but few opportunities for participation and for involvement in the decision making process. For their part, based on a study of European clubs, Paché and N'Goala (2011) focus on the value creation strategies implemented by the clubs directors, players and fans. These strategies aims the development of brand equity, player-capital and customer equity, especially through marketing policies that seek to promote the links that exist between the three, but the appropriation of the consequently created value is not equal for all of the main actors, in particular for the supporters. Sarikaya et al. (2012) address a different issue: the question of the usefulness of stakeholder management and corporate reputation to control the volatility of sports corporations market value in the case of four listed Turkish clubs (Beşiktaş, Fenerbahçe, Galatasaray and Trabzonspor). The authors emphasize the fact that corporate reputation is closely linked to stakeholder management and that these two dimensions are of paramount importance for the clubs success, for their financial performance and to control the volatility of their market value. For his part, Morrow (2013) deals with the issue of company information – especially financial information – in connection with stakeholders (investors, lenders, employees (players, staff...), supporters and the football governing bodies (league, UEFA)) on the basis of British football clubs. It appears that clubs should extend information beyond the economic and financial aspects especially towards a

social dimension in accordance with the different areas of clubs performance and the consequently expansion of the scope of their responsibility.

4. Research Objective and Methodology

Our research objective is to enrich the reflections on French football clubs with regard to their stakeholders and to fill literature gap. Firstly, it is to complete and precise Senaux's (2004, 2008) stakeholder identification work by taking into account a larger set of stakeholders and by considering each of them individually, i.e. for example by distinguishing professional league and federation. Secondly, it is to complete and discuss his stakeholder prioritization by including in the analysis all the stakeholders previously identified – and not limited to a small number of stakeholders –. Thirdly, it is to fill the literature gap related to French football clubs' stakeholder management. In fact, most research on football organizations under a stakeholder management perspective concern British clubs. Senaux (2011) mentions this issue for French football clubs by simply opening up new perspectives for future research on clubs' governance and management. In order to limit the amount of work, we will characterize the club practices for the most important stakeholders that will be identified beforehand. So our research will strive to answer the two following questions: which stakeholders « count » the most and deserve special attention from the organization's managers and which mechanisms are put in place to manage the relationship with them? To provide some elements of response, we will perform a case study.

The case study is a widely used method in research particularly in social science (Denzin and Lincoln, 1994; Eisenhardt, 1989; Stake, 1994; Yin, 2011, 2013). This method is especially efficient to study situations the researcher has no control on (Yin, 2013), as is our present case because the way officers administrate a club is hardly observable from the outside. Our case study is instrumental (Stake, 1995) as the case studied helps give an overview of the object of the study, i.e. the practices of professional football clubs. It is conducted towards generalization in reference to a specific context generalization (David, 2004) that corresponds to the other professional football clubs. One should note that the very idea of generalization is questioned by Moriceau (2003) who prefers the notion of repetition. This would avoid the eagerness towards generalization by giving priority to a certain consistency from one case to another. It would then be possible to recognize an unchangeable singularity in one case without renouncing to a knowledge applicable to other cases (Moriceau, 2003). In other words, we must recognize the existence of almost universal recurring practices within singular processes. We are then facing a singular replica of an analogous problem (Moriceau, 2003). For Ayerbe and Missonier (2007), the idea is not to study a case but to study the phenomena and processes it highlights. Our case study is in this perspective.

The completion of a case study is based on four steps: research design, case selection, data collection and analysis mode (Ayerbe and Missonier, 2007). The architecture of a research refers to the theoretical and analytical framework (Yin, 2013). It expresses how the researcher will explore the subject (Ayerbe and Missonier, 2007). In line with the questions underlying our research, we will adopt a two-step analytical process. The first analytical step will consist in the club stakeholder identification and prioritization. To do this, we will proceed by distinguishing the internal and external stakeholders in reference to Carroll and Näsi's (1997) classification and by highlighting their expectations. This will bring more clarity to the stakeholders presentation. Then as Senaux (2004, 2008) did, we will choose Mitchell et al.'s (1997) method to prioritize the identified stakeholders and we will compare our respective results. The second analytical step will consist in the examination of the club stakeholder management. For each stakeholder qualified as definitive, we will attempt to characterize the club practices in reference to the various types of stakeholder management defined by Friedman and Miles (2006). Discussion will mobilize more widely extent literature and recommendations will be made.

The selection phase requires to be cautious of possible biases related to the sample, in particular the selection effects from the researcher (Drucker-Godard et al., 1999). Among the clubs in Ligue 1 in France, we chose to study OM. The club is over one hundred years old and has a rich success history. Our choice is particularly justified by the fact that it is the most successful French professional club: eleven French League titles³, ten French Cup titles, three League Cups, two Champions Trophies and the only French club to have won the Champions League title. Its turnover of 109.7 million Euros for the 2014/2015 season makes it one of the biggest budgets in Ligue 1 and one of the top 40 clubs in Europe. It is also the French club with the largest fan base. It should be noted that the club legal structure is a commercial firm – Société Anonyme Sportive Professionnelle (SASP) – combined with a support association affiliated with the FFF.

³OM claims eleven French League titles, two of which are controversial, the 1929 one (before professional era) and 1993 (OM was stripped of their title by the LFP after the OM/Valenciennes case).

The information used in this study mainly comes from a participant observation (Adler and Adler, 1987; Brewer, 2000; Lapassade, 2001; Soulé, 2007) by three of the authors who have contributed to the club's life by holding executive (general secretary and vice president of the Management Board between 2005 and 2006 and member of the Supervisory Board from 2004 to 2012), sporting and research (player between 1994 and 2004, research fellow from 2010 to 2011 and sponsored PhD student from 2012 to 2015) and counseling (consultant on the training center strategy and policy and on the SASP human resources policy from 2004 to 2010) positions. In the literature, it is sometimes preferred to call such method an observant participation to stress the importance of long-term involvement, the preponderance of participation over observation or the transition from pure participation to observation via a conversion to research (Soulé, 2007). The third case corresponds to the situation of these three authors mentioned above who are today university professor, PhD student and associate senior lecturer. Brewer (2000) in particular considers the use of an existing role to undertake research in a familiar environment as characteristic of an observant participation. However, many works considered as participant observation have used this method to enter a field (Soulé, 2007). This source of data was supplemented by the examination of reports by Deloitte (2015) and DNCG – Direction Nationale du Contrôle de Gestion – (2015) and the LFP website (www.lfp.fr). Thus the variety of sources of information and data collection methods was privileged (Miles and Huberman, 2003). The study mainly covers the period from 2004 to 2015 before the ownership and management change in 2016. We extend our sincere thanks to the former management of the club, especially the ex-general secretary, for his support.

The analysis of all qualitative data collected was carried out by means of a classical content analysis widely used in the literature (Krippendorff, 2003; Robert and Bouillaguet, 1997). This consists in transposing the data and treating them according to a predefined analysis grid which corresponds to a « closed procedure », a « deductive approach of data translation » (Andreani and Conchon, 2005). Information will be treated so as to allow the identification of stakeholders and their expectations, their characterization according to the chosen typology and the highlighting of the management set up for them.

5. Results and Discussion on Identification and Prioritization of Club Stakeholders

Who are the actors that influence and are influenced by a professional football club? As mentioned previously, we will distinguish internal and external stakeholders, which corresponds to an usual and practical classification (Carroll and Näsi, 1997). Then we will prioritize all stakeholders identified according to Mitchell et al. (1997) method based on power, legitimacy, urgency criteria.

5.1 Identification of Club Stakeholders

5.1.1 Internal Stakeholders

While Senaux (2004, 2008) only considers three internal stakeholders – shareholders, players and the support association – we choose to take a larger number of stakeholders into consideration to have a complete view of the actors within a club. Table 1 presents a list of all of them and indicates their main expectations.

Table 1. Internal stakeholders and their main expectations

Internal stakeholders	Main expectations	Internal stakeholders	Main expectations
Owners	Sports, economic, financial, social, media and political	Team collaborators	Sports
Directors	Sports, economic, financial, media and political	Administrative employees	Financial and social
Coaches/General managers	Sports, financial and media	Support association	Sports, societal and values
Players	Sports, financial and media	Youth academy	Sports and economic
Technical and medical teams	Sports	Volunteers	Recognition

Club owners are natural or legal persons. On the period covers by the study, OM is owned at 99.7 % by Eric Soccer, a holding of the Louis-Dreyfus family. Rather few owners have a direct responsibility in the club management. OM is in this case with Vincent Labrune as its chairman from June 2011 to July 2016.

On the sporting aspect, coaches can be placed under the authority of a general manager or combine both functions. For example, the coach during the 2014/2015 season, Marcelo Bielsa, had extensive functions. Players are responsible for sports performance. OM has a group of 25 to 30 players registered with the LFP over the past seasons. Technical and medical teams include on the one hand the assistant coaches, goalkeeper coach, fitness coaches, the head of recruitment and scouts and, on the other hand, doctors, physiotherapists, osteopaths, sports therapists, podiatrists, nutritionists, etc. At OM, these teams are made of around fifteen people. The team collaborators (team manager, team coordinator, kit man, etc.) assist the team on a daily basis. There are between 10 and 12 team collaborators at OM.

Administrative employees – human resources, marketing, communication, finance, etc. – are another internal stakeholder. They are present in both constituent structures of clubs, namely the corporate structure and the support association. At the end of 2015, OM has 25 administrative employees in the association and around 80 in the corporate structure. The latter are divided into the following departments: human resources (2), secretariat and direction assistance (2), general services – among which infrastructure management – (6), financial department (6), security department (3), legal department (2), media department (31), communication department (7), marketing and trade operations department (24).

The support association is the historical entity of the club, holds the club's FFF registration number, registers teams in national competitions and owns the club logo, color code and slogan, which makes it especially important to the corporate structure. Depending on clubs, the youth academy is attached either to the support association or to the corporate structure. At OM, it is connected with the support association and funded by the corporate structure directly via objectives agreements and indirectly as part of the dedicated staff is employed by the corporation. In addition, it has its own infrastructures (sports, accommodation, academic and medical facilities).

Volunteers are essential to a club's activity, and are attached to the association. OM has several dozens of volunteers. The club relies on them for tasks such as detecting and recruiting players for the youth academy and football school, organizing tournaments and camps throughout the year, and coaching youth teams. Volunteers receive material compensation in the form of equipment, tickets to the stadium and a symbolic retribution by their belonging to the locally highly valued « OM » institution.

5.1.2 External Stakeholders

Our identification of external stakeholders is both more comprehensive and accurate than the one previously made by Senaux (2004, 2008) who studied only four categories – league/federation, local authorities, spectators/supporters and TV channels/sponsors – and mentioned four others – the press, players agents, the European Commission and the State – without investigating them. For our part, we choose to work on a more thorough picture of external stakeholders and to consider them precisely and individually so as to highlight their specific characteristics. Indeed, we will examine the league and the federation separately, as we will do for TV channels and sponsors, and we will distinguish cities from other local authorities and spectators from supporters groups. External stakeholders and their expectations are presented in table 2.

Table 2. External stakeholders and their main expectations

External stakeholders	Main expectations	External stakeholders	Main expectations
FIFA	Football development and regulatory	Coaches union	Respect, promotion and defense of the profession
UEFA	Football development and regulatory	Players union	Respect, promotion and defense of the profession
FFF	Football development and legal	Referees union	Respect, promotion and defense of the profession
LFP	Football development, regulatory and economic	Agents union	Legitimacy and recognition
DNCG	Regulatory	Spectators	Sports and entertainment
EU	Legal and regulatory	Supporters groups	Sports, entertainment, social and identity
Ministry of Sports	Football development, legal and regulatory	Media	Audience/visibility, sports, entertainment, economic and financial
Ministry of Economy and Finance/Ministry of Labor	Legal and financial	Suppliers	Visibility/image, economic, financial and social
Home Office	Regulatory	Clients	Visibility/image, economic and financial
City	Sports, political, image and territorial development	Competitors	Sports and entertainment
Other local authorities	Political, image and territorial development	Environmental, residents and territory defense associations	Compliance with laws and rules and defense of the association's interests
Players agents	Sports and financial	Social associations	Defense and promotion of the association's social object
Chairmen union	Professional clubs development	Financial community	Funding in compliance with the rules set by the supervisory bodies

FIFA, at the head of world football, leads and guides the practice in a strategic perspective. Clubs must comply with the rules of the game established by FIFA via the International Football Association Board (IFAB). UEFA is itself responsible for the development of football in Europe under the authority of FIFA. Ligue 1 clubs, like those in other championships, are directly related to UEFA for the competitions it organizes (Champions League, Europa League) and, in a less direct way, by the specifications it has established to organize and host these competitions. The FFF, in charge of amateur football, in connection with the associations, and the LFP, in charge of organizing professional football championships, are two key stakeholders for professional clubs. The organization and marketing of the competitions, income distribution, clubs promotion, etc., are core tasks of these bodies. All professional clubs, including OM, are permanently connected to these institutions. Vincent Labrune was vice-chairman of the LFP board. There is also the DNCG whose main objective is to ensure the sustainability and fairness of the competition, particularly by verifying that each club's sports investments do not exceed its financial capacity. Every year, like all French professional clubs, OM must give a balance sheet and operating account for the past season and a projection for the coming season to this institution. The DNCG has the power to demote to a lower division a club which management does not fit the enacted framework.

By its legislation, the European Union (EU) has an impact on clubs, especially on transfers as shown by the 1995 Bosman ruling. Before this date, OM plays with only three foreign players on the game sheet, while all the other players were eligible to play for the national squad. Nowadays, and for the same competition, there could be no eligible player at all. At national level, the State, through its various ministries, lays down rules to which all Ligue 1 clubs must comply. The Ministry of Sports periodically sets an objectives agreement with the FFF and contributes to the legislation of professional sports. The Ministry of Economy and Finance and the Ministry of Labor define tax rules and social laws. The Home Office regulates match organization from a security point of view. Some OM games (especially against Paris-Saint Germain (PSG)) are considered as high-risk and mobilize large numbers of police officers and stewards. In addition, the club is subject to the minister's decisions concerning the contingent of its supporters for away games.

Local authorities (city, county, region, community of communes, community of agglomerations) provide direct funding – subsidies – and indirect funding – purchase of advertising space, etc. – to clubs. Authorities also often own the sporting facilities and therefore are involved in their management. As far as OM is concerned, the Velodrome Stadium is owned by the City of Marseille and its refurbishment for Euro 2016 falls within a public-private partnership between the City of Marseille and Arema. OM is considered as the resident club but is only tenant, while the club wanted to operate the stadium. The Robert Louis-Dreyfus training center, originally the property of the City of Marseille but in which the club had invested, was recently bought by OM for 6.5 million Euros.

Players agents, key actors in the world of professional sports, represent the interests of hundreds of players and coaches. The extensive player portfolio of some agents gives them a prominent position. In OM's case several world renowned agents are involved each year – summer and winter transfer markets – in the transactions. In the last five years the club has recorded a minimum of 12 moves per season.

One must also consider the various unions: the chairmen unions (Première Ligue and Union des Clubs Professionnels de Football (UCPF)), the coaches union (Union Nationale des Entraîneurs et Cadres Techniques professionnels du Football (UNECATEF)), the players union (Union Nationale des Footballeurs Professionnels (UNFP)), the referees union (Syndicat des Arbitres de Football Elite (SAFE)) and the agents unions (Union des Agents Sportifs du Football (UASF) and Syndicat National des Agents Sportifs (SNAS)). Unions seek to defend the interests of their members, including salary. Vincent Labrune was a member of Première Ligue.

Spectators are the clubs first customers. During the 2014/2015 season, the total attendance at the Velodrome Stadium was 1 009 478 people over 19 Ligue 1 matches, meaning an average of 53 130. Supporters groups, who, by essence, are brand partisans and driven by passion, are the ultimate form of structuring in the typology of spectators. OM has nine officially recognized supporters groups accounting for more than 25 000 supporters mainly in the north and south stands of the stadium. They organize displays in the stadium and therefore are part of the show and hereby strengthen the club's attractiveness. At OM, the relationship with fans is rather atypical because since the 1980s, they manage the marketing of season tickets for the north and south stands.

The media ensure championship visibility and exposure and help strengthen and develop its social penetration. In addition, the television rights are an important part of the clubs income. For the 2014/2015 season, OM was the club with the second highest retribution and the second most broadcast (behind the PSG): 23 times on Canal +, 12 times on Bein Sport 1, for championship games only (LFP). It was also the most present in the written press: 13% of *L'Equipe* newspaper front pages (Office de Justification de Diffusion (OJD)) and 75% more

presence than any other club in the national press (Datops). It is also the most followed French club on digital media and social networks (4.8 million followers on Facebook and 1.7 million followers on Twitter).

Professional football clubs rely on suppliers for the part of their event organization and promotion activity they want to outsource (logistics, maintenance, cleaning, security, reception, catering, public relations, ticketing, etc.). In some cases, clubs and suppliers operate via the barter exchange model. They are in turn suppliers and customers. Thus, OM uses Etic Group as a supplier for hospitality services and Etic Group is itself a client of the club (seasonal renting of a hospitality box).

Clients are another group of external stakeholders. Among them, sponsorship is an important part of the marketing revenues for professional football clubs, which are an essential part of their total revenues (approximately 30% for the 2014/2015 season). OM has had around 300 clients over the last five seasons and sponsorship accounted for about 31 million Euros in the 2014/2015 105 million Euros budget.

Competitors can be of different nature. First, there are the other clubs with which the competition is not only on the sports level (national and European competitions, recruitment) but also on the economic level (sponsorship) and media coverage level. Then, competition can also come from other actors who offer sports entertainment other than football or even outside the world of sports. Indeed, OM faces competition with more or less attractive national and European clubs and, outside football, must also cope with other forms of competition such as the one with the Rugby Club Toulonnais on some aspects of its offer.

Environmental, residents and territory defense associations can be an important opposition force against clubs in development, building, refurbishment or rehabilitation programs, like stadiums or training centers, may the clubs be simple tenants, operators or owners of the infrastructures. The association « En toute franchise », representing the interests of independent traders around the stadium, appealed to the Conseil d'Etat against the refurbishment of the Velodrome Stadium and the planning of the stadium surroundings (building of a 25 000 sqm mall). Social associations for their part use the clubs opinion leadership to promote, defend and develop the missions of general interest they carry out. OM considers itself as a defender of multiculturalism and anti communitarianism.

Finally, the financial community is able to provide the capital required to develop a significant economic sector (Ligue 1 clubs altogether weigh 1.5 billion Euros (LFP)). However clubs can only be funded by financial institutions in compliance with the rules set by the dedicated supervisory and management bodies.

If this stakeholder identification was performed by highlighting the characteristics of OM, it reflects more broadly the panorama of all Ligue 1 clubs.

5.2 Prioritization of Club Stakeholders

Based on Mitchell et al.'s (1997) analytical grid, Table 3 presents the attributes for each of them (except managers themselves) in the OM case.

We clearly identified seven definitive stakeholders, ten dominant, three dangerous, one demanding, and twelve discretionary. In two cases, the classification varies according to individual actors that make up each stakeholder category: definitive/dangerous and definitive/dominant. We believe that our prioritization of stakeholders carried out on the basis of the OM case is in fact valid for all Ligue 1 clubs except in some cases such as the youth academy regarding the power criterion or supporters regarding the urgency criterion.

We can compare our results with those of Senaux (2004, 2008) when it is possible because, as previously mentioned, only a few stakeholders are taken into account by the author. If they are similar regarding shareholders and players, they differ somewhat for other stakeholders. The support association is considered by Senaux as a rather dormant stakeholder that can become dominant or definitive. We consider the support association to be dominant. It has legitimacy and its main power lies in owning the club's affiliation number to national competitions. However and according to us its status does not allow it to impose any urgency on SASP OM. For Senaux, the league and the federation are probably dormant but have the ability to become dominant or even definitive. The disassociation of the league and the federation brought us to consider the first as definitive and the second as discretionary. According to us the FFF, which is in charge of amateur football and linked to support associations rather than to professional clubs, cannot really influence clubs. Then Senaux classifies local authorities as discretionary. It seems to us the City of Marseille should be considered differently than other local authorities that we also list as discretionary. Indeed, the City, as the owner of the Stade Vélodrome, undeniably has power and legitimacy, and therefore is classified as dominant. For Senaux, supporters are *a priori* definitive stakeholders but can in some situations be only dominant or dangerous. In OM's case, supporters are undoubtedly definitive stakeholders but their importance may vary for other clubs depending on the supporters

groups organization, on numbers, on the amount of passion and support they show or on their presence in the media and their importance in the club's image. According to Senaux, TV channels are dormant and can become dominant if TV rights are commercialized on an individual basis. We believe they are for OM either dangerous or definitive stakeholders depending on their legitimacy. The most renowned and followed mainstream media influence the club's image and notoriety and therefore are treated by the club with special attention contrarily to the multitude of recently born OM centered media which legitimacy is not recognized.

Table 3. Stakeholder attributes and type

Stakeholders	Attributes			Type
	Power	Legitimacy	Urgency	
<i>Internal</i>				
Owners	Yes	Yes	Yes	Definitive
Coaches/General managers	Yes	Yes	Yes	Definitive
Players	Yes	Yes	Yes	Definitive
Technical and medical teams	No	Yes	No	Discretionary
Team collaborators	No	Yes	No	Discretionary
Administrative employees	No	Yes	No	Discretionary
Support association	Yes	Yes	No	Dominant
Youth academy	Yes	Yes	No	Dominant
Volunteers	No	Yes	No	Discretionary
<i>External</i>				
FIFA	No	Yes	No	Discretionary
UEFA	Yes	Yes	No	Dominant
FFF	No	Yes	No	Discretionary
LFP	Yes	Yes	Yes	Definitive
DNCG	Yes	Yes	Yes	Definitive
EU	Yes	Yes	No	Dominant
Ministry of Sports	No	Yes	No	Discretionary
Ministry of Economy and Finance, Ministry of Labor	Yes	Yes	No	Dominant
Home Office	Yes	Yes	Yes	Definitive
City	Yes	Yes	No	Dominant
Other local authorities	No	Yes	No	Discretionary
Players agents	Yes	No	Yes	Dangerous
Chairmen union	No	Yes	No	Discretionary
Coaches union	Yes	Yes	No	Dominant
Players union	Yes	Yes	No	Dominant
Referees union	No	Yes	No	Discretionary
Agents union	No	Yes	No	Discretionary
Spectators	No	No	Yes	Demanding
Supporters groups	Yes	Yes	Yes	Definitive
Media	Yes	Yes/No*	Yes	Definitive/Dangerous
Suppliers	Yes	Yes	No	Dominant
Clients	Yes	Yes	Yes/No**	Definitive/Dominant
Competitors	Yes	No	Yes	Dangerous
Environmental, residents and territory defense associations	Yes	No	Yes	Dangerous
Social associations	No	Yes	No	Discretionary
Financial community	Yes	Yes	No	Dominant

*: depending on individual media. **: depending on individual clients.

6. Results and Discussion on the Management of Club Stakeholders

In what framework do the relationships between the club manager and the most important stakeholders take place? In other words, what are the mechanisms and processes at the manager's disposal or established by them to deal with these stakeholders expectations (Freeman, 1984)? Our analysis will be limited to only the definitive stakeholders that are unequivocally qualified as such above, i.e. those are the most important to be considered by managers following Mitchell et al.'s (1997) prioritization method. We will attempt in particular to characterize the club practices in reference to the various types of stakeholder management defined by Friedman and Miles (2006): manipulation, therapy, informing, explaining, placation, consultation, negotiation, involvement, collaboration, partnership, delegated power and control. The analysis will mobilize more widely extent literature. This will bring us to make some managerial recommendations that we hope helpful for all professional football clubs. In particular, we will specify the nature of the dialogue with each of the studied stakeholders we advocate. As mentioned by Michie and Oughton (2005), good governance requires that clubs communicate not only with their shareholders, but also with other stakeholders.

6.1 Owner

The relationship between a club director and a club owner (when they are not the same person) is essential. It takes place within the Board of Directors or within the Supervisory Board and the Management Board depending on the legal structure of the club. Between 2001 and 2011, OM was operated according to this last formula. The members of the Supervisory Board were appointed by the majority shareholder. There were seven members on the Supervisory Board and, two to three members on the Management Board. The Supervisory Board met every three months unless an emergency was important enough to provoke an extraordinary meeting. The decision-making process being much shorter, the transition to a Board of Directors reflects the company's wish to facilitate and streamline the relationship between the shareholder and the chairman of the club. The Board of Directors is composed of six to eight members among whom two members represent the employees of the administrative department and attend meetings in an advisory capacity. The Board of Directors meets once every two months. As in any company, the chairman must meet the owner's expectations and may be revoked by the Board of Directors or the Supervisory Board if such is not the case. This is what happened in June 2011 for Jean-Claude Dassier, then chairman of OM, who was dismissed by the Supervisory Board. The shareholder then appointed Vincent Labrune as club chairman and the transition to a Board of Directors mentioned above was made. The relationship between the club chairman and its owner is institutionalized and similar to what happens in any business. Beyond the sporting dimension, economic issues are of utmost importance in the relationship with the owner, and the latter sets the tone. If the former owner – Robert Louis-Dreyfus – tolerated recurring losses, it is quite otherwise with Margarita Louis-Dreyfus who demands a remediation of accounts. Consequently, the club made a 380 000 Euros profit for the 2012/2013 season – the first time since 2009 – thanks to the efforts made to reduce spending (especially a 23% decrease of the payroll compared to the previous season). This consolidation of the club's accounts in the last few seasons however has had a negative effect on the quality of the player capital and on football performances. It should be noted that, in general, unlike traditional companies, profitability is not as important for the club owners whose satisfaction should be considered in other areas. For an owner, the club can be a value-creation and a reputation tool for all his activities and can create a communication and emotional synergy and thus become a powerful means of adherence, contagion, etc. The case of Robert Louis-Dreyfus, OM's owner from 1996 to 2009, shows that two of the Louis Dreyfus Group companies were successively the club's main partner: Neuf Telecom from 2003 to 2008 and Direct Energy from 2008 to 2010. They benefited *de facto* from the club's likeability and penetration which enabled them to develop their activities more quickly on the club's territory. In 2006, Neuf Telecom chose Marseille as its main call center and customer relations center. The idea of profit maximization clearly does not suit sports organizations in favor of an alternative behavior consisting in maximizing a utility function incorporating other elements, which may be subject to a minimum profit or maximum loss constraint (Goddard and Sloane, 2005; Sloane, 1971, 2006; Zimbalist, 2003).

The relationships with owners correspond certainly to the « control » type of management which is the highest level of participation in Friedman and Miles' (2006) typology. Owners are at the heart of the decision-making process. In this respect the aim for a club director is to keep the owner informed of the club's strategies and policies and to have them validated. At all time the owner's opinion and requirements in terms of sports projects (e.g. choice of the coach), economic matters (e.g. bank guarantee or not) or club development (e.g. training facilities development) must be taken into account. Face to financial and operational difficulties and challenges, it is necessary to improve corporate governance practices, financial reporting and risk assessment procedures (Hamil et al., 2004).

We deduce from this analysis the following recommendations for professional football clubs, including the fact to have more frequent meetings than those officially planned (board meetings...) (Table 4).

Table 4. Managerial recommendations for the stakeholder « Owner »

- Organize meetings with the owner at three key moments of a season: pre-season (sport situation, financial situation), winter break (mid-season appraisal, adjustment of the resources) and end of season (season report, perspectives).
- Maintain dialogue with the owner outside these three key moments, throughout the season via interim reports.
- Depending on current situation, set up regular, possibly daily contacts with the owner (phone, text messaging, videoconference, emails...).
- Improve corporate governance practices, financial reporting and risk assessment procedures (sports and economic).

6.2 Coach/General Manager

Relationships between director and coach/general manager start at the time of contract negotiation, which is a good time to exchange on each other's expectations and which continues over time. Meetings frequency increases in specific situations that concern either the coach/general manager personally like a desire to leave the club, contract ending, salary renegotiation, etc., or more generally the team especially in case of poor performance or for transfers (buying and selling players). At OM, there are consultation meetings every two weeks, and obviously meetings that can be held on a daily basis according to current events. While the assessment of « intrinsic » results is performed by the corporate manager, « technical » assessment goes through procedures that fall within the technicians' expertise: the general manager will discuss with the coach on how all sports issues are conducted. One should note the very important place of informal relationships with the coach, which has advantages but also generates biases. The relationship is based on a collaborative model as this stakeholder is seen as an essential component of the general strategy (Svendsen, 1998).

The management concerning the coach/general manager seems to correspond to the « delegated power » type in reference to Friedman and Miles (2006). Indeed this stakeholder owns the sports expertise which makes them a vital element of the club and the guarantor of its sports policy. This expertise is related to the dynamic social construction of coaching knowledge in a highly competitive environment (Jones et al., 2003) and in particular to the capacity to allow a better team cohesion thanks to higher levels of engagement in social support, training and instruction, positive feedback, and a democratic style (Westre and Weiss, 1991). The club manager therefore delegates sport power to the coach or general manager. In return, the club manager will assess him on his results and will continuously make sure that they match the objectives.

A close and almost permanent (daily) dialogue, often more informal than formal, with this essential stakeholder is necessary (Table 5).

Table 5. Managerial recommendations for the stakeholder « Coach/General manager »

- Plan meetings according to key sports moments: pre-season in June and July (set sport objectives), before the winter break in December (mid-season report, adjustment of the resources and complementary recruiting during the winter transfer market) and end of season in may (season report and preparation for the next season).
- Organize meetings per blocks of about four league games or monthly meetings.
- Have additional meetings according to the evolution of the club's situation (lack of results, ethical issue, contractual situation of the coach/general manager...).
- Create the favorable conditions for the deployment of the coach' sports expertise.

6.3 Players

Like for coach/general manager, on the negotiation phase prior to recruitment is the time for officers to assess the players – essentially financial – expectations and to answer them. Then, relationships take place over time and the parties meet more or less frequently depending on performance, contract and transfers. During the period of the contract, it is important for officers to develop and maintain stable and lasting relationships with the players (and their representatives) as they are the centerpiece of the club's performance. Apart from meetings with the players (and their representatives) for salary negotiations, meetings are held on a more informal level. At OM, relationships with players often take place with the general manager, the coach or even the agent. In addition to individual meetings, there are group meetings between the manager and the team during which opinion leaders express themselves on topics such as premiums, crisis situations, etc. To keep players in the best conditions (especially those considered as « star » players with a high potential), OM provides and pays for various services such as luxury concierge service, personal protection services, etc. In the same way as with the coach/general manager relationship, a truly collaborative approach is used towards players as they are at the heart of the club's general strategy (Svendsen, 1998) and as their performances greatly contribute to the club's development.

For the club manager players are both a sports capital and an economic capital which brings to consider the « partnership » type of management mentioned by Friedman and Miles (2006). The aim is to increase the value of the economic capital a player represents and to increase his efficiency on the pitch. The manager must make sure the players respect their sport obligations (individual behavior, collective performance). More generally, in relation with the coach/general manager he must create the conditions for the team success by trying to foster relationships and cooperative behavior among players. Teamwork is viewed as a synergetic process in which the efforts of the cooperative group surpass individual efforts and ineffective communication or lack of trust are considered likely to hinder or not support a team effort (Scarnati, 2001). Team effectiveness can also be

improved by a better management of team conflicts with personal audit as a tool (Opote, 2012). In an economic point of view, the manager must take into account their contractual situation, aim at maximizing the sports aspects (players are an intangible asset), and include the latter in the club's marketing strategy (market valuation of the image). A strong partnership links the club and the player as the player's good performances not only contribute to the club's good health but also to his own career development.

In this respect, individual and collective meetings should be planned to build and maintain a close relationship and actions must be devised in a team building perspective (Table 6).

Table 6. Managerial recommendations for the stakeholder « Players »

- Organize individual meetings at the three key moments of the season: pre-season (definition of the objectives), winter break (mid-season report, squad adjustment through loan or transfer), and end of season (season report, transfer, contract renewal).
- Organize occasional individual meetings according to the player's contractual situation.
- Plan collective meetings at the key moments of the season, on match day, after remarkable performances or in case of insufficient results.
- Achieve a good distribution of roles and undertake actions in favor of teamwork and conflict management to increase individual and collective performances.

6.4 LFP

For definitive external stakeholders that have an essentially regulatory influence on clubs, there is the LFP. The club does not take any specific action to meet this stakeholder's expectations as they are perfectly known and relatively stable over time. The club is simply attentive to its topical requests when a specific problem arises. Some units – general management and the legal department in most cases – are responsible for dealing with its regulatory requirements, which is the case at OM. With the issues and problems that can occur during a season, clubs commission a representative among their members to defend their interests. For example, whenever one of its members is heard by the LFP Disciplinary Committee, OM sends a representative who is most often the chief legal officer. The relationship with this stakeholder is of the risk management type in order to limit reputation damage or sanctions (Friedman and Miles, 2006).

A « delegated power » characterizes de facto the relationship with the LFP. As the governing body for professional football the latter initiates relationships with clubs. It organizes meetings with all the clubs managers. Moreover and according to circumstances it can plan meetings about commercial, ethical, disciplinary, sports, security... aspects. The club must therefore be available.

To go further, in the aim of maintaining and defending the club's interests, we recommend the manager continuously try to influence the LFP decisions (negotiations and distribution of commercial rights, fixtures, disciplinary decisions...) (Table 7).

Table 7. Managerial recommendations for the stakeholder « LFP »

- Influence and lobby the various LFP committees to preserve the club's interests.
- Request meetings with the decision-makers on specific points (for example, to arrange fixtures before and after European games).

6.5 DNCG

Regarding DNCG, the reasoning is similar to that developed for LFP. This stakeholder's expectations are known and stable. The club financial department is responsible for being kept informed of any change in the rules and procedures (transmission of past and projected balance sheets, hearings...) and for preparing the documents that have to be transmitted. The chairman is of course liable of meeting DNCG's expectations. However, some situations may require the intervention of the owner. For example, in June 2001, Robert Louis-Dreyfus, as OM owner (he was also chairman at the time), had to provide a bank guarantee at DNCG's express request, to compensate the past season losses and have the club be authorized to play in Ligue 1 for the following season. As with LFP, the relationship with DNCG is of the risk management type to limit sanctions in case of poor financial management (Friedman and Miles, 2006).

Because of its position in the hierarchy (supervisory and control body for professional football), it is « control » in reference to Friedman and Miles (2006) that seems obvious for the DNCG stakeholder. Management possibilities for this stakeholder are very limited given the binding framework in which the relationship takes place. Indeed the club manager has to provide DNCG with a pre-season projected budget, a mid-season report

and an end-of-season statement. On DNCG's request, the manager might also have to provide additional accounting documents.

Thus, the only valid recommendation with regard to this stakeholder is to be amenable and cooperative (Table 8).

Table 8. Managerial recommendations for the stakeholder « DNCG »

- | |
|--|
| <ul style="list-style-type: none"> • Try and establish a trusting relationship with DNCG by providing all necessary elements in due time. |
|--|

6.6 Home Office

Concerning relationships with the Home Office, clubs must be attentive to its topical requests. The clubs chief officer is informed of high-risk matches and of any restriction so that clubs comply with these requirements. OM is one of the most closely watched clubs not only because of the number and versatility of its supporters, but also because of its history with other Ligue 1 sides. Several collaborators have all or part of their mission focused on security during the games, supporters behavior and the club's relationship with the supporters and with the authorities.

We believe the relationship with the Home Office corresponds to the « collaboration » in Friedman and Miles' (2006) typology. The Home Office establishes a classification for high-risk games (supporters and spectators flow management) and asks the clubs to make required arrangements. Clubs have a specific correspondent at the Home Office to discuss decisions.

In these conditions, it is important that the manager answers to the specifications regarding public events safety in a timely and optimal way (Table 9).

Table 9. Managerial recommendations for the stakeholder « Home Office »

- | |
|---|
| <ul style="list-style-type: none"> • Anticipate potential high-risk games as soon as fixtures are announced. • Show the Home Office that the club mobilized all necessary resources to ensure that each game takes place under optimal security conditions. |
|---|

6.7 Supporters

Relationships between the club chairman and the supporters groups depend strongly on the club's history and culture. In all cases, it is important to establish good communication with them (Michie and Oughton, 2005). Supporters represent the 12th man of the team in the sense that they are considered to contribute to team performances (Davies et al., 1995) because their encouragements lead players to excel (Svendsen, 1998). Therefore a collaborative relationship must be established with this stakeholder. At OM, meetings are held at the beginning of the season and during special events (« risky » away games, finals, etc.). The club and the supporters groups are also in constant and direct contact through some of the club members' functions (employees working for the security service, for example). Moreover, in the case of strong supporters dissatisfaction, clubs directors are forced to see their representatives. For example, in 1999, due to unsatisfactory sports results, Marseille supporters ransacked part of the stand they had been assigned to in the Geoffroy Guichard stadium in Saint-Etienne and a few days later, prevented all access to the Commanderie training center, damaged some of the players' cars and even forced a French international player to hide in a car boot to leave the center. Following this demonstration of anger, the club's directors met the supporters groups at their request to find a form of consensus in order not to jeopardize the club's activity. This example shows the relationship with this specific stakeholder comprises a risk management part that can decide in some critical situations (Friedman and Miles, 2006). Another event is interesting to understand the nature of the relationship between the club and its supporters. In 2006 for a PSG/OM game, the supporters groups saw the number of seats for visiting fans cut down and later allocated in stands that did not satisfy them in terms of safety. To show his support, Pape Diouf, then chairman of the club, decided to send a team of young players and players lacking regular match action. This decision displeased the LFP and the media as PSG/OM « Classics » are a highlight of the season and make a record audience. This example illustrates the fact that stakeholder management implies to find a balance between the various interests (Freeman, 1984). This task is particularly difficult because of their potentially large number and their sometimes contradictory and conflicting expectations. It is, for Svendsen (1998), a characteristic ability of successful companies, which does not mean that the interests of all can be satisfied at all time. More generally, the OM case illustrates, albeit in a particularly high degree, the importance of the relationship with the supporters and the fact that this relationship differs from the usual relationship between a firm and its clients (Michie and Oughton, 2005).

For supporters groups the management is on the register of « involvement » in Friedman and Miles' (2006) typology. Supporters groups are at the same time a « dramaturgical » issue (which contributes to the show and

therefore to writing the games and the clubs history) and an economic issue. They can also be a nuisance for the club. On logistical aspects (preparing fan displays) and security and financial aspects, the manager has to impose very strict specifications to the supporters groups.

In these conditions, it is important to implement mechanisms that favor supporters involvement based on communication (Michie and Oughton, 2005). The set up of a fans virtual community may be a lever on which to play in facilitating dialogue with supporters, especially with the most influential members of the community (Healy and McDonagh, 2013). So the manager must have direct and regular relationships with the legal representatives of the supporters groups and be open to new communication mode (Table 10).

Table 10. Managerial recommendations for the stakeholder « Supporters groups »

- Define a meeting schedule with the supporters groups representatives at key moments of the season: in pre-season to present the club's expectations on various aspects (security, displays...) and plan the following meetings (with the club and team staff), in mid-season for a mid-season report and possible adjustments, and at the end of the season for a season report and corrective action.
- Organize specific meetings (for example before difficult games, or to prepare an important home game).
- Encourage the set up of a fans virtual community.

7. Conclusion

It is clear from our research that stakeholders play an important role in how clubs are managed, especially those considered as definitive given their power, legitimacy and urgency attributes. The relationships with the latter, studied in the OM case, can be of different type, ranging from involvement to control. It appears that the club tries as much as possible to take their expectations into account. This is not always done through pre-defined procedures, as a significant part of the relationships remains informal. Stakeholder management recommendations have been made to improve the clubs practices by considering the specific nature of each relationship, the importance of dialogue in the relationship, the articulation of the formal and informal dimensions of the relationship, the regularity of the relationship and the flexibility of the relationship.

Future research could be made to complete this study by analyzing other stakeholders, notably those with two attributes (dominant, dangerous and dependent). It would give a more thorough vision of the variety of actors in a professional club's environment and help appreciate the increased complexity of the clubs' objective function that encompasses multiple arguments (sports, economic, social...) thus reflecting the search for a multidimensional performance accordingly to a variety of stakeholder expectations.

References

- Adler, P. A., & Adler, P. (1987). *Membership roles in field research*. Thousand Oaks: Sage Publications. <https://doi.org/10.4135/9781412984973>
- Anderson, S. R., Bryson, J. M., & Crosby, B. C. (1999). *Leadership for the common good fieldbook*. St. Paul: University of Minnesota Extension Service.
- Andreani, J. C., & Conchon, F. (2005). Les méthodes d'analyse et d'interprétation des études qualitatives, un état de l'art en marketing. *4^{ème} Congrès International des Tendances du Marketing*, 21-22 janvier, Paris.
- Ayerbe, C., & Missonier, A. (2007). Validité interne et validité externe de l'étude de cas: principes et mise en œuvre pour un renforcement mutuel. *Finance Contrôle Stratégie*, 10(2), 37-62.
- Barnard, C. I. (1938). *The functions of the executive*. Cambridge: Harvard University Press.
- Boon, G. (2000). Football finances: too much money? In: Hamil S., Michie J., Oughton C., Warby S. (Eds.), *Football in the digital age: whose game is it anyway?* Edinburgh: Mainstream Publishing, 28-35.
- Breitbarth, T., & Harris, P. (2008). The role of corporate social responsibility in the football business: towards the development of a conceptual model. *European Sport Management Quarterly*, 8(2), 179-206. <https://doi.org/10.1080/16184740802024484>
- Brewer, J. D. (2000). *Ethnography*. Buckingham: Open University Press.
- Bridoux, F., & Stoelhorst, J. W. (2014). Microfoundations for stakeholder theory: Managing stakeholders with heterogeneous motives. *Strategic Management Journal*, 35(1), 107-125. <https://doi.org/10.1002/smj.2089>
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: toward the moral management of organizational stakeholders. *Business Horizons*, July-August: 30-48. [https://doi.org/10.1016/0007-6813\(91\)90005-g](https://doi.org/10.1016/0007-6813(91)90005-g)

- Carroll, A. B., & Buchholtz, A. K. (2000). *Business and society: ethics and stakeholder management*. Cincinnati: South-Western Publishing.
- Carroll, A. B., & Näsi, J. (1997). Understanding stakeholder thinking: themes from a Finnish conference. *Business Ethics: A European Review*, 6(1), 46-51. <https://doi.org/10.1111/1467-8608.00047>
- Clarkson, M. B. (1994). A risk based model of stakeholder theory. Proceedings of the second Toronto conference on stakeholder theory. Centre for Corporate Social Performance & Ethics, University of Toronto.
- Clarkson, M. B. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20(1), 92-117.
- Dahl, R. A. (1957). The concept of power. *Behavioral Science*, 2(3), 201-215. <https://doi.org/10.1002/bs.3830020303>
- David, A. (2004). « Études de cas et généralisation scientifique en sciences de gestion », *Actes de la XIIIème Conférence de l'Association Internationale de Management Stratégique*, Le Havre.
- Davies, B., Downward, P., & Jackson, I. (1995). The demand for rugby league: evidence from causality tests. *Applied Economics*, 27(10), 1003-1007. <https://doi.org/10.1080/00036849500000081>
- Deloitte. (2015). *Deloitte football money league*, January.
- Denzin, N. K., & Lincoln, Y. S. (1994). Entering the field of qualitative research. In: Denzin N. K., Lincoln Y. S. (Eds.), *Handbook of qualitative research*, Thousand Oaks: Sage Publications, 1-17.
- Direction Nationale du Contrôle de Gestion (DNCG). (2015). *Comptes individuels des clubs, saison 2014-2015*.
- Dodd, E. M. (1932). For whom are corporate managers trustees? *Harvard Law Review*, 45(7), 1145-1163. <https://doi.org/10.2307/1331697>
- Drucker-Godard, C., Ehlinger, S., & Grenier, C. (1999). Validité et fiabilité de la recherche. In: Thiétart R. A. (Ed.), *Méthodes de recherche en management*, Paris: Dunod, 257-287.
- Eden, C., & Ackermann, F. (1998). *Making strategy: the journey of strategic management*, London: Sage Publications.
- Eisenhardt, K. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532-550.
- Etzioni, A. (1964). *Modern organizations*. Englewood Cliffs: Prentice-Hall.
- Eyestone, R. (1978). *From social issue to public policy*. New York: Wiley.
- Freeman, R. E. (1984). *Strategic management: a stakeholder approach*. Boston: Pitman.
- Freeman, R. E. (2006). The Wal-Mart effect and business, ethics and society. *Academy of Management Perspectives*, 20(3), 38-40. <https://doi.org/10.5465/AMP.2006.21903479>
- Freeman, R. E., & McVea, J. (2001). A stakeholder approach to strategic management. Working Paper, 01-02, Darden Graduate School of Business Administration, University of Virginia. <https://doi.org/10.2139/ssrn.263511>
- Friedman, A., & Miles, S. (2006). *Stakeholders: theory and practice*. Oxford: Oxford University Press.
- Gibson, K. (2000). The moral basis of stakeholder theory. *Journal of Business Ethics*, 26(3), 245-257. <https://doi.org/10.1023/A:1006110106408>
- Goddard, J., & Sloane, P. J. (2005). Economics of sport. In: Bowmaker S. (Ed), *Economics uncut: an alternative guide to the dismal science*, Northampton: Edward Elgar, 345-366. <https://doi.org/10.4337/9781845427986.00026>
- Hamil, S., Holt, M., Michie, J., Oughton, C., & Shailer, L. (2004). The corporate governance of professional football clubs, *Corporate Governance: The International Journal of Business in Society*, 4(2), 44-51. <https://doi.org/10.1108/14720700410534967>
- Harrison, J. S., & St John, C. H. (1996). Managing and partnering with external stakeholders. *Academy of Management Executive*, 10(2), 46-60. <https://doi.org/10.5465/ame.1996.9606161554>
- Harrison, J. S., & St John, C. H. (1997). *Strategic management of organizations and stakeholders*. South-Western College Publishing, Cincinnati.
- Healy, J. C., & McDonagh, P. (2013). Consumer roles in brand culture and value co-creation in virtual

- communities. *Journal of Business Research*, 66(9), 1528-1540. <https://doi.org/10.1016/j.jbusres.2012.09.014>
- Hill, C. W. L., & Jones, T. M. (1992). Stakeholder-agency theory. *Journal of Management Studies*, 29(2), 131-154. <https://doi.org/10.1111/j.1467-6486.1992.tb00657.x>
- Jones, R. L., Armour, K. M., & Potrac, P. (2003). Constructing expert knowledge: a case study of a top-level professional soccer coach. *Sport, Education and Society*, 8(2), 213-229. <https://doi.org/10.1080/13573320309254>
- Krippendorff, K. (2003). *Content analysis: an introduction to its methodology*, Thousand Oaks: Sage Publications.
- Lapassade, G. (2001). L'observation participante. *Revue Européenne d'Ethnographie de l'Education*, 1(1), 9-26.
- Low, C., & Cowton, C. (2004). Beyond stakeholder engagement: the challenges of stakeholder participation in corporate governance. *International Journal of Business Governance and Ethics*, 1(1), 45-55. <https://doi.org/10.1504/IJBGE.2004.004896>
- Mendelow, A. (1991). Stakeholder mapping. *Proceedings of the 2nd International Conference on Information Systems*, Cambridge, MA.
- Mercier, S. (2001). L'apport de la théorie des parties prenantes au management stratégique: une synthèse de la littérature, *Xème Conférence de l'Association Internationale de Management Stratégique (AIMS)*, Université Laval, Québec, 13-15 juin.
- Meyssonnier, F., & Mincheneau, M. (2013). Le contrôle de gestion des clubs de football professionnel, *Finance Contrôle Stratégie*, 16(4), 63-81. <https://doi.org/10.4000/fcs.1425>
- Michie, J., & Oughton, C. (2005). The corporate governance of professional football clubs in England. *Corporate Governance. An International Review*, 13(4), 517-531. <https://doi.org/10.1111/j.1467-8683.2005.00446.x>
- Miles, M. B., & Huberman, A. M. (2003). *Analyse des données qualitatives*, Paris: De Boeck.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Towards a theory of stakeholder identification and salience: defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853-886. <http://www.jstor.org/stable/259247>
- Moriceau, J. L. (2003). La répétition du singulier: pour une reprise du débat sur la généralisation à partir d'études de cas. *Revue Sciences de Gestion*, 36, 113-140.
- Morrow, S. (2013). Football club financial reporting: time for a new model? *Sport, Business and Management: An International Journal*, 3(4), 297-311.
- Opute, A. P. (2012). Maximizing effectiveness in team sports: the personal audit tool, *Team Performance Management: An International Journal*, 18(1/2), 78-101.
- Paché, G., & N'Goala, G. (2011). Les stratégies de création et d'appropriation de la valeur dans un contexte d'incertitude majeure: le cas du football professionnel. *Management & Avenir*, 46, 53-78. <https://doi.org/10.3917/mav.046.0053>
- Pfeffer, J. (1981). *Power in organizations*. Marshfield: Pitman.
- Phillips, R. (2003a). Stakeholder legitimacy. *Business Ethics Quarterly*, 13(1), 25-41. <https://doi.org/10.5840/beq20031312>
- Phillips, R. (2003b). *Stakeholder theory and organizational ethics*. San Francisco: Berrett-Koehler Publishers.
- Post, J., Preston, L., & Sachs, S. (2002). Managing the extended enterprise: the new stakeholder view. *California Management Review*, 45(1), 6-28. <https://doi.org/10.2307/41166151>
- Robert, A. D., & Bouillaguet, A. (1997). *L'analyse de contenu*. Paris: Presses Universitaires de France.
- Sarikaya, M., Yılmaz, S., & Temizel, F. (2012). The need and corporate reputation in publicly traded sports corporations: examination of Beşiktaş Sports Inc. *International Journal of Economics and Accounting*, 3(1), 4-31. <https://doi.org/10.1504/IJEA.2012.045520>
- Scarnati, J. T. (2001). On becoming a team player, *Team Performance Management: An International Journal*, 7(1/2), 5-10.
- Senaux, B. (2004). Gouvernance des clubs de football professionnel: une approche partenariale, *XIIIème*

- Conférence de l'Association Internationale de Management Stratégique (AIMS)*, Le Havre, 2-4 juin
- Senaux, B. (2008). A stakeholder approach to football club governance. *International Journal of Sports Management and Marketing*, 4(1), 4-17. <https://doi.org/10.1504/IJSMM.2008.017655>
- Senaux, B. (2011). Playing by the rules but which ones? *Sport, Business and Management: An International Journal*, 1(3), 252-266.
- Sloane, P. J. (1971). The economics of professional football: the football club as a utility maximizer. *Scottish Journal of Political Economy*, 18(2), 121-146. <https://doi.org/10.1111/j.1467-9485.1971.tb00979.x>
- Sloane, P. J. (2006). The European model of sport. In: Andreff W, Szymanski S (Eds), *Handbook on the economics of sport*, Northampton: Edward Elgar, 299-303. <https://doi.org/10.4337/9781847204073.00037>
- Soulé, B. (2007). Observation participante ou participation observante? Usages et justifications de la notion de participation observante en sciences sociales. *Recherches Qualitatives*, 27(1), 127-140.
- Stake, R. E. (1994). Case Studies. In: Denzin N. K., Lincoln Y. S. (Eds), *Strategies of qualitative inquiry*, Thousand Oaks: Sage Publications, 86-109.
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks: Sage Publications.
- Suchman, M. C. (1995). Managing legitimacy: strategic and institutional approaches. *Academy of Management Review*, 20(3), 571-610.
- Sugden, J. (2002). Network football. In: Sugden J., Tomlinson A. (Eds), *Power games: a critical sociology of sport*, London: Routledge, 61-80.
- Svendsen, A. (1998). *The stakeholder strategy: profiting from collaborative business relationships*. San Francisco: Berrett-Koehler.
- Walters, G. (2011). The implementation of a stakeholder management strategy during stadium development: a case study of Arsenal football club and the Emirates Stadium. *Managing Leisure*, 16(1), 49-64. <https://doi.org/10.1080/13606719.2011.532600>
- Walters, G., & Chadwick, S. (2009). Corporate citizenship in football: delivering strategic benefits through stakeholder engagement. *Management Decision*, 47(1), 51-66. <https://doi.org/10.1108/00251740910929696>
- Walters, G., & Tacon, R. (2010). Corporate social responsibility in sport: stakeholder management in the UK football industry. *Journal of Management & Organization*, 16(4), 566-586. <https://doi.org/10.1017/S1833367200001942>
- Wartick, S. L., & Mahon, J. M. (1994). Toward a substantive definition of the corporate issue construct: a review and synthesis of the literature. *Business & Society*, 33(3), 293-311. <https://doi.org/10.1177/000765039403300304>
- Weber, M. (1947). *The theory of social and economic organization*. New York: Free Press.
- Weiss, J. W. (1994). *Business ethics: a managerial stakeholder approach*. Belmont: Wadsworth.
- Westre, K. R., & Weiss, M. R. (1991). The relationship between perceived coaching behaviors and group cohesion in high school football teams, *The Sport Psychologist*, 5(1), 41-54. <https://doi.org/10.1123/tsp.5.1.41>
- Williamson, O. E. (1985). *The economic institutions of capitalism*. New York: Free Press.
- Wood, D. J. (1991). Corporate social performance revisited. *Academy of Management Review*, 16(4), 691-718.
- Yin, R. K. (2011). *Applications of case study research*, Thousand Oaks: Sage Publications.
- Yin, R. K. (2013). *Case study research: design and methods*, Thousand Oaks: Sage Publications.
- Zimbalist, A. (2003). Sport as business. *Oxford Review of Economic Policy*, 10(4), 503-511. <https://doi.org/10.1093/oxrep/19.4.503>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

The B2Com Relationship: An Empirical Study of the Measure of Relationship Quality in a Business-to-Community Relationship

Oluyomi Abayomi Osobajo¹, David Moore¹

¹The Scott Sutherland School of Architecture & Built Environment, The Robert Gordon University, Aberdeen, Scotland, United Kingdom

Correspondence: Oluyomi Abayomi Osobajo, The Scott Sutherland School of Architecture & Built Environment, The Robert Gordon University, Aberdeen, Scotland, United Kingdom.

Received: May 16, 2017

Accepted: June 13, 2017

Online Published: June 19, 2017

doi:10.5539/ibr.v10n7p118

URL: <https://doi.org/10.5539/ibr.v10n7p118>

Abstract

The quality of relationship between Oil Producing Companies (OPC) and their Host Communities (HC) within the Niger Delta Region of Nigeria (NDRN) is a source of concern for different stakeholders such as the practitioners, government, communities, and OPC. Scholars in the field of marketing have studied relationship quality in different contexts, such as business-to-business, business-to-customer, customer-to-business, and interpersonal relationship. In this paper, the authors build on existing studies to develop a new relationship framework in a business-to-community (B2Com) context, intended to assess the degree of relationship quality between a business and its host community. The framework is supported by the results of a qualitative research study conducted using an in-depth semi-structured interview approach in exploring and assessing the various relationship elements and constructs impacting on the quality of a relationship developed between an OPC business and its host community in the Niger Delta of Nigeria. The findings showed that activity links, resources ties, actor bond, mutual benefit, communication, control mutuality, mutual goal and culture are the main antecedents of relationship quality, while trust, satisfaction, and commitment are the essential outcomes of relationship quality. The findings also showed that there is a linear relationship between trust, satisfaction and commitment.

Keywords: relationship, relationship marketing, relationship elements, relationship quality, community, oil producing company, oil and gas industry

1. Introduction

The concept of relationship emerges from the field of relationship marketing (Christopher et al., 1991; Gummesson, 1995; Buttle, 1996), which is focused on “attracting, maintaining and, in multi service organisations, enhancing customer relationships” (Berry 1983, p. 25). Likewise, Gronroos (1994, p. 355) added that relationship marketing is about “establishing, maintaining, and enhancing relationships with customers and other partners, at a profit, so that the objectives of the parties involved are met. This is achieved by a mutual exchange and fulfilment of promises”. Christopher et al (1991), and Rust et al (2004) argued further that the focus within the relationship marketing paradigm has shifted completely from a transactional paradigm to a relationship paradigm. The relationship paradigm focuses on having a long-term orientation that will result in a win-win situation among relationship parties, while the transactional paradigm is merely a one-off exchange between relationship parties. Hence, these views and opinions suggest that relationship marketing can be termed as a process by which parties to a relationship obtain what they desire through creating and exchanging value with one another (Kotler and Armstrong, 2010).

Researchers have predominantly studied relationship quality through a focus on business-to-business (B2B), business-to-customer (B2C), customer-to-business (C2B), and interpersonal relationships. The development of a business-to-community (B2Com) relationship has not received any attention from researchers. Indeed, as Gummesson (2002) suggested that there are 30 different relationship types that need to be evaluated and, not surprisingly, scholars have concluded that there are many types of relationships that should be examined (Athanasopoulou, 2006). This research study intends to empirically explore and understand the quality of relationship in a B2Com context. A B2Com relationship refers to a relationship developed between a business and its host community in which it operates. This supports the assertion that, in an increasingly competitive business environment, a business must give attention to its various stakeholders such as the community that could support

or hinder the realisation of business objectives (Freeman, 1984). Hence, the development of a B2Com relationship is important for those businesses whose achievement of their objectives is strongly influenced by the community in which they operate.

This research study presented here commenced with a discussion on the importance of a relationship between a business and its host community, and subsequently conducted a literature review to determine what is a relationship, relationship elements, relationship quality and relationship quality constructs as identified by existing literature. Thereafter, the research findings are discussed and propositions are formulated.

2. The Importance of the Oil Producing Company (OPC) and Host Community (HC) Relationship

Nigeria as a nation is highly dependent on crude oil as a major source of her income (Akins, 1973; Beckman, 1982; Khan, 1994; Ellis, 2003; Watts, 2004; Ross, 2012; Kadafa, 2012; Esfahani et al., 2014; Arezki and Blanchard, 2015; Ikein, 2016). Ross (2003), Adenugba and Dipo (2013), Rhodes and Suleiman (2013), and Ikein (2016) noted that Nigeria has consistently earned over 90% of her revenue from crude oil since commercial production commenced in the 1970s. In addition, Ikelegbe (2001), Eweje (2006), and Omofonmwan and Odia (2009) argued that a larger percentage of the exploration and production (EP) activities within the Nigerian oil and gas industry (NOGI) take place in the Niger Delta region of Nigeria (NDRN). Hence, making the NDRN a region to be reckoned with (Frynas, 2001).

The rapid and continuous deterioration of the NDRN has been widely noted by scholars and practitioners (Puyate and Rim-Rukeh, 2008; Giraud and Renouard, 2010; Renouard, 2010; Renouard and Lado, 2012; Ubani and Onyejekwe, 2013). This decline is evidenced by poverty among the communities in the region (Nriagu et al., 2016), poorly planned and managed coastal and community development (Ubani and Onyejekwe, 2013), and a poor educational system (Osaghae et al., 2007; Omofonmwan and Odia, 2009; Onemolease and Alakpa, 2009; Nyengidiki and Allagoa, 2011). In addition, the region is facing worsened environmental conditions (Ikporukpo, 1983; Watts, 2001; Puyate and Rim-Rukeh, 2008), increases in social inequality (Renouard, 2011), water pollution, reductions in wildlife and fisheries, soil degradation (Chokor, 2004), and generally worsened economies and health condition (Giraud and Renouard, 2010; Renouard and Lado, 2012; Adelabu, 2012). Kadafa (2012), Ite et al (2013), and Ebegbulem et al (2013) acknowledged that these outcomes are attributable to crude oil exploration and production (EP) activities and by association, the presence of OPCs in the region. Hence, the region has been the subject of continuous conflicts and violence between the NDRN communities and the OPCs (Aghedo, 2013; Obi, 2014).

Among the different types of community (i.e. host community, impacted community, transit community, and terminal community) in the NDRN, the Host Community (HC) is the most highly affected. This is because the HC serve as the host for OPC's EP operations and activities. Elum et al (2016, p. 12880) referred to HC as "the places (on land) or communities where oil wells are sited". The effects of OPC presence on the HC is evidenced in the adverse environmental effects on forest, soils and water bodies in HC in the NDRN (Worgu, 2000). Likewise, Eweje (2006) asserted that the commencement of OPC's EP activities led to the emergence of environmental problems in the HC. Apata (2010) added that OPC presence within the region led to the beginning of a continuous environmental degradation that has resulted in a culminating poverty, which is depriving the HC of its resource benefits. Equally, Idemudia (2016) noted that the HC has experienced undermined human development due to the presence of OPC. Olobaniyi and Omo-Irabor (2016) stated that the HC has experienced declining health and environmental conditions since the arrival of the OPC, while Elum et al (2016) concluded that the HC has experienced disastrous and persistent effects of gas flaring on its agricultural produce.

Scholars (e.g. Idemudia, 2014b; Aghedo and Osumah, 2014; Osaghae, 2015) have likened the NDRN to a war zone since the 1990's due to the continuous conflict between the OPC and HC. Idemudia (2014a) stated that the OPC and HC relationship began to deteriorate into conflict and violence in the 1980's. Idemudia (2007) asserted that the HC perceived their relationship with the OPC as "negative" because they (the HC) believe they are considered as an obstacle by the OPC to the successful exploration and production of crude oil in the region. Therefore, OPC are regarded as increasingly viewing the HC as a risk to be managed (Idemudia, 2014a). In addition, Elum et al (2016, p. 12881) asserted that the "HC are relegated to the background in decision making as it affects oil exploration and exploitation in their territory". These standpoints necessitate the assessment of the relationship between the OPC and HC (Idemudia, 2014b).

3. What is a Relationship?

There is no consensus among scholars of a single definition on what a relationship really is; the concept has varying definitions in different disciplines. Hinde (1979, 1981), cited in Blumstein & Kollock (1988, p. 468) within the social psychology discipline, define a relationship as "a series of related interactions, each affected by

past episodes, and in turn affecting future interactions". This definition considers a *relationship* to be symbiotic in nature; the behaviour of people or groups within the relationship affects each other. Likewise, Hakansson and Snehota (1995, p. 25) define a relationship as "a mutually oriented interaction between two reciprocally committed parties". They regard mutual orientation and commitment as an essential aspect of the interactions between relationship parties. In addition, it could be argued that the presence of mutual orientation and commitment connotes dependency between them, such that the existence of one party depends on the survival of the other party.

Within the communication discipline, a relationship is referred to as a link existing between two or more people with a mutual purpose over a period of time (Coombs, 2001). Relationship in this respect is considered a two-way route where parties involved need to be aware of each other and their respective interaction.

Ledingham and Bruning (1998, p. 62), within the public relations discipline, define a relationship as being the "state which exists between an organisation and its key publics in which the actions of either entity impact the economic, social, political, and/or cultural wellbeing of the other entity". Broom et al (2000) added that a relationship is as a series comprising interaction, transaction, exchange, and linkage between the parties involved. They claim that there exist different properties between the people involved and the relationship itself. This leads to a distinction between the attributes, perception and identities of the people involved in the relationship. Ledingham (2003, p. 190) asserted that an effective theory of *relationship* should encourage collaboration because "effectively managing organizational-public relationships around common interests and shared goals, over time, results in mutual understanding and benefit for interacting organizations and publics".

However, it is worth stating that a significant body of research and literature on the meaning of "relationship" adopts the standpoint of the organisation and thus incorporates some level of corporate biasness in it. From this standpoint, people who are not in support of the organisation's objectives are pictured adversely, and the organisation is required to please them. Hallahan (2004, p. 775) concluded that a relationship involves "routinized, sustained patterns of behaviour by individuals related to their involvement with an organisation ... and thus are part of a total organisational-public relationship". Even though all these scholars have different approaches to the definition of a relationship, they all seem to view relationship as a form of interaction, which often arises between two or more parties because of the outcome interdependence.

3.1 Types of Relationship

The evaluation of types of relationship is important in order to assess the relationship that exists between relationship parties. It provides and describes the features of a relationship and the expected relationship outcomes (Grunig, 2002). The types of relationships will be discussed under the following subheadings: exchange or discrete transaction relationship, and communal or relational exchange relationship.

3.1.1 Exchange Relationship

In an exchange relationship, one relationship party provides benefit to another in return for something that is of comparable value to them (Grunig, 2002). The comparable value provided could be a future expectation or something for immediate exchange. This suggests that relationship parties are only willing to give benefits to one another because there is a benefit of perceived comparable value to receive in return. This type of relationship is also referred to as a **discrete transaction** relationship. MacNeil (1980, p. 60), asserts that "the archetype of discrete transaction is manifested by money on one side and an easily measured commodity on the other". Discrete transaction relationships are characterised by narrow content and limited communications. For example, a purchase of unleaded gasoline made by a passing customer at a filling station. In addition, a party receiving a benefit in an exchange relationship must have incurred an obligation in the past or should be ready to return a favour in the future (Hung, 2005). Hence, there is an uncertain time dimension component in this relationship. Exchange relationship is the foundation on which relationship marketing as a concept was formed (Grunig, 2002). However, an exchange relationship is not suitable for all of an organisation's stakeholders. For example, the public (i.e. the community) expect more benefit from an organisation than the benefit typically expected from the public by that organisation.

3.1.2 Communal Relationship

In a communal relationship, relationship parties "are willing to provide benefits to the other because they are concerned for the welfare of the other—even when they believe they might not get anything in return" (Grunig, 2002). This relationship type is viewed as a departure from the discrete transaction relationship, which suggests that the parties involved have no expectation of an exchange of benefits, but merely provide benefits in a philanthropic manner (Clark & Mils, 1993). Communal relationship is also referred to as a **relational exchange** relationship (Dwyer et al., 1987). MacNeil (1978) asserted that in a relational exchange relationship, transactions

transpire over time such that a transaction's history is viewed in order to promote anticipation into the future. Going by this standpoint, Ganesan (1994) asserted that communal or relational relationship has a long-term orientation. An organisation often engages in communal or relational exchange relationships with different stakeholders such as the community and their employees in order to add value to itself. Communal relationships with different stakeholders are important if an organisation wants to contribute to its community and to be socially responsible. Participants often derive personal satisfaction, which in most cases results in social exchange. This is because participants' duties occur over a period. Dwyer et al (1987, p. 13) differentiate discrete transaction relationships from relational exchange relationships using 12 key features of a contract, as shown in table 1.

Table 1. A Comparison of Transaction and Relational Exchange Relationships (Adapted from Dwyer et al., 1987)

	Discrete Transaction	Relational Exchange
Contractual Elements		
Timing of exchange (commencement, duration, and termination of exchange)	Distinct beginning, short duration, and sharp ending by performance	Commencement traces to previous agreements; exchange is longer in duration, reflecting an ongoing process
Number of parties (entities taking part in some aspect of the exchange process)	Two parties	Often more than two parties involved in the process and governance of exchange
Obligations (three aspects: sources of content, sources of obligation, and specificity)	Content comes from offers and simple claims, obligations come from beliefs and customs (external enforcement), standardized obligations	Content and sources of obligations are promises made in the relation plus customs and laws; obligations are customized, detailed, and administered within the relation
Expectations for relations (especially concerned with conflicts of interest, the prospects of unity, and potential trouble)	Conflicts of interest (goals) and little unity are expected, but no future trouble is anticipated because cash payment upon instantaneous performance precludes future interdependence	Anticipated conflicts of interest and future trouble are counterbalanced by trust and efforts at unity
Non-contractual Elements		
Primary personal relations (social interaction and communication)	Minimal personal relationships; ritual-like communications predominate	Important personal, noneconomic satisfactions derived; both formal and informal communications are used
Contractual solidarity (regulation of exchange behaviour to ensure performance)	Governed by social norms, rules, etiquette, and prospects for self-gain	Increased emphasis on legal and self-regulation; psychological satisfactions cause internal adjustments
Transferability (the ability to transfer rights, obligations, and satisfactions to other parties)	Complete transferability; it matters not who fulfils contractual obligation	Limited transferability; exchange is heavily dependent on the identity of the parties
Cooperation (especially joint efforts at performance and planning)	No joint efforts	Joint efforts related to both performance and planning over time; adjustment over time is endemic
Planning (the process and mechanisms for coping with change and conflicts)	Primary focus on the substance of exchange; no future is anticipated	Significant focus on the process of exchange; detailed planning for the future exchange within new environments and to satisfy changing goals; tacit and explicit assumptions abound
Measurement and specificity (calculation and reckoning of exchange)	Little attention to measurement and specifications; performance is obvious	Significant attention to measuring, specifying, and quantifying all aspects of performance, including future benefits
Power (the ability to impose one's will on others)	Power may be exercised when promises are made until promises are executed	Increased interdependence increases the importance of judicious application of power in the exchange
Division of benefits and burdens (the extent of sharing of benefits and burdens)	Sharp division of benefits and burdens into parcels; exclusive allocation to parties	Likely to include some sharing of benefits and burdens and adjustments to both shared and parceled benefits and burdens over time

This is not to say that discrete transaction or exchange relationships should be discarded. Rather, researchers should recognise that often times, relationships begin with an exchange relationship and subsequently develop into relational or communal relationships as time passes. Contrary to this, Grunig (2002) argued that organisations could need to start a relationship from a communal relationship in order to arrive at an exchange relationship. Nevertheless, Grunig (2002) asserted that an organisation's measure of relationship success with its various stakeholders will relate to its level of communal or relational relationship with such stakeholders. Ganesan (1994) concluded that long-term relationships place an organisation in a sustainable competitive position, promote cooperation, allow mutual dependency among parties involved, and encourage goal and risk sharing.

3.2 Relationship Elements

It is worth stating that there are limited research studies on relationship elements. Hence, the field has been

dominated by a few researchers. Medlin et al (2005), Hakansson and Snehota (1995), and Hakansson, Blankenburg and Johanson (1992) demonstrated through a robust framework the properties of a relationship using network analysis, in which actors are seen to be performing activities and/or control resources. They suggest that relationships can only be meaningful when considered in respect of three elements i.e. actor bonds, activity links, and resource ties. Hakansson and Snehota (1995) stated that a partner relationship involves three crucial aspects of activity links, resource ties and actor bonds.

“Activity links embrace activities of a technical, administrative and marketing kind”

“Resource ties include exchanging and sharing resources which are both tangible, such as machines, and intangible, such as knowledge”

“Actor bonds are created by people who interact and exert influence on each other and form opinions about each other”

Halinen et al (1999) added that actor bonds, activity links and resource ties bind relationship partners’ together, thus giving rise to interdependence and stability between them. Ford et al (1998) argued further that the presence of these properties in any relationship could result in either a transactional relationship, a facilitative relationship or an integrative relationship. Ford et al (2008) concluded that activity links, actor bonds, and resource ties are critical to relationship partners’ strategy and capability development.

3.3 Relationship Quality and its Context of Study

Relationship quality as a concept results from research and theory in the field of relationship marketing (e.g. Dwyer et al. 1987; Crosby et al., 1990; Gronroos, 2000; Gummesson, 1987; Gummesson, 2000), wherein the main focus is to strengthen and make stronger existing relationships (Berry and Parasuraman, 1991). Crosby et al (1990), and Garbarino and Johnson (1999) stated that relationship quality provides an assessment of the strength of a relationship. These definitions suggest that relationship quality focuses on the assessment and evaluation of how well or satisfied relationship partners are in the fulfilment of their expectations or needs. Hakansson (1982) added that during the evaluation process of a relationship, it is imperative to take into consideration the relationship partners behaviour and their ability to meet one another's needs, while Jap et al. (1999) contemplated that relationship quality assessment focuses on different aspects (e.g. future expectations, and process and attitudinal variables). The last-mentioned definition implies that relationships consist of various processes where by one process serves as a prerequisite to the other (Jap and Anderson, 2007; Dwyer et al. 1987) and that a relationship requires frequent assessment (Eggert et al. 2006). Johnson (1999, p. 6) asserts that relationship quality is “the overall depth and climate of the inter-firm relationship”, while Huntley (2006, p. 706) concluded that relationship quality is the “degree to which buyers are satisfied over time with the overall relationship”.

In addition, some scholars provide a context-based relationship quality definition, which focuses on relationship parties’ interactions. For example, Lagace et al (1991) define relationship quality as the level of interaction between relationship parties (i.e. the physician and the pharmaceutical sales person). In a different context, Moorman et al. (1992, p. 316) viewed relationship quality as “the degree to which users view user-researcher interactions as productive”. Holmlund (2001, p. 15) provides a working definition that views relationship quality as “the joint cognitive evaluation of business interactions by key individuals in the dyad, comparatively with potential alternative interactions”. These context-based definitions also suggest that relationship quality focuses on an evaluation of the relationship based on either relationship partners’ interaction over a period (Boles et al. 1997; Holmlund, 2001) or the outcome of relationship partners’ interaction (Moorman et. 1992). These definitions suggest that relationship parties are required to establish a working relationship which allows adequate and appropriate information and/or other resources sharing.

Furthermore, relationship quality has been defined in relation to the exchange of intangible rewards among relationship parties. For example, Levitt (1986, p. 302) referred to relationship quality as “a bundle of intangible value which augments products and results in an expected interchange between buyers and sellers”. Likewise, Crosby et al (1990) asserted that relationship quality is a higher order construct composed of satisfaction and trust among relationship parties. Relationship quality from this standpoint connotes that a party to a relationship could receive its reward by gaining the trust and satisfaction of another party to the relationship. In addition, Bejou et al (1996, p. 137) defined relationship quality as when “the customer is able to rely on the salesperson's integrity and has confidence in the salesperson's future performance because the level of past performance has been consistently satisfactory”. In this last definition, integrity and performance are regarded as intangible rewards. However, there is an element of time i.e. these rewards tend to materialise over time into the future. Crosby et al (1990, p. 76) concluded that “relationship quality contributes to a lasting bond by offering assurance that the salesperson will continue to meet the customer’s expectations (satisfaction) and not knowingly distort information or otherwise

subvert the customer's interests (trust)."

Also evidenced from research, (e.g. Crosby et al. 1990; Storbacka et al. 1994; Kumar et al. 1995; Bejou et al. 1996; Hennig-Thurau and Klee, 1997; Dorsch et al. 1998; Wulf et al. 2001; Walter et al. 2003; Lages et al., 2005) relationship quality has also been discussed within other fields outside of relationship marketing. Fynes et al (2005), within the supply chain discipline, define relationship quality as the extent to which parties in a relationship are involved in a long-term and active relationship. This is similar to Golicic and Mentzer's (2005) definition of relationship quality as the strength or degree of closeness of relationship parties within a relationship. It is obvious that relationship quality is an important feature in developing a successful relationship (Rauyruen and Miller 2007; Palmatier et al. 2006; Woo and Ennew 2004). Hence, relationship quality has become a key aspect within the relationship marketing discipline (Smith, 1998a; Hennig-Thurau et al., 2001; Gummesson, 2002).

Building on the foregoing, it is clear that relationship quality as a concept lacks a common definition (Sheth and Parvatiyar, 2002; Palmatier et al. 2006). However, Dwyer and Oh (1987), Dorsch et al (1998), Crosby et al (1990), Robert et al. (2003), and Woo and Ennew (2004) concluded that relationship quality is usually defined as a higher-order construct consisting of several distinct but related components. Evidence suggests that relationship quality has been studied, developed and empirically tested within the confine of different research contexts (Wong et al., 2005; Vieira et al, 2008). These research contexts range from interpersonal relationships (i.e. relationship between individuals), business-to-business relationships (B2B), business-to-customer relationships (B2C), and customer to business relationships (C2B).

Interpersonal relationship is the relationship between two or more individuals, customers, or consumers, such as the relationship between a couple i.e. husband and wife (Zimmerman and Robert, 2012). Also, the relationship between different customers through online auctions such as Amazon, eBay and Gumtree can be classified under this relationship type.

A **B2B** relationship is perceived as a working relationship between two or more firms (Dwyer et al., 1987, Anderson and Narus, 1990; Ganesan, 1994; Chumpitaz and Paparoidamis, 2007). It also involves one business making a commercial deal or transaction with another (Gummesson, 2004). For example, manufacturers in business markets relationship with their suppliers (Johnson and Selnes, 2004; Ulaga and Eggert, 2006), and an automobile manufacturer's relationship with a dealer (Dwyer et al., 1987).

A **B2C** relationship describes the relationship between a business and its final consumer. For example, an automobile retailer and its customers (Morgan and Hunt, 1994), a financial institution and its customers (Zineldin, 1995; Bejou et al 1996; Lang and Colgate, 2003; Rauyruen and Miller, 2007), and a hotel and its guests (Bowen and Shoemaker, 1998).

A **C2B** relationship describes the relationship between an individual customer and a business entity (Law et al., 2003). This is the reverse to the B2C relationship model. For example, the relationship between a patient and his/her surgery (Griswold, 2003), and an individual (i.e. customer or consumer) making an online call to a call centre (Wong et al., 2005).

3.4 Relationship Quality Constructs

Despite the growing body of literature on relationship quality constructs, scholars have argued that there exists a high level of uncertainty as to which of the relationship quality constructs can be categorised as determinant or dimension (Vieira et al., 2008; Rauyruen and Miller, 2007; Ivens and Pardo, 2007; Huntley, 2006). However, a review of relevant literature suggests that trust, satisfaction and commitment are the main constructs of relationship quality (Moorman et al., 1992; Dwyer and Oh, 1987). This has streamlined the focus of the majority of the empirical research conducted on relationship quality to trust, satisfaction and commitment, thus giving little or no attention to a large number of other constructs (Dwyer et al., 1987; Anderson and Narus, 1990; Morgan and Hunt, 1994; Ulaga and Eggert 2006; Carr, 2006; Ndubisi, 2006; Hsin Hsin and Po Wen, 2009; Barry and Doney, 2011; Rafiq, Fulford and Lu, 2013). Relationship quality is usually defined as a higher-order construct consisting of several distinct but related components (Dorsch et al. 1998; Smith, 1998a; Van Bruggen et al. 2005; Ulaga and Eggert 2006; Rauyruen and Miller, 2007). These constructs are also referred to as components, which are categorised either as determinants of relationship quality or dimensions of relationship quality (Athanasopoulou, 2009). This is because there is no consensus among scholars as to the constructs of relationship quality. See Appendix A for a detailed and comprehensive list of various relationship quality constructs.

3.4.1 Determinants of Relationship Quality

The lack of agreement as to the constructs that make up the determinants of relationship quality could be linked to the context, perspective and research settings in which various studies have been carried out (Vieira et al., 2008).

Determinants of relationship quality are referred to as precursors of relationship quality (Vieira et al., 2008). Table 2 lists authors who have cited mutual benefit, communication and control mutuality as the most frequently used constructs functioning as determinants of relationship quality.

Table 2. Determinants of Relationship Quality (summarised from the literature)

CONSTRUCT	AUTHORS
Mutual benefit	Huntley, 2006; Parson, 2002; Vieira, 2001; Boles et al., 2000; Smith, 1998a; Lagace et al., 1991; Crosby et al., 1990
Communication	Ndubisi, 2006; Athanasopoulou, 2006; Bennett and Barkensjo, 2005; Sanzo et al., 2003; de Ruyeter et al., 2001; Vieira, 2001; Goodman and Dion, 2001; Selnes, 1998; Smith, 1998b; Leuthesser, 1997; Menon et al., 1996; Kumar et al., 1995; Morgan and Hunt, 1994
Control mutuality	Kent and Taylor, 2002; Hon and Grunig, 1999; Stafford and Canary, 1991; Rusbult, 1983

3.4.2 Dimensions of Relationship Quality

The constructs that make up the dimension of relationship quality are not clearly distinguished or defined from one another. However, the main dimensions of relationship quality consistently identified and evaluated in the literature are trust, satisfaction and commitment (Vieira et al., 2008; Athanasopoulou, 2009). Hence, the focus of this study will be on trust, satisfaction and commitment, which are the most mentioned and studied constructs within the literature. These three constructs are also referred to as measures of relationship quality (Athanasopoulou, 2009). Other scholars (e.g. Kempeners, 1995; Crosby et al., 1990) referred to trust, satisfaction and commitment as the key relationship management building blocks. In addition, these three constructs were selected because they have been validated in different contexts and they form an area of convergence for otherwise differentiated studies on dimensions of relationship quality. Dorsch et al (1998), Smith (1998 a), Hennig-Thurau et al (2002), Robert et al. (2003), Ulaga and Eggert (2006), and Rauyruen and Miller (2007) referred to the three constructs as essential indicators of good relationship quality. Arguably, the three dimensions of relationship quality (i.e. trust, satisfaction and commitment) are not independent. Hence, there is a casual link between the dimensions of relationship quality (Hennig-Thurau and Klee, 1997).

4. The Study Theoretical Framework

Based on the review of previous literature which gives an insight into the main elements, determinants and dimensions of relationship quality, figure 1 present the proposed research study framework.

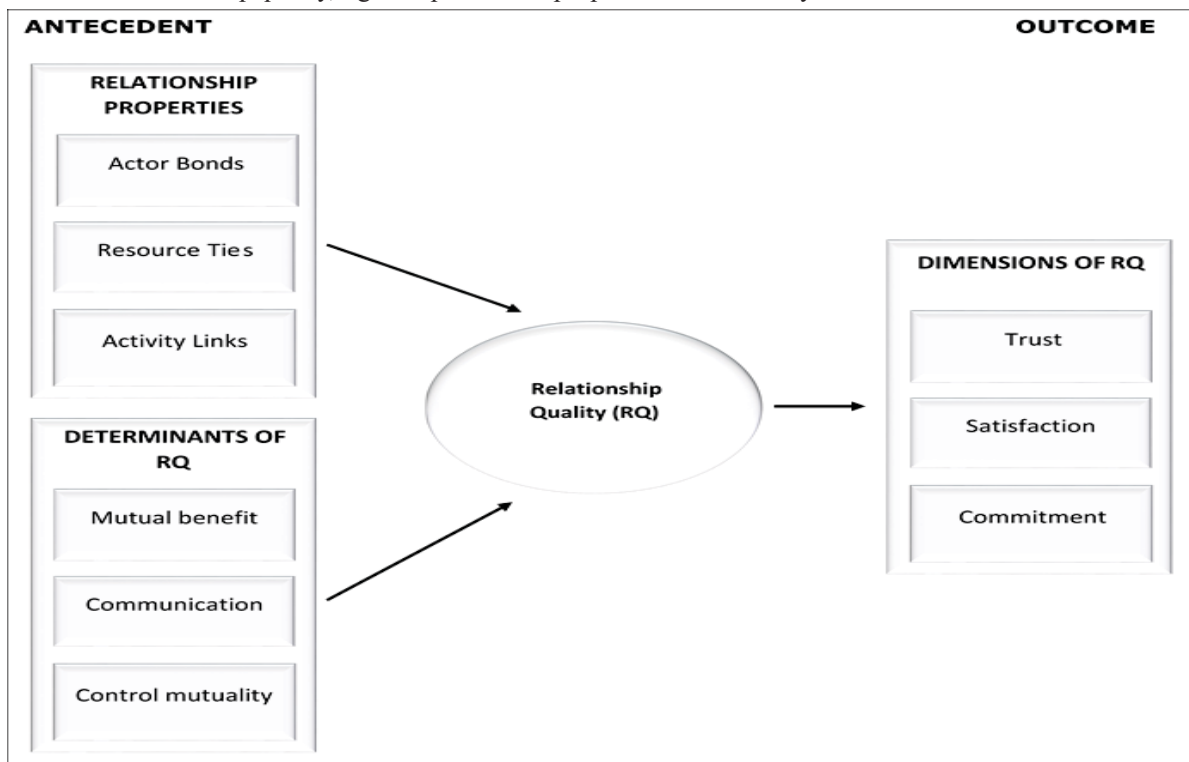


Figure 1. Research Study Theoretical Framework for a B2Com Relationship Quality (author generated)

5. Methodology

This research study aims to explore and understand the relationship elements and relationship quality constructs that are important in establishing a mutually beneficial relationship between a business and the community in which it operates. This was approached from the perspective of the community. Therefore, an exploratory research study was taken on board in order to gather the views and opinions of the host community. This is because the various relationship elements and relationship quality constructs identified by researchers and scholars (in a different context), which serve as the basis for this research study require a better understanding within a B2Com context. The process involved in carrying out this research is:

1. Defining the research study aims, which are to explore and understand the nature and quality of the relationship between the OPC and HC by considering the relationship elements, determinants of relationship quality, and dimensions of relationship quality as the basis of establishing and developing a successful relationship quality between the OPC and HC, and to develop a framework capable of assessing a B2Com relationship.
2. Formulating research objectives for the study. These are; to examine the nature and quality of the relationship between the OPC and HC in the NDRN, identify the relationship elements and key determinants and dimensions of relationship quality which the OPC could use to build and sustain a mutual sense-making relationship, and determine the impact of current relationship quality frameworks in improving and enhancing the integration of OPC and HC in the NDRN.
3. A detailed and comprehensive literature review was carried out in order to ascertain the research problem. In addition, the key relationship determinants and relationship dimensions suggested by scholars and researchers based on different research contexts were identified. This informed the development of the current study's theoretical framework as shown in figure 1.
4. Subsequently, data were collected from sixteen research participants from three states using an in-depth semi-structured interview, which is "the verbal interaction between one or more researchers and one or more respondents for the purpose of collecting valid and reliable data to answer particular research questions" Parahoo (2006, p. 307). The semi-structured interview was designed to give room for flexibility, which Bryman and Bell (2004) considered important because it allows the interviewer the opportunity to vary the interview questions and probe any inconsistent interviewee's response. The interview schedule focused mainly on exploring:

The key elements of a relationship: The purpose of this is to gain a detailed insight and background into the nature of the relationship between the OPC and HC from the HC point of view. In addition, it gave the research participants the opportunity to themselves assess and evaluate the relationship between the OPC and HC

The determinants of relationship quality: This focuses on capturing and understanding the constructs that give rise to relationship quality. In addition, why research participants consider such constructs as essential in achieving effective relationship quality. Crosby et al (1990) referred to these constructs as the antecedents of relationship quality

The dimensions of relationship quality: This aspect is included in order to establish and explore the likely constructs which serve as indicators of the level or state of the quality of relationship. Hence, it measures the quality of relationship between the OPC and HC. The interview questions explored under this section focus on relationship quality evaluation.

However, prior to carrying out interview sessions with different research participants, a pilot study was carried out in order to identify and correct the deficiencies and lapses in the research design procedure prior to major or main studies (Aitman et al., 2006). Polit and Beck (2009) defined a pilot study as a trial or small-scale version conducted prior to a major study. Arguably, a pilot study could be seen as a means of avoiding resource waste i.e. money or time. This was carried out via the telephone with five experts and operators in the field within the current context of study. Hence, the researcher was able to test the initial research interview questions and, from responses received, develop the final research interview questions (McNamara, 1999). Furthermore, the outcome of the pilot study informed the current study sample selection, which was based on selective sampling. Selective sampling originates from restrictions placed upon the researcher's observations by the research settings and/or context. Sandelowski et al (1992, p. 302) referred to selective sampling as "a decision made prior to beginning a study to sample subjects according to a preconceived, but reasonable initial set of criteria. Likewise, Glaser (1978, p. 37) defined selective sampling as "the calculated decision to sample a specific locale according to a preconceived but reasonable initial set of dimensions (such as time, space, identity or power) which are worked out in advance for a study". This

suggests that the ability of the researcher to select the appropriate sampling method depends on his or her understanding of the research context and/or settings. Coyne (1997) termed selective sampling as a purposeful sampling. Patton (2002) added that this sampling technique is widely used in qualitative research studies in order to identify and select information-rich research participants, while Cresswell and Plano Clark (2011) concluded that selective sampling involves identifying and selecting individuals that have experience or knowledge about a phenomenon of interest. Within the NDRN are nine independent states (i.e. Abia, Akwa Ibom, Bayelsa, Cross River, Delta, Edo, Imo, Ondo and Rivers). However, three of these states (i.e. Bayelsa, Delta and Rivers) were selected for the purpose of data collection because they are worst affected due to the intensity and nature of oil production and operations, which are mostly onshore. In addition, these states experience the highest level of violence and conflicts compared to the remaining six other states in the NDRN.

The data collected was analysed using content analysis. This method of data analysis has been used both by quantitative and qualitative scholars. For example, Kaplan (1943, p. 230) referred to it as “a technique which attempts to characterise the meaning in a given body of discourse in a systematic and quantitative fashion”. Likewise, among the qualitative scholars, Hsieh and Shannon (2005, p. 1278) define content analysis as a “research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns”. Webber (1990) argued that content analysis as a method of data analysis focuses directly on the transcript and/or text of human communications because communication is core to social interaction. Franzosi (2004) added that content analysis is often used to capture the key themes that emerge from a transcript and/or text.

Harris (2001) asserted that content analysis is important for studying organisations, beliefs, human relations and attitudes. Therefore, content analysis could be considered the most appropriate approach for the purpose of analysing data collected through interviews in order to understand and explore people’s views and opinions on the quality of a relationship (Golicic and Mentzer, 2005). Hence, it offered the researcher the opportunity to test and utilise the theoretical framework developed in order to assess and understand the quality of relationship between the OPC and HC. To this end, this research study adopted Harris’s (2001) eight step process for the purpose of data analysis as shown below:

1. Identify the questions to be asked and constructs to be used.
2. Choose the texts to be examined.
3. Specify the unit of analysis.
4. Determine the categories, or themes of meaning. Into which responses are divided.
5. Generate a coding scheme or coding rules.
6. Conduct a sample or pilot study.
7. Collect the data and revise the scheme as necessary.
8. Analyse the data and assess validity and reliability.

6. Results and Discussion

6.1 Antecedents of Relationship Quality

Data analysis revealed that activity links, actor bonds, resources ties, mutual benefit, communication, control mutuality, culture and mutual goal are perceived as antecedents of relationship quality.

6.1.1 Activity Links

Activity links become important when building a relationship because the parties involved are linked to each other through their various activities, and these links capture the efficiency in the use of resources. Hakansson and Snehota (1995) described activity links as a flow of exchange episodes involving each party to a relationship undertaking one or more activities. This description suggests the need for involvement and coordination between relationship partners as they will consequently affect how activities are carried out in the relationship. Interviewees’ understanding of activity links in this study reflects the act of participation in something, association with someone or a situation, engrossment with something which relies on performance, being considered as a necessary part of something, and when your contribution counts. These are consistent with Hallen et al (1989), Turnbull and Valla (1986) and Hakansson’s (1982) finding that relationship partners in any relationship are linked through activities.

Data gathered suggested that activity links are an important starting point when building a B2Com relationship. Whilst it is considered as a means by which a business and its community are brought together, the majority of the interviewees asserted that activity links increase the level of awareness and involvement between relationship

partners. Whilst some argued that activity links bring about proper engagement and a “right” connection, others added that proper interaction, exposure to opportunities and community building will result when there is appropriate activity links between a business and its community. Thus, the activity links in a relationship have dynamic (developments) and structural (efficiency) effects (Hakansson and Snehota 1995) and also lead to the development of capabilities (Teece et al 1997). Moller and Torronen (2003) stated that activity links affect interaction in any relationship. Research participants argued that activity links develop when the activities of parties to a relationship are understandable and visible to one another. They concluded that activity links is inherent in achieving trust between the relationship partners in a B2Com relationship.

6.1.2 Resources Ties

Resource ties capture a party’s awareness and knowledge about the resources of another party within a relationship (Holmen et al 2005). Resource ties develop as parties in a relationship access or exchange resources with one another as they carry out their respective activities. In most cases, the development process transforms existing resources of the parties so as to create new resources. This further suggests that relationship parties interact and become aware of one another’s resources. Hence, as resource ties develop between two parties in a relationship they become mutually and increasingly interdependent (Hakansson and Snehota 1995).

As with activity links, research participants perceived resource ties as a key component in this relationship context. They argued that resource ties will facilitate exchanges and create positive connections between relationship partners. The findings suggested that resource ties occur when partners become aware of, and interact about, their respective resources. Research participants argued further that the resources that bring together both a business and the community in which it operate must be mutually shared between the two parties. Hence, there will be efficient use and development of relationship resources (Kalwani and Narayandas, 1995; Turnbull et al., 1996; Wilkinson, 1998; Spencer et al., 2003). Arguably, it is evident from the data collected and analysed that the existence of resource ties is an essential relationship element that should be taken into consideration as being of benefit for the relationship parties. Hence, research participants concluded that resource ties between relationship partners is important to achieving trust.

6.1.3 Actor Bonds

Similar to resource ties, actor bonds refer to the ways that parties in a relationship respond to and perceive each other. Actor bonds impact on the identities of relationship partners towards one another and also affect the way these partners view and interpret situations. Hakansson and Snehota (1995, p. 198) stated that “identities, to begin with diffused, are shaped by the mutual interaction and its interpretation by the individuals within the two parties over time”. Hence, parties in a relationship react to one another’s actions in diverse situations. The development of identities between two parties in a relationship is largely related to developing commitment and trust. Hakansson and Snehota (1995) argued that commitment connotes to what parties will do for one another i.e. realizing of potential, while trust relates to what parties can do for one another i.e. identifying of potential. Hence, actor bonds between partners in a relationship emerge over time and are mutually developed through the experience and knowledge gained via interaction.

Research participants acknowledged the need for actor bonds to be mutually developed between relationship partners. They argued that this should take into consideration the long-term needs of the relationship partners. Hence, it will create a source of relationship bonding between them. Furthermore, research participants asserted that the presence of bond between relationship partners encourages frequent communication, which they perceived as a means of creating harmony and avoiding conflict in such relationship. This view by the research participants is consistent with Hakansson and Snehota’s (1995) that appropriate actor bonds between relationship partners will result in proper communication and efficient use of their respective capacity. Likewise, they argued that bond between relationship partners encourages and influences their level of commitment. This is because relationship partners tend to show more commitment in maintaining a relationship when they have a strong personal relationship. In addition, the research participants acknowledged that appropriate bonds between relationship partners will result in satisfaction, which facilitate efficient use of their respective capacity within the relationship. They concluded that bonding between relationship partners will give rise to trust, which encourages openness between the parties.

6.1.4 Mutual Benefit

Data gathered revealed that for mutual benefit to exist between a business and the community in which it operate, there must be cooperation between them. Research participants acknowledged that a lack of agreed mutual benefit between the OPC and HC has resulted in underutilisation of resources within the region, leading to an increase in waste. This conforms to Wilkinson and Young’s (2002) argument that cooperation is a form of resource acquisition

strategy, while competition is a strategy useful in attaining marketplace advantage. Even though, from the business perspective, the OPCs are used to competition than cooperation. Furthermore, findings from the data gathered revealed that mutually agreed benefit between partners' prompts commitment. This is consistent with Morris et al (2007) and Morgan & Hunt's (1994) claim that mutual benefit influences commitment within a relationship. This suggests that the community in which a business is located (i.e. carry out its operations) will show commitment to the relationship with such a business if the community perceives greater benefit from the presence of the business. Similarly, data gathered revealed that trust has a positive impact on mutual benefit, which invariably results in relationship success. This is congruent with Zabkar & Brencic's (2004) assertion that trust between partners is a means of shaping partners' intentions and behaviours. Research participants concluded that the earlier both a business and its community consider one another as cooperating partners, by ensuring mutuality of benefits accruable to one another, the sooner they will both enjoy a smooth and peaceful relationship. Morris et al (2007) corroborate that the lesser the competitive rivalry between partners, the higher will be the opportunity for a mutually beneficial relationship. These findings emphasise the importance of a business and its community ensuring mutuality of benefit between one another; benefits associated with information and resources particularly help in achieving a successful relationship.

6.1.5 Communication

Communication was interpreted as being an important factor that gives rise to trust, which is essential in building commitment to the relationship enhancement management between a business and its community. For effective and efficient communication purposes, most research participants emphasized the importance of employing a communication strategy that considers the nature of the information to be shared, and the affected entity within the community, in order to determine how such information will be transmitted. It was suggested by interviewees that a direct and face-to-face communication between the OPC and community people would be ideal. By doing this, research participants argued that a business would have access to first-hand information, and access to immediate feedback from the community (Cannon and Homburg, 2001).

Highlighting the importance of communication between a business and its community within the NDRN context, data gathered clearly showed that communication is crucial in maintaining continuity between the two parties because this would produce the intended or desired result within the relationship, while inadequate communication will often result in conflict and violence. In addition, research participants argued that untimely sharing of information would negatively impact the quality of relationship between relationship partners. Hence, relationship parties must be proactive in their communication process in order to arrive at the desired result. Furthermore, research participants established a connection between communication and trust. A few of the interviewees argued that trust is an afterward effect of effective communication. Their views show that effective communication has both direct and indirect outcomes in upholding trust between a business and its community within the relationship. These views support Anderson et al's (1987) assertion that communication is positively related with trust. This implies that effective communication will play an important role in maintaining, upholding and strengthen the level of trust between relationship partners in a B2Com relationship. Hence, communication has significant impact on trust.

Furthermore, communication flow was perceived as a strong predictor of satisfaction between relationship partners by interviewees. This is because proper and adequate communication between relationship partners increases their satisfaction level. A majority of the research participants concluded that communication is a prerequisite for commitment, while others perceived communication as a determinant of commitment.

6.1.6 Control Mutuality

In general, research participants perceived control mutuality as the power balance in a relationship. This they referred to by agreeing with the distribution of power and level of mutual influence between relationship partners. This is in line with Men (2011) and Hon & Grunig's (1999) assertion that control mutuality shares some similarity with empowerment and a feeling of control because it is relevant to power sharing and influence. Data gathered revealed that the more a community can influence and/or control matters and issues pertaining to their relationship with a business entity, the more strongly such community believes that the business values the community's ideas and opinions. This suggests that a commendable level of interactivity and interaction between a business and its community will be of significant importance. Research participants argued that the lack of power balance between relationship partners will always result in violence and conflict. This is consistent with Stafford & Canary's (1991) claim that satisfaction with and/or agreement on the way things are done, or decisions are made, in a relationship signifies control mutuality. This further suggests the importance of relationship parties actively incorporating conflict management ability and effective communication in their relationship.

Furthermore, control mutuality was expressed in relation to decision-making between relationship partners. Research participants argued that a relationship lacks stability and interdependence when decisions that originate from such a relationship do not reflect each party's opinion. In addition, it was revealed that two-way communication between a business and its community in their decision making process is pertinent in attaining a control mutuality position. Research participants asserted that a business must allow the self-efficacy (e.g., enhance their control ability and empower them) of the community in which it operates in order to gain their satisfaction. These findings suggest that there is a need for appropriate power-sharing between relationship parties.

6.1.7 Culture

Culture is one of the themes that emerged during the data analysis process. A majority of the research participants stressed the need for a business to understand the cultural heritage of the community in which its operations are being carried out in order to obtain a productive and successful relationship with such a community. In addition, the research participants added that the various strategies employed by a business must take into cognisance the importance of the people's cultural heritage in order to avoid violence and conflicts. This finding is in line with Tobor and Muzorewa (2016, p. 15) assertion that "A majority of researchers writing on the Niger Delta crisis proffered possible solutions without considering the significance of the culture of the people for whom the program is meant". Even though there is no consensus on the definition of "culture", it is usually perceived to connote values and beliefs. Jaques (1951) defined culture as a traditional and customary way of thinking and doing things, shared by all its members. This suggests that members are bound by a common set of values and that any new member must learn and at least partially abide by such values in order to be accepted. Research participants concluded that culture plays a significant role on how a community engages with the outside world, such as business coming into their community, and that it is embedded in community participation (Tobor and Muzorewa, 2016). Hence, involving the community in a B2Com relationship context could lead to increased quality of decisions, access to new information, and enhanced fairness.

6.1.8 Mutual Goal

Wilson (1995) defined mutual goals as the extent to which relationship partners share goals which are meant to be achieved jointly by the relationship partners, and the maintenance of such a relationship. Hence, parties to a relationship must all participate in the relationship as agreed (Adler, 1967). McQuiston, (2001) added that mutual goals provide relationship partners with the right conditions and the opportunity to participate effectively in a relationship. Vieira et al (2008) argue further that mutual goals between relationship partners encourages similarity of values, such that relationship partners equally work towards a common long-term goal or achievement. Zineldin (2004) stated that a mutual goal is when relationship parties cooperate and coordinate their activities together. These definitions further suggest that relationship parties are expected to work towards achieving a unified goal that could create value and mutually beneficial exchanges.

The research participants emphasised the benefit of involving the community in the formulation of goals and strategies that affect the communities. They stated that the OPC relationship with the HC will be successful when the OPC takes into cognisance the community when making decisions and formulating strategies. This is consistent with Zineldin's (1998) standpoint that a mutual goal is a way of integrating a relationship such that partners' will achieve a common goal. Vieira et al (2008) argued that the nature of a mutual goal should be considered as a core determinant of relationship quality. Likewise, some scholars (e.g. Huntley, 2006; Parsons, 2002; Boles et al., 2000; Smith, 1998a; Lagace et al., 1991; Crosby et al., 1990) asserted that mutual goal is one of the most commonly emphasised relationship quality determinants. The research participants stated that when both the OPC and HC pursue the same goal(s), their level of trust and satisfaction would improve. These excerpts are in line with Anderson and Weitz's (2008) assertion that trust between relationship partners is enhanced when they share similar goals, and Vieira et al's (2008) argument that the level of satisfaction experienced by parties to a relationship is enhanced when they share mutual goals. Likewise, the research participants argued that when both the OPC and HC share a mutual goal, their level of commitment will improve. Hence, this research study considers mutual goal as a determinant of relationship quality.

6.2 *Relationship Quality Outcome*

Data analysis revealed that trust, satisfaction and commitment are termed as the relationship quality outcome.

6.2.1 Trust

Within the literature, trust has been viewed from two distinct standpoints (LaBahn and Kohli, 1997). One standpoint viewed trust as a combination of behavioural intentions and beliefs (Moorman et al 1992), while the other considered trust to centre on trustworthiness (Morgan and Hunt 1994, Anderson and Weitz 1989). This study

adopted Morgan and Hunt's (1994) standpoint which referred to trust as trustworthiness. In addition, trust has been studied at three different levels; firstly, at the individual level (Crosby et al 1990), secondly at the organisational level (Garbarino and Johnson 1999), and thirdly Rauyruen and Miller (2007), and Karantinou and Hogg (2009) focused on both individual and organisational level. Regardless of these views and levels of study, Smyth et al (2010) concluded that trust is not a calculated judgement but rather an attitude which is socially measured through interactions.

It was made known that trust is developed over time through numerous interactions and information sharing between relationship partners. Hence, communication is an important driving factor for relationship parties to act to establish trust. Research participants revealed that a business's perceived honesty, openness and reliability in giving appropriate and timely information on issues that affect the HC is crucial to the success of a B2Com relationship. This will help the parties build mutual understanding and establish confidence between them and also reduces the risks associated with failed projects and over-promising. Research participants noted that trust has a positive impact on satisfaction. They argued that when relationship partners share a higher level of trust, they would be less concerned or worried about their level of interaction, which ultimately results in a greater level of satisfaction with each other. In addition, research participants added that trust between a business and its community is important in establishing commitment between the OPCs and the HC. They concluded that commitment will be the follow-on effect of a business and its community improving the level of trust between them.

6.2.2 Satisfaction

Satisfaction is the pleasurable fulfilment of need (Oliver 1997, 1999) and can be regarded as an overall evaluation of performance (Fornell 1992). Satisfaction from these two researchers' perspectives can be seen as an emotion-based judgement and an evaluation of a service experience. Oliver (2010) revealed that satisfaction can be judged and evaluated at three different stages; (i) during interactions, (ii) at the end of a series of interactions, and (iii) a global assessment taking into consideration the whole encounter and experience between partners.

The majority of the research participants argued that satisfaction is an essential construct because relationship parties must have a feeling of fair treatment. They stated that both the business and its community should be responsible for building and/or enhancing the level of satisfaction within a B2Com relationship. This suggests the need for a business and its community to have a common understanding of what constitutes satisfaction within their relationship context. Research participants added that satisfaction is perceived when desired outcomes are achieved, when agreed promises are fulfilled or when results are consented to by parties to the relationship. They concluded that when relationship partners are satisfied with their dealings and interactions with one another, they create an atmosphere that get each other committed to the relationship.

6.2.3 Commitment

Commitment, according to Caceres and Pappas (2007), focuses on involvement, while La (2005) argued that commitment has two dimensions; relationship orientation and attitudinal disposition. Commitment for the purpose of this study has been termed as the desire of parties in a relationship to retain and maintain the relationship. This is consistent with assertions by Moorman et al (1992) and Anderson and Weitz (1992). Research participants argued that genuine commitment of relationship partners to each other results in a long-term and stable relationship. This is consistent with Gundlach et al's (1995) assertion that two-way approaches to commitment between partners promotes their relationship and fosters trust also. Research participants added that commitment presents relationship partners with an opportunity to determine their future exchanges and develop a shared norm in the process.

7. Contribution

The success of existing research studies on relationship quality is shifting towards the study of new relationship types (Athanasopoulou, 2009). The concept of "relationship" is one that includes relationship parties who are not necessarily an organisation or individuals (Huang and Chiu, 2000), or where the parties involved do not take on the traditional roles of a seller and buyer (Athanasopoulou, 2009). Osobajo and Moore (2016), and Athanasopoulou (2009) recommend that researchers should look at new relationship types between parties that may not be organisations or individuals using qualitative approaches to analyse the quality of relationship, while Vieira et al (2008) suggest that relationship quality constructs could be varied depending on the research context. Consequently, this research study extended the concept of relationship and relationship quality in several aspects.

First, this research study was the first of its kind to develop a detailed and comprehensive framework of relationship quality in the context of a business-to-community (B2Com) relationship in a unique commercial

context. It draws from the literature in four main areas: interpersonal relationships (i.e. relationship between individuals), business-to-business relationships (B2B), business-to-customer relationships (B2C), and customer-to-business relationships (C2B). Figure 2 demonstrate the final proposed model for a B2Com relationship model.

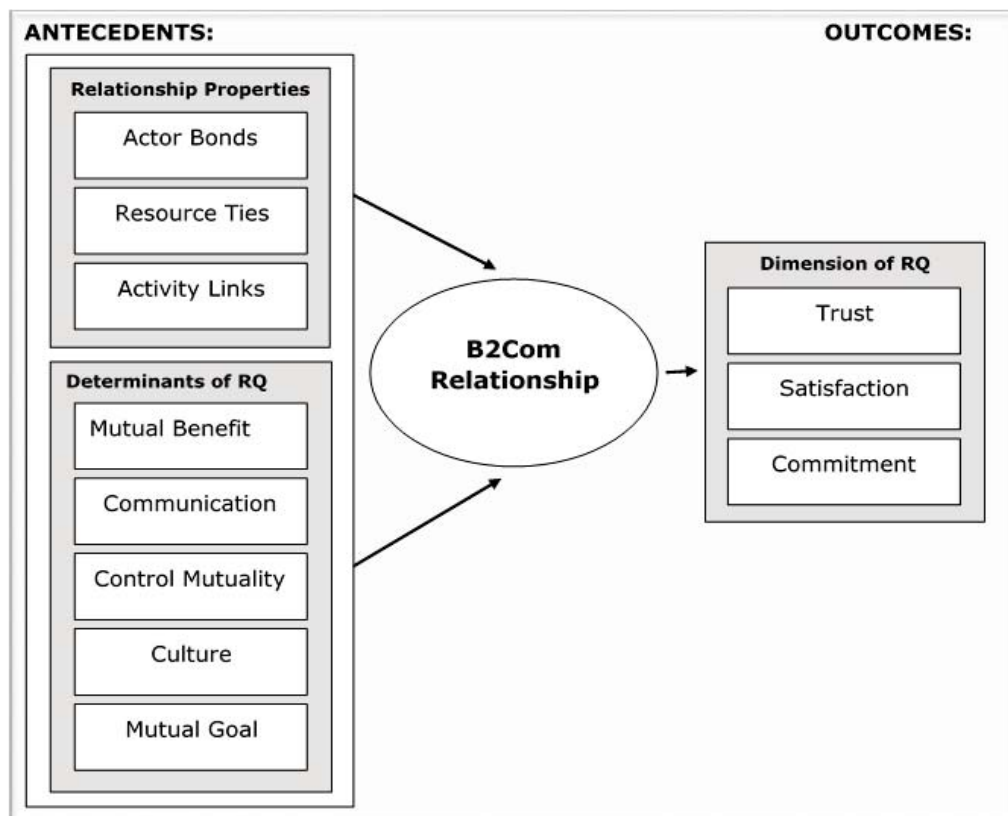


Figure 2. The Final Proposed Theoretical Framework for a B2Com Relationship Quality (author generated)

Second, existing research on the constructs of relationship quality have either analysed data deductively (i.e. by applying existing theories and literature to a specific research context (Hennink et al., 2010)) or inductively (i.e. moving from data to the development of framework (Kerlinger, 1986)) using a statistical or mathematical analytical tool (Osobajo and Moore, 2016). This is the first to employ both the deductive and inductive reasoning approaches using content analysis to inform the research final framework. This is because the two reasoning approaches to research give a detailed and comprehensive understanding of the concept of relationship quality within the context of a business-to-community relationship. Hence, certain determinants of relationship quality (i.e. culture and mutual goal) were identified by research participants (Vieira et al., 2008).

Third, this research study extended the application of relationship quality frameworks that were conducted in a developed economic environment such as the United Kingdom and United States of America (Osobajo and Moore, 2016) to a developing economic environment such as Nigeria through the replication of these frameworks. This is consistent with Vieira et al's (2008) suggestion that additional constructs may need to be included in order to acknowledge the context of the current study. Likewise, Collins (1985) stated that replication of previous or existing studies is imperative for the generation of knowledge, while Hubbard and Armstrong (1994) concluded that replication is the key to generalisation for the advancement of science. Even though researchers have made adequate and robust effort in developing these frameworks, the fact that these studies were carried out in a developed economy suggests scope for further replication and extension studies. In addition to mutual benefit, communication and control mutuality, this research study adds to the body of knowledge by confirming that culture and mutual goal are important determinants of relationship quality within the NOGI context.

Fourth, this research study also enhances the understanding of practitioners (i.e. public relation officers) working within the Nigerian oil and gas industry (NOGI) and other sectors on how to develop and maintain their relationship with the communities they operate within. It is obvious that as the OPCs experience difficulty in the exploration and production of crude oil, establishing and maintaining a mutually beneficial relationship will become more of a priority. In addition, the OPCs will be able to exploit crude oil resources that were previously

uneconomical due to the accessibility of such resources. Practitioners need to work with the community to develop a mutually beneficial relationship that meets the needs of all relational parties. Effort should be made in creating a mutual goal atmosphere and understanding the culture of the people in order to develop a better relationship with the community.

8. Limitations and Direction for Future Research

Deciding on the research design for this research study resulted in certain trade-offs, which could limit the research findings.

The aim of this research study is to develop a framework that is capable of enhancing the quality of relationship between the OPC and HC, but with specific focus on the NOGI. In doing so, this research study offers a framework that draws from the literature reviewed and the data gathered. The research study analysis supported the connection and interlink that exists between the determinants of relationship quality and dimensions of relationship quality based on the samples surveyed. However, caution should be taken in generalising the research study results to other sectors within the NDRN. This research study acknowledged that it is likely impossible to develop a framework that is appropriate for all sectors because of the following reasons:

1. The process followed in drawing the sample size for the research study produced results that were specific to the oil and gas industry. This is because research participants interviewed were selected based on their perceived knowledge of the relationship between OPC and HC within the NDRN, which may not be applicable to other sectors.
2. The use of content analysis as the most appropriate method for analysing the data collected through interviews in order to understand and explore people's views and opinions on the quality of relationship may not be applicable to other sectors.

Hence, further refinement and modification of the constructs proposed by this research study may be necessary in order to take into account the industry specific context of future research studies. Future research studies should consider using other sampling approaches such as a stratified systematic sampling which would divide the community population into the various groups, and each group of actor sampled using a systematic approach in order to obtain a reliable sample size.

Furthermore, this research study supported the relevance of the various relationship quality constructs suggested by previous scholars as used in this research study framework, and expanded the constructs to include culture and mutual goal. However, further research could explore the propositions formulated by the current study. In addition, future research studies should consider drawing samples from either the OPC or both the OPC and HC in order to have diverse opinions and views from research participants and facilitate investigation of the interdependence of the relationship. This is because the research samples selected for this research study come from the community only. It would be worthwhile if future research in the field of study could look into the optimum order in which the different constructs and/or elements identified within the framework would be effective in enhancing and/or improving a B2Com relationship. However, the order suggested by the findings of this research study flow from the interrelationships between the various elements and constructs that made up the study framework. Also, the findings suggested a linear relationship between trust, satisfaction and commitment. Having considered different relationship quality frameworks, this research study is concluded with the notion that the developed theoretical framework is a tool capable of enhancing and/or improving the quality of relationship between two or more relationship parties

References

- Adelabu, N. S. (2012). The political economy of oil deregulation in Nigeria's fourth republic: Prospects and challenges. *Journal of Emerging Trends in Educational Research and Policy Studies*, 3(3), 193.
- Adenugba, A. A., & Dipo, S. O. (2013). Non-oil exports in the economic growth of Nigeria: A study of agricultural and mineral resources. *Journal of Educational and Social Research*, 3(2), 403. <https://doi.org/10.5901/jesr.2013.v3n2p403>
- Adler, L. (1967). Resource pooling for mutual benefit. *Management Review*, 56(2), 59-64.
- Aghedo, I. (2013). Winning the war, losing the peace: Amnesty and the challenges of post-conflict peace-building in the Niger delta, Nigeria. *Journal of Asian and African Studies*, 48(3), 267-280. <https://doi.org/10.1177/0021909612453987>
- Aghedo, I., & Osumah, O. (2014). Insurgency in Nigeria: A comparative study of Niger delta and boko haram uprisings. *Journal of Asian and African Studies*.

- Akins, J. E. (1973). The oil crisis: This time the wolf is here. *Foreign Affairs*, 51(3), 462-490. <https://doi.org/10.2307/20037995>
- Anderson, E., & Weitz, B. (1989). Determinants of continuity in conventional industrial channel dyads. *Marketing Science*, 8(4), 310-323. <https://doi.org/10.1287/mksc.8.4.310>
- Anderson, E., & Weitz, B. (1992). The use of pledges to build and sustain commitment in distribution channels. *Journal of Marketing Research*, 18-34. <https://doi.org/10.2307/3172490>
- Anderson, J. C., & Narus, J. A. (1990). A model of distributor firm and manufacturer firm working partnerships. *The Journal of Marketing*, 42-58. <https://doi.org/10.2307/1252172>
- Anderson, L. A., DeVellis, B. M., & DeVellis, R. F. (1987). Effects of modeling on patient communication, satisfaction, and knowledge. *Medical Care*, 1044-1056. <https://doi.org/10.1097/00005650-198711000-00003>
- Apata, T. (2010). Linkages between crude-oil exploration and agricultural development in Nigeria: Implications for relevant qualitative data collection and analysis to improve rural economy. *Third Wye City Group Conference on Agricultural and Rural Household Statistics Economic Research Service, may*, 24-25.
- Arezki, R., & Blanchard, O. (2015). The 2014 oil price slump: Seven key questions. *VOXEU, January*, 13.
- Athanasopoulou, P. (2009). Relationship quality: A critical literature review and research agenda. *European Journal of Marketing*, 43(5/6), 583-610. <https://doi.org/10.1108/03090560910946945>
- Athanasopoulou, P. (2006). Determining relationship quality in the development of business-to-business financial services. *Journal of Business-to-Business Marketing*, 13(1), 87-120. https://doi.org/10.1300/J033v13n01_03
- Beckman, B. (1982). Whose state? State and capitalist development in Nigeria. *Review of African Political Economy*, 9(23), 37-51. <https://doi.org/10.1080/03056248208703487>
- 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. [https://doi.org/10.1016/0148-2963\(95\)00100-X](https://doi.org/10.1016/0148-2963(95)00100-X)
- Berry, L. L. (1983). Relationship marketing.
- Berry, L. L., & Parasuraman, A. (1991). Marketing service. *Competing through Quality, New York*,
- Blankenburg, D., & Johanson, J. (1992). Managing network connections in international business. *Scandinavian International Business Review*, 1(1), 5-19. [https://doi.org/10.1016/0962-9262\(92\)90033-3](https://doi.org/10.1016/0962-9262(92)90033-3)
- Blumstein, P., & Kollock, P. (1988). Personal relationships. *Annual Review of Sociology*, 467-490. <https://doi.org/10.1146/annurev.so.14.080188.002343>
- Boles, J. S., Barksdale, H. C., & Johnson, J. T. (1997). Business relationships: An examination of the effects of buyer-salesperson relationships on customer retention and willingness to refer and recommend. *Journal of Business & Industrial Marketing*, 12(3/4), 253-264. <https://doi.org/10.1108/08858629710188072>
- Boles, J. S., Johnson, J. T., & Barksdale, H. C. (2000). How salespeople build quality relationships: A replication and extension. *Journal of Business Research*, 48(1), 75-81. [https://doi.org/10.1016/S0148-2963\(98\)00078-2](https://doi.org/10.1016/S0148-2963(98)00078-2)
- Bowen, J. T., & Shoemaker, S. (1998). Loyalty: A strategic commitment. *Cornell Hotel and Restaurant Administration Quarterly*, 39(1), 12-25. <https://doi.org/10.1177/001088049803900104>
- Broom, G. M., Casey, S., & Ritchey, J. (2000). Concept and theory of organization-public relationships. *Public Relations as Relationship Management: A Relational Approach to the Study and Practice of Public Relations*, 3-22.
- Bryman, A., & Bell, E. (2004). Research designs. *Social Research Methods*, 5.
- Buttle, F. (1996). *Relationship marketing: Theory and practice* Sage. <https://doi.org/10.4135/9781446252062>
- Cannon, J. P., & Homburg, C. (2001). Buyer-supplier relationships and customer firm costs. *Journal of Marketing*, 65(1), 29-43. <https://doi.org/10.1509/jmkg.65.1.29.18136>
- Chokor, B. A. (2004). Perception and response to the challenge of poverty and environmental resource degradation in rural Nigeria: Case study from the Niger delta. *Journal of Environmental Psychology*, 24(3), 305-318. <https://doi.org/10.1016/j.jenvp.2004.08.001>
- Christopher, M., Payne, A., & Ballantyne, D. (1991). Relationship marketing: Bringing quality customer service

and marketing together.

- Chumpitaz Caceres, R., & Paparoidamis, N. G. (2007). Service quality, relationship satisfaction, trust, commitment and business-to-business loyalty. *European Journal of Marketing*, 41(7/8), 836-867. <https://doi.org/10.1108/03090560710752429>
- Clark, M. S., & Mils, J. (1993). The difference between communal and exchange relationships: What it is and is not. *Personality and Social Psychology Bulletin*, 19(6), 684-691. <https://doi.org/10.1177/0146167293196003>
- Coombs, W. T. (2001). Interpersonal communication and public relations. *Handbook of Public Relations*, 105-114. <https://doi.org/10.4135/9781452220727.n7>
- Coyne, I. T. (1997). Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries? *Journal of Advanced Nursing*, 26(3), 623-630. <https://doi.org/10.1046/j.1365-2648.1997.t01-25-00999.x>
- Crosby, L. A., Evans, K. R., & Cowles, D. (1990). Relationship quality in services selling: An interpersonal influence perspective. *The Journal of Marketing*, 68-81. <https://doi.org/10.2307/1251817>
- Dorsch, M. J., Swanson, S. R., & Kelley, S. W. (1998). The role of relationship quality in the stratification of vendors as perceived by customers. *Journal of the Academy of Marketing Science*, 26(2), 128-142. <https://doi.org/10.1177/0092070398262004>
- Dwyer, F. R., & Oh, S. (1987). Output sector munificence effects on the internal political economy of marketing channels. *Journal of Marketing Research*, 347-358. <https://doi.org/10.2307/3151382>
- Ebegbulem, J., Ekpe, D., & Adejumo, T. O. (2013). Oil exploration and poverty in the Niger delta region of Nigeria: A critical analysis. *International Journal of Business and Social Science*, 4(3), 279-287.
- Ellis, S. (2003). Briefing: West africa and its oil. *African Affairs*, 102(406), 135-138. <https://doi.org/10.1093/oxfordjournals.afraf.a138814>
- Elum, Z., Mopipi, K., & Henri-Ukoha, A. (2016). Oil exploitation and its socioeconomic effects on the Niger delta region of Nigeria. *Environmental Science and Pollution Research*, 1-10. <https://doi.org/10.1007/s11356-016-6864-1>
- Esfahani, H. S., Mohaddes, K., & Pesaran, M. H. (2014). An empirical growth model for major oil exporters. *Journal of Applied Econometrics*, 29(1), 1-21. <https://doi.org/10.1002/jae.2294>
- Eweje, G. (2006). Environmental costs and responsibilities resulting from oil exploitation in developing countries: The case of the Niger delta of Nigeria. *Journal of Business Ethics*, 69(1), 27-56. <https://doi.org/10.1007/s10551-006-9067-8>
- Ford, D., Gadde, L., Håkansson, H., Snehota, I., & Waluszewski, A. (2008). Analysing business interaction. *24th IMP Conference, Uppsala*, 1-37.
- Ford, J. K., Smith, E. M., Weissbein, D. A., Gully, S. M., & Salas, E. (1998). Relationships of goal orientation, metacognitive activity, and practice strategies with learning outcomes and transfer. *Journal of Applied Psychology*, 83(2), 218. <https://doi.org/10.1037/0021-9010.83.2.218>
- Fornell, C. (1992). A national customer satisfaction barometer: The swedish experience. *The Journal of Marketing*, 6-21. <https://doi.org/10.2307/1252129>
- Franzosi, R. (2004). *From words to numbers: Narrative, data, and social science* Cambridge University Press.
- Freeman, L. C. (1984). The impact of computer based communication on the social structure of an emerging scientific specialty. *Social Networks*, 6(3), 201-221. [https://doi.org/10.1016/0378-8733\(84\)90011-X](https://doi.org/10.1016/0378-8733(84)90011-X)
- Frynas, J. G. (2001). Corporate and state responses to anti-oil protests in the Niger delta. *African Affairs*, 100(398), 27-54. <https://doi.org/10.1093/afraf/100.398.27>
- Fynes, B., De Burca, S., & Marshall, D. (2004). Environmental uncertainty, supply chain relationship quality and performance. *Journal of Purchasing and Supply Management*, 10(4), 179-190. <https://doi.org/10.1016/j.pursup.2004.11.003>
- Fynes, B., Voss, C., & de Búrca, S. (2005). The impact of supply chain relationship quality on quality performance. *International Journal of Production Economics*, 96(3), 339-354. <https://doi.org/10.1016/j.ijpe.2004.05.008>

- Ganesan, S. (1994). Determinants of long-term orientation in buyer-seller relationships. *The Journal of Marketing*, 1-19. <https://doi.org/10.2307/1252265>
- Garbarino, E., & Johnson, M. S. (1999). The different roles of satisfaction, trust, and commitment in customer relationships. *The Journal of Marketing*, 70-87. <https://doi.org/10.2307/1251946>
- Giraud, G., & Renouard, C. (2010). Mesurer la contribution des entreprises extractives au développement local. le cas des pétroliers au nigeria. *Revue Française De Gestion*, 208, 101. <https://doi.org/10.3166/rfg.208-209.101-115>
- Glaser, B. G. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory* Sociology Pr.
- Golicic, S. L., & Mentzer, J. T. (2005). Exploring the drivers of interorganizational relationship magnitude. *Journal of Business Logistics*, 26(2), 47-71. <https://doi.org/10.1002/j.2158-1592.2005.tb00205.x>
- Griswold, D. (2003). *Clearinghouse that Enables Physicians to Submit Prescriptions Securely Over the Internet to a Pharmacy Patients can also Access their Prescription Data Over the Internet*.
- Grönroos, C. (1994). From marketing mix to relationship marketing: Towards a paradigm shift in marketing. *Management Decision*, 32(2), 4-20. <https://doi.org/10.1108/00251749410054774>
- Grönroos, C. (2000). Creating a relationship dialogue: Communication, interaction and value. *The Marketing Review*, 1(1), 5-14. <https://doi.org/10.1362/1469347002523428>
- Grunig, J. E. (2002). Qualitative methods for assessing relationships: Between organizations and publics.
- Gummesson, E. (1987). The new marketing—developing long-term interactive relationships. *Long Range Planning*, 20(4), 10-20. [https://doi.org/10.1016/0024-6301\(87\)90151-8](https://doi.org/10.1016/0024-6301(87)90151-8)
- Gummesson, E. (1995). Relationship marketing: From 4Ps to 30Rs. *Malmö: Liber-Hermods*.
- Gummesson, E. (2000). Internal marketing in the light of relationship marketing and network organizations. *Internal Marketing: Directions for Management*, 27-42. <https://doi.org/10.4324/9780203207352.pt2>
- Gummesson, E. (2000). *Qualitative methods in management research* Sage.
- Gummesson, E. (2002). Total relationship marketing: Marketing management, relationship strategy and CRM approaches for the network economy. *Total Relationship Marketing: Marketing Management, Relationship Strategy and CRM Approaches for the Network Economy*.
- Gummesson, E. (2004). Return on relationships (ROR): The value of relationship marketing and CRM in business-to-business contexts. *Journal of Business & Industrial Marketing*, 19(2), 136-148. <https://doi.org/10.1108/08858620410524016>
- Gundlach, G. T., Achrol, R. S., & Mentzer, J. T. (1995). The structure of commitment in exchange. *The Journal of Marketing*, 78-92. <https://doi.org/10.2307/1252016>
- Hakansson, H., & Snehota, I. (1995). *Developing relationships in business networks* Routledge London.
- Hakansson, N. H. (1982). To pay or not to pay dividend. *The Journal of Finance*, 37(2), 415-428. <https://doi.org/10.1111/j.1540-6261.1982.tb03564.x>
- Halinen, A., Salmi, A., & Havila, V. (1999). From dyadic change to changing business networks: An analytical framework. *Journal of Management Studies*, 36(6), 779-794. <https://doi.org/10.1111/1467-6486.00158>
- Harris, H. (2001). Content analysis of secondary data: A study of courage in managerial decision making. *Journal of Business Ethics*, 34(3-4), 191-208. <https://doi.org/10.1023/A:1012534014727>
- Hennig-Thurau, T., & Klee, A. (1997). The impact of customer satisfaction and relationship quality on customer retention: A critical reassessment and model development. *Psychology & Marketing*, 14(8), 737-764. [https://doi.org/10.1002/\(SICI\)1520-6793\(199712\)14:8<737::AID-MAR2>3.0.CO;2-F](https://doi.org/10.1002/(SICI)1520-6793(199712)14:8<737::AID-MAR2>3.0.CO;2-F)
- Hennig-Thurau, T., Gwinner, K. P., & Gremler, D. D. (2002). Understanding relationship marketing outcomes an integration of relational benefits and relationship quality. *Journal of Service Research*, 4(3), 230-247. <https://doi.org/10.1177/1094670502004003006>
- Hennig-Thurau, T., Langer, M. F., & Hansen, U. (2001). Modeling and managing student loyalty an approach based on the concept of relationship quality. *Journal of Service Research*, 3(4), 331-344. <https://doi.org/10.1177/109467050134006>
- Hinde, R. A. (1981). The bases of a science of interpersonal relationships. *Personal Relationships*, 1, 1-22.

- Hinde, R. A., & Tajfel, H. (1979). *Towards understanding relationships* Academic Press London.
- Holmen, E., Pedersen, A., & Torvatn, T. (2005). Building relationships for technological innovation. *Journal of Business Research*, 58(9), 1240-1250. <https://doi.org/10.1016/j.jbusres.2003.10.010>
- Holmlund, M. (2001). The D&D model-dimensions and domains of relationship quality perceptions. *Service Industries Journal*, 21(3), 13-36. <https://doi.org/10.1080/714005036>
- Hon, L. C., & Grunig, J. E. (1999). Guidelines for measuring relationships in public relations.
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288. <https://doi.org/10.1177/1049732305276687>
- Hung, C. F. (2005). Exploring types of organization–public relationships and their implications for relationship management in public relations. *Journal of Public Relations Research*, 17(4), 393-426. https://doi.org/10.1207/s1532754xjpr1704_4
- Huntley, J. K. (2006). Conceptualization and measurement of relationship quality: Linking relationship quality to actual sales and recommendation intention. *Industrial Marketing Management*, 35(6), 703-714. <https://doi.org/10.1016/j.indmarman.2005.05.011>
- Idemudia, U. (2007). Community perceptions and expectations: Reinventing the wheels of corporate social responsibility practices in the Nigerian oil industry. *Business and Society Review*, 112(3), 369-405. <https://doi.org/10.1111/j.1467-8594.2007.00301.x>
- Idemudia, U. (2014a). Corporate-community engagement strategies in the Niger delta: Some critical reflections'. *The Extractive Industries and Society*, 1(2), 154-162. <https://doi.org/10.1016/j.exis.2014.07.005>
- Idemudia, U. (2014b). Corporate social responsibility and development in Africa: Issues and possibilities. *Geography Compass*, 8(7), 421-435. <https://doi.org/10.1111/gec3.12143>
- Idemudia, U. (2016). Environmental Business–NGO partnerships in Nigeria: Issues and prospects. *Business Strategy and the Environment*.
- Ikein, A. A. (2016). Nigeria oil & external exposure: The crude gains and crude pains of crude export dependence economy. *The Business & Management Review*, 7(3), 109.
- Ikelegbe, A. (2001). Civil society, oil and conflict in the Niger delta region of Nigeria: Ramifications of civil society for a regional resource struggle. *The Journal of Modern African Studies*, 39(03), 437-469. <https://doi.org/10.1017/S0022278X01003676>
- Ikporukpo, C. (1983). Petroleum exploitation and the socio-economic environment in Nigeria. *International Journal of Environmental Studies*, 21(2), 193-203. <https://doi.org/10.1080/00207238308710076>
- Ite, A. E., Ibok, U. J., Ite, M. U., & Petters, S. W. (2013). Petroleum exploration and production: Past and present environmental issues in the Nigeria's Niger delta. *American Journal of Environmental Protection*, 1(4), 78-90. <https://doi.org/10.12691/env-1-4-2>
- Ivens, B. S., & Pardo, C. (2007). Are key account relationships different? Empirical results on supplier strategies and customer reactions. *Industrial Marketing Management*, 36(4), 470-482. <https://doi.org/10.1016/j.indmarman.2005.12.007>
- Jacques, E. (1951). The changing culture of a factory: A study of authority and participation in an industrial setting. *London: Tavistock*.
- Jap, S. D., & Anderson, E. (2007). Testing a life-cycle theory of cooperative inter organisational relationships: Movement across stages and performance. *Management Science*, 53(2), 260-275. <https://doi.org/10.1287/mnsc.1060.0610>
- Jap, S. D., Manolis, C., & Weitz, B. A. (1999). Relationship quality and buyer–seller interactions in channels of distribution. *Journal of Business Research*, 46(3), 303-313. [https://doi.org/10.1016/S0148-2963\(98\)00032-0](https://doi.org/10.1016/S0148-2963(98)00032-0)
- Johnson, J. L. (1999). Strategic integration in industrial distribution channels: Managing the interfirm relationship as a strategic asset. *Journal of the Academy of Marketing Science*, 27(1), 4-18. <https://doi.org/10.1177/0092070399271001>
- Johnson, M. D., & Selnes, F. (2004). Customer portfolio management: Toward a dynamic theory of exchange relationships. *Journal of Marketing*, 68(2), 1-17. <https://doi.org/10.1509/jmkg.68.2.1.27786>
- Kadafa, A. A. (2012). Oil exploration and spillage in the Niger delta of Nigeria. *Civil and Environmental*

- Research*, 2(3), 38-51.
- Kalwani, M. U., & Narayandas, N. (1995). Long-term manufacturer-supplier relationships: Do they pay off for supplier firms? *The Journal of Marketing*, 1-16. <https://doi.org/10.2307/1252010>
- Kaplan, A. (1943). Content analysis and the theory of signs. *Philosophy of Science*, 10(4), 230-247. <https://doi.org/10.1086/286814>
- Karantinou, K. M., & Hogg, M. K. (2009). An empirical investigation of relationship development in professional business services. *Journal of Services Marketing*, 23(4), 249-260. <https://doi.org/10.1108/08876040910965584>
- Keating, B., Rugimbana, R., & Quazi, A. (2003). Differentiating between service quality and relationship quality in cyberspace. *Managing Service Quality: An International Journal*, 13(3), 217-232. <https://doi.org/10.1108/09604520310476481>
- Keating, B. W., Alpert, F., Kriz, A., & Quazi, A. (2011). Mediating role of relationship quality in online services. *Journal of Computer Information Systems*, 52(2), 33-41.
- Kempeners, M. (1995). Relationship quality in business-to-business relationships. *Proceedings of the 11th IMP Conference*, 3, 1629-1639.
- Khan, S. A. (1994). Nigeria: The political economy of oil.
- Kilburn, A. J., & Kilburn, B. R. (2008). Internal relationship quality: The impact of relationship quality on internal customer perceptions. *Academy of Marketing Studies Journal*, 12(1), 43.
- Knobloch, L. K., & Knobloch-Fedders, L. M. (2010). The role of relational uncertainty in depressive symptoms and relationship quality: An actor-partner interdependence model. *Journal of Social and Personal Relationships*, 27(1), 137-159. <https://doi.org/10.1177/0265407509348809>
- Kotler, P., & Armstrong, G. (2010). *Principles of marketing*. Pearson education.
- Kühne, B., Gellynck, X., & Weaver, R. D. (2013). The influence of relationship quality on the innovation capacity in traditional food chains. *Supply Chain Management: An International Journal*, 18(1), 52-65. <https://doi.org/10.1108/13598541311293177>
- Kumar, N., Scheer, L. K., & Steenkamp, J. E. (1995). The effects of supplier fairness on vulnerable resellers. *Journal of Marketing Research*, 54-65. <https://doi.org/10.2307/3152110>
- LaBahn, D. W., & Kohli, C. (1997). Maintaining client commitment in advertising agency-client relationships. *Industrial Marketing Management*, 26(6), 497-508. [https://doi.org/10.1016/S0019-8501\(97\)00025-4](https://doi.org/10.1016/S0019-8501(97)00025-4)
- Lagace, R. R., Dahlstrom, R., & Gassenheimer, J. B. (1991). The relevance of ethical salesperson behavior 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. <https://doi.org/10.1016/j.jbusres.2004.03.001>
- Lai, I. K. W. (2014). The role of service quality, perceived value, and relationship quality in enhancing customer loyalty in the travel agency sector. *Journal of Travel & Tourism Marketing*, 31(3), 417-442. <https://doi.org/10.1080/10548408.2014.883346>
- Lang, B., & Colgate, M. (2003). Relationship quality, on-line banking and the information technology gap. *International Journal of Bank Marketing*, 21(1), 29-37. <https://doi.org/10.1108/02652320310457785>
- Law, M., Lau, T., & Wong, Y. (2003). From customer relationship management to customer-managed relationship: Unraveling the paradox with a co-creative perspective. *Marketing Intelligence & Planning*, 21(1), 51-60. <https://doi.org/10.1108/02634500310458153>
- Ledingham, J. A. (2003). Explicating relationship management as a general theory of public relations. *Journal of Public Relations Research*, 15(2), 181-198. https://doi.org/10.1207/S1532754XJPRR1502_4
- Ledingham, J. A., & Bruning, S. D. (1998). Relationship management in public relations: Dimensions of an organization-public relationship. *Public Relations Review*, 24(1), 55-65. [https://doi.org/10.1016/S0363-8111\(98\)80020-9](https://doi.org/10.1016/S0363-8111(98)80020-9)

- Leonidou, C. N., Leonidou, L. C., Coudounaris, D. N., & Hultman, M. (2013). Value differences as determinants of importers' perceptions of exporters' unethical behavior: The impact on relationship quality and performance. *International Business Review*, 22(1), 156-173. <https://doi.org/10.1016/j.ibusrev.2012.03.005>
- Leonidou, L. C., Barnes, B. R., & Talias, M. A. (2006). Exporter–importer relationship quality: The inhibiting role of uncertainty, distance, and conflict. *Industrial Marketing Management*, 35(5), 576-588. <https://doi.org/10.1016/j.indmarman.2005.06.012>
- Leuthesser, L. (1997). Supplier relational behavior: An empirical assessment. *Industrial marketing management*, 26(3), 245-254. [https://doi.org/10.1016/S0019-8501\(96\)00092-2](https://doi.org/10.1016/S0019-8501(96)00092-2)
- Levitt, T. (1986). *Marketing imagination: New* Simon and Schuster.
- Liang, T. P., Ho, Y. T., Li, Y. W., & Turban, E. (2011). What drives social commerce: The role of social support and relationship quality. *International Journal of Electronic Commerce*, 16(2), 69-90. <https://doi.org/10.2753/JEC1086-4415160204>
- Lin, S. (2013). The influence of relational selling behavior on relationship quality: The moderating effect of perceived price and customers' relationship proneness. *Journal of Relationship Marketing*, 12(3), 204-222. <https://doi.org/10.1080/15332667.2013.816931>
- Lo, A. S. Y., & Im, H. H. (2014). Drivers of Customer–Brand Relationship Quality: A Case of Mainland Chinese Hotel Loyalty Program Members. *Journal of Travel & Tourism Marketing*, 31(7), 763-782. <https://doi.org/10.1080/10548408.2014.889638>
- MacNeil, I. (1978). Contracts: Adjustment of long-term economic relations under classical, neoclassical, and relational contract law, *Northwestern University Law Review*, 854-905.
- MacNeil, R. D. (1980). The relationship of cognitive style and instructional style to the learning performance of undergraduate students. *The Journal of Educational Research*, 73(6), 354-359. <https://doi.org/10.1080/00220671.1980.10885265>
- 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. <https://doi.org/10.1016/j.indmarman.2013.07.017>
- McNamara, C. (1999). General guidelines for conducting interviews, Minnesota. *Missouri Institute of Science*,
- McQuiston, D. H. (2001). A conceptual model for building and maintaining relationships between manufacturers' representatives and their principals. *Industrial Marketing Management*, 30(2), 165-181. [https://doi.org/10.1016/S0019-8501\(00\)00141-3](https://doi.org/10.1016/S0019-8501(00)00141-3)
- Medlin, C. J., Aurifeille, J., & Quester, P. G. (2005). A collaborative interest model of relational coordination and empirical results. *Journal of Business Research*, 58(2), 214-222. [https://doi.org/10.1016/S0148-2963\(02\)00496-4](https://doi.org/10.1016/S0148-2963(02)00496-4)
- Men, L. R. (2011). How employee empowerment influences organization–employee relationship in china. *Public Relations Review*, 37(4), 435-437. <https://doi.org/10.1016/j.pubrev.2011.08.008>
- Menon, A., Bharadwaj, S. G., & Howell, R. (1996). The quality and effectiveness of marketing strategy: Effects of functional and dysfunctional conflict in intraorganizational relationships. *Journal of the Academy of Marketing Science*, 24(4), 299-313. <https://doi.org/10.1177/0092070396244002>
- Möller, K. K., & Törrönen, P. (2003). Business suppliers' value creation potential: A capability-based analysis. *Industrial Marketing Management*, 32(2), 109-118. [https://doi.org/10.1016/S0019-8501\(02\)00225-0](https://doi.org/10.1016/S0019-8501(02)00225-0)
- Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between providers and users of market research: The dynamics of trust within and between organizations. *Journal of Marketing Research*, 29(3), 314. <https://doi.org/10.2307/3172742>
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3).
- Morris, M. H., Koçak, A., & Özer, A. (2007). Coopetition as a small business strategy: Implications for performance. *Journal of Small Business Strategy*, 18(1), 35.
- Morry, M. M., & Kito, M. (2009). Relational-interdependent self-construal as a predictor of relationship quality: The mediating roles of one's own behaviors and perceptions of the fulfillment of friendship functions. *The Journal of social psychology*, 149(3), 305-322. <https://doi.org/10.3200/SOCP.149.3.305-322>

- Morry, M. M., Reich, T., & Kito, M. (2010). How do I see you relative to myself? Relationship quality as a predictor of self-and partner-enhancement within cross-sex friendships, dating relationships, and marriages. *The Journal of social psychology, 150*(4), 369-392. <https://doi.org/10.1080/00224540903365471>
- Naudé, P., & Buttle, F. (2000). Assessing relationship quality. *Industrial Marketing Management, 29*(4), 351-361. [https://doi.org/10.1016/S0019-8501\(00\)00112-7](https://doi.org/10.1016/S0019-8501(00)00112-7)
- Naudé, P., Ashnai, B., Chaharsooghi, K., & Perzon, H. (2007). An analysis of B2B relationship quality among Iranian managers: A comparison between Iranian and English managers. *Total Quality Management & Business Excellence, 18*(8), 861-874. <https://doi.org/10.1080/14783360701350508>
- Ndubisi, N. (2006). Effect of gender on customer loyalty: a relationship marketing approach. *Marketing Intelligence & Planning, 24*(1), 48-61. <https://doi.org/10.1108/02634500610641552>
- Ndubisi, N. O., Malhotra, N. K., Ulas, D., & Ndubisi, G. C. (2012). Examining uncertainty avoidance, relationship quality, and customer loyalty in two cultures. *Journal of International Consumer Marketing, 24*(5), 320-337. <https://doi.org/10.1080/08961530.2012.741477>
- Nguyen, T. T., & Nguyen, T. D. (2014). Enhancing business relationship quality through cultural sensitization. *Journal of Relationship Marketing, 13*(1), 70-87. <https://doi.org/10.1080/15332667.2014.882177>
- Nriagu, J., Udofia, E. A., Ekong, I., & Ebuk, G. (2016). Health risks associated with oil pollution in the Niger delta, Nigeria. *International Journal of Environmental Research and Public Health, 13*(3), 346. <https://doi.org/10.3390/ijerph13030346>
- Nyengidiki, T., & Allagoa, D. (2011). Rupture of the gravid uterus in a tertiary health facility in the Niger delta region of Nigeria: A 5-year review. *Nigerian Medical Journal, 52*(4), 230. <https://doi.org/10.4103/0300-1652.93794>
- Obi, C. (2014). Oil and conflict in Nigeria's Niger delta region: Between the barrel and the trigger. *The Extractive Industries and Society, 1*(2), 147-153. <https://doi.org/10.1016/j.exis.2014.03.001>
- Oliver, C. (1997). Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal, 18*(9), 697-713. [https://doi.org/10.1002/\(SICI\)1097-0266\(199710\)18:9<697::AID-SMJ909>3.0.CO;2-C](https://doi.org/10.1002/(SICI)1097-0266(199710)18:9<697::AID-SMJ909>3.0.CO;2-C)
- Oliver, R. L. (1999). Whence consumer loyalty? *The Journal of Marketing, 33*-44. <https://doi.org/10.2307/1252099>
- Oliver, R. L. (2010). Customer satisfaction. Wiley International Encyclopedia of Marketing. <https://doi.org/10.1002/9781444316568.wiem03008>
- Olobaniyi, S. B., & Omo-Irabor, O. O. (2016). Environmental impact assessment of selected oil production facilities in parts of Niger delta, Nigeria. *Journal of Water Resource and Protection, 8*(02), 237. <https://doi.org/10.4236/jwarp.2016.82020>
- Omilion-Hodges, L. M., & Baker, C. R. (2013). Contextualizing LMX within the workgroup: The effects of LMX and justice on relationship quality and resource sharing among peers. *The Leadership Quarterly, 24*(6), 935-951. <https://doi.org/10.1016/j.leaqua.2013.10.004>
- Omofonmwan, S. I., & Odia, L. O. (2009). Oil exploitation and conflict in the Niger-delta region of Nigeria. *Journal of Human Ecology, 26*(1), 25-30.
- Onemolease, E., & Alakpa, S. (2009). Determinants of adoption decisions of rural youths in the Niger delta region of Nigeria. *Journal of Social Sciences, 20*(1), 61-66.
- Osaghae, E. E. (2015). Resource curse or resource blessing: The case of the Niger delta 'oil republic' in Nigeria. *Commonwealth & Comparative Politics, 53*(2), 109-129. <https://doi.org/10.1080/14662043.2015.1013297>
- Osaghae, E., Ikelegbe, A., Olarinmoye, O., & Okhomina, S. (2007). Youth militias, self-determination and resource control struggles in the Niger-delta region of Nigeria. *Unpublished Mimeograph*,
- Osobajo, O. A., & Moore, D. R. (2016). Methodological choices in Relationship Quality (RQ) research 1987 to 2015: A systematic literature review. (Accepted by Journal of Relationship Marketing for publication)
- Palmatier, R. W., Dant, R. P., Grewal, D., & Evans, K. R. (2006). Factors influencing the effectiveness of relationship marketing: A meta-analysis. *Journal of Marketing, 70*(4), 136-153. <https://doi.org/10.1509/jmkg.70.4.136>
- Parahoo, K. (2006). *Nursing research: Principles, process and issues* Palgrave Macmillan.

- Park, J. E., & Deitz, G. D. (2006). The effect of working relationship quality on salesperson performance and job satisfaction: Adaptive selling behavior in Korean automobile sales representatives. *Journal of Business Research*, 59(2), 204-213. <https://doi.org/10.1016/j.jbusres.2005.04.002>
- Park, J. E., Kim, J., Dubinsky, A. J., & Lee, H. (2010). How does sales force automation influence relationship quality and performance? The mediating roles of learning and selling behaviors. *Industrial marketing management*, 39(7), 1128-1138. <https://doi.org/10.1016/j.indmarman.2009.11.003>
- Parsons, A. L. (2002). What determines buyer-seller relationship quality? An investigation from the buyer's perspective. *Journal of Supply Chain Management*, 38(1), 4-12. <https://doi.org/10.1111/j.1745-493X.2002.tb00124.x>
- Petrican, R., Burris, C. T., Bielak, T., Schimmack, U., & Moscovitch, M., 2011. For my eyes only: Gaze control, enmeshment, and relationship quality. *Journal of personality and social psychology*, 100(6), 1111. <https://doi.org/10.1037/a0021714>
- Polit, D. F., & Beck, C. T. (2009). International gender bias in nursing research, 2005–2006: A quantitative content analysis. *International Journal of Nursing Studies*, 46(8), 1102-1110. <https://doi.org/10.1016/j.ijnurstu.2009.02.002>
- Prinsloo, M., Bäckström, L., & Salehi-Sangari, E. (2007). The impact of incentives on interfunctional relationship quality: Views from a South African firm. *Total Quality Management & Business Excellence*, 18(8), 901-913. <https://doi.org/10.1080/14783360701350870>
- Puyate, Y., & Rim-Rukeh, A. (2008). Some physico-chemical and biological characteristics of soil and water samples of part of the Niger delta area, Nigeria. *Journal of Applied Sciences and Environmental Management*, 12(2).
- Rafiq, M., Fulford, H., & Lu, X. (2013). Building customer loyalty in online retailing: The role of relationship quality. *Journal of Marketing Management*, 29(3-4), 494-517. <https://doi.org/10.1080/0267257X.2012.737356>
- Ramaseshan, B., Yip, L. S. & Pae, J. H. (2006). Power, satisfaction, and relationship commitment in Chinese store-tenant relationship and their impact on performance. *Journal of Retailing*, 82(1), 63-70. <https://doi.org/10.1016/j.jretai.2005.11.004>
- Rašković, M., & Mörec, B. (2013). Determinants of supplier-buyer relationship competitiveness in transnational companies. *Economic and Business Review*, 15(1), 5-31.
- Rauyruen, P., & Miller, K. E. (2007). Relationship quality as a predictor of B2B customer loyalty. *Journal of Business Research*, 60(1), 21-31. <https://doi.org/10.1016/j.jbusres.2005.11.006>
- Renouard, C. (2010). Le Nigeria et la malédiction des ressources. *Études*, 413(10), 307-318.
- Renouard, C. (2011). Corporate social responsibility, utilitarianism, and the capabilities approach. *Journal of Business Ethics*, 98(1), 85-97. <https://doi.org/10.1007/s10551-010-0536-8>
- Renouard, C., & Lado, H. (2012). CSR and inequality in the Niger Delta (Nigeria). *Corporate Governance: The international journal of business in society*, 12(4), 472-484. <https://doi.org/10.1108/14720701211267810>
- Rhodes, M., & Suleiman, T. (2013). The importance of oil to an export dependent economy: The case of Nigeria. Available at SSRN 2307636,
- 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. <https://doi.org/10.1108/03090560310454037>
- Ross, M. (2012). *The oil curse: How petroleum wealth shapes the development of nations* Princeton University Press.
- Ross, M. L. (2003). Nigeria's oil sector and the poor. *Position Paper for DFID-Nigeria, UCLA, Los Angeles*,
- Rusbult, C. E. (1983). A longitudinal test of the investment model: The development (and deterioration) of satisfaction and commitment in heterosexual involvements. *Journal of Personality and Social Psychology*, 45(1), 101-117. <https://doi.org/10.1037/0022-3514.45.1.101>
- Rust, R. T., Ambler, T., Carpenter, G. S., Kumar, V., & Srivastava, R. K. (2004). Measuring marketing productivity: Current knowledge and future directions. *Journal of Marketing*, 68(4), 76-89. <https://doi.org/10.1509/jmkg.68.4.76.42721>

- Sandelowski, M., Holditch-Davis, D., & Harris, B. G. (1992). Using qualitative and quantitative methods: The transition to parenthood of infertile couples. *Qualitative Methods in Family Research*, 301-322.
- Sanzo, M. J., Santos, M. L., Vázquez, R., & Álvarez, L. I. (2003). The effect of market orientation on buyer-seller relationship satisfaction. *Industrial Marketing Management*, 32(4), 327-345. [https://doi.org/10.1016/S0019-8501\(01\)00200-0](https://doi.org/10.1016/S0019-8501(01)00200-0)
- Scanlan, L., & McPhail, J. (2000). Forming service relationships with hotel business travelers: The critical attributes to improve retention. *Journal of Hospitality & Tourism Research*, 24(4), 491-513. <https://doi.org/10.1177/109634800002400405>
- Selnes, F. (1998). Antecedents and consequences of trust and satisfaction in buyer-seller relationships. *European journal of marketing*, 32(3/4), 305-322. <https://doi.org/10.1108/03090569810204580>
- Semrau, T., & Werner, A. (2014). How Exactly Do Network Relationships Pay Off? The Effects of Network Size and Relationship Quality on Access to Start - Up Resources. *Entrepreneurship Theory and Practice*, 38(3), 501-525. <https://doi.org/10.1111/etap.12011>
- Shabbir, H., Palihawadana, D., & Thwaites, D. (2007). Determining the antecedents and consequences of donor - perceived relationship quality—A dimensional qualitative research approach. *Psychology & Marketing*, 24(3), 271-293. <https://doi.org/10.1002/mar.20161>
- Sheth, J. N., & Parvatiyar, A. (2002). Evolving relationship marketing into a discipline. *Journal of Relationship Marketing*, 1(1), 3-16. https://doi.org/10.1300/J366v01n01_02
- Sheu, J. B. (2015). Power shifts and relationship quality improvement of producer-retailer green channel dyads under government intervention. *Industrial Marketing Management*, 50, 97-116. <https://doi.org/10.1016/j.indmarman.2015.04.010>
- Skarmeas, D., & Robson, M. J. (2008). Determinants of relationship quality in importer-exporter relationships. *British Journal of Management*, 19(2), 171-184. <https://doi.org/10.1111/j.1467-8551.2007.00537.x>
- Smith, B. (1998a). Buyer-Seller relationships: Bonds, relationship management, and Sex-Type. *Canadian Journal of Administrative Sciences/Revue Canadienne Des Sciences De l'Administration*, 15(1), 76-92.
- Smith, J. B. (1998b). Buyer-seller relationships: Similarity, relationship management, and quality. *Psychology & Marketing*, 15(1), 3-21. [https://doi.org/10.1002/\(SICI\)1520-6793\(199801\)15:1<3::AID-MAR2>3.0.CO;2-I](https://doi.org/10.1002/(SICI)1520-6793(199801)15:1<3::AID-MAR2>3.0.CO;2-I)
- Smyth, H., Gustafsson, M., & Ganskau, E. (2010). The value of trust in project business. *International Journal of Project Management*, 28(2), 117-129. <https://doi.org/10.1016/j.ijproman.2009.11.007>
- Spencer, L., Ritchie, J., Lewis, J., & Dillon, L. (2003). Quality in qualitative evaluation: A framework for assessing research evidence.
- Stafford, L., & Canary, D. J. (1991). Maintenance strategies and romantic relationship type, gender and relational characteristics. *Journal of Social and Personal Relationships*, 8(2), 217-242. <https://doi.org/10.1177/0265407591082004>
- Storbacka, K., Strandvik, T., & Grönroos, C. (1994). Managing customer relationships for profit: The dynamics of relationship quality. *International Journal of Service Industry Management*, 5(5), 21-38. <https://doi.org/10.1108/09564239410074358>
- Subramony, M. (2014). Client supportiveness in contingent employment: The role of relationship quality. *European Journal of Work and Organizational Psychology*, 23(1), 131-144. <https://doi.org/10.1080/1359432X.2012.718116>
- Tareque, A. M., & Azila, M. N. N. (2013). Evaluating the effect of cost related factors on relationship quality: An investigation of retailer-supplier relationship in Bangladesh. *International Journal of Retail & Distribution Management*, 41(7), 545-558. <https://doi.org/10.1108/IJRDM-05-2013-0098>
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 509-533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z)
- Tobor, J. O., & Muzorewa, W. (2016). A comparative analysis of the Niger delta crisis in Nigeria and the land reform process in zimbabwe. *European Journal of Research and Reflection in Educational Sciences*, 4(4).
- Tripathi, G., & Dave, K. (2013). Store format choice and relationship quality in apparel retail: A study of young and early-middle aged shoppers in New Delhi region. *Journal of Retailing and Consumer Services*, 20(5),

- 479-487. <https://doi.org/10.1016/j.jretconser.2013.04.003>
- Tung, B., & Carlson, J. (2013). Modeling a formative measure of relationship quality and its effects: Evidence from the Hong Kong retail banking industry. *Services Marketing Quarterly*, 34(2), 139-158. <https://doi.org/10.1080/15332969.2013.770674>
- Turnbull, P. W., & Valla, J. (1986). Strategic planning in industrial marketing: An interaction approach. *European Journal of Marketing*, 20(7), 5-20. <https://doi.org/10.1108/EUM0000000004652>
- Turnbull, P., Ford, D., & Cunningham, M. (1996). Interaction, relationships and networks in business markets: An evolving perspective. *Journal of Business & Industrial Marketing*, 11(3/4), 44-62. <https://doi.org/10.1108/08858629610125469>
- Ubani, E., & Onyejekwe, I. (2013). Environmental impact analysis of gas flaring in the Niger delta region of Nigeria. *American J. of Scientific and Industrial Research*, 4(2), 246-252. <https://doi.org/10.5251/ajsir.2013.4.2.246.252>
- Uchino, B. N., Smith, T. W., & Berg, C. A. (2014). Spousal relationship quality and cardiovascular risk dyadic perceptions of relationship ambivalence are associated with coronary-artery calcification. *Psychological science*, 25(4), 1037-1042. <https://doi.org/10.1177/0956797613520015>
- Uлага, W., & Eggert, A. (2006). Relationship value and relationship quality: Broadening the nomological network of business-to-business relationships. *European Journal of Marketing*, 40(3/4), 311-327. <https://doi.org/10.1108/03090560610648075>
- Van Bruggen, G. H., Kacker, M., & Nieuwlaat, C. (2005). The impact of channel function performance on buyer-seller relationships in marketing channels. *International Journal of Research in Marketing*, 22(2), 141-158. <https://doi.org/10.1016/j.ijresmar.2004.06.004>
- Venetis, K. A., & Ghauri, P. N. (2004).. Service quality and customer retention: building long-term relationships. *European Journal of marketing*, 38(11/12), 1577-1598. <https://doi.org/10.1108/03090560410560254>
- Vesel, P., & Zabkar, V. (2010). Relationship quality evaluation in retailers' relationships with consumers. *European Journal of Marketing*, 44(9/10), 1334-1365. <https://doi.org/10.1108/03090561011062871>
- Vidal, D. (2012). Does loyalty make customers blind? The impact of relationship quality on channel members' attributions and behaviors following negative critical incidents. *Journal of Business-to-Business Marketing*, 19(2), 97-128. <https://doi.org/10.1080/1051712X.2012.621839>
- Vieira, A. L., Winklhofer, H., & Ennew, C. T. (2008). Relationship quality: A literature review and research agenda. *Journal of Customer Behaviour*, 7(4), 269-291. <https://doi.org/10.1362/147539208X386833>
- Vieira, A. L. (2009). Business-to-business relationship quality. *Portuguese journal of management studies*, 14(3), 197-216.
- Vikas, G. (2011). An empirical study to understand the different antecedents of relationship quality in the Indian context with reference to the mobile telecommunication sector. *Romanian Journal of Marketing*, 6(1), 29.
- Walter, A., Müller, T. A., Helfert, G., & Ritter, T. (2003). Functions of industrial supplier relationships and their impact on relationship quality. *Industrial Marketing Management*, 32(2), 159-169. [https://doi.org/10.1016/S0019-8501\(02\)00230-4](https://doi.org/10.1016/S0019-8501(02)00230-4)
- Watts, M. (2001). Petro-violence: Community, extraction, and political ecology of a mythic commodity. *Violent Environments*, 189-212.
- Watts, M. (2004). Resource curse? Governmentality, oil and power in the Niger delta, Nigeria. *Geopolitics*, 9(1), 50-80. <https://doi.org/10.1080/14650040412331307832>
- Weber, R. P. (1990). *Basic content analysis* Sage. <https://doi.org/10.4135/9781412983488>
- Wilkinson, A. (1998). Empowerment: Theory and practice. *Personnel Review*, 27(1), 40-56. <https://doi.org/10.1108/00483489810368549>
- Wilkinson, I., & Young, L. (2002). On cooperating: Firms, relations and networks. *Journal of Business Research*, 55(2), 123-132. [https://doi.org/10.1016/S0148-2963\(00\)00147-8](https://doi.org/10.1016/S0148-2963(00)00147-8)
- Wilson, D. T. (1995). An integrated model of buyer-seller relationships. *Journal of the Academy of Marketing Science*, 23(4), 335-345. <https://doi.org/10.1177/009207039502300414>
- Wong, Y., Chan, R. Y., & Leung, T. K. (2005). Managing information diffusion in internet marketing. *European*

Journal of Marketing, 39(7/8), 926-946. <https://doi.org/10.1108/03090560510601842>

- Woo, K., & Ennew, C. T. (2004). Business-to-business relationship quality: An IMP interaction-based conceptualization and measurement. *European Journal of Marketing*, 38(9/10), 1252-1271. <https://doi.org/10.1108/03090560410548960>
- Wulf, K. D., Odekerken-Schröder, G., & Iacobucci, D. (2001). Investments in consumer relationships: A cross-country and cross-industry exploration. *Journal of Marketing*, 65(4), 33-50. <https://doi.org/10.1509/jmkg.65.4.33.18386>
- Zabkar, V., & Makovec Brencic, M. (2004). Values, trust, and commitment in business-to-business relationships: A comparison of two former Yugoslav markets. *International Marketing Review*, 21(2), 202-215. <https://doi.org/10.1108/02651330410531402>
- Zimmerman, K. J., & Roberts, C. W. (2012). The influence of a financial management course on couples' relationship quality. *Journal of Financial Counselling and Planning*, 23(2).
- Zineldin, M. (1995). Bank-company interactions and relationships: Some empirical evidence. *International Journal of Bank Marketing*, 13(2), 30-40. <https://doi.org/10.1108/02652329510078677>
- Zineldin, M. (2004). Co-opetition: The organisation of the future. *Marketing Intelligence & Planning*, 22(7), 780-790. <https://doi.org/10.1108/02634500410568600>
- Zineldin, M. A. (1998). Towards an ecological collaborative relationship management A. *European Journal of Marketing*, 32(11-12), 1138-1164. <https://doi.org/10.1108/03090569810243767>

Appendix A. Relationship Quality Constructs (summarised from the literature)

Authors	Method	Relationship type	Industry	Constructs
Dwyer, Schurr & Oh, 1987	Survey and random sample	Manufacturers and dealers i.e. sellers and buyers	USA Automobile	Trust, satisfaction, minimal opportunity
Crosby et al., 1990	Survey i.e. questionnaire and random sample	Sales people - retail customers	USA life insurance	Trust, satisfaction
Lagace et al., 1991	Telephone request and mailed questionnaires	physicians and Pharmaceutical sales people	Business	Trust, satisfaction
Moorman et al., 1992	Survey i.e. questionnaire and convenience sample	Providers and users of market research e.g internal marketing manager & researcher	Marketing research	Trust, satisfaction
Han et al., 1993	Survey i.e. questionnaire and convenience sample	buyers and suppliers e.g Purchasing agents and sales people	Industrial relationship	Trust, satisfaction
Johnson et al., 1993	Survey i.e. mailed questionnaire and convenience sample	Japanese distributors of U.S. manufactured consumer products and U.S. suppliers	Consumer goods	Satisfaction, cooperation, stability
Wray et al., 1994	Telephone survey and random sample interview	Financial intermediary and customers of financial service intermediaries	Financial service	Trust, satisfaction
Morgan & Hunt, 1994	In-depth on-site interview for preliminary study, questionnaire and random sample	Retailers and their customers	Automobile	Trust, commitment
Zineldin, 1995	Survey i.e. mailed questionnaire and random sample	Banks and corporate customers	Financial service	N/A
Kumar et al., 1995	Survey and random sample	Large manufacturers and small regional new car dealers	Automobile	Trust, commitment, willingness to invest
Bejou et al., 1996	Survey i.e. questionnaire, random sample and telephone interviews	Sales people and retail customers	Financial service	Trust, satisfaction
Menon et al., 1996	Mailed survey letter and questionnaire	Intraorganizational relationships	Busines/organisation	N/A
Leuthesser, 1997	Questionnaire and random sample	Supplier to buyer (B2B)	various businesses	Trust, satisfaction
Doney & Cannon, 1997	Mailed questionnaire and random sample	Supplier to buyer	Manufacturing	Trust

Gwinner et al., 1998	In-depth interviews judgement sample and Survey and random sample	Service provider and customers in	various industries	N/A
Dorsch et al., 1998	Mailed questionnaire and random sample	Vendors and purchasing executives	Purchasing	Trust, satisfaction, commitment, opportunism, ethics
Smith, 1998a	Survey, random sample	Purchasing professionals and sales representatives	domestic market	Trust, satisfaction, commitment
Smith, 1998b	Survey, random sample	buyer-seller relationship	domestic market	Trust, satisfaction, commitment
Selnes, 1998	Prior telephone invitation and survey i.e questionnaire and random sample	Food producer and its customers	Cafeterias and Restaurants/ food supply	Trust, satisfaction
Bowen & Shoemaker, 1998	survey i.e questionnaire and random sample	Hotels and their guests	hotel industry	Trust, commitment
Jap et al., 1999	In-depth interviews and interaction data were obtained from four key informants	Buyers-sellers	Retail firms	Trust, Continuity
Baker et al., 1999	Survey and convenience sample	Suppliers and resellers	Channel: various industries	Trust, satisfaction, commitment
Johnson, 1999	Survey i.e. questionnaire and convenience sample	Suppliers distributors (buyer-seller) and	Industrial machinery and equipment distribution	Trust, fairness
Garbarino & Johnson, 1999	Survey i.e. questionnaire and random sample of	Service providers and consumers	customer-firm	Trust, satisfaction, commitment
Henning-Thurau, 2000	Face-to-face questionnaire survey and random sample	Customers and manufacturers	Electronic	Trust, commitment, quality
Naude & Buttle, 2000	Questionnaire	Executives in various industries and their suppliers (B-to-B)	Business	Trust, satisfaction, coordination, power
Boles et al., 2000	Survey i.e. questionnaire and random sample	Business to business	Business	Trust, satisfaction
Scanlan & McPhail, 2000	Exploratory i.e. in-depth interview and descriptive research i.e. survey and convenient sampling	Business travellers and hotel receptionists	Hospitality	Satisfaction
Hibbard et al., 2001	Mailed questionnaire	Manufacturers and their independent dealers	Market channel	Trust, commitment
Goodman and Dion, 2001	Mailed questionnaire	Distributor-manufacturer	Industrial distribution channel	Commitment
De Ruyeter et al., 2001	Indepth interview and questionnaire	Business to business	Technology	Trust, commitment
Hewett et al., 2002	Questionnaire and convenient sample	buyer-seller	Industrial	N/A
Woo & Cha 2002	Questionnaire	Service provider i.e. hotels and guests	Tourism/hotel	Trust, satisfaction
Henning-Thurau et al., 2002	Questionnaire	Customers-services business	Service business	Trust, satisfaction, commitment
Wong & Sohal, 2002a	Questionnaire	Department store and retail shoppers	Retail	N/A
Wong & Sohal, 2002b	Questionnaire	Employee and company	Retail	Trust, satisfaction, commitment, quality
Friman et al., 2002	Case study	Business to business i.e. service firms and international partners	International business	Trust, commitment
Lang & Colgate, 2003	Stratified probability sampling and questionnaire	Financial service providers (banks) and online retail customers	Information technology	Trust, satisfaction, commitment, bond
Keating et al., 2003	Focus groups and an online survey and convenient sampling	Online retailing	Online retail	Trust, communication, understanding, value
Walter et al., 2003	Supplier-customer	Manufacturing supplier and purchasing professional, various industries	Various industries	Trust, satisfaction, commitment
Roberts et al.,	Questionnaire	Service firms and their	Various service	Trust, satisfaction,

2003		customers	industries	commitment
Sanzo et al., 2003	Questionnaire	Buyer-seller Industrial firms and suppliers	i.e. Industrial	Trust, conflict, value
Woo & Ennew, 2004	Questionnaire	B-to-B relationships	Professional services (consulting engineering services)	Adaptation, cooperation
Fynes et al., 2004	Mailed questionnaire and convenience sampling	Supply chain relationship	Manufacturing	Trust, communication, adaptation, cooperation
Venetis & Ghauri, 2004	Semi-structured interview and questionnaire, convenience sample	Advertising agencies and business customers (products and services)	Advertising	Commitment
Lages et al., 2005	Survey i.e. questionnaire and convenience sample	Exporters - importers	Export market	Satisfaction, communication
Bennett & Barkensjo, 2005	Survey i.e. interview and questionnaire and convenience sample	Charities and their beneficiaries	Charity	Trust, commitment
Farrelly & Quester, 2005	Survey i.e. interview and questionnaire and convenience sample	Football teams (Australian Football League) and their sponsors	Sport	Trust, commitment
Van Bruggen et al., 2005	Survey i.e. mailed questionnaire convenience sample	B-to-B relationships Professional painters (owners/heads of painting firms) and distributors of paints	Channel distribution	Trust, commitment, satisfaction, conflict
Huntley, 2006	Telephone survey and convenience sampling	Buyer-seller	Technology	Trust, commitment
Athanasopoulou, 2006	Case study, indepth interview and document review	Corporate customers and financial service providers (leasing services)	Corporate financial service	N/A
Park & Deitz, 2006	Survey, convenience sample	Automobile manufacturers and their salespeople	Automobile	Satisfaction
Ramaseshan et al., 2006	Survey i.e. questionnaire and random sample	Department stores and their tenants	Distribution channel	Satisfaction, commitment
Uлага & Eggert, 2006	Depth-interview and mailed questionnaire	Industrial purchasing managers and vendors - various industries	Manufacturing	Trust, commitment, satisfaction
Leonidou et al., 2006	Random questionnaire i.e. and systematic sample	US exporters and importer	Industrial export	Trust, commitment, satisfaction, cooperation, communication
Carr, 2006	Interview	IS departments and IS users	Information systems	Trust, satisfaction, commitment
Ndubisi, 2006	Survey i.e. questionnaire and convenience sample	Banks and retail customers	Banking	Trust, satisfaction, commitment
Naudé et al., 2007	Questionnaire	Manager to manager	Business to business	N/A
Rauyruen & Miller, 2007	Mail and online survey; convenience sample	Business to business	Courier Delivery services	N/A
Prinsloo et al., 2007	Internal mail system questionnaire	Inter-functional	Small-medium size marketer	N/A
Shabbir et al., 2007	Semi-structured interview			N/A
Beatson et al., 2008	Self-completed questionnaire	Business and leisure travellers	Tourism	Satisfaction, trust, and commitment
Ibrahim & Najjar, 2008	Questionnaire	Retailer-customer	Retail	N/A
Kilburn & Kilburn, 2008	Online questionnaire	internal customers and suppliers	organisation	N/A
Skarmeas & Robson, 2008	Mailed questionnaire	Importers and foreign suppliers	International business	N/A
Hsin Hsin & Po Wen, 2009	questionnaire, case study and interview			satisfaction, trust, and commitment
Morry & Kito, 2009	Questionnaire	self-friend relationship	interpersonal	N/A
Vieira, 2009	Questionnaire	Business to business	Hotel	N/A
Vesel & Zabkar,	Telephone interviews	Retail relationship	Retail	Trust, commitment and

2010				satisfaction
Knobloch & Knobloch-Fedders, 2010	Questionnaire	Actor-partner interdependence	Couple	N/A
Al-alak, 2010	Questionnaire	N/A	Health and fitness setting	N/A
Canevello & Crocker, 2010	Questionnaire	Interpersonal relationship	Human relationship	N/A
Cannière et al., 2010	Questionnaire	Customer-firm	Retail	N/A
Cater & Cater, 2010	Email and web based questionnaire.	Business-to-business	Manufacturing	N/A
Morry et al., 2010	Questionnaire	Self- versus partner	Human relationship	trait, perception,
Park et al., 2010	Questionnaire		Industrial selling	N/A
Barry & Doney, 2011	Exploratory research, pretesting, and final survey administration	Suppliers and retailer	Industrial service marketing	Satisfaction, trust, and commitment
Clark et al., 2011	Online questionnaire	physician and the pharmaceutical sales representative	Medical marketing	Relationship benefits, relationship investment, relational dependences
Gentzler et al., 2011	On-line questionnaire	Parental relationship	Parenting	Communication
Hunt et al., 2011	Questionnaire	Financial planners and clients	Financial sector	N/A
Keating et al., 2011	Online questionnaire	Customer to business	Online banking service	Service delivery, loyalty
Liang et al., 2011	Questionnaire	User's social sharing and social shopping	E-commerce	N/A
Petrican et al., 2011	Questionnaire	Partner-couple		N/A
Weigel et al., 2011	Questionnaire	Individuals in romantic relationships		N/A
Vikas, 2011	Structured questionnaire	Customers and service providers	Telecoms	N/A
Zhang et al., 2011	Questionnaire	Information systems professionals and online customer	Online	N/A
Chu & Wang, 2012	Questionnaire	Company-third party logistics providers	Supply chain	N/A
Ndubisi et al., 2012	Questionnaire	Retail banking and customer	Retail banking	N/A
Vidal, 2012	Questionnaire	Supplier-retailer	Industrial distribution context	N/A
Yen et al., 2012	Questionnaire	Life insurance service provider and customer		N/A
Zimmerman & Roberts, 2012	Questionnaire	Couple	Marriage relationship	N/A
Ahamed & Skallerud, 2013	Questionnaires	Business to business.	Garment-exporting firms	N/A
Bellavance et al., 2013	Questionnaire	Superior-manager relationship	Organisation	N/A
Brouer et al., 2013	Questionnaire	Unit leader-staff personnel relationship	Academic/ school	N/A
Kühne, et al., 2013	Questionnaire	Relationship between chain members	Food chain	N/A
Kang et al., 2013	Face-to-face interview and questionnaire	Business	Food	N/A
Leonidou et al., 2013	questionnaire	exporter-importer relationship	international business	cooperation, communication, trust, and commitment
Lin, 2013	Questionnaires	Customers and their service provider		Trust and satisfaction
Marquardt, 2013	Questionnaire	Buyer-seller relationships	Industrial	N/A
Omilion-Hodges & Baker, 2013	Questionnaire	Individual-leader	Organisation/work place	N/A
Rafiq et al., 2013	Online questionnaire	retailer and online grocery shoppers	Internet retailing/e-grocery	Satisfaction, commitment, trust
Rašković et al.,	Email and web based	buyer-supplier	industrial	N/A

2013	questionnaire.	relationships	procurement	
Tareque Aziz & Azila Mohd Noor, 2013	Questionnaire	Retailer-supplier relationship	Retail	N/A
Tung & Carlson, 2013	Questionnaire	Retail banking and customer	Banking industry	N/A
Tripathi & Dave, 2013	Questionnaire	Customer-retail	Retail	N/A
Ying-Pin, 2013	Questionnaire	Suppliers and retailers	Automobile industry	Commitment, cooperation, trust, satisfaction, coordination, adaptation
Akrouf, 2014	Semi-structured interview	Business to business		N/A
Al-Alak, 2014	Questionnaire	Banks-client		N/A
Atrek et al., 2014	Semi-structured interview	Business to business i.e . Company & supplier	Supply chain	Service performance, service quality, product quality
Giota and Kleftras, 2014	Questionnaire	Facebook users	Online media social	N/A
Huang et al., 2014	Online interview, web link and questionnaire	Online customer - buyer	Online market/ buying	N/A
Lai, 2014	Questionnaire	Business to customer	Travel agency industry	Service quality and perceived value are antecedents of relationship quality
Lo & Im, 2014	Questionnaire and in-depth interviews	Hotel staff and customers	Hotel industry	N/A
Nguyen & Nguyen, 2014	Questionnaire	Business	Export	N/A
Subramony, 2014	Questionnaire	Firm-client	Business	N/A
Semrau & Werner, 2014	Interview	Network relationship	Business network	N/A
Uchino et al., 2014	Questionnaire	spousal relationships	marriage relationship	N/A
Ahamed et al., 2015	Questionnaires	Business to business	Exporting firms	N/A
Hoppner et al., 2015	Mailed questionnaire	Business to business	Business	N/A
Itani & Inyang, 2015	Questionnaire	Sales person to customer	Retail banking	N/A
Sheu, 2015	Face-to-face interview and questionnaire	Producer-dealer distribution channels	Distribution channels	N/A
Williams et al., 2015	Questionnaires	Business/firm	Project management	N/A

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Export Effect of China's Outward FDI: Provincial Panel Data Analysis

Xiaohui Wang¹

¹School of Economics and Management, LeShan Normal University, LeShan, Sichuan Province, China

Correspondence: Xiaohui Wang, School of Economics and Management, LeShan Normal University, No.402, Unit2, JinLin, ManTingFang, No.776, Xiaoba Road, LeShan City, Sichuan Province, China.

Received: May 25, 2017

Accepted: June 5, 2017

Online Published: June 19, 2017

doi:10.5539/ibr.v10n7p148

URL: <https://doi.org/10.5539/ibr.v10n7p148>

Abstract

China's direct investment overseas reaches US\$170.11 billion and is US\$44 billion more than the actual use of foreign investment, which makes China a net capital exporter. Large scale of Outward Foreign Direct Investment also has a great influence on the export. This article made an estimation on the export effect of Outward Foreign Direct Investment through fixed effect model and Generalized Method of Moment based on the provincial panel data from 2004 to 2014. The result shows Outward Foreign Direct Investment has a positive effect on export whether in the whole country or in different districts, every 1% increase of Outward Foreign Direct Investment will lead to about 0.1% rising in export, and moreover positive effect of Outward Foreign Direct Investment in the middle and western districts is stronger than that in the eastern district.

Keywords: export effect, Outward Foreign Direct Investment (OFDI), provincial panel data, system Generalized Method of Moment (GMM)

1. Introduction

According to the statistics from China's ministry of commerce and state administration of foreign exchange, in 2016, the Chinese investors made direct investment overseas in 7,961 enterprises of 164 countries and regions. The direct investment overseas amounted to RMB 1.12992 trillion, going up 53.7% year on year (equivalent to US\$170.11 billion, up 44.1% year on year). The direct investment overseas is US\$44 billion more than the actual use of foreign investment which reached US\$126 billion in 2016, which means that China has become a net capital exporter. Under the influence of the strategy of Belt and Road, China will expand the foreign investment and encourage transferring competitive industries and excessive capacity to the countries along the Belt and Road, building array of interconnection projects and increasing the investment on manufacturing, service and other industries in the countries along the Belt and Road. Meanwhile, China was a great country in absorbing the foreign investment capital, second to USA. Why does China need large scale of outer foreign direct investment, and what influence will be brought by the large scale of outer foreign direct investment on export which is a major driver of Chinese economic growth? Will it promote export or replace export? Study on this problem not only contributes to the economy theory, but also to the practice.

There are two ways for a country to enter into the international market: export and Outward Foreign Direct Investment (hereinafter referred to as OFDI). Export means products are made in native country and sold to the international market, which will be affected by the tariff, non-tariff wall and transportation cost. While OFDI means the native company sets up factory in the foreign countries and sell its products there or to a third country. Internationalization of production and block factorization of value chain merge with the elimination of tariff wall and decrease of transportation and communication cost, and thus industry becomes multinationalization and its value chains are subdivided into many countries. In this way, Company can complete all production procedure in the district with highest efficiency and lowest cost, and thus wins the competitive advantages. When OFDI is implemented in host country, will it replace home country's export to the host country or be complementary to the export in home country? There are some different conclusions in theoretical study and practical study. OFDI can replace as well as complement the export of motherland in theoretical study, while it is complementary to the export in the practical study.

The article tries to analyze the influence of OFDI to export in China based on the provincial panel data of 2004 to 2014 through the ways of fixed effects and GMM estimation, and further propose suggestion for the development of OFDI in China.

2. Literature Review

Whether OFDI promotes or replaces export is a hot topic in international economy field all the time, and no definite answer was made to it in economy theory. On the hypothesis of new classic Heckscher-Ohlin-Samuelson theory, Mundell (1957) studied on the relationship between OFDI and export. New classic theory supposed that the flow of OFDI depends on the difference of factor price and factor endowment among countries. Difference between factor price and factor endowment shrinks with the international flow of factor. Therefore Mundell assumed that capital flow pushed by OFDI replaces export. Internalization theory (Williamson, 1975; Markusen & Venables, 1998) assumed that OFDI would replace export when OLI-conditions proposed by Dunning (1977) is valid and a large amount of external trade cost (such as the cost of export and permission) exists. Besides, Brainard (1992) stated fixed cost, transportation cost and "proximity-concentration trade-off" caused by trade barrier are the explanations for replacement relationship between OFDI and trade.

There are two types of FDI, one is horizontal FDI (international company sets up subsidiary corporations in many countries for transportation cost and more close to the consumers) and another is vertical FDI (international corporation puts its different producing links in different countries according to the cost advantages). Horizontal FDI model shows FDI has a negative effect on export, and thus forms a replacement relationship. Markusen (1984) found the replacement relationship between horizontal FDI and export. So whether international corporation should set up a subsidiary institution or export depends on the one hand on the trade cost (tariff), and on the other hand on the cost of setting up a factory close to the consumer. At last, the model speculate the negative relation between technology difference and horizontal FDI when horizontal FDI appears in the countries where factor endowment, income and technology are close to each other. Markusen & Venables (1998) set up a model and discover that when different factor endowment and technique in different countries become similar, FDI and trade forms replacement relationship.

Other theory presumes that OFDI and trade may be complementary to each other. The reason of the complementary relation between vertical FDI and export can be attributed to the increase of input product export from motherland to host country promoted by the investment of manufacturer (Svensson, 1966). Helpman (1984) pointed out in his model that vertical FDI and export are complementary and foreign subsidiary corporation export the final products to its parent firm, while parent firm exported semi-finished products to foreign subsidiary company. The model also shows that vertical FDI tends to take place between developed country and developing country. For example, producing in other countries may increase the total demands of entire product line (Lipsey & Weiss, 1984).

In spite of different empirical study method, most researchers predict that a positive relationship exist between OFDI and export. According to the data hierarchy, empirical literature can be classified into such types as national level study, industry-level study, corporation-level study and product-level study.

Study from national level indicates OFDI and export are complementary. Swedenborg (1979) found that OFDI's effect on the parent exports is weak, while new exports (such as intermediate goods) are incurred. This result was confirmed in his study of 1982 which came to the conclusion that each dollar of local sales substitutes only 2 cents of exports but "creates" 12 cents of new exports, so there is a net positive complementary effect of 10 cents. Pfaffermayr (1994, 1996) reached the conclusion of obvious bilateral positive effect through Granger causality test when he was studying the relationship between FDI and export of Austria. In addition, Eaton & Tamura (1994) also got a complementary conclusion of the relationship between OFDI and export through analysis. However, Clausing (2000) discovered OFDI had a strong positive impact on export through his study on the business state of American international corporations in 29 host countries from 1977 to 1994. When multinational activities and intra-firm trade were taken into consideration, this positive effect are more obvious. Egger, P. (2001) found that exports and stocks of outward FDI are found to be substitutes with respect to changes in transport costs and complements with respect to most of the other determinants through his study. Bajo-Rubio, O., & Montero-Muñoz, M. (2001) found the existence of a relationship of complementarity between both variables, with Granger causality running in the short run from outward FDI to exports.

The result of empirical study of the industry-level is mixed. Lipsey & Weiss (1981) discovered American OFDI in 40 countries in 1970 has a positive impact on export and one dollar OFDI can increase 2 to 78 cents' export in the correspondent market. Through the study on American 27 related markets in the product level, Brainard (1997) found that when the per capital income in the partner country is close to that of America, OFDI tends to replace export. While at the same time, Blonigen (2001) discovered if Japan manufactures car components in America, OFDI will replace Japanese's export of car components to America. The further study also shows that a complementary relation exists between Japan's manufacturing cars in America and its exporting car components

to America. Marchant et al. (2002) also identified the complementary relationship between OFDI and export through the research on the investment of American food industry in Free Trade Area of America. Turkan's study (2006) shows that America's OFDI and its intermediate goods are complementary, however, OFDI has a little bit of negative effect on the export of final products.

On the corporation level, Lipsey & Weiss (1984) studied the relationship between America's manufacturing the intermediate products in the host country and its export to the host country in 1970, and found a strong complementary relation did exist between the two parts, for increasing one dollar's investment in host country might lead to an increase of 9 to 25 cents' export of the mother country.

With the development of Chinese OFDI, more attention are paid to the study of OFDI's effect on export, but studies in China are empirical in the macro level. Ruqing Zhang (2005) discovered import and export have a great influence on OFDI, while the impact of OFDI on import and export is not significant through a study on Chinese annual OFDI and the data of import and export from 1982 to 2002 by applying the cointegration theory, error correction model and Granger causality test to the study. Through an empirical study on the panel data of China's investment and trade in 50 countries or districts from 2000 to 2006 via gravity model, Benwu Xiang (2009) found that OFDI has an apparent positive influence on Chinese export to the host country, but the effect is not obvious in a short term. Jie Xie and Renyu Liu (2011) also discovered China's OFDI and trade are complementary through a study on the trade effect of China's OFDI. Chunping Zhang (2012) also discovered that effect of China's OFDI on trade is obvious positive. Yuyu Chen (2012), Yuehong Sui and Zhenhua Zhao (2012) made an empirical study on the impact of China's OFDI on trade structure based on time series and panel data model, and also pointed out that OFDI affected the trade structure greatly. Guanhong Jiang (2014) found that OFDI of Chinese corporation promotes export, and OFDI not only deepens the intensive margin of export, but also expands its extensive margin through checking trade effect of 1498 corporations' OFDI from 2005 to 2007 through data matching method and difference-in-differences Estimation. Shen Wang(2014) proved that the trade effect of China's OFDI has national differences through an empirical study on the panel data from 2003 to 2011 with the extended gravity model.

From the above analysis, researches outside China on OFDI focused on those developed countries in Europe, America, Japan and so on, while few are made on the relation between Chinese OFDI and trade. What's more, literature in China discussed the trade effect of Chinese OFDI from the perspective of difference of nationality and district, seldom from different regions in the country itself. In fact, There is a great difference in the level of economic development and natural endowment in different regions in China, and thus OFDI in different regions will lead to different export effect. Therefore, the article will analyze the export effect of Chinese OFDI from the perspective of different regions in China and enrich the study on this subject.

3. Research Design

3.1 Model Specification

Panel data can overcome the problem of insufficient of sample, and can analysis heterogeneity between individuals through the combination of time series data and cross section data. Therefore, following Chunping Zhang. (2012), a panel data model of analysis of OFDI's effect on export is employed in this article as follows:

$$\ln EXP_{it} = \beta_0 + \beta_1 \ln EXP_{i(t-1)} + \beta_2 \ln OFDI_{it} + \varepsilon_{it}$$

Where EXP_{it} denotes the value of merchandise export in i district of China in t year, $EXP_{i(t-1)}$ denotes the value of merchandise export in i district of China in $t-1$ year. The first-lagged merchandise export can be treated as the proxy variable of parts of omitted variables, and it can reflect the self inertia and lasting influence of merchandise export. The first-lagged merchandise export also makes the model the typical dynamic panel model. $OFDI_{it}$ denotes the outer foreign direct investment stock of i district of China in t year, ε_{it} denotes the random disturbance term. This model is a logarithmic model, the parameters are the elastic coefficients of the explanatory variables to the dependent variables, and the logarithmic model can keep the square deviation from being too large.

3.2 Data and Descriptive Statistics

The data of the article is panel data of value of export and outer foreign direct investment stock of 31 provinces and autonomous regions of China from 2004 to 2014. Data of value of export came from the gross export of source of supply in the statistic yearbook of National Bureau of Statistics of China. Data of OFDI stock came from Statistical Bulletin of China's Outward Foreign Direct Investment. The main description of the variable is as table 1.

Table 1. Variable descriptive statistics

variable		Mean	Std.Dev.	Min	Max	Observations
logexport	overall	9.308675	1.771658	4.675312	13.52155	N=341
	between		1.712533	5.846582	12.94828	n=31
	within		.5406099	7.817823	11.1816	T=11
Logofdi	overall	6.048284	2.288734	0	10.80931	N=341
	between		1.762718	1.071211	9.252968	n=31
	within		1.490811	1.536981	9.049123	T=11

This article draw a scatter diagram of logarithm of export and logarithm of OFDI. According to figure 1, an apparent positive relation between OFDI and export shows OFDI may have a positive effect on export. But the relationship between china's OFDI and export needs further verification.

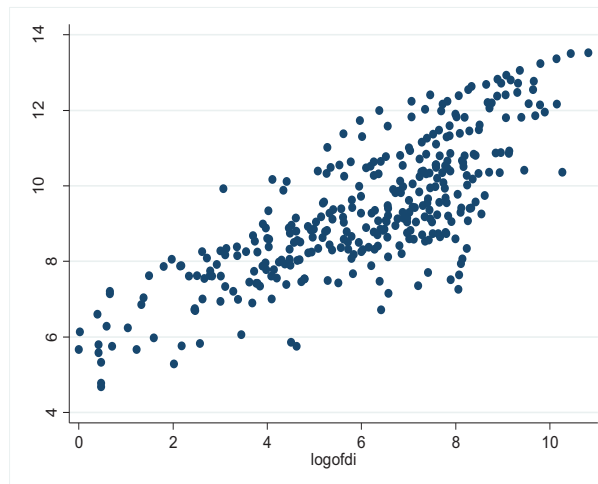


Figure 1. Scatter diagram of china's export and Outer Foreign Direct Investment

4. Empirical Analysis

4.1 Research Method

This article tries to study the export effect of OFDI in China from 2004-2014 based on panel data model through STATA soft. Spurious regression might be caused by the non-stationary of the panel data, so LLC method and Fisher-PP method will be adopted to test the stationary of panel data. If the panel data is stationary, the model can be estimated directly; if the panel data is non-stationary, co-integration test and adjustment of the model should be made before estimation of model. After the test of stationary, the random effect and fixed effect will be estimated, and Hausman test will be made to judge which one is appropriate for the this article.

Owing to the causality between OFDI and export, deviation may be occurred when OLS model was directly adopted in the estimation. In order to solve the endogenous problem, a first-lagged of merchandise export is added to the explanatory variables as the proxy variable of parts of omitted variables, which is able to reflect the self inertia and makes the model the typical dynamic panel model. Therefore, this article adopts the way of system GMM to make the regression analysis for the advantage in GMM which allows heteroscedasticity and serial correlation in the random error. The results of auto correlation test of first order difference and second order difference will be respectively attached to the latter part in the article.

In order to analyze the difference of the export effect of OFDI in different regions of China, this article divided the 31 regions of the panel data into three main parts, eastern district, middle district and western district, on which a respective estimation will be made and results will be further compared.

4.2 Stationary Test

Panel data may cause false regression because of non-stationary of the data, so this article firstly tests the stationary of the panel data. If panel data is non-stationary, data needs to be cointegrated, or the model needs to be adjusted before estimation. The main ways of stationary test of panel data are LLC(Levin-Lin-Chu Test) and Fisher-PP. This article proceeds the stationary test and results of test of all variables are in the table 2. According to table 2, all variables are stationary because they have no unit root.

Table 2. Results of stationary test of all variables

variable		logexport	logofdi
LLC	statistic	-6.0616	-6.7429
	P value	0.0000	0.0000
Fisher-PP	statistic	97.5798	121.2224
	P value	0.0026	0.0000

4.3 Regression Analysis

This article first estimates the model by the ways of pooled OLS, fixed effect and random effect without first-lagged explained variable. Fixed effect method is more suitable because of the result of F test, BPLM test and hausman test. Later the model was estimated by the ways of pooled OLS, fixed effect and system GMM with first-lagged explained variable. The result of regression is as table 3.

Table 3. Regression result of the model (explained variable: logexport)

explaining variables	Regress 1 POLS	Regress 2 FE+Robust	Regress 3 POLS	Regress 4 FE+Robust	Regress 5 sysGMM
L.logexport			0.995*** (0.00811)	0.731*** (0.0729)	0.657*** (0.0870)
logofdi	0.609*** (0.0579)	0.289*** (0.0285)	-0.00758 (0.00865)	0.0596*** (0.0160)	0.0953*** (0.0330)
Constant	5.627*** (0.292)	7.560*** (0.173)	0.242*** (0.0789)	2.265*** (0.585)	2.714*** (0.672)
AR (1)					0.0045
AR (2)					0.9196
R-squared	0.618	0.636	0.982	0.810	
N	341	341	310	310	310
region		31		31	31

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

From table 3, in the results of regress 1, regress 2, regress 4 and regress 5 all coefficients are positive and significant and the coefficient of determination is much larger which mean China's OFDI has an apparent positive effect on export. The determination Coefficients of regression 3 and regression 4 are much larger than that of regression 1 and regression 2, and the coefficients of OFDI are much smaller. That means the model is more suitable and close to practice when first-lagged explained variable is added to the model. The system GMM method adopted in regression 5 is the most suitable estimating way for the dynamic panel model because of taking account of heteroscedasticity and serial correlation in the random error. Besides, result of regression 5 indicates that the first order auto-correlation exists but second order of auto-correlation doesn't exist in the difference of disturbing term, so the original hypothesis of no auto-correlation of disturbing term is accepted. In regression 5 the coefficient of lagged export is 0.657, which means 1% increase in export will lead to 0.657% increase in export of next year and thus China's export has large inertia and lasting influence. Coefficient of OFDI is 0.0953, which explains that 1% rise of OFDI causes the rise of 0.0953% in the export.

Table 4. Regression result of the model (explained variable: logexport)

explaining variables	Regress 1(eastern) POLS	Regress 2(middle) FE+Robust	Regress 3(western) POLS
L.logexport	0.653*** (0.0173)	0.489*** (0.0531)	0.697*** (0.0727)
logofdi	0.0547*** (0.0135)	0.165*** (0.0242)	0.127*** (0.0312)
Constant	3.431*** (0.131)	3.704*** (0.347)	1.900*** (0.410)
AR (1)	0.0052	0.1253	0.0352
AR (2)	0.0129	0.1425	0.6294
N	120	80	110
region	12	8	11

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Due to the differences in the economic development, technology level, factor endowment and level of opening up, OFDI has different influence on export in different areas. Therefore, this article divides 31 districts of the panel data into 3 main part as eastern district, middle district and western district, and then performs estimations

on them by system GMM method respectively. The result of regression is as table 4. According to table 4, OFDI in Chinese eastern district, middle district and western district both has an apparent effect on export, while the effect is imbalanced. OFDI in middle and western districts has a powerful positive effect on export, while that effect of OFDI in eastern district on export is weaker.

5. Conclusion and Suggestion

5.1 Research Conclusion

Through the estimations of fixed effect model and GMM made on Chinese OFDI in 31 regions and in different districts, such conclusion is reached: positive effect of OFDI on export is significant. When first-lagged explained variable is taken into consideration in GMM estimation, 1% increase of OFDI will lead to 0.0953% rising in export. In terms of the three districts such as eastern, western and middle districts, positive effect of OFDI on the export in the three districts is also significant, but imbalanced. Positive effect of OFDI on export in middle and western districts is greater than that in the eastern district.

This article enrich the research of China's export effect of OFDI through extending the study to the regional panel level and estimating the effect respectively in China's three districts. But this paper didn't discuss the reason of the imbalanced effect between China's three districts which will be the direction for future research.

5.2 Suggestion

From the above analysis, China's OFDI on the one hand can explore the international market, promote the intermediate products export, on the other hand it can absorb the foreign good resources and make the products more competitive. Therefore, China can encourage the competitive districts and corporations to further explore the international markets and absorb foreign advanced technology and management experience through OFDI, and stimulate districts and corporations with comparative advantage to implement OFDI in developing countries along the Belt and Road to further promote the development of intermediate product exports and take advantage of low cost.

References

- Bajo-Rubio, O., & Montero-Muñoz, M. (2001). Foreign direct investment and trade: a causality analysis. *Open Economies Review*, 12(3), 305-323. <https://doi.org/10.1023/A:1011185507169>
- Benwu, X. (2009). An Empirical Research on the Features of Host -country and China's Direct Investment Abroad. *The Journal of Quantitative & Technical Economics*, 7, 33-46.
- Brainard, S. L. (1992). A simple theory of multinational corporations and trade with a trade-off between proximity and concentration. *Nber Working Papers*, 87(2), 118-124.
- Brainard, S. L. (1997). An empirical assessment of the proximity-concentration trade-off between multinational sales and trade. *American Economic Review*, 87(4), 520-544.
- Chunping, Z. (2012). The Study on the Effects of China's OFDI on International Trade. *The Journal of Quantitative & Technical Economics*, (6), 74-85.
- Clasing, K. A. (2000). Does multinational activity displace trade? *Economic Inquiry*, 38(2), 190-205. <https://doi.org/10.1111/j.1465-7295.2000.tb00013.x>
- Dunning, J. H. (1977), Trade, Location of Economic Activity and the Multinational Enterprise: A Search for an Eclectic Approach in Ohlin, B., Hesselborn and Wijkman, P. M. (eds), *The International Allocation of Economic Activity*, Macmillan, London, 395-418. https://doi.org/10.1007/978-1-349-03196-2_38
- Eaton, J., & Tamura, A. (1994). Bilateralism and regionalism in Japanese and U.S. trade and direct foreign investment patterns. *Journal of the Japanese & International Economies*, 8(4), 478-510. <https://doi.org/10.1006/jjie.1994.1025>
- Egger, P. (2001). European exports and outward foreign direct investment: a dynamic panel data approach. *Review of World Economics*, 137(3), 427-449. <https://doi.org/10.1007/BF02707625>
- Guanhong, J., & Dianchun, J. (2014). Outward Direct Investment and Export. *Economic Research Journal*, 5, 160-173.
- Helpman, E. (1984). A simple theory of international trade with multinational corporations. *Journal of Political Economy*, 92(3), 451-471. <https://doi.org/10.1086/261236>
- Jifeng, Z., & Ping, H. (2013). Substitute Exports or Promote Exports?-Study on the Influence China's Outward Foreign Direct Investment on Exports. *Journal of International Trade*, 3, 95-103.

- Lipsey, R. E., & Weiss, M. Y. (1981). Foreign production and exports in manufacturing industries. *Review of Economics & Statistics*, 63(4), 488-494. <https://doi.org/10.2307/1935843>
- Lipsey, R. E., & Weiss, M. Y. (1984). Foreign production and exports of individual firms. *Review of Economics & Statistics*, 66(2), 304-308. <https://doi.org/10.2307/1925832>
- Markusen, J. R. (1984). Multinationals, multi-plant economies, and the gains from trade. *Journal of International Economics*, 16(3-4), 205-226. [https://doi.org/10.1016/S0022-1996\(84\)80001-X](https://doi.org/10.1016/S0022-1996(84)80001-X)
- Markusen, J. R., & Venables, A. J. (1998). Multinational firms and the new trade theory. *Journal of International Economics*, 46(2), 183-203. [https://doi.org/10.1016/S0022-1996\(97\)00052-4](https://doi.org/10.1016/S0022-1996(97)00052-4)
- Mundell, R. A. (1957). International trade and factor mobility. *American Economic Review*, 47(3), 321-335.
- Pfaffermayr, M. (1994). Foreign direct investment and exports: a time series approach. *Applied Economics*, 26(4), 337-351. <http://dx.doi.org/10.1080/00036849400000080>
- Qiling, M., & Jiayun, X. (2014). Does OFDI of China's Corporation Promote Innovation. *The Journal of World Economy*, 8, 98-125.
- Shuli, W., & Jiaojiao, X. (2014). Creation Effect or Substitution Effect: A Study on the Effect Mechanism of China's Outward Foreign Direct Investment on Import and Export. *World Economy Studies*, 6, 66-72, 89.
- Svensson, R. (1996). Effects of overseas production on home country exports: evidence based on swedish multinationals. *Review of World Economics*, 132(2), 304-329. <https://doi.org/10.1007/BF02707809>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Organizational Commitment-Rewards Relationship and Its Change in Japanese Companies in China

Keisuke Kokubun¹

¹International Economy and Work Research Institute, Osaka, Japan

Correspondence: Keisuke Kokubun, International Economy and Work Research Institute, 3-14 Kitahama-Higashi, Chuo-ku, Osaka, 540-0031, Japan.

Received: May 25, 2017

Accepted: June 19, 2017

Online Published: June 26, 2017

doi:10.5539/ibr.v10n7p155

URL: <https://doi.org/10.5539/ibr.v10n7p155>

Abstract

This study investigates a transition of the relationship between rewards and the organizational commitment of total 1,005 university graduates who work for 4 Japanese companies in China. Hierarchical regression analysis revealed that supervisor support had stronger influence on organizational commitment in 2013 than it did in 2007, showing that the employees became to require more support from supervisors than before due to a growing anxiety under economic slowdown since the global financial crises of 2008. This result indicates that employees may become more collectivistic during a period of economic growth stagnation. Discussions and implications concerning human resource management of Japanese companies in China are offered.

Keywords: change, China, exploratory factor analysis, Japanese companies, organizational commitment, rewards, university graduates

1. Introduction

Among developing countries, China is the largest recipient of foreign direct investment (FDI) and has the largest number of employees who work for foreign companies (United Nations Conference on Trade and Development, 2010). Indeed, approximately 24 million employees (3% of China's total employment) were employed by foreign companies in China (United Nations Conference on Trade and Development, 2004). Among them, Japanese companies continue to benefit from China's growth and remain one of the leading investors in China, which accounted for 6.0% of the total effective FDI in 2013 and became China's third largest source of foreign capital, following Hong Kong and Singapore (Japan External Trade Organization, 2016). The number of Japanese companies located in China in the end of 2012 was 23,094, which accounted for the highest share 7.9% of total foreign companies in China (The Japanese Chamber of Commerce and Industry in China, 2016). The number of employees who work for Japanese companies in China in 2015 was 1.62 million, which accounted for 40.5 percent of total employees of Japanese companies in Asia (Ministry of Economy, Trade and Industry of Japan, 2016).

However, the major economic crisis that originated in the United States in 2008 also affected China and it is said that tens of thousands of foreign-invested companies in the eastern provinces collapsed with millions of people losing their jobs (Zhou & Lin, 2009). The number of Japanese companies also decreased by more than 2,500 in 2009 after increase by more than 11,000 between 2000 and 2008. Although the number started to increase again in 2010, the growth rate has been lower than before (Shibata, 2015). Meanwhile, real GDP growth rate has decreased remarkably: Before the crises, it was 10.0 (2003), 10.1 (2004), 11.3 (2005), 12.7 (2006) and 14.2 (2007) percent; After the crises, it changed to 9.6 (2008), 9.2 (2009), 10.6 (2010), 9.5 (2011), 7.9 (2012), 7.8 (2013), 7.3 (2014), 6.9 (2015) and 6.7 (2016) percent annually (International Monetary Fund, 2017). Besides, with an alarming rise in the number of unemployed and under-employed graduates, a large group of educated young people are becoming alienated and unable to become part of the growing middle class (Sharma, 2014). The unemployment rate of graduates was higher than 30 percent in 2008 and still around 30 percent in 2014 (Sharma, 2014; Zhou & Lin, 2009).

In this long-standing social unrest, it is necessary to determine how the nature of university graduates has been changed over time for the management of Japanese companies to obtain useful hints to utilize their abilities or to retain them in the present company for the maintenance or further improvement of their competitiveness in China and the world. So, this study analyzes the transition of relationship between organizational commitment

(OC) and its antecedents of university graduates who are employed by Japanese firms between 2007 and 2013. OC is defined as the employees' state of being committed to assist in the achievement of the organization's goals, and involves the employees' levels of identification, involvement, and loyalty (Caught & Shadur, 2000). The reason why the researcher focuses on the antecedents of OC is because OC is seen as a prime explanation for why some desire to remain employed while others do not (Allen & Meyer, 1990; Mowday, Porter, & Steers, 1982; Peyyer, Jordan, Firms, & Travaglione, 2010; Steers, 1977) or why some have a high work performance while others do not (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Phipps, Prieto, & Ndinguri, 2013). OC is also known to be related with the corporate innovation and creativity (Hou, Gao, Wang, & Yu, 2011; Jaffri, 2010).

2. Literature Review

2.1 Organizational Rewards in China

The achievement of an organization does not only rely on how the organization utilizes its human capitals and competencies but also on how it incites commitment to the organization (Beukhof, De Jong, & Nijhof, 1998). Barrett and O'Connell (2001) argue that employees may view some human resource practices as a reward. The result of this reward is that employees have a greater sense of debt, feel like insiders and are more committed to the organization.

Several studies conducted in China also show that OC is strongly related to the employee's intention to leave or stay with the organization and it plays a vital role to strengthen the organization growth (Nazir, Shafi, Qun, Nazir, & Tran, 2016). In addition, another study has indicated a strong link between OC and organizational innovation (Ming & Zhao ying, 2010). The antecedents significantly correlated with OC in previous study in Chinese setting were: support from supervisors/colleagues (He, Lai, & Lu, 2011; Lam & O'Higgins, 2011; Miao, Newman, Sun, & Xu, 2013; Nazir, et al., 2016; Newman & Sheikh, 2012; Wang, 2008); financial compensation (Chiu, Luk & Tang, 2002; Nazir, et al., 2016; Newman & Sheikh, 2012); stress (Jamal, 2005); autonomy or discretionary power (Chen & Aryee, 2007; Froese & Xiao, 2012; Miao et al., 2013; Nazir, et al., 2016; Newman & Sheikh, 2012); training or skill/ ability provision (Nazir, et al., 2016; Newman, Thanacoody, & Hui, 2011); role clarity (Newman & Sheikh, 2012), etc. Following these pieces of research, this paper supposes seven rewards as the antecedents of OC. They are: supervisor support; co-worker support; benefit satisfaction; fatigue; autonomy; training provision; and role clarity.

These rewards are sometimes classified into three groups: i.e. intrinsic rewards, extrinsic rewards and social rewards. In previous research, intrinsic rewards comprised autonomy, training provision and role clarity; extrinsic rewards included benefit satisfaction and fatigue; social rewards contained supervisor support and co-worker support (e.g., Kokubun, 2017a). Porter and Lawler (1968) defined intrinsic rewards as the satisfaction that a person derives from doing the job and extrinsic rewards as tangible benefits obtained as a result of doing the job, such as pay and promotions. On the other hand, according to Mottaz (1985), social rewards refer to those that are derived from interpersonal relationships with colleagues and supervisors. Previous works suggest that: (i) intrinsic rewards have a greater impact on OC of employees in the West than extrinsic or social rewards (Eby, Freeman, Rush, & Lance, 1999; Malhotra, Budhwar, & Prowse, 2007; O'Reilly & Caldwell, 1980); and (ii) extrinsic and social rewards have a greater impact on OC of Chinese employees than intrinsic rewards (Miao, et al., 2013; Newman & Sheikh, 2012).

As it was found by Hofstede (1980) that culture of a country changes as its economy develops, difference between '(i)' and '(ii)' might be attributed not only to geographical features such as the West and the East but also to economic stages on which each country is placed. Furthermore, Boyacigiller and Adler (1991) argue that the commitment of employees with collectivist values may arise from ties with managers, owners, and co-workers, whereas the commitment of employees with an individualist orientation may be due to the job itself or the compensation system. If these assertions are true, the reason of '(i)' might be attributed as follows: as Western countries are overall more developed than others, employees are more individualistic and intrinsic rewards are accordingly more important for OC. On the other hand, for '(ii)', it may be assumed that: as China is less developed than Western countries, employees are less individualistic and social rewards are accordingly more important for OC. The reason why extrinsic rewards are important for OC of employees in China in spite of its collectivistic culture will be that economy of China is still in transition and most employees have to work for resources for subsisting.

Although these studies much contributed to understanding of OC in China, it is unclear how the association between these rewards and OC change over time, especially in economically good times or bad times. The present study is the first to research changes in the relationship between OC and rewards in China using the

sample of employees who work for four Japanese affiliates. The survey was conducted in 2007 and 2013, which permits us to see the changes before and after the financial crisis in 2008. The author expects that this study enable us to advise corporate managers in China as to what strategies may be effective to foster high levels of OC amongst university graduates when it is under a circumstance of economic slowdown.

2.2 Moderating Role of Year

Previous research suggests that individualism could be increasing in China (Yan, 2009), and that such a trend is likely to be most evident in more economically developed parts of the country (Gamble & Tian, 2015; Ralston, Holt, Terpstra, & Kai-Cheng, 2008). If we could apply these findings to this research, we might be able to expect that individualism is strengthened during the boom while collectivism is strengthened during the bust. As the survey period in this paper corresponds to the latter, it is considerable that Chinese employees may have become more collectivistic reflecting the long lasting economic slowdown. This leads us to the following hypotheses:

Hypothesis 1: Relationship between supervisor support and OC is positively stronger in 2013 than in 2007.

Hypothesis 2: Relationship between co-worker support and OC is positively stronger in 2013 than in 2007.

Both supervisor support and co-worker support are classified as 'social rewards' in the previous research and are said to be stronger in relation with OC in collectivistic society (Boyacigiller & Adler, 1991). Especially, supervisors are said to have a greater influence on the work activities of their subordinates in Chinese organizations than is the case in the West due to a cultural context in which there is respect for seniority, strict hierarchies in the workplace and limited subordinate participation in decision-making (Chan, Feng, Redman, & Snape, 2006; Cheng, Jiang & Riley, 2003; Chen, Tsui & Farth, 2002). If it is true that such collectivistic culture was more typical in the past and has become weaker as the society has developed economically, it may not be unreasonable to consider that people become more collectivistic and require more support from peers in a period of economic stagnation. Then, what about other rewards? If we expect that individualism is weakened during the economic slowdown, the relations of extrinsic and intrinsic rewards with OC may also become weaker as they are known to be stronger in individualistic societies (Boyacigiller & Adler, 1991). However, the researcher is reluctant to accept such assertion because individualism is not the antonym of collectivism (Triandis, Bontempo, Villareal, Asai, & Lucca, 1988). Indeed, Asian countries have adopted market economic perspectives and become more individualistic without substantially forsaking their collectivistic Confucian roots. Accordingly, developing economies have created their own unique hybrid version of a market economy, integrating traditional cultures with new economic ideology (Ralston, Nguyen, & Napier, 1999). Furthermore, it may also be possible to consider that the relations of these rewards with OC become stronger as laborers face more difficulties to find a workplace of reasonable treatments and work fulfillments during hard times. Anyway, the fact that the study regarding the change of OC and its rewards is quite limited tentatively leads us to the following hypotheses:

Hypothesis 3: Relationship between benefit satisfaction and OC is equally strong (weak) in 2007 and in 2013.

Hypothesis 4: Relationship between fatigue and OC is equally strong (weak) in 2007 and in 2013.

Hypothesis 5: Relationship between autonomy and OC is equally strong (weak) in 2007 and in 2013.

Hypothesis 6: Relationship between training provision and OC is equally strong (weak) in 2007 and in 2013.

Hypothesis 7: Relationship between role clarity and OC is equally strong (weak) in 2007 and in 2013.

Totally, we suppose the support from supervisors and co-workers became more correlated with OC during the period of stagnation between 2007 and 2013 leaving the relations of other rewards and OC unchanged based on an understanding that collectivism became stronger leaving individualism unchanged.

2.3 Japanese Companies' HRM Performance in China

As we suppose that the supervisor support becomes more related with OC during hard times, let us review what local employees think about Japanese companies before proceeding analyses. The Japanese manufacturing workplace has been characterized by commitment, loyalty and lower rates of turnover, absenteeism and industrial conflict along with high levels of productivity and product quality (Colignon, Usui, & Kerbo, 2007). Besides, it has been argued that elements of Japanese management, such as secure employment or an emphasis on seniority, are still strongly present in Japanese overseas subsidiaries, and that such practices may even be more appropriate for countries that are developing economically (Wasti, 1998). However, in contrast, previous survey conducted in China has indicated that Japanese companies do not rank among the most popular employers, and are even frequently named as those that people would least want to work for (Zhang, 2003). Likewise, Yu and Meyer-Ohle (2008) revealed that employees who worked for Japanese companies had more complaints than those who worked for Western companies by interview surveys to employees who worked for

Japanese and Western companies in China.

Actually, Japanese companies face great numbers of employees resigning from their positions: i.e., the separation rate for regular workers and university graduates were 11.5 and 12.4 percent respectively (Japan-China Investment Promotion Organization, 2005). Another study reveals that separation rates in Japanese companies and the Western companies in Shang Hai were 15.2 and 6.3 percent respectively, where the former is more than the double of the latter. Especially, the score is high, around 30 percent, for special and technical staffs (Recruit Management Solutions, 2012). Such a high separation rate in Japanese affiliates is sometimes attributed to its inadequate localization and insufficient communication between Chinese staffs and Japanese expatriates who are replaced in 3 to 4 years (Wan, 2009). Actually, previous survey revealed that Japanese managers in China received poorer evaluations from their subordinates than local managers do especially for job performing ability, leadership and capability for managing subordinates (Shiraki, 2012). From these findings, HRM of Japanese companies may not be fully effective for enhancing OC of employees at least in particular groups who have confidence on their skills and have more opportunities to work directly with Japanese expatriates such as university graduates, although might be effective to some extent for general employees in China. If these assertions are true, supervisors in Japanese companies in China may face some barriers to provide university-graduate employees appropriate support which could be perceived as the rewards worth reciprocating. Off course, supervisors are not only Japanese expatriates but in most cases Chinese managers, but even the latter may be influenced by the former and vary in its quality if a company couldn't educate the latter appropriately or couldn't hire the latter with high management skills.

3. Methods

3.1 Participants

We sent questionnaires to employees in 4 Japanese manufacturing companies in China from April to November 2007. We purposely selected Japanese companies in China instead of other kinds, such as state-owned or other private companies as the latter has a different set of HRM practices and many organizational variables would not be eligible for legitimate comparison with Japanese counterparts (Warner, 2004). 700 questionnaires were distributed via the HR department of participant companies. The participation was basically compulsory. With a promise to present the summary results, the HR department of each firm administered the questionnaires by distributing and collecting completed questionnaires. Each respondent was requested to put the completed questionnaire into an envelope that the researcher provided along with the questionnaire and seal it for him/her self to guarantee complete anonymity. Overall, 613 surveys were collected, reflecting a response rate of 87.6%. We eliminated 184 surveys due to missing values or inappropriate participants for this research (e.g. contract employees, foreign workers, Japanese expatriates, etc.). Consequently, the final samples comprised 429 Chinese participants.

Again, we sent the same questionnaires to employees in the same 4 Japanese companies between May 2013 and February 2014. 800 questionnaires were distributed and 698 surveys were collected, reflecting a response rate of 87.3%. We eliminated 122 surveys due to the same reason above and consequently the final samples comprised 576 Chinese participants. In this research, we use these data sets to calculate how the nature of employees has changed in terms of the rewards-organizational commitment between 2007 and 2013. Among 4 companies, three were electrical and another was automobile makers. Geographically, two were in Dalian city (Liaoning province), one was in Wuxi city (Jiangsu province) and another was in Dongguan city (Guangdong province). For reference, the numbers of major Japanese companies located in these provinces were 288, 629 and 614, which accounted for 7.0, 15.3 and 14.9 percent of the total in China, respectively (Yan, 2010). The sample four companies are all subsidiaries of well known big Japanese companies listed on the first section of the Tokyo Stock Exchange. The total number of employees who work for these four companies was more than 6,000 in 2013. So, the researcher considers that the sample appropriately reflects the entire tendencies of university graduates in Japanese companies in China. Other demographic information of the participants is shown in tables of appendix. We controlled for all the demographic variables in order to attenuate any concern about sample compatibility.

3.2 Measures

The questions are obtained from Kokubun (2006), in which OC was correlated with various rewards in Malaysian setting. Recent research by Kokubun (2017a; 2017b) confirmed such correlations in setting of Thailand and Malaysia using the same questions, too. Accordingly, the researcher expects the similar association between the variables of reward and OC described below because these countries and China share similarities in geographical and cultural spheres (e.g., collectivism, high-power distance, etc. Cf. Hofstede, 1980). They are measured on a five-point scale. The original questionnaire was developed in English and then translated into

Chinese. To ensure the accuracy of the translation, the questionnaire was then translated back.

3.2.1 Supervisor Support

Supervisor support was measured on a five-item scale. The alpha reliability was 0.863 for the 2007 and 0.898 for the 2013.

3.2.2 Co-worker Support

Co-worker support was measured on a four-item scale. The alpha reliability was 0.804 for the 2007 and 0.859 for the 2013.

3.2.3 Benefit Satisfaction

Benefit satisfaction was measured on a three-item scale. The alpha reliability was 0.759 for the 2007 and 0.826 for the 2013.

3.2.4 Fatigue

Fatigue was measured on a three-item scale. The alpha reliability was 0.777 for the 2007 and 0.854 for the 2013.

3.2.5 Autonomy

Autonomy was measured on a three-item scale. The alpha reliability was 0.548 for the 2007 and 0.625 for the 2013.

3.2.6 Training Provision

Training provision was measured on a three-item scale. The alpha reliability was 0.632 for the 2007 and 0.792 for the 2013.

3.2.7 Role Clarity

Role clarity was measured on a two-item scale. The alpha reliability was 0.674 for the 2007 and 0.772 for the 2013.

3.2.8 Organizational Commitment

Six items were used to measure OC. The alpha reliability was 0.818 for the 2007 and 0.881 for the 2013.

3.2.9 Control Variables

Several demographic variables were included to control for individual differences. Answered figures without any conversion were used for age and organizational tenure. Sample dummy shows the survey year whether 2007 or 2013. Gender, turnover experience, marital status, indirect/direct department, managerial/non-managerial position were also measured. Three dummy variables were created to control for the four different companies.

4. Results

We conducted an exploratory factor analysis of all items (except control variables) to examine measurement invariance between the samples of 2007 and 2013. The results of the factor analysis with varimax rotation are presented in Table 1, confirming a eight-factor solution for all the items of supervisor support, co-worker support, benefit satisfaction, fatigue, autonomy, training provision, role clarity and OC. The factor structure was the same for the 2007 and the 2013; therefore, we are convinced that both employees in 2007 and those in 2013 ascribed the same meanings to the scale items used in the current study (Milfont & Fischer, 2010).

Descriptive statistics for both the 2007 and the 2013 samples are presented in Table 2. We tested our hypotheses using hierarchical regression analysis. We entered the control variables in Step 1 and main effects of supervisor support, co-workers support, benefit satisfaction, fatigue, autonomy, training provision and role clarity in Step 2. In Step 3, we entered the sample variable (1 for the 2013 and 0 for the 2007) and its interaction terms with main effects for the entire sample to test the moderation. Variables forming the interaction term were entered to minimize multicollinearity among the interaction terms and their components (Aiken & West, 1991). In addition, we conducted separate regression analysis using the 2007 and the 2013 data. All regression results are presented in Table 3.

Step 1 presents the results when only the control variables are included in the regression to predict OC. Out of seven demographic variables, only one variable, gender, was found to influence OC negatively ($\beta = -0.11$, $p < 0.01$). That means that female employees tend to have higher OC than male ones.

Step 2 presents the results when all the seven reward variables are added to the regression. Fatigue is negatively and the other six reward variables are positively associated to the regression significantly ($p < 0.01$). Observing adjusted R², these rewards explained 41% of additional variance in OC. This implies that all of rewards are

important for OC.

At step 3, the relationship between supervisor support and OC was moderated by the sample, showing that their relationship was stronger in 2013 than in 2007 ($\beta=0.30, p < 0.05$). In other words, university graduates' OC in 2013 was more affected by supervisor support than it was in 2007. On the other hand, the relationships of other variables with OC showed no significant difference between 2007 and 2013. The significant results of these moderation tests are consistent with the Hypotheses 1 and 3 to 7 but inconsistent with the Hypothesis 2.

Table 1. Results of Exploratory Factor Analysis

Items	2007								2013							
	Benefit satisfaction	Fatigue	Supervisor support	Co-workers support	Autonomy	Training provision	Role clarity	Organizational commitment	Benefit satisfaction	Fatigue	Supervisor support	Co-workers support	Autonomy	Training provision	Role clarity	Organizational commitment
Possibility of my promotion.	0.60	-0.07	0.25	0.10	0.13	0.25	0.04	0.17	0.74	0.10	0.23	0.21	0.05	0.16	0.05	0.24
Amount of my salary or wage.	0.60	-0.08	0.15	0.09	-0.14	0.07	0.04	0.22	0.63	0.16	0.16	0.09	-0.06	0.12	0.06	0.27
My position or rank at the working place.	0.69	-0.11	0.18	0.22	-0.03	0.14	0.12	0.19	0.59	0.13	0.22	0.26	-0.11	0.24	0.11	0.29
I often feel exhausted.	-0.05	0.88	-0.03	-0.15	0.01	-0.04	-0.03	-0.13	-0.07	-0.94	-0.09	-0.13	-0.01	-0.02	-0.08	-0.11
After finishing my work, I feel exhausted.	-0.07	0.71	0.02	0.05	0.02	-0.03	-0.07	-0.09	-0.11	-0.75	-0.09	-0.10	0.03	-0.07	-0.08	-0.06
I feel exhausted when I wake up in the morning.	-0.07	0.60	-0.10	-0.14	-0.04	-0.11	-0.01	-0.09	-0.09	-0.69	-0.12	-0.02	-0.09	-0.06	-0.04	-0.19
My boss/supervisor is trustful.	0.07	-0.02	0.84	0.09	0.01	0.06	0.11	0.21	0.16	0.09	0.80	0.17	0.07	0.07	0.07	0.24
My boss/supervisor treats employees fairly.	0.21	-0.05	0.70	0.10	0.09	0.09	0.09	0.24	0.25	0.08	0.77	0.19	0.07	0.15	0.16	0.21
My boss/supervisor deals with employees' complaints effectively.	0.26	-0.05	0.65	0.16	0.05	0.13	0.08	0.13	0.18	0.09	0.69	0.17	0.11	0.21	0.11	0.24
My boss/supervisor trusts workers.	0.08	-0.03	0.76	0.10	0.14	0.05	0.10	0.08	0.12	0.15	0.65	0.17	0.04	0.11	0.11	0.17
My boss/supervisor is willing to instruct the employees what they do not know about their work.	0.06	-0.01	0.54	0.15	-0.02	0.17	0.11	0.03	0.01	0.06	0.63	0.22	0.03	0.17	0.09	0.20
Relationship with my co-workers and subordinates.	0.02	-0.07	0.14	0.71	0.13	0.09	0.02	0.13	0.06	0.07	0.25	0.77	0.18	0.13	0.11	0.12
Evaluation by my co-workers and subordinates.	0.03	-0.09	0.11	0.71	0.16	0.17	0.02	0.12	0.22	0.06	0.16	0.72	0.18	0.09	0.09	0.17
Ability of my co-workers and subordinates.	0.19	-0.04	0.16	0.63	-0.03	0.08	0.07	0.11	0.15	0.10	0.18	0.64	-0.03	0.19	0.11	0.19
Human relationship at my working place.	0.16	-0.07	0.11	0.66	0.15	-0.03	-0.02	0.16	0.07	0.12	0.26	0.62	0.01	0.19	0.14	0.21
I can mostly solve the problems that arise in my work.	-0.01	-0.04	0.08	0.16	0.61	0.03	0.09	0.11	-0.01	0.03	0.03	0.14	0.70	0.04	0.11	0.13
The level of my skill in the company is higher than the average.	-0.07	0.09	0.01	0.08	0.54	0.01	-0.06	0.05	-0.07	-0.01	0.02	0.00	0.57	-0.04	-0.04	0.03
I carry out my work by observing and planning it by myself.	0.08	-0.11	0.08	0.06	0.42	0.00	0.22	0.24	0.13	0.07	0.23	0.14	0.50	0.11	0.20	0.25
For the past one year, I was given useful training to develop ability and achieve my target.	0.29	-0.07	0.13	0.05	-0.07	0.53	0.05	0.15	0.23	0.06	0.17	0.18	-0.01	0.72	0.11	0.21
In my work, I can master new skills and develop my ability.	0.14	-0.17	0.18	0.14	0.06	0.50	0.08	0.25	0.15	0.09	0.22	0.25	0.07	0.62	0.08	0.22
At work, the bosses/supervisors and the seniors are training their subordinates.	0.08	-0.05	0.28	0.20	0.11	0.43	0.00	0.21	0.08	0.05	0.33	0.23	0.01	0.52	0.15	0.25
The work division that I have to do is clearly identified.	0.07	-0.02	0.17	0.04	-0.03	-0.01	0.68	0.14	0.06	0.07	0.18	0.15	0.15	0.11	0.84	0.09
The division of labor between my co-workers and I is clear.	0.07	-0.09	0.17	0.00	0.16	0.11	0.69	0.10	0.09	0.12	0.16	0.16	0.01	0.11	0.63	0.19
I am willing to contribute to development of this company.	0.08	-0.12	0.04	0.14	0.11	0.09	0.08	0.65	0.10	0.11	0.30	0.21	0.15	0.18	-0.02	0.69
I have dreams about the future of my company and its work.	0.15	-0.06	0.18	0.06	0.10	0.09	0.07	0.70	0.24	0.16	0.17	0.15	0.07	0.13	0.16	0.69
I have strong will to work hard in this company.	0.05	-0.05	0.14	0.07	0.06	0.10	0.06	0.67	0.17	0.09	0.29	0.15	0.06	0.16	0.05	0.69
I want to be employed by this company as long as possible.	0.31	-0.04	0.16	0.11	0.12	0.14	0.14	0.51	0.27	0.08	0.29	0.12	0.06	0.14	0.16	0.59
My company makes very meaningful contributions to this society.	0.01	-0.05	0.14	0.14	0.18	0.21	0.03	0.48	0.08	0.08	0.11	0.23	0.19	0.06	0.07	0.57
I am attracted to the slogan of the company and the strategies to achieve it.	0.21	-0.10	0.06	0.12	-0.03	0.01	0.06	0.59	0.23	0.18	0.20	0.02	0.09	0.27	0.18	0.54

Table 2. Descriptive Statistics and Correlations.

	Mean		SD		2013\2007														
	2007	2013	2007	2013	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Gender	0.583	0.568	0.494	0.496		0.144**	0.029	0.098*	-0.057	-0.201**	0.120*	0.066	0.035	0.002	0.073	0.040	0.053	-0.018	-0.035
2 Age	27.825	30.729	4.459	5.612	0.073		0.805**	0.365**	0.590**	-0.024	0.569**	0.096*	0.044	0.076	-0.092	0.308**	0.072	0.124*	0.177**
3 Tenure	2.895	5.625	3.428	5.062	-0.031	0.823**		0.188**	0.557**	0.068	0.548**	0.106*	0.051	0.053	-0.094	0.412**	0.057	0.157**	0.190**
4 Turnover experience	0.527	0.455	0.500	0.498	-0.005	0.317**	0.150**		0.233**	-0.094	0.151**	0.087	0.067	0.106*	-0.027	0.117*	0.039	0.123*	0.063
5 Marital status	0.375	0.623	0.485	0.485	0.038	0.566**	0.518**	0.250**		0.073	0.336**	0.092	0.094	0.098*	-0.103*	0.276**	0.075	0.174**	0.185**
6 Indirect department	0.683	0.698	0.466	0.460	-0.124**	-0.045	-0.044	-0.022	-0.075		0.009	-0.050	0.077	-0.106*	-0.043	0.049	-0.067	0.035	0.059
7 Position	0.077	0.118	0.267	0.323	0.059	0.644**	0.579**	0.109**	0.240**	0.042		0.067	0.073	0.096*	-0.088	0.210**	0.130**	0.075	0.115*
8 Supervisor support	3.897	4.110	0.891	0.839	-0.033	0.034	0.084*	-0.052	0.045	-0.013	0.157**		0.344**	0.505**	-0.290**	0.189**	0.420**	0.324**	0.390**
9 Co-worker support	3.970	4.109	0.628	0.592	-0.016	-0.031	0.040	-0.075	0.012	0.035	0.107**	0.529**		0.470**	-0.263**	0.243**	0.334**	0.132**	0.352**
10 Benefit satisfaction	2.865	3.329	0.921	0.938	-0.064	-0.008	0.015	-0.049	-0.047	-0.029	0.136**	0.440**	0.351**		-0.228**	0.085	0.461**	0.223**	0.457**
11 Fatigue	3.402	3.150	1.157	1.139	0.126**	-0.116**	-0.105*	-0.026	-0.061	-0.015	-0.156**	-0.142**	-0.208**	-0.319**		-0.070	-0.238**	-0.129**	-0.236**
12 Autonomy	3.901	3.898	0.805	0.686	0.041	0.345**	0.350**	0.061	0.275**	-0.090*	0.269**	0.265**	0.267**	0.115**	-0.122**		0.146**	0.191**	0.284**
13 Training provision	3.396	3.935	0.982	0.858	0.003	-0.095*	-0.024	-0.115**	-0.130**	-0.028	0.084*	0.532**	0.522**	0.513**	-0.228**	0.188**		0.202**	0.445**
14 Role clarity	3.744	4.030	1.157	0.933	-0.019	-0.007	0.050	-0.039	0.025	-0.031	0.078	0.385**	0.379**	0.293**	-0.231**	0.236**	0.362**		0.273**
15 Organizational commitment	3.828	3.942	0.804	0.744	-0.182**	0.118**	0.162**	0.019	0.058	0.005	0.176**	0.593**	0.500**	0.595**	-0.345**	0.334**	0.555**	0.382**	

Note. n=429(2007), 576(2013). **p<0.01, *p<0.05.

Correlations for the 2007 samples appear above diagonal and the 2013 samples below diagonal.

Table 3. Results of Hierarchical Regression Analyses.

Variables	Organizational commitment (2007 and 2013, n=1,005)			Organizational commitment (2007, n=429)				Organizational commitment (2013, n=576)			
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 4	Step 1	Step 2	Step 3	Step 4
Gender	-0.11 **	-0.10 **	-0.09 **	-0.02	-0.05	-0.04	-0.05	-0.16 **	-0.15 **	-0.13 **	-0.13 **
Age	0.00	0.07	0.10 *	0.05	0.07	0.11	0.11	-0.07	0.05	0.07	0.08
Tenure	0.08	-0.01	0.01	0.08	0.04	0.01	0.00	0.08	0.03	0.01	0.01
Turnover experience	0.01	0.03	0.02	0.01	-0.02	-0.04	-0.05	0.02	0.04	0.07 *	0.06 *
Marital status	0.05	-0.02	0.00	0.09	0.07	0.01	0.02	0.02	-0.03	0.00	-0.01
Indirect department	-0.02	0.02	0.02	0.02	0.06	0.06	0.07	-0.05	-0.03	-0.01	-0.01
Position	0.06	-0.03	-0.07 *	-0.04	-0.03	-0.08	-0.07	0.15 **	0.02	-0.05	-0.06
Company 1 (dummy)	-0.16 **	-0.10 **	-0.09 **	-0.17 *	-0.09	-0.06	-0.05	-0.16 **	-0.11 *	-0.12 **	-0.11 **
Company 2 (dummy)	-0.10 **	-0.06 *	-0.04	-0.03	0.02	0.01	0.02	-0.14 **	-0.12 **	-0.07 *	-0.07 *
Company 3 (dummy)	-0.06	0.00	-0.01	-0.13	-0.10	-0.05	-0.05	-0.01	-0.01	0.04	0.04
<i>Social rewards</i>											
Supervisor support		0.16 **	0.09 *		0.38 **		0.10 *		0.57 **		0.21 **
Co-worker support		0.09 **	0.10 **			0.11 *	0.09 *			0.11 **	0.07 *
<i>Extrinsic rewards</i>											
Benefit satisfaction		0.26 **	0.25 **			0.27 **	0.24 **			0.34 **	0.30 **
Fatigue		-0.07 **	-0.05			-0.05	-0.06			-0.09 **	-0.07 *
<i>Intrinsic rewards</i>											
Autonomy		0.16 **	0.14 **			0.15 **	0.15 **			0.17 **	0.15 **
Training provision		0.18 **	0.22 **			0.23 **	0.21 **			0.23 **	0.18 **
Role clarity		0.07 **	0.08 *			0.10 *	0.08			0.10 **	0.08 *
Sample			-0.30								
Sample×Supervisor support			0.30 *								
Sample×Co-worker support			-0.11								
Sample×Benefit satisfaction			0.07								
Sample×Fatigue			-0.04								
Sample×Autonomy			0.02								
Sample×Training provision			-0.04								
Sample×Role Clarity			0.00								
R ²	0.07	0.48	0.49	0.06	0.20	0.37	0.38	0.10	0.41	0.57	0.60
Adjusted R ²	0.06	0.47	0.48	0.04	0.17	0.35	0.35	0.08	0.40	0.56	0.58
F	7.62 **	52.70 **	37.72 **	2.76 **	9.20 **	15.31 **	14.78 **	6.33 **	35.48 **	46.78 **	48.45 **

Note. *Significance at the 5% level; **Significance at the 1% level.

In separate regression analysis using the 2007 and the 2013 data, we entered the control variables in Step 1, and main effects of supervisor support, co-worker support, benefit satisfaction, fatigue, autonomy, training provision and role clarity in Step 4. In Step 2 to 3, main effects were separately entered by supervisor support in Step 2 and other rewards in Step 3 to test their comparative importance. All the five reward variables, except fatigue of the 2007, were significantly associated with OC when they were entered separately in Step 2 to 3 ($p < 0.05$). Observing adjusted R², supervisor support and other rewards explained 13% and 31% of additional variances in OC respectively in the 2007 data. On the other hand, these figures were 32% and 48% in the 2013 data. These imply that both supervisor support and other rewards were important for OC in both years but the former is more important comparatively and absolutely in 2013 than in 2007, confirming Hypotheses 1.

5. Discussion and Implications for Theory and Practice

The objective of the present study was to investigate the change between 2007 and 2013 in antecedents of the organizational commitment (OC) of university-graduate employees working in the Japanese companies in China. Our findings demonstrate that seven rewards (i.e. supervisor support, co-worker support, benefit satisfaction, autonomy, training provision, role clarity and lower fatigue) engendered higher levels of OC. This is in line with the previous research (e.g. Nazir, 2016) and indicates there are many rewards to enhance OC of Chinese university graduates. However, we found a difference in the significance of correlation between supervisor support and OC between the samples of 2007 and 2013. The result indicates that university graduates in Japanese companies had become to require more support from supervisors in 2013 than they did in 2007.

This finding was consistent with the hypothesis and in line with the indication of previous research regarding Chinese society as it has been argued that Chinese culture is largely collectivistic (Triandis, 1995) and employees' OC in such a society may arise from ties with supervisors and surrounding people (Boyacigiller & Adler, 1991). However, empirical evidence suggests that individualism in China could be increasing in the long run (Yan, 2009) because culture in a society tends to shift to individualism as it develops economically (Triandis, 1995; Hofstede, 2001). Supposing such a correlation between economic condition and individualism, we can reasonably expect that a society may advance backward intensifying its collectivistic feature when it is under economic slowdown. Accordingly, it is considered that the economic crisis in 2008 and the following long-lasting hard times had made

the university graduates feel more anxious, become more collectivistic and seek for more support from the bosses than they did before. Such a retrograde movement may possibly have been intensified by Chinese past-oriented culture where they tend to be high in uncertainty avoidance and more uncomfortable with change than Western people (Rarick, 2007).

However, the result that co-worker support, which is another fragment of social rewards, showed no significant change in relation with OC contradicts our hypothesis. What is the reason of such difference? To obtain a hint for answering this question, we may have to remember another cultural feature of this country in which there is respect for seniority, strict hierarchies in the workplace and limited subordinate participation in decision-making (Chan, et al., 2006; Cheng, et al., 2003; Chen, et al., 2002). As people had much accounted of seniority in their human relations due mainly to traditional Confucian culture, they may have come to more rely on such relations when they became anxious under economic slowdown because relations with the bosses are not merely related with collectivism but also with the Confucian ethical view which has taken root in general in this society. On the other hand, relations with co-workers are considered to be less related with such tradition and may not change its importance as a factor of OC even in the hard time.

This result is full of interesting suggestion for considering the future of management in China. Although recent empirical studies highlight the growing importance of participative leadership in various enterprises in exchange of abandoning traditional authoritarian and command-based styles (Huang, Iun, Liu, & Gong, 2010), there has been limited focus on its relevance in the period of slowdown. Based on the finding in this research and taking account the Chinese past-oriented features, more flexible HRM which allows some adjustments depending on economic conditions might be more acceptable for Chinese graduate employees than those which require selecting one style from two alternatives irrespective the situations which confront them. However, at the same time, we may not have to exaggerate the necessity of going back to the past because this research indicates that employees' response to the most rewards including intrinsic and extrinsic rewards which are said to be stronger in individualistic culture (Boyacigiller & Adler, 1991) do not change over time. This result may be understood that individualism is not weakened even during the economic slowdown because individualism is not the polar opposite of collectivism (Triandis, et al., 1988) and Chinese society has adopted market economic principles and become more individualistic without substantially forsaking their collectivistic Confucian culture (Ralston, Nguyen, & Napier, 1999). In other words, they may need to be more collectivistic to soften anxiety in the depression but may not need to be less individualistic as individualism may coexist with collectivism. Accordingly, building good teamwork with supervisors and co-workers, removing irrational quantities from treatments, enriching opportunities of self-enhancement, clarifying job scope and enhancing a sense of autonomy by delegation of organizational authority (an area in which Japanese companies are weak. Cf. Yu & Meyer-Ohle, 2008) are all important and should be considered comprehensively anytime irrespective of economic conditions.

Additionally, we could examine local adaptability of the management of Japanese companies in a time of recession. Japanese companies is sometimes considered to be a second family which encourages intensive socialization (Jackson & Tomioka, 2004) and require managers closely involved with a work group (Whitney, 1994, p.100), even though nowadays Japanese management changes and parts from such family-like style due to economic stagnation and the influence of globalization (Haghirian, 2010). In this sense, Japanese companies may possibly adapt themselves to Chinese work conditions especially when the latter is under a circumstance of economic stagnation and becomes more collectivistic than usual. However, we may not take an optimistic view remembering the fact that Japanese managers are typically less trusted from their subordinates than Chinese counterparts especially for job performing ability, leadership and capability for managing subordinates (Shiraki, 2012). Accordingly, collectivistic culture of Japanese companies may not be attractive for the employees even in the hard time, rather, could become harmful to soundness of the management through the channel of strengthened effect of supervisor support towards OC in the economic slowdown. Of course, the supervisors in Japanese companies are not only Japanese but also Chinese, but the latter may also be inferior to those of other kind of companies in their skills of managing subordinates as Japanese companies are known not to be selected by university graduates as the workplaces they primarily want to work for (Zhang, 2003) and as the result not a few Chinese managers there may be the ones who couldn't enter other kind of companies. Accordingly, Japanese companies may need to improve the HRM in China to attract better managers and to enhance the employees' OC even in a depression by strengthening the support from supervisors to subordinates through enriched education to the former, localization of the management by transferring authority from Japanese expatriates to local staffs, etc.

6. Study Limitations and Suggestions for Future Research

There are three significant limitations on this research. The first one is about target. The sample in this research

targeted only four Japanese manufacturing companies. If the sample includes larger number of companies of diverse industries of various origins, the results may perhaps be altered.

The second limitation is applicability. The incident which occurred and influenced the nature of employees between 2007 and 2013 may not only the economic slowdown but also a product of many other occurrences unmentioned in this paper. So, to further consider the change of rewards-OC relationship over time, future research is recommended to take account more various possibilities.

The third limitation of this research is about reliability. This study used self-report data from single respondents, which may have resulted in common method bias. Future research might consider the inclusion of supervisor-rated scales to reduce common method bias and remedy the weakness of the present study design.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuous, and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1-18. <https://doi.org/10.1111/j.2044-8325.1990.tb00506.x>
- Barrett, A., & O'Connell, P. J. (2001). Does training generally work? The returns to in-company training. *Industrial and Labor Relations Review*, 54(3), 647-662. <https://doi.org/10.1177/001979390105400307>
- Beukhof, G., De Jong, M. J., & Nijhof, W. J. (1998). Employee commitment in changing organization: An exploration. *Journal of European Industrial Training*, 22(6), 243-248. <https://doi.org/10.1108/03090599810224701>
- Boyacigiller, N., & Adler, N. J. (1991). The parochial dinosaur: Organizational suicide in global context. *Academy of Management Review*, 16, 262-290. <https://doi.org/10.5465/AMR.1991.4278936>
- Caught, K., & Shadur. (2000). The measurement artifact in the organizational commitment questionnaire. *Psychological Reports*, 87(3), 777-788. <https://doi.org/10.2466/pr0.2000.87.3.777>
- Chan, A. W., Feng, T. Q., Redman, T., & Snape, E. (2006). Evaluating the multi-dimensional view of employee commitment: A comparative UK-Chinese study. *International Journal of Human Resource Management*, 17(11), 1873-1887. <https://doi.org/10.1080/09585190601000022>
- Chen, Z. X., & Aryee, S. (2007). Delegation and employee work outcomes: An examination of the cultural context of mediating processes in China. *Academy of Management Journal*, 50, 226-238. <https://doi.org/10.5465/AMJ.2007.24162389>
- Chen, Z. X., Tsui, A. S., & Farth, J. L. (2002). Loyalty to supervisor vs. organizational commitment: Relationships to employee performance in China. *Journal of Occupational and Organizational Psychology*, 75(3), 339-356. <https://doi.org/10.1348/096317902320369749>
- Cheng, B. S., Jiang, D. Y., & Riley, J. H. (2003). Organizational commitment, supervisory commitment, and employee outcomes in the Chinese context: Proximal hypothesis or global hypothesis? *Journal of Organizational Behavior*, 24(3), 313-334. <https://doi.org/10.1002/job.190>
- Chiu, R. K., Luk, V. W. M., & Tang, T. L. P. (2002). Retaining and motivating employees: Comparison preferences in Hong Kong and China. *Personnel Review*, 31, 402-431. <https://doi.org/10.1108/00483480210430346>
- Colignon, R. A., Usui, C., Kerbo, H., & Slagter, R. (2007). Employee commitment in US and Japanese firms in Thailand. *Asian Social Science*, 3(11), 16-32. Retrieved from http://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=1051&context=ssci_fac
- Eby, L. T., Freeman, D. M., Rush, M. C., & Lance, C. E. (1999). Motivational bases of affective organizational commitment: A partial test of an integrative theoretical model. *Journal of Occupational and Organizational Psychology*, 72(4), 463-483. <https://doi.org/10.1348/096317999166798>
- Froese, F. J., & Xiao, S. (2012). Work values, job satisfaction and organizational commitment in China. *The International Journal of Human Resource Management*, 23(10), 2144-2162. <https://doi.org/10.1080/09585192.2011.610342>
- Gamble, J., & Tian, A. W. (2015). Intra-national variation in organizational commitment: evidence from the Chinese context. *The International Journal of Human Resource Management*, 26(7), 948-970.

- <https://doi.org/10.1080/09585192.2012.722122>
- Gregersen, H. B., & Black, J. S. (1996). Multiple commitments upon repatriation: The Japanese experience. *Journal of Management*, 22(2), 209-229. <https://doi.org/10.1177/014920639602200202>
- Haghirian, P. (2010). *Innovation and Change in Japanese Management*, Springer. <https://doi.org/10.1057/9780230250536>
- He, Y., Lai, K. K., & Lu, Y. (2011). Linking organizational support to employee commitment: Evidence from hotel industry of China. *International Journal of Human Resource Management*, 22(1), 197-217. <https://doi.org/10.1080/09585192.2011.538983>
- Hofstede, G. (2001). *Culture's consequences* (2nd ed). Beverly Hills, CA: Sage Publications.
- Hofstede, G. (1980). *Culture's consequence*. Beverly Hills, CA: Sage Publications.
- Hou, Y., Gao, G., Wang, F., Li, T., & Yu, Z. (2011). Organizational commitment and creativity: the influence of thinking styles. *Annals of Economics & Finance*, 12(2), 411-431. Retrieved from <http://aefweb.net/aefarticles/aef120209.pdf>
- Huang, X., Iun, J., Liu, A., & Gong, Y. (2010). Does participative leadership enhance work performance by inducing empowerment or trust? The differential effects on managerial and non-managerial subordinates. *Journal of Organizational Behavior*, 31(1), 122-143. <https://doi.org/10.1002/job.636>
- International Monetary Fund (2017). *World Economic Outlook Databases April 2017*. Retrieved from <http://www.imf.org/external/ns/cs.aspx?id=28>
- Jackson, K., & Tomioka, M. (2004). *The Changing Face of Japanese Management*, London: Routledge.
- Jafri, M. H. (2010). Organizational commitment and employee's innovative behavior: A study in retail sector. *Journal of Management Research*, 10(1), 62-68.
- Jamal, M. (2005). Personal and organizational outcomes related to job stress and Type-A behavior: a study of Canadian and Chinese employees, *Stress and Health*, 21(2), 129-137. <https://doi.org/10.1002/smi.1047>
- Japan External Trade Organization. (2016). *2015 nen no taichu chokusetsu toshi doko (Direct investment trend in China 2015)*, July 2016. (Japanese). <https://www.jetro.go.jp/world/reports/2016/01/12f11b2258f74978.html>
- Japan-China Investment Promotion Organization. (2005). *Dai 8 ji nikkei kigyo anketo chosa shukei kekka (gaiyo) (Aggregated results of the 8th survey of Japanese companies)*, October 2005. (Japanese)
- Kokubun, K. (2006). *Globalization and industrial reallocation: How to motivate Malaysian workers*. Paper presented at the 3rd International Globalization Studies Network (GSN) Conference, Universiti Kebangsaan Malaysia.
- Kokubun, K. (2017a). Organizational commitment and rewards in Thailand, with comparison between university graduates and others. *Asian Social Science*, 13(6), 1-19. <https://doi.org/10.5539/ass.v13n6p1>
- Kokubun, K. (2017b). The moderating effect of gender on the organizational commitment-rewards relationship. *International Journal of Business and Management*, 12(7), 1-16. <https://doi.org/10.5539/ijbm.v12n7p1>
- Lam, C. S., & O'Higgins, E. R. E. (2011). Enhancing employee outcomes: The interrelated influences of managers' emotional intelligence and leadership style. *Leadership & Organization Development Journal*, 33(2), 149-174. <https://doi.org/10.1108/01437731211203465>
- Malhotra, N., Budhwar, P., & Prowse, P. (2007). Linking rewards to commitment: An empirical investigation of four UK call centres. *International Journal of Human Resource Management*, 18(12), 2095-2128. <https://doi.org/10.1080/09585190701695267>
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, 61(1), 20-52. <https://doi.org/10.1006/jvbe.2001.1842>
- Miao, Q., Newman, A., Sun, Y., & Xu, L. (2013). What factors influence the organizational commitment of public sector employees in China? The role of extrinsic, intrinsic and social rewards. *International Journal of Human Resource Management*, 24(17), 3262-3280. <https://doi.org/10.1080/09585192.2013.770783>
- Milfont, T. L., & Fischer, R. (2010). Testing measurement invariance across groups: Applications in cross-cultural research. *International Journal of Psychological Research*, 3, 111-121. <https://doi.org/10.21500/20112084.857>

- Ming, L., & Zhao ying, Z. (2010). How does organizational commitment affect organizational innovation. *2010 International Conference on E-Business and E-Government*, 1164-1170. Institute of Electrical and Electronics Engineers. <https://doi.org/10.1109/ICEE.2010.300>
- Ministry of Economy, Trade and Industry of Japan. (2016). *Dai 46 kai kaigai jigyo katsudo kihon chosa gaiyo (Summary report: 46th basic survey of foreign business activities)*. (Japanese) Retrieved from http://www.meti.go.jp/statistics/tyo/kaigaizi/result/result_46/pdf/h2c46kaku1.pdf
- Mottaz, C. J. (1985). The relative importance of intrinsic and extrinsic rewards as determinants of work satisfaction. *The Sociological Quarterly*, 26(3), 365-385. <https://doi.org/10.1111/j.1533-8525.1985.tb00233.x>
- Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). *Employee-organization linkages: The psychology of commitment, absenteeism and turnover*. New York, NY: Academic Press.
- Nazir, S., Shafi, A., Qun, W., Nazir, N., & Tran, Q. D. (2016). Influence of organizational rewards on organizational commitment and turnover intentions. *Employee Relations*, 38(4), 596-619. <https://doi.org/10.1108/ER-12-2014-0150>
- Newman, A., & Sheikh, A. Z. (2012). Organizational commitment in Chinese small- and medium-sized enterprises: The role of extrinsic, intrinsic and social rewards. *International Journal of Human Resource Management*, 23(2), 349-367. <https://doi.org/10.1080/09585192.2011.561229>
- Newman, A., Thanacoody, R., & Hui, W. (2011). The impact of employee perceptions of training on organizational commitment and turnover intentions: A study of multinationals in the Chinese service sector. *International Journal of Human Resource Management*, 22(8), 1765-1787. <https://doi.org/10.1080/09585192.2011.565667>
- O'Reilly, C. A., & Caldwell, D. F. (1980). Job choice: The impact of intrinsic and extrinsic factors on subsequent satisfaction and commitment. *Journal of Applied Psychology*, 65(5), 559-565. <https://doi.org/10.1037/0021-9010.65.5.559>
- Peyyer, C., Jordan, C., Firms, I., & Travaglione, A. (2010). Predicting turnover intentions. *Management Research Review*, 33(9), 911-923. <https://doi.org/10.1108/01409171011070323>
- Phipps, S. T., Prieto, L. C., & Ndinguri, E. N. (2013). Understanding the impact of employee involvement on organizational productivity: The moderating role of organizational commitment. *Journal of Organizational Culture, Communication and Conflict*, 17(2), 107.
- Porter, L. W., & Lawler, E. E. (1968). *Managerial attitudes and performance*. Homewood, IL: Dorsey Press.
- Ralston, D. A., Nguyen, V. T., & Napier, N. K. (1999). A comparative study of the work values of north and south Vietnamese managers. *Journal of International Business Studies*, 30(4), 655-672. <https://doi.org/10.1057/palgrave.jibs.8490097>
- Ralston, D. A., Holt, D. H., Terpstra, R. H., & Kai-Cheng, Y. (2008). The impact of national culture and economic ideology on managerial work values: A study of the United States, Russia, Japan, and China. *Journal of International Business Studies*, 39(1), 8-26. <https://doi.org/10.1057/palgrave.jibs.8400330>
- Rarick, C. A. (2007). Confucius on management: Understanding Chinese cultural values and managerial practices. *Journal of International Management Studies*, 2(2), 22-28. Retrieved from <http://www.jimsjournal.org/3%20Charles.pdf>
- Recruit Management Solutions. (2012). *Chugoku ni okeru Nikkei kigyō no image to daigakusei ga kigyō ni motomeru koto (Image towards Japanese companies in China and what university students ask companies for)*. (Japanese) Retrieved from https://www.recruit-ms.co.jp/research/study_report/0000000290/
- Sharma, Y. (2014). What do you do with millions of extra graduates? *BBC News*. 1 July 2014. Retrieved from <http://www.bbc.com/news/business-28062071>
- Shibata, H. (2015). Personnel management of Japanese companies in China (5): Personnel management problems of this stage. *Sensyu Ningenkagaku Ronsyu Shakaigakuhen*, 5(2), 51-67. (Japanese) Retrieved from file:///C:/Users/user/Downloads/1072_0005_09%20(1).pdf
- Shiraki, M. (2012). Nihon Kigyo no globalization to kaigai hakensha: Asia no genchi staff niyoru joshi hyoka karano kento (Japanese companies' globalization and overseas expatriates: Examination by local staffs' evaluation towards supervisors in Asia). *Nihon Rodo Kenkyu Zasshi*, 623, 5-16. (Japanese) Retrieved from <http://www.jil.go.jp/institute/zassi/backnumber/2012/06/pdf/005-016.pdf>

- Steers, R. M. (1977). Antecedents and outcomes of organizational commitment. *Administrative Science Quarterly*, 22(1), 46-56. <https://doi.org/10.2307/2391745>
- The Japanese Chamber of Commerce and Industry in China (2016). *Chugoku keizai to nihon kigyo 2016 nen hakusyo (Chinese economy and Japanese companies 2016 white paper)*. (Japanese). Retrieved from http://www.cjcci.biz/public_html/whitepaper/.../hakusho_full_JP.pdf
- Triandis, H. C. (1995). *Individualism and Collectivism*. Boulder, CO: Westview Press.
- Triandis, H. C., Bontempo, R., Villareal, M. J., Asai, M. & Lucca, N. (1988). Individualism and collectivism: Cross-cultural perspectives on self-ingroup relationships. *Journal of Personality and Social Psychology*, 54(2), 323-338. <https://doi.org/10.1037/0022-3514.54.2.323>
- United Nations Conference on Trade and Development. (2004). *World investment report 2004: The shift towards services*. New York and Geneva: United Nations. Retrieved from http://unctad.org/en/Docs/wir2004_en.pdf
- United Nations Conference on Trade and Development. (2010). *World investment report 2010*. New York and Geneva: United Nations. Retrieved from http://unctad.org/en/Docs/wir2010_en.pdf
- Wan, S. (2009). *Chugoku shinsyutsu Nikkei kigyo no rodo CSR (Labor CSR of Japanese companies in China)*. (Japanese) Retrieved from <http://www.ipp.hit-u.ac.jp/consultingproject/2009/CP09Wang.pdf>
- Warner, M. (2004). Human resource management in China revised: Introduction. *International Journal of Human Resource Management*, 15(4-5), 617-634. <https://doi.org/10.1080/0958519042000192861>
- Wasti, S. A. (1998). Cultural barriers in the transferability of Japanese and American human resources practices to developing countries: the Turkish case. *International Journal of Human Resource Management*, 9(4), 608-631. <https://doi.org/10.1080/095851998340928>
- Whitney, R. (1994). *Business systems in Asia: Firms, markets and societies*. London, Newbury Park, Sage publications.
- Yan, X. (2010). *Nihon kigyo niyoru taichu sinsyutu no chiiki bunpu (Japanese companies' regional distribution in China)*. Retrieved from http://www.osaka-ue.ac.jp/zemi/kusanagi/2009nagizemi/pdf/02_Yan.pdf
- Yan, Y. X. (2009). *The individualization of Chinese society*. Oxford: Berg.
- Yu, J., & Meyer-Ohle, H. (2008). Working for Japanese corporations in China: A qualitative study. *Asian Business and Management*, 7(1), 33-51. <https://doi.org/10.1057/palgrave.abm.9200250>
- Zhang, J. (2003). Nikkei kigyo no jinji romu kanri to chingin mondai: Kawaru Chugokujin no ishiki to kwaranu Nihongata keiei (The labor management of Japanese companies and the problems of its wage system: The changing concepts of Chinese and the changeless Japanese management). *Asia Market Review*, 15(10), 34-36. (Japanese) Retrieved from <http://chasechina.jp/reports/chinabiz/resources/401.html>
- Zhou, M., & Lin, J. (2009). CHINA: Graduate unemployment on the rise. *University World News*, 71. [universityworldnews.com](http://www.universityworldnews.com). 12 April 2009. Retrieved from <http://www.universityworldnews.com/article.php?story=20090409203634912>

Appendix. Demographic Information.

	Gender			Total	Age					Total
	Male	Female	Total		Below 20 years old	20-29	30-39	40-49	50 years old and above	
2007	250 58.3%	179 41.7%	429 100.0%	1 0.2%	322 75.1%	91 21.2%	15 3.5%	0 0.0%	429 100.0%	
2013	327 56.8%	249 43.2%	576 100.0%	0 0.0%	265 46.0%	265 46.0%	41 7.1%	5 0.9%	576 100.0%	
Total	577 57.4%	428 42.6%	1,005 100.0%	1 0.1%	587 58.4%	356 35.4%	56 5.6%	5 0.5%	1,005 100.0%	

	Working experience					Total	Experience of changing your jobs		Total
	Below 1 year	1 year	2-4 years	5-9 years	10 years and above		Have no experience	Have no experience	
2007	102 23.8%	110 25.6%	124 28.9%	59 13.8%	34 7.9%	429 100.0%	226 52.7%	203 47.3%	429 100.0%
2013	66 11.5%	73 12.7%	138 24.0%	192 33.3%	107 18.6%	576 100.0%	262 45.5%	314 54.5%	576 100.0%
Total	168 16.7%	183 18.2%	262 26.1%	251 25.0%	141 14.0%	1,005 100.0%	488 48.6%	517 51.4%	1,005 100.0%

	Educational background								Total
	Lower Secondary School	Upper Secondary School	Specialized College	College/Vocational	University	Graduate School	In the middle of school years	Others	
2007	0 0.0%	0 0.0%	0 0.0%	0 0.0%	418 97.4%	11 2.6%	0 0.0%	0 0.0%	429 100.0%
2013	0 0.0%	0 0.0%	0 0.0%	0 0.0%	551 95.7%	25 4.3%	0 0.0%	0 0.0%	576 100.0%
Total	0 0.0%	0 0.0%	0 0.0%	0 0.0%	969 96.4%	36 3.6%	0 0.0%	0 0.0%	1,005 100.0%

	Marriage			Total	Department		Total	Position		Total
	Single	Married	Others		Direct department	Indirect department		Managerial position	Non-managerial position	
2007	265 61.8%	161 37.5%	3 0.7%	429 100.0%	136 31.7%	293 68.3%	429 100.0%	33 7.7%	396 92.3%	429 100.0%
2013	210 36.5%	359 62.3%	7 1.2%	576 100.0%	174 30.2%	402 69.8%	576 100.0%	68 11.8%	508 88.2%	576 100.0%
Total	475 47.3%	520 51.7%	10 1.0%	1,005 100.0%	310 30.8%	695 69.2%	1,005 100.0%	101 10.0%	904 90.0%	1,005 100.0%

	Industry			Total	City			Total
	Automobile	Electrical	Total		Dalian	Wuxi	Dongguan	
2007	5 1.2%	424 98.8%	429 100.0%	152 35.4%	272 63.4%	5 1.2%	429 100.0%	
2013	24 4.2%	552 95.8%	576 100.0%	195 33.9%	357 62.0%	24 4.2%	576 100.0%	
Total	29 2.9%	976 97.1%	1,005 100.0%	347 34.5%	629 62.6%	29 2.9%	1,005 100.0%	

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

An Application of the CHAID Algorithm to Study the Environmental Impact of Visitors to the Teide National Park in Tenerife, Spain

Flora M^aD íz-P érez¹ & M^aBethencourt-Cejas²

¹Universidad de La Laguna, La Laguna, Tenerife, Canary Islands, Spain

²Universidad de La Laguna, La Laguna, Tenerife, Canary Islands, Spain

Correspondence: Flora M^aD íz-P érez, Universidad de La Laguna, 38071 La Laguna, Tenerife, Canary Islands, Spain.

Received: May 8, 2017

Accepted: June 19, 2017

Online Published: June 26, 2017

doi:10.5539/ibr.v10n7p168

URL: <https://doi.org/10.5539/ibr.v10n7p168>

Abstract

The significant and complex relationship between visitor numbers to a national park and the environment calls for appropriate policies to be adopted. This paper analyzes the relationship from the perspective of visitors to the Teide National Park (TNP) in Tenerife, aiming to establish strategies to reduce visitors' environmental impacts. This is particularly important as the TNP, with over 3,000,000 visitors in 2015, is the most visited park in Spain and one of the most visited in Europe. An empirical study was conducted during 2016 resulting in 805 valid questionnaires. A CHAID algorithm was then applied to segment visitors according to criterion variables. Findings show the first segmenting variable is transport type, with the car being the most frequently used by visitors. Specifically, the visitor segment coming by car is also associated with the longest stays in the TNP. Regarding the practical and social implications, it is assumed the longer the stay, the greater the environmental impact. These results highlight the need for new transport strategies for the park with improved, less polluting vehicles.

Keywords: transport and environmental policies, CHAID algorithm, market segmentation, socioeconomic characteristics

1. Introduction

Economic policies in the tourism sector have to face the contradiction between the search for greater economic profitability and, on the other hand, the conservation of natural heritage and the sustainability of natural resources associated with tourist destinations. An example of a natural resource that needs adequate protection for its use and enjoyment, not only by the present generation, but also by future ones, is that of a National Park (NP).

In Spain, there are a total of 15 National Parks (Ministry of Agriculture, Food and Environment, 2016). These 15 parks received 14,429,535 visitors (INE) in 2015: an increase of 50.1% compared to 2010 (in the midst of the economic crisis). However, the real increase is lower considering that in 2015 there was a new NP created. This new park is the Sierra de Guadarrama (Castilla Le ón and Madrid), and in 2015, it received 2,989,556 visitors. Adjusting for the new NP, the real increase stands at 19%, which is still a significant number from the perspective of the possible environmental impact. The increase in the number of visitors may also be linked to the gradual but constant economic recovery, after many years of recession.

Problems arising from the negative impacts of the volume of visitors on parks' natural resources are undoubtedly very diverse, given that not all territories have the same environmental load capacity. Island territories, for example, are more fragile and suffer greater deterioration (Ramdas & Mohamed, 2014; Zubair, Bowen & Elwin, 2011). The Canary Islands Autonomous Region, for example, consists of seven islands and contains four of the fifteen National Parks (Caldera de Taburiente, Garajonay, Teide and Timanfaya) located on different islands: La Palma, La Gomera, Tenerife and Lanzarote, respectively. The total number of visitors received by the four Canary Island parks amounts to 6,219,058: nearly half the total number of visitors to all Spanish NPs. As the total number of visitors is not an homogeneous group, the first step in any analysis is to segment the complete group of visitors with the aim of determining which of these segments generate the greatest environmental impact.

The study of market segmentation has been traditionally undertaken by resorting to regression methods. Nevertheless, the need for a significant number of segments and qualifying variables has led to the use of other procedures of multivariate analysis (D'áz-Pérez & Bethencourt-Cejas, 2016; Legohérel, Hsu & Daucé 2015; Nicholson & Pearce, 2000). One such segmentation technique is CHAID (Chi-square Automatic Interaction Detection). This market segmentation technique is more sophisticated than other multivariate analysis techniques (McCarty & Hastak, 2007) but has rarely been used in this field. This is despite CHAID having very important advantages, since it does not involve the restrictive principle of parametric tests for predictive variables.

Considering the previous arguments, the originality and value of this paper is the study of the environmental impact of visitors based on the segmenting power of socioeconomic characteristics. This study experiments with the technique of analysis based on algorithms: CHAID (Chi Square Automatic Interaction Detection). This technique is novel both in the area of tourism market segmentation and for its use to analyze the demand associated with NPs in island territories. In this case, total number of visitors was classified using the CHAID algorithm and the criterion variable selected was duration of stay in the park, under the assumption that the longer the stay, the greater the environmental impact (Jim, 2000).

2. Background

2.1 Length of the Stay and the Environmental Impact

2.1.1 Length of Stay and the Environment

Many studies have demonstrated the importance of the length of stay on income generated by tourists in destination (Alegre, Mateo & Pou, 2011); however, less attention has been paid to the environmental impact of a longer stay. This is especially relevant for small island destinations as resources are limited, and the natural environment is fragile. Therefore increased numbers of tourist arrivals can put pressure on limited resources such as water and land availability, beyond the carrying capacity threshold limits of islands, thereby jeopardizing sustainability (Holden, 2000; UNEP, 1999). Moreover, on small islands there is often a high degree of endemism and biodiversity but, conversely, relatively small species numbers, and consequently a high risk of extinction among flora and fauna (Zubair, Bowen & Elwin, 2011).

The information obtained from the analysis of destination demand is a very important issue when the researcher is interested in determining which market segment causes the least stress on local resources. In this respect, a core issue in this context is carrying capacity analysis (Saarinen, 2006). Carrying capacity has been generally defined as *the maximum number of people who can use a site without any unacceptable alteration in the physical environment and without any unacceptable decline in the quality of the experience gained by tourists* (Mathieson and Wall 1982, 2). The relevance of carrying capacity should, however, be considered in a relative way. In fact, this concept of carrying capacity is based on different perspectives and opinions concerning nature and culture and their uses as resources, thus resulting in many different definitions. As established in the literature, the number of tourists or the time they spend in a particular destination reach the threshold level when human values and (changing) perceptions concerning the resources indicate that the maximum level has been reached (Hughes and Furley 1996; Odell, 1975).

2.1.2 Length of Stay and Destination Demand Determinants

In the literature, a renewed interest in studying the role of length of stay as a determinant of tourism destination demand has appeared (Alegre & Pou, 2007; Gokovali, Bahar & Kozak, 2007; Gomes de Menezes, Moniz & Cabral, 2008; Pestana Barros & Correira, 2007; Alegre, Mateo & Pou, 2011; Pestana Barros & Pinto Machado, 2010; Thrane, 2012). However, it has been many years since the initial studies were conducted (Mak, Moncur, and Yonamine, 1977; Mk & Nishimura, 1979; Bell & Leeworthy, 1990) and Fleischer & Pizam, 2002).

Economic theory generally treats the length of stay as a constraint on demand imposed by available time, but not by destination demand. However, other studies such as those carried out by Thrane, (2012) show that nationality, age, spending patterns and other trip-related characteristics are associated with length of stay. Moreover, no previous research has used a decision tree model to segment a NP natural resource, taking advantage of a criterion method from a destination management perspective.

2.2 The Tourism Market Segmentation

Several authors have emphasized the desirability of combining different market strategies to capture different segments; (Cook & Mindak 1984, Kardes 2002, Mok & Iverson 2000, Rhim & Cooper 2005, Solomon, Bamossy & Askegaard, 2002). These authors confirm the need to advance in the study of the most suitable segmentation techniques. The ultimate objective of previous studies has been to find as many market segments as possible, statistically speaking. This was, for example, the intention of authors researching tourism market

segmentation that have used tourist expenditure as a segmentation variable. Some of the first papers were written by LaPage (1969) and Styne & Mahoney (1980); however, they did not have much success from the perspective of the clear identification of different groups of tourists based on expenditure. However, more recent studies (Díaz-Pérez & Bethencourt-Cejas 2016; Díaz-Pérez, Bethencourt-Cejas & Álvarez-González 2005; Legohérel 1998; Legohérel & Wong 2006; Spotts & Mahoney 1991) have obtained precise information on the composition and characteristics of homogeneous groups of tourists according to their level of expenditure.

2.2.1 Chi-square Automatic Interaction Detection (CHAID) or Genetic Algorithm

Although the CHAID algorithm segmentation procedure, itself, was first introduced by Kass in 1975, in general, it has been rarely used in market segmentation. In addition, in relation to tourism market segmentation, researchers have used two types of analysis: *a priori* (in origin) or *post hoc* (when leaving destination). Often both *a priori* and *post hoc* analysis have had a descriptive nature. CHAID algorithms, on the other hand, are based on a criterion variable with two or more categories, which allow researchers to determine segmentation with respect to that variable and according to a combination of independent predictors (Chen 2003; Díaz-Pérez, Bethencourt-Cejas & Álvarez-González 2005; Legohérel, Hsu & Daucé 2015). However, the lack of knowledge and complexity of models (McCarty & Hastak 2007) has limited their use to relatively few cases of tourism market segmentation (Chen, 2003; Chung, Oh, Kim & Han 2004; Diaz-Perez, Bethencourt-Cejas & Alvarez-Gonzalez 2005; Diaz-Perez & Bethencourt-Cejas, 2016).

It is important to highlight some of the strengths of CHAID analysis as a method of tourism market segmentation. These strengths can be summarized based on the following characteristics: 1) Chi-square is a nonparametric statistic, thus any form of variable distribution is accepted; 2) both nominal and interval variables can be included in the model as independent variables (predictors); 3) continuous variables can be chosen as criterion variables, since they can be dichotomized and 4) the criterion variable will be selected according to the objectives of destination operators, a characteristic that increases the model's efficiency.

In addition, when comparing CHAID with other non-criterion methods, such as cluster analysis, we observe greater efficiency in terms of the number of variables and the amount of data contained in the former. In this sense, we appreciate, for example, how CHAID algorithms allow the classification of new cases observed in mutually selective, i.e. non-overlapping segments, which means that each element is contained in a single segment (Kass, 1980).

2.2.2 Choice of the Criterion Variable

CHAID analysis has been used in the study of tourism markets since 2000 with the goal of obtaining diverse results including: the identification of preferences when choosing hotel establishments using demographic variables (Chung, Oh, Kim & Han 2004), or clarification of preferences in hotel and restaurant choices (Legohérel, Hsu & Daucé 2015). It has also been used to obtain information on expenditure levels using both demographic variables and those related to the trip's characteristics (Díaz-Pérez, Bethencourt-Cejas & Álvarez-González, 2005) and to describe spending habits (Legohérel & Wong, 2006). Some studies have used it to identify future recommendations using product satisfaction, price and quality of service as independent variables (Chen, 2003); to know the likelihood of returning (Assaker & Hallak, 2012; Hsu & Kang, 2007) and to obtain information on intentions to recommend and visit the destination in the future (Vassiliadis, 2008).

However, we did not find in the literature any study that segmented the tourist markets by duration of stay, in this case on a visit to the TNP. What is more, if we look at the use of CHAID algorithms as a segmentation method, it is even more difficult to find studies applied to the whole industry and, of course, we do not find any referring to the segmentation of national parks.

2.4 Contribution of the Study Corresponding to This Research

In this paper, the most relevant contribution is summarized by the following aspects: 1) tourism markets associated with national park visits are segmented for the first time in Spain; 2), the "duration of the visit" is also established for the first time in the process of using it as a criterion variable in a CHAID analysis. This comparison will allow tourism destination operators and NP management authorities to make more informed decisions regarding the economic and environmental management of tourist destinations; 3) the application, for the first time, of CHAID to measure the environmental impact of different means of transport segmented according to socioeconomic variables. In fact, this study analyzed the socioeconomic characteristics of visitors to a national park and used them as criterion variables to segment the duration of the visit.

3. Objectives and Research Hypotheses

Within the framework of the Autonomous Region of the Canary Islands, the Teide National Park stands out with

a total of 3,289,444 visits, as the most visited NP, not only in the Canary Islands, but also in the entire territory of Spain (INE, 2015). Such an important place, the most popular in terms of visitor numbers, makes us realize how inappropriate the high frequency of visitors is for the conservation of an essential natural resource in the tourist offer of the island where it is based: Tenerife. In fact, the island of Tenerife receives annually five times the number of tourists as its total population.

The data provided by FRONTUR on tourist arrivals on international direct flights for the year 2015 show a total of 5,195,209 tourists arriving in Tenerife, 66.7% more than in 2010 (ISTAC 2002). Visitors to the Teide National Park grew in the same period by 36.6%, giving a 63.3% the ratio of visitors to TNP per number of tourist arrivals. This notable number of tourist visits to the Teide National Park (two out of three tourists visit) coupled with the booming tourism sector in the last two years (2015 and 2016) clearly requires the development of the necessary control measures within the framework of the island's tourism policy and, above all, for the conservation of an essential resource in the island's tourist offer.

3.1 Objectives

The approaches set out above lead to the following objectives for this study:

- 1) To experiment with the technique based on CHAID algorithms (Chi Square Automatic Interaction Detection) in the context of tourist market segmentation for the specific case of the demand associated with NPs, since these are considered important sustainable tourist products in island territories.
- 2) To incorporate, for the first time in the use of this technique by the scientific community, the segmentation based on the "duration of the visit" as the criterion variable.
- 3) Finally, the application of this technique will make it possible to better understand the different segments of the tourism markets currently visiting the Canary Island NPs and, therefore, lead to the development of competitiveness plans aimed at improving both productivity and the conservation of NPs as heritage resources.

3.2 Hypothesis

Based on the above objectives, this research sets out to demonstrate the following hypotheses:

H1. CHAID algorithms allow the construction of a decision tree, relevant for the management of Canary Island NP, using as criterion variable "the duration of the visit".

H2. The decision tree resulting from the application of the CHAID algorithms as a classification tool shows as its first classification variable in the hierarchy, "the country of origin".

Testing the above hypotheses will favour the adoption of precise and better defined tourism policies aimed at improving the competitiveness of TNP tourism and also of tourism environmental policy, which will result in greater and better insular tourist development.

4. Method

4.1 Variables

The variables considered in the segmentation will be of several types: demographic (age, educational level, gender, marital status), economic (household income level, current occupation, type of housing, high/low season and daily expenditure in destination by components) and geographical (country or region of origin of the tourist).

4.2 Characteristics of Information Collection

This study is a quantitative one, and in order to have a precise knowledge of visitors to the TNP, a structured questionnaire divided into two blocks was developed. A first block with questions aimed at obtaining information that determines the most outstanding characteristics of the population under study, namely: nationality or place of habitual residence; frequency of visits to the TNP; with whom the visit was made; sex, age, marital status, current occupation, studies performed, income level of the family unit, type of accommodation and municipality. The second block includes all those questions aimed at collecting information related to the specific objectives of this research.

An ad-hoc survey was developed allowing a much more precise knowledge of the visitors of the park.

4.3 Sampling Technique

Simple random probabilistic sampling was used with 805 effective surveys being carried out and fieldwork organized in two phases. The first phase of interviews was made in the high tourist season on the island including the Easter period. The second phase in low season corresponds to late spring and summer. A reliability of $\pm 2\delta$ was achieved, which is detailed below (Table 1), as a function of the sample size, $n = 805$. The

estimation error was $\pm 3\%$ of the proportions calculated on the total of variables, under the assumption of dichotomy.

Table 1. Maximum estimation error by variable

Variables	Maximum estimation error
Country or region of origin	$\pm 2.88\%$
Gender	$\pm 3.52\%$
Age	$\pm 3.06\%$
Marital status	$\pm 3.48\%$
Current occupation	$\pm 3.54\%$
Educational level	$\pm 3.45\%$
Household income level	$\pm 2.99\%$
Type of accommodation	$\pm 3.25\%$
Season High/Low	$\pm 3.49\%$

Note. Source: data from the questionnaires

4.4 Statistical Analysis Technique

The technique of analysis applied has been the CHAID algorithm, a novel technique from the point of view of its application to tourist market segmentation (Diaz-Perez, & Bethencourt Cejas, 2016).

The Chi-square Automatic Interaction Detection (CHAID) or Genetic Algorithm model generates a decision tree from a significant Chi-square. It is a technique of predictive analysis based on the choice of a criterion variable associated with the rest of the variables that configure the segments through a dependence relationship. Tourism destination operators could use this technique to conduct an analysis depending on previously established objectives, since it allows the *a priori* choice of a criterion variable. Chi-square is the basic statistic collected in CHAID analysis providing a choice between segments in a qualitative and more natural way and with greater explanatory power than other techniques. In addition, Chi-square is also designed for different variables: discrete and freely distributed variables, among others. In reaching such a great amount of advantages, automation has played a fundamental role; in fact, without the use of suitable software it would be difficult to calculate the complex CHAID algorithms.

With respect to the different forms of regression analysis, CHAID analysis is presented as a more rigorous technique insofar as the researcher does not incorporate any value judgment when selecting the independent variables. Such selection is executed by an automated statistical procedure, depending on the classification power of the significant variables. Although the selection of independent variables is also performed *a priori*, the procedure is designed to consider a sufficiently large number of possible exogenous variables, whose association or not with the criterion variable is in the hands of CHAID. It is therefore determined automatically by the software that supports it. To the extent that a non-criteria analysis employs a batch of variables that may not be significant predictors in explaining the configuration of the segments, the results may not achieve optimal homogeneity from the viewpoint of classifiers; which is not the case when CHAID is used as the classification technique. The number of categories of independent variables depends on whether the results of applying the Chi-square test are significant or not. In the resulting decision tree, the most significant variables appear on the first node of the segmentation. The process of node formation and segment configuration ends when the independent variables and the dependent variables no longer have a significant relationship between them.

Finally, the hierarchy obtained for a set of significant variables provides extremely useful information for a destination operator, since this technique identifies which variable segments the most and shows a ranking based on a decreasing segmentation power. Thus, this becomes a very useful tool when the policy maker has in mind the promotion of those forms of tourism with the greatest positive effect on the environment or local economy.

5. Results

5.1 Countries of Origin of Visitors

The information obtained from the questionnaires, with a procedure of purely descriptive statistics, characterizes visitors according to the country of origin in three groups: tourists from abroad (29 countries), tourists from Spain and Balearic Islands and from Tenerife and rest of Canary Islands.

The group of tourist from abroad is classified in the following: 1) visitors from 13 countries which are part of what is traditionally called Western Europe; 2) 10 can be considered as Central and Eastern Europe countries; 3) four American countries; and 5) others, mainly Israel and Australia.

Considering the percentage of visitors by country of origin, we find the largest share (14.5%) are Germans, followed closely by those coming from the United Kingdom (12%) and at a greater distance, France (5.9%),

Italy (5.2%) and Sweden (2.7%). In the bloc of countries, we have called Central and Eastern Europe, Russia stands out with 4.1%, followed by Poland with 1.8%, Czech Republic, 1.8%, Latvia, 0.9%, Estonia and Romania with 0.7% each and a number of countries with 0.5% (Lithuania, Croatia, Ukraine). Out of the four American countries the highest percentage corresponds to USA with 0.7%, Argentina and Brazil with 0.5. Finally, the percentage of visitors from Israel stands at 1.4%. The percentage of visitors from mainland Spain and Balearic Islands reaches the important amount of 21%. And finally, there is 16% of the visitors to the TNP that are resident on the island of Tenerife, to which must be added 4.6% of visitors from other islands of the archipelago.

The above data show the main countries of origin of visitors to the TNP, which we can complete by establishing a more precise profile of these visitors using CHAID algorithm.

5.2 Results of Applying the CHAID Algorithm

The results obtained from applying the CHAID algorithm segmentation technique to the total of the visitors to the TNP, considering “the duration of the visit” as a criterion variable and the rest of variables above as predictors, are those that appear in the following figure. All the values included in the decision tree are significant (Chi-square 141.662), and well classified in a nearly 90% (upper to 11.0705) of the total visitors for five degrees of freedom. As we can see, the first node of the classification is not the country of origin, but the mean of transport used.

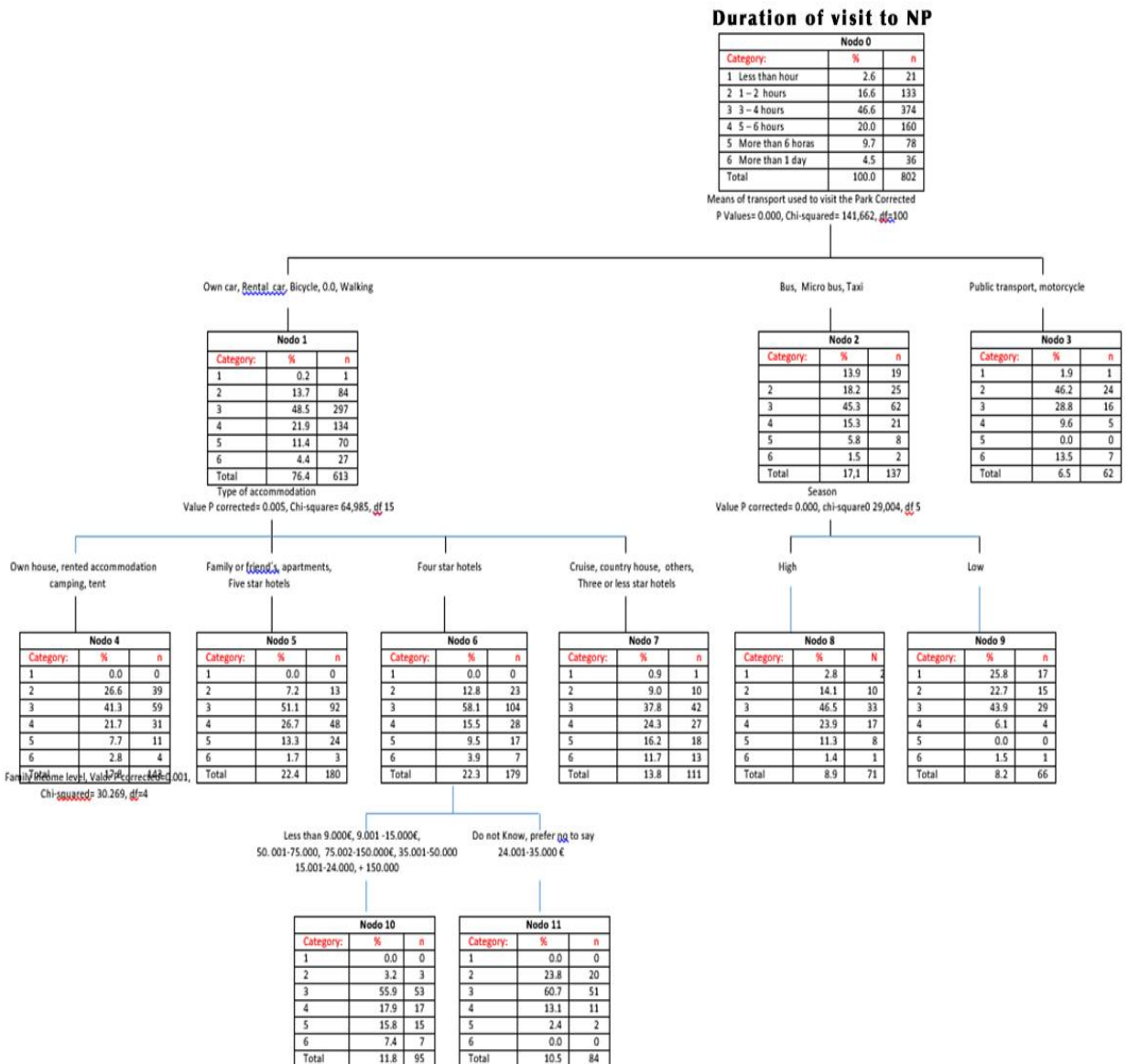


Figure 1. Results of applying CHAID algorithm

Chi-squares and P values relative to the second and third node can be checked in the figure and are all significant, as well. The tree represents segmentation levels and, most importantly shows that the most relevant variable when segmenting is the means of transport used to visit TNP. The second level is determined by those who use an individual means of transport, and within this, the third level is given by the type of accommodation, which includes those who stay in 4-star hotels depending on their income level.

Returning to the second level, some relevant results were found:

First, for those who visit using collective transport, the segmentation variable that discriminates best is the season (high / low).

Second, visitors who pollute the most, those who use cars to visit, are the ones that spend the most time in the park and, therefore, those that most deteriorate it. It is worth remembering that over 3 million visitors a year enter the TNP. Everything seems to indicate that this segment is configured by local people and tourists who rent cars.

Third, the bus, minibus and taxi segment is possibly segmented in high and low season because it corresponds, in its entirety, to visitors to the TNP who are non-local tourists. Interestingly, those who come in high season spend more time inside the park.

Finally, it appears that those who use public transport correspond to those who spend more than one day in the National Park and reach a percentage of 13.5% of the total frequency of visitors of this segment. In the other hand, those who visit the TNP by motorcycle are the ones that spend the least time in the park, usually between one and two hours.

6. Conclusions & Discussion

As can be seen from the results of the analysis, the application of the CHAID algorithm segmentation technique makes it possible to conclude the following:

- 1) The first of the hypotheses is fulfilled, that is to say, CHAID algorithms allow the construction of a decision tree relevant to the needs of the management authorities of the Canary Island NPs, using as a criterion variable "the duration of the visit".
- 2) The decision tree resulting from the application of the CHAID algorithms as a classification tool reveals as the first classification variable in the hierarchy "the means of transport used" and not "the country of origin of the tourist". Thus, the second hypothesis is rejected. In fact, the geographic origin of the tourist does not appear clearly as a predictive variable in the model, although as we said in the results, in the background of some segments we can sense a relevant role for visitors' country of origin, with a bivalent character: local / not local.

All in all, the findings show that the first segmenting variable is transport type and, that the means most frequently used by visitors is the car. Specifically, the segment of visitors coming by car is associated with the longest stay in the TNP.

Regarding the practical and social implications, it is assumed the longer the stay, the greater the environmental impact. These results, therefore, show the need for new transport strategies with less polluting vehicles. In this sense there should be strategies such as: 1) the greater use of public transport or, 2) the use of buses for trips within the TNP and on the way to the park or, perhaps also 3) the use of electric vehicles to move around within the park.

In short, the results testing the previous hypotheses could help in the adoption of precise and defined tourism policies aimed at improving the competitiveness of TNP tourism production as well as a tourism environmental policy. This would also result in enhanced and more sustainable island tourist development.

6.1 Discussion

The basic premises of this paper are as follows. First, the idea that the longer the visit, the greater the environmental deterioration. Second, it is assumed that the use of the car as a means of transport, compared to other transport, such as bus, minibus ... causes greater pollution and environmental deterioration, since the car is highly polluting due to its high fossil fuel consumption per traveller.

At this point, and in view of the statistical data collected above, it does not seem an easy task to resolve the contradiction between objectives to improve the competitiveness and sustainability of the NP resource. In fact, the competent local authorities will have to deal with the dialectical relationship between competitiveness (measured by the number of visits per year) and sustainability (measured by the state of conservation of the natural heritage). In addition, all this is in the context of an island territory with a high population density and a

number of tourists a year that quintuples the total population of the island.

Bearing in mind the above premises, and considering that the total number of visitors is not a homogeneous group, the first step in this research has been to segment the whole group of visitors with the aim of determining which segments generate the greatest environmental impact.

Nevertheless, the starting point for future research should be segmenting the tourism market of the Teide NP based on different perspectives of how nature should be used as a tourism resource. Additionally, as it is possible to find many different definitions of carrying capacity, future studies should be focused on what is considered to be the threshold limit in carrying capacity of tourists on the one hand and, at the same time, by local people, on the other.

Acknowledgment

This work has been supported by funding from the National Park of El Teide, the Canarian Department of Education, Culture and Sport, Government of the Canary Islands, Spain.

References

- Alegre, J. Mateo, S., & Pou, L. (2011). A latent class approach to tourists' length of stay. *Tourism Management*, 32, 555-563. <https://doi.org/10.1016/j.tourman.2010.05.003>
- Assaker, G., & Hallak, R. (2012). European travelers' return likelihood and satisfaction with mediterranean sun-and-sand destinations: a chi-square automatic identification detector e based segmentation approach. *Journal of Vacation Marketing*, 18(2), 105-120. <https://doi.org/10.1177/1356766711435977>
- Bell, F. W., & Leeworthy, V. R. (1990). Recreational demand by tourists for saltwater beach days. *Journal of Environmental and Management*, 18(3), 189-205. [https://doi.org/10.1016/0095-0696\(90\)90001-f](https://doi.org/10.1016/0095-0696(90)90001-f)
- Chen, J. S. (2003). Market segmentation by tourists' sentiments. *Annals of Tourism Research*, 30(1), 178-193. [https://doi.org/10.1016/S0160-7383\(02\)00046-4](https://doi.org/10.1016/S0160-7383(02)00046-4)
- Chung, K. Y., Oh, S. Y., Kim, S. S., & Han, S. Y. (2004). Three representative market segmentation methodologies for hotel guest room customers. *Tourism Management*, 25(4), 429-444. [https://doi.org/10.1016/S0261-5177\(03\)00115-8](https://doi.org/10.1016/S0261-5177(03)00115-8)
- Cook, V. J., & Mindak, W. A. (1984). A search for constants: The heavy user revisited. *Journal of Consumer Marketing*, Spring, 79-81. <https://doi.org/10.1108/eb008118>
- D íaz-P érez, F. M., & Bethencourt-Cejas, M. (2016). CHAID algorithm as an appropriate analytical method for tourism market segmentation. *Journal of Destination Marketing & Management*, 5(3), 275-282. <https://doi.org/10.1016/j.jdmm.2016.01.006>
- D íaz-P érez, F. M., Bethencourt-Cejas, M., & Álvarez-Gonz ález, J. A. (2005). The segmentation of Canary island tourism markets by expenditure: implication for tourism policy. *Tourism Management*, 26(6), 961-964. <https://doi.org/10.1016/j.tourman.2004.06.009>
- Fleischer, A., & Pizam, A. (2002). Tourism constraints among Israeli seniors. *Annals of Tourism Research*, 29(1), 106-123. [https://doi.org/10.1016/S0160-7383\(01\)00026-3](https://doi.org/10.1016/S0160-7383(01)00026-3)
- Gokovali, U., Bahar, O., & Kozak, M. (2007). Determinant of length of stay: A practical use of survival analysis. *Tourism Management*, 28(3), 736-746. <https://doi.org/10.1016/j.tourman.2006.05.004>
- Gomes de Menezes, M., & Cabral, V. (2008). The determinants of length of stay of tourists in the Azores. *Tourism Economics*, 14(1), 205-222. <https://doi.org/10.5367/000000008783554866>
- Holden, A. (2000). *Environment and tourism*. London: Routledge.
- Hsu, H. C., & Kang, S. K. (2007). CHAID- based Segmentation: International Visitors' Trip Characteristics and Perceptions. *Journal of Travel Research*, 46, 207-216. <https://doi.org/10.1177/0047287507299571>
- Hughes, G., & Furley, P. (1996). Threshold, Carrying Capacity and the Sustainability of Tourism: A Case Study of Belize. *Caribbean Geography*, 7(1), 36-51.
- INE. (2015). Instituto Nacional de Estad ística. <http://www.ine.es/>
- ISTAC (Instituto Canario de Estad ística). (2002). Demanda turística: turistas y pasajeros. Gobierno de Canarias. <http://www.gobiernodecanarias.org/8/03/2015>
- Jim, C. Y. (2000). Environmental changes associated with mass urban tourism and nature tourism development in Hong Kong. *The Environmentalist*, 20(3), 233-247. <https://doi.org/10.1023/A:1006708031927>

- Kardes, F. R. (2002). *Consumer behavior and managerial decision making*. Upper Saddle River, NJ: Prentice-Hall.
- Kass, G. V. (1975). Significance testing in automatic interaction detection. *Journal of the Royal Statistical Society. Series C (Applied Statistics)*, 1 January, 24(2), 178-189. <https://doi.org/10.2307/2346565>
- Kass, G. V. (1980). An Exploratory Technique for Investigating Large Quantities of Categorical Data. *Applied Statistics*, 29(2), 119-127. <https://doi.org/10.2307/2986296>
- LaPage, W. F. (1969). *Campground marketing: The heavy-half strategy*. USDA forest service research note NE_93. Upper Darby, PA: Northeastern Forest Experiment Station.
- Legohérel, P. (1998). Toward a market segmentation of the tourism trade: Expenditure levels and consumer behavior instability. *Journal of Travel Research*, 29(4), 12-18. https://doi.org/10.1300/j073v07n03_02
- Legohérel, P., & Wong, K. F. (2006). Market segmentation in the tourism industry and consumers` spending: what about direct expenditure? *Journal of Travel and Tourism Marketing*, 20(2), 15-30. https://doi.org/10.1300/J073v20n02_02
- Legohérel, P., Hsu, C. H. C., & Daucé B. (2015). Variety-seeking: Using the CHAID segmentation approach in analyzing the international traveler market. *Tourism Management*, 46, 359-366. <https://doi.org/10.1016/j.tourman.2014.07.011>
- Mak, J., & Nishimura, E. (1979). The economics of a hotel room tax. *Journal of Travel Research*, 17, 2-6. <https://doi.org/10.1177/004728757901700401>
- Mak, J., Moncur, J., & Yonamine, D. (1977). Determinants of visitor expenditure and visitor length of stay: a cross-section analysis of U.S. visitors to Hawaii. *Journal of Travel Research*, 15, 5-8. <https://doi.org/10.1177/004728757701500302>
- Mathieson, A., & Wall, G. (1982). *Tourism: Economic, Physical and Social Impacts*. Longman: New York.
- McCarty, J. A., & Hastak, M. (2007). Segmentation approaches in data-mining: A Comparison of RFM, CHAID, and logistic regression. *Journal of Business Research*, 60, 656-662. <https://doi.org/10.1016/j.jbusres.2006.06.015>
- Mok, C., & Iverson, L. G. (2000). Expenditure-based segmentation: Taiwanese tourists to Guam. *Tourism Management*, 21(3), 299-305. [https://doi.org/10.1016/S0261-5177\(99\)00060-6](https://doi.org/10.1016/S0261-5177(99)00060-6)
- Nicholson, R., & Pearce, D. (2000). Who goes to events: A comparative analysis of the profile characteristics of visitors to four south island events in New Zealand. *Journal of Vacation Marketing*, 6, 236-253. <https://doi.org/10.1177/135676670000600304>
- Odell, R. (1975). Carrying Capacity Analysis: Useful but Limited. R. Scott, D.J. Brower, D. Miner (Eds.), *Management and Control of Growth*, vol. III, The Urban Land Institute: Washington DC, 22-28.
- Pestana, B. C., & Correia, A. (2007). *Survival analysis in tourism demand: The length of stay in Latin American destinations*. Working paper 03/2007/DE. Departamento de Economia, Instituto Superior de Economia e Gesta, Universidade Técnica de Lisboa.
- Pestana, B. C., & Pinto, M. L. (2010). The length of stay in tourism. *Annals of Tourism Research*, 7(3), 692-706. <https://doi.org/10.1016/j.annals.2009.12.005>
- Ramdas, M., & Mohamed, B. (2014). Visitor Perceptions on the Impacts of Tourism Activities, Development and Infrastructure on the Environment of Perhentian Islands. *SHS Web of Conferences*, 12 (0108), 4th International Conference on Tourism Research (4ICTR). <https://doi.org/10.1051/shsconf/20141201081>
- Rhim, H., & Cooper, L. G. (2005). Assessing potential threats to incumbent brands: New product positioning under price competition in a multisegmented market. *International Journal of Research in Marketing*, 22(2), 159-182. <https://doi.org/10.1016/j.ijresmar.2004.06.005>
- Saarinen, J. (2006). Traditions of sustainability in tourism studies. *Annals of Tourism Research*, 33(4), 1121-1140. <https://doi.org/10.1016/j.annals.2006.06.007>
- Solomon, M., Bamossy, G., & Askegaard, S. (2002). *Consumer behaviour: A European perspective*. Essex: Pears.
- Spotts, D. M., & Mahoney, E. M. (1991). Segmenting visitors to a destination region based on the volume of their expenditure. *Journal of Travel Research*, 29(4), 24-31. <https://doi.org/10.1177/004728759102900405>

- Stynes, D. M., & Mahoney, E. M. (1980). *Michigan downhill ski market study: Segmenting active skiers*. Research report 391. East Lansing, MI: Michigan University Agricultural Experiment Station.
- Thrane, C. (2012). Analyzing tourists length of stay at destinations with survival models: A constructive critique base don a case study. *Tourism Management*, 33, 126-132. <https://doi.org/10.1016/j.tourman.2011.02.011>
- UNEP United Nations Environment Programme. (1999). Small islands developing states. Our planet. (Accessed 10.01.2017)
- Vassiliadis, C. A. (2008). Destination product characteristics as useful predictors for repeat visiting and recommendation segmentation variables in tourism: a CHAID exhaustive analysis. *International Journal of Tourism Research*, 10, 439-452. <https://doi.org/10.1002/jtr.678>
- Zubair, S., Bowen, D., & Elwin, J. (2011). Not quite paradise: Inadequacies of environmental impact assessment in the Maldives. *Tourism Management*, 32, 225-234. <https://doi.org/10.1016/j.tourman.2009.12.007>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

The Consumer, the Consumed, & the Devastated: A Longitudinal Study of Jordanian Consumers

Mohammad Ibrahim Obeidat¹

¹Department of Marketing, Amman Arab University, Amman, Jordan

Correspondence: Mohammad Ibrahim Obeidat, Department of Marketing, Amman Arab University, Amman, Jordan.

Received: May 22, 2017

Accepted: June 15, 2017

Online Published: June 26, 2017

doi:10.5539/ibr.v10n7p178

URL: <https://doi.org/10.5539/ibr.v10n7p178>

Abstract

Based on a longitudinal study of a 120 Jordanian housewives, this study examines the influence of the Arab spring events on the Jordanian consumers in the form of the changes in the demographic and consumption patterns of the Jordanian consumers during the years 2012-2017 (i.e. the Arab spring phase). The results of this study reveals significant implications of the events of the region and governmental policies on the Jordanian consumers and presents the first ever typology of Jordanian consumers. Generally, the findings of this study reveal a decrease in the middle class segment in favor of the upper class. A number of managerial implications and suggestions for solving these issues are also presented.

Keywords: Arab spring, consumer issues, Jordan, public policies

1. Introduction

The recent problems in the Middle East has caused a number of economic issues to the Jordanian customer (Ammonnews, 2012). The continuous bombing of the Egyptian gas line, the blockage of trade between Jordan, Iraq and Syria due to the ongoing war in these countries, and the increased pressure placed on Jordan water, health, and educational resources, all posed serious economic and social issues to Jordanians (Obeidat Obeidat, Obeidat, and Xiao, 2016). As a response, a continuous increase in the inflation rates, shortage of products, decrease in income levels, the diminishment of the middle class, the increase in the unemployment levels (i.e. 12%) were all witnessed in Jordan (Obeidat, 2015). The importance of this study stems from the economic, social and psychological effects that have negatively affected the Jordanian society as individuals and families as a result of the crushing wars which led to political and economic instability in the neighbouring countries. Consequently, the instability of various kinds in the neighbourhood led to negative economic and social effects to the Jordanian society (Obeidat et al, 2016).

In general, individuals, families and economic institutions of Jordan have been affected by a series of declines. From the decrease of monthly incomes and the inflation of the prices of goods and services due to the lack of proper supervision of the local markets, in addition to the imbalance in imposing taxes and fees, Which has often been in the interest of the stakeholders of the traders and manufacturers (Obeidat et al, 2016). All this has happened as a result of the change of some laws and laws for the benefit of stakeholders whose number has increased and their potential and potential. In short, what was happening in the local environment due to the lack of supervision and increased stakeholder control led to a number of changes in the structure and capabilities of different segments of Jordanian consumers compared to what it was before the Arab Spring. Despite these issues, most of the research attention has been given to examining the causes of these issues and not their influence on the Jordanian customers. Therefore, this study aims to answer the following research question; how did these issues influence the Jordanian customer economically? As a result, this study aims to (a) identify the general and demographic characteristics of consumers in Jordan (B). To identify the approximate percentage for each category or type of consumer, And (c) to provide a set of suggestions aimed at reducing the problems and difficulties that affect the lives of each category of consumers according to the results of this study.

2. Previous Studies

When looking at the studies examining the current economic conditions in Jordan, research themes tend to focus on investigating the issues faced by the economy of Jordan as a result of the political and economic events of its

surroundings. For example, three main themes appear to have caught the attention of researchers. The first main theme focused on examining Inflation issues in Jordan (e.g. Saymeh and Abu Orabi, 2013; Sweidan, 2004; Mousa, Al Safi, Hasonah, and Abo-Orabi, 2013; Obeidat, 2015). In this stream of studies, positive relationships were found between inflation and economic growth (Saymeh et al, 2013; Sweidan, 2004), the lack of governmental control (Obeidat et al, 2016), governmental monetary policy (Mousa et al, 2013), and unemployment (Obeidat, 2015).

Moreover, the second stream of research has focused on examining the influence of the refugee migration on the Jordanian infrastructure and resources such as water, health, and energy (Farishta, 2014; Hadadin, Qaqish, Akawwi, and Bdour, 2010; Abdel Khaleq, and Dziegielewski, 2006; Raddad, 2005; Abushams and Dahiyat, 2004; Buryan, 2012). And found a significant correlation between the number of immigrants and the increases in the energy bill (e.g. Farishta, 2014), the increased pressure placed on the health, education, and energy resources and infrastructure (e.g. Hadadin et al, 2010; Abdel Khaleq, and Dziegielewski, 2006). Whereby, the third main stream focused on examining the economic condition and monetary situation of the country after the Arab spring (World Bank, 2013; Jaradat, 2010; Nazzal, 2005; Mousa, 2010). This stream of research found that inflation, poverty, youth unemployment, and the slow growth rate in the economy were the main outcomes of the Arabic spring.

Consequently, as seen by the previous studies, limited research attention was given to examining the influence of the economic, political and governmental conditions and decisions in recent years on the Jordanian consumer, despite the Jordanian customer being the first victim of these conditions and decisions. As a result, this study will examine the influence of these issues on the Jordanian consumer during the last five years.

3. Methodology

In order to examine the influence of the economic issues and the events of the Arab spring on Jordanian customers, an exploratory Qualitative longitudinal Research methodology was chosen from a purposive sample of (N=120) Jordanian housewives. In qualitative research, this sample size is more than appropriate considering the most qualitative studies employ a sample size between 50-70 (Saunders, Lewis, and Thornhill, 2007; Bryman, and Bell, 2011)) Considering that not much is known about these types of customer, the qualitative approach seemed more suitable (Hennink, Hutter, and Bailey, 2010). Furthermore, longitudinal qualitative designs are very suitable in the context of social sciences and where the aim is to evaluate changes in behavioral patterns over duration of time (Holland, Thomson, & Henderson, 2006). In addition, qualitative longitudinal designs were found to contribute heavily for studies aiming to evaluate governmental policies (Holland et al, 2006). Additionally, to ensure a certain degree of accuracy and representation of the situation of consumers in Jordan, the data was collected from all the main neighborhoods in Amman. Only female housewives in the city of Amman were dealt with due to them being the decision makers in the matters of consumption in most Jordanian families (Obeidat, Xiao, Iyer, and Nicholson, 2017). The data was collected first from the housewives in 2012 and then in 2017. When the participants were first contacted all of them were informed about the aims of the study and their contact information was taken to allow the researcher to contact them later. Moreover, due to the lack of research identifying the Jordanian consumer, to collect the data, semi structured in-depth interviews were used with each interview lasting between 20-25 minutes. Using interviews in this study will help generate rich amounts of data that will help uncover the main patterns in each group (Sekaran, 2003). Each interview included a series of demographic questions (such as monthly income, monthly expenditure, type of housing, area of residence, family size, household status, number of family workers, educational level, price stability of goods and services. Moreover, as recommended, the author provided the participants with an explanation of the objectives of the research in addition to assurances that their information will remain confidential (Saunders et al, 2007). Furthermore, the collection of the data lasted for three months after which the author began the data analysis. The main types of customers were identified according to their demographic answers they provided in addition to their answers to the interviewers questions. Additionally, to ensure the validity and reliability of the main themes analyzed, two independent researchers were also asked to view and analyze the main findings and reached similar conclusions. Finally, with regards to the process of translation the interview manuscripts, a back translation was used as recommended by Saunders et al, (2007) to ensure the best match between the original and the translated manuscripts.

4. Results

4.1 Sample Description

With regards to the age of the participants at the beginning of the data collection as seen in table (1), 67% of the housewives were over 40 years old which indicates a good consumption experience, 13.3% were less than 30, and 19.7% were between 30-39 years old.

Table 1. Age of the sample

Age	Percentage
Less than 30	13.3%
30-39	19.7%
40 and above	67%
Total	100%

Moreover, with regards to the educational level of the sample in the year (2012) and (2017), 60% of the sample members had bachelor's degrees while 25% held a high school degree, 8.3% hold a mba degree, 1.7% a phd, and 5% held a diploma. In the second data collection phase, the only changes in the sample educational level occurred in the MBA category with a 1% increase in MBA degree holders.

Table 2. Educational level of the sample

Education level (2012)	Percentage	Education level (2017)
High school degree	25%	25%
Bachelor	60%	60%
MBA	1.7%	2.7%
PHD	1.7%	1.7%
Diploma	5%	4%
Total	100%	

Furthermore, with regards to the participants income level and monthly spending level as seen in table (3), their purchasing power for 50% of the sample was not enough and therefore the situation of households deteriorate from time to time as a result of government decisions and the private sector related to the imposition or increase of fees and raise some tax rates and raise prices for some goods and services, which exhausts or exhausts these families. The same table shows that 36.6% of the sample items suffer daily as a result of the continuous decline in their purchasing capacity. Households with a monthly income of more than 2250 dinars were apparently in the category of traders, manufacturers or popular professions and senior government officials (ie, stakeholders).

Table 3. Monthly income & spending level

Monthly income	2012	2017	Average Monthly spending level (2012)	Average Monthly spending level (2017)
Less than 750	50%	50%	1000	1000
750-1500	40%	36.6%	1800	1800
1500-2250	4%	6.7%	1750	1750
2250 & more	6%	6.7%	2000	2000
Total	100%	100%	-	-

Furthermore, with regards to the place of residence type in (2012), 60% of the sample were renting and didn't actually own a place of their own, 33% were living in a place of their own, and 7% were living with their parents as seen in table (4). As can be seen, the percentage of the owned houses increased for about 2% with percentage of people renting decreased for 2%.

Table 4. Place of residence type

Type of residence	Percentage (2012)	Percentage (2017)
Rent	60%	58%
Owned	33%	35%
Other	7%	7%

With regards to the employment status, as seen in table (5), 31.7% of respondents suffer from the fact that they do not work in principal. In addition, 30% of the items of the study are employed in permanent government jobs. Despite no measures or decisions were taken to raise the monthly salaries of workers and retirees / retirees for more than five years despite the continuous price increases for goods and services. In the second data collection stage, the only differences were the increased unemployment rate by 3%. This appeared to them losing their jobs in the private sector.

Table 5. Employment status

Employment status	Percentage (2012)	Percentage (2017)
Full time in the governmental sector	30%	30%
Full time in the private sector	15%	12%
Business owner	10%	10%
Unemployed	31.7%	34.7%
Retired	13.3%	13.3%
Total	100%	100%

In addition, as seen in table (6) below, 50% of the sample had a big family size in which the wife and husband have at least five children, which means that this type of households or consumers are exhausted and suffer continuously due to the low purchasing power of these families. Nevertheless, there was an increase in the husband and wife and two kids category by 8.3%.

Table 6. Family size

Family size	Percentage (2012)	Percentage (2017)
Newly weds	8.3%	-
Husband & wife & 2 kids	5%	13.3%
Husband & wife & 3 kids	16.7%	21%
Husband & wife & 4 kids	20%	20%
Husband & wife & at least 5 kids	50%	50%
Total	100%	100%

Finally, with regards to the housewives husbands employment type, as seen in table (7), 60% of the sample of the study had their husbands working as governmental employees in the lower and middle administrative levels, while 18.3% of housewives husbands were employed in the private sector. (13.4%) and (8.4% + 5%) had their husbands either as business owners or manufacturers. Consequently, no changes were noticed regarding the employment type of the housewives husbands.

Table 7. Husband's employment status

Husband employment type	Percentage (2012)	Percentage (2017)
Merchant	8.4%	8.4%
Manufacturer	5%	5%
Governmental employee	60%	60%
Private sector employee	18.3%	18.3%
Retired	8.3%	8.3%
Total	100%	100%

4.2 Types of Jordanian Consumers

based on the analysis of data, 3 main types of customers appeared to exist in Jordan according to the main demographics themes of the sample, as seen in table (6), 13.4% of the households studied can be classified and labeled the "actual consumers" because their members were financially and physically satisfied. Moreover, the main age group of this type of customers was between 40 and 60 years old, and the monthly income of the family was more than 3000 dinars, and they owned real estate (land and housing) and an owned house. Furthermore, most of them had a high school diploma and the other had bachelor's degrees. The profession of the husband was either a trader or a manufacturer or a senior government employee or retired. The size of the families was four persons, including the wife and husband. This type of household does not appear to be affected by any governmental or private decisions aimed at raising prices for goods and services or raising fees or tax rates.

The second category of customers in Jordan with 36.6% was labeled the "consumed consumers" due to them being constantly affected by government and private sector decisions related to raising fees, taxes and prices. Moreover, the main age group was between 30 and less than 60 years, and the monthly income was between 750 and less than 1500 dinars. While some families of this category have a house, most of them rented. The academic qualification was the bachelor's degree for most of its members, between a teacher and a government employee. Most of the family members are employed. The size of the family ranges from six to seven, including the husband and wife. The monthly income of the family is not enough or meets the needs of the family, forcing them to borrow because of the increase in prices of goods and services.

Finally, the last category was labeled "the destroyed consumers" with 50% of the households surveyed due to them being the most affected by governmental decision and the economic conditions which led to a huge reduction in their purchasing power. Furthermore, the age group for this category was inclusive of all age groups in the community. The monthly income was less than 750 dinars. The vast majority of the households lived in rented old houses. The scientific qualification of the housewife was between less than a public secondary school and the first degree. The occupations practiced by this category of households range from cheap labor to teachers or unemployed. Some families also receive some assistance from the Ministry of Social Development. The average size of families ranges from (6) - (9) individuals, including the wife and husband. Consequently, the monthly income of these customers is not sufficient and it is used to obtain loans and aid because its income is constantly affected by the continuous rise in prices of goods and services.

Table 8. Segments of Jordanian customers

Category	(2012)	(2017)
The actual consumer	10%	13.4%
The consumed consumer	40%	36.6%
The destroyed consumer	50%	50%
Total	100%	100%

6. Discussion and Conclusion

To sum up, by adopting a qualitative longitudinal approach this research examined the influence of the current economic climate and governmental policies on the Jordanian consumers. Subsequently, semi structured interviews were used to collect the data of the study from a purposive sample of Jordanian housewives (N=120). In this study, the demographic information of the sample pointed toward three main types of consumers, the actual consumer, the consumed consumer, and the devastated consumer. As a result, this study present the first ever typology of Jordanian consumers.

The results of this qualitative study indicate a clear picture of the characteristics of Jordanian consumers according to the views of the housewives studied. In short, consumers in Jordan can be classified into three categories. The first is the "actual consumer" category, which is characterized by several characteristics, the most important of which are a high purchasing power that is constantly increasing, Economic profitability, and they are mostly business owners or currently holding high governmental positions. It should be noted here that the proportion of those who applied to be in the actual consumers was only 10% at the time this study was first conducted (i.e. 2012) specifically. Consequently, when the data was collected again at the beginning of this year, this segment appeared to increase by 2%. This finding is supported by previous findings and reports which tend to imply that the middle class in Jordan is beginning to fade away in favour of the upper class and the lower class (Ammonnews, 2012).

The percentage of the second category (the consumed consumer) was 36.6% this year. This group seems to be the most affected by the events of the last five years. Moreover, this type of consumer has been exposed during the last five years to all the waves of absorption of purchasing capacity by some government agencies and the private sector in the form of raising current fees or imposing new taxes on goods and services. In addition to the unregulated price increases of what is sold from Goods and Services. In fact, this result is a natural reflection of the series of government decisions and the private sector related to raising prices for goods and services as the percentage of the middle class decreased from 40% to 36.6%. Similarly, this finding is also supported by previous findings which state that the middle class in Jordan is continually being diminished (Obeidat et al, 2017). Consequently, this group seems to have psychological and social structures built with a sense of depression and a sense of injustice as a result of their continuous living in suffering due to the lack of government planning and control, in addition to the planned and programmed crawling of the private sector and monopoly leaders of all kinds in order to collect more money at the expense of consumers of this type and the third final type.

Moreover, the third type of consumers in Jordan which was labelled "Devastated/destroyed consumer". According to the results of this qualitative study, the percentage of this group of consumers is about 50%. It should be noted here that the vast majority of consumers in this category suffer from a constant decrease in their purchasing power, which requires the involvement of non-profit organizations in the formulation of economic and social policies of the state. Nevertheless, no changes were noticed in this category during the last five years. Generally, the findings of this study are supported by a number of previous findings in the literature. For example, Mirkin, (2013) found that the events of the Arab spring affected the demographic trends in the region leading to an increase in youth unemployment and energy and food shortages. Similarly, the study of Fargues and Fandrich, (2012) found that the events of the Arab and the issues of immigration caused a grim pressure on Arabic countries and Jordan.

Consequently, based on the results of this study, decision makers in the Jordanian state should consider very carefully a number of important implications. First, it is clear that the economic approach applied in Jordan, which is based on the principle of bilateral partnership between the public and private sectors, is not valid or useful, but contradicts with His Majesty King Abdullah II in the sixth discussion paper which focused on the importance of adopting the socio-economic approach (Jordantimes, 2016). Moreover, the experiences of developed countries (e.g.India, China, Singapore, South Europe, Australia, Canada and most Latin American countries) combined the efforts of all three economies (government economy, private economy and informal economy) when developing their plans for economic growth(Obeidat, 2017).

Second, the amendment of the Jordanian economic approach, according to His Majesty King Abdullah II,

requires the State and all its institutions to take practical care of the activities of all three economies and the benefits and benefits they represent for all social sectors, especially the rural and desert areas. Consequently, the amendment of this approach, as noted above, requires the existence of a socio-economic team that believes in the benefits of this approach in order to develop plans, policies and programs to achieve the objectives of this approach aimed at the economic advancement of the rights of all segments of society. In addition, to complete the march of the national economy with its three pillars, it is necessary to establish an independent government authority for the economy in the form of a ministry affiliated to the Council of Ministers with notable amendments to laws such as agriculture, municipalities, industry and trade, and perhaps tourism, in order to remove obstacles facing the activities of the informal civil economy.

Third, if the establishment of an independent government authority is established by a law to achieve the objectives of the social economy, as noted earlier, calculated financial systems and procedures must be developed to provide full opportunity to assist the borrowers of small or medium-sized enterprises to receive or receive soft loans for long periods of time, It is proposed to commence these activities in the countryside and the rural areas first. Moreover, as apparent by the findings of this study, the middle class in Jordan is being diminished. Consequently, future economic activities should be aimed at enhancing the productivity and purchasing abilities of the middle class. In doing so, the growth rate of the economy will certainly increase.

Finally, a number of limitations exist concerning the methodology of this study. Nevertheless, future research could use a more quantitative design with a larger sample. By doing so, examining the influence of the numerous economic issues facing the Jordanian customers could identify the most influential issue facing each segment of customers in Jordan. Additionally, future research could use the findings of this study as basis for future studies that compares the influence of the economic situation in Jordan on the Jordanian customers in addition to examining the changing patterns in consumer segments in Jordan. Moreover, although this study examines three main segments of consumers in Jordan, future research could focus specifically on examining each single consumer segment, this approach would allow for a better examination and could help identify more problems facing each one of these segments.

References

- Abdullah, A. (2012). Repercussions of the Arab Spring on GCC States, *Arab center for research and policy studies*, available online at: <http://english.dohainstitute.org/file/get/5b1fafdb-19d4-4946-a18e-f3115c6fd0aa.pdf>
- Abdel, K. R., & Dziegielewski, D. (2006). A National Water Demand Management Policy in Jordan. *Journal of Management of Environmental Quality*, 17(2), 216-225. <https://doi.org/10.1108/14777830610650528>
- Abushams, I., & Dahiyat, I. (2004). Private Sector Participation; a Tool for Effective Water Demand Management in Jordan. *International Conference on Water Demand Management*, Dead Sea-Jordan.
- Ammonnews. (2012). Toukan: The Arab spring has influenced the economy of Jordan. available online at: <http://www.ammonnews.net/article.aspx?articleno=107560>
- Bryman, A., & Bell, E. (2011). *Business Research Methods, 3rd edition*, Oxford university press.
- Buryan, E. (2012). Analysis of Host Community-Refugee Tensions in Mafraq, Jordan. *Mercycorps*, available online at: <http://data.unhcr.org/syrianrefugees/download.php?id=2958>
- Fargues, P., & Fandrich, C. (2012). Migration after the Arab spring, Available online at: <http://cadmus.eui.eu/bitstream/handle/1814/23504/MPC-RR-201209.pdf?sequence=1>
- Farishta, A. (2014). The Impact of Syrian Refugees on Jordan's Water Resources and Water Management Planning, *Master's thesis*, Faculty of Architecture and Planning and Preservation, Columbia University.
- Hadadin, N., Qaqish, M., Akawwi, E., & Bdour, A. (2010). Water Shortage in Jordan- Sustainable solutions, *Desalination*, 250, 197-202. <https://doi.org/10.1016/j.desal.2009.01.026>
- Hennink, M., Hutter, I., & Bailey, A. (2010). *Qualitative research methods*. Sage.
- Holland, J., Thomson, R., & Henderson, S. (2006). *Qualitative longitudinal research: A discussion paper*. London: London South Bank University.
- Jaradat, H. (2010). Jordan's economy crisis, challenges and Measures. Presented at the third Annual Meeting of Middle East and North African Senior Budget Officials (MENASBO) Dubai, UAE (Oct. 31-Nov. 1, 2010).
- Jordantimes.com (2016). Elections a Qualitative step Forward on Political Reform, available online at <http://ftp.jordantimes.com/news/local/elections-qualitative-step-forward-political-reform-path-%E2%80%99>

4-king

- Nazzal, M. (2005). Economic Reform in Jordan: An Analysis of Structural Adjustment and Qualified Industrial zones, Available online at: www.lawanddevelopment.org/doc/s/jordan.pdf
- Mirkin, B. (2013). *Arab Spring: Demographics in a Region in Transition*, United Nations Development Programme, Regional Bureau for Arab States.
- Mousa, S. N., Al Safi, W., Hasoneh, A. B., & Abo-Orabi, M. A. (2012). The Relationship Between Inflation and Stock Prices: A case of Jordan. *IJRAS*, (10-1), 46-52.
- Mousa, N. Y. A. (2010). Monetary policy and the role of exchange rate, the case of Jordan, *Doctoral thesis*, Department of economics, University of Birmingham. Available online at: etheses.bham.ac.uk/1031/1/Mousa10PhD.pdf
- Obeidat, M. I. (2017). *Informal civil economy*. Dar Wael Publications
- Obeidat, Z. M., Xiao, S. H., & Gopalkrishnan, I. (2017). Consumer Revenge using Online and Social Media: An Examination of the Role of Service Failure Types and Cognitive Appraisal Processes. *Psychology and marketing*, 34(4), 496-515. <https://doi.org/10.1002/mar.21002>
- Obeidat Z. M., Obeidat, M., Xiao, S. H., & Obeidat, A. M. (2016). Jordanians Economic challenges & Aspirations: An Empirical Examination. *International Journal of Business & Economics Research*, 5(3), 29-37. <https://doi.org/10.11648/j.ijber.20160503.11>
- Obeidat Z. M. (2015). Youth Unemployment In Jordan: Causes & Solutions. *International Journal of Business Research*, 15(3), 77-90. <https://doi.org/10.18374/IJBR-15-3.7>
- Raddad, K. (2005). Water Supply and Water use Statistics in Jordan, *Presented at the International Work Session on Water Statistics*, Vienna, Austria, (June, 2005).
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research Methods for Business Students*, 4th edition, Prentice Hall Financial Times, Harlow.
- Saymeh, A. F., & Abu Orabi, M. M. (2013). The Effect of Interest Rate, Inflation Rate, GDP, on Real Economic Growth in Jordan. *Asian Economic and financial review*, 3(3), 341-354.
- Sekaran, U. (2003). *Research Methods for Business: A Skill Building Approach*, 4th edition, New York: John Wiley and Sons.
- Sweidan, O. D. (2004). Does Inflation Harm Economic Growth in Jordan? An Econometric Analysis for the Period 1970-2000). *International Journal of econometrics and Quantitative studies*, 1-2, 41-66.
- World Bank. (2013). Jordan: Maintaining Stability and Fostering Shared Prosperity amid Regional Turmoil, Jordan Economic Monitor, Poverty Reduction and Economic Management Unit, MIDDLE EAST AND NORTH AFRICA REGION, available online at: http://www.worldbank.org/content/dam/Worldbank/document/MNA/Jordan_EM_Spring_2013.pdf
- Zeaud, H. I. (2014). The Trade-off Between Unemployment and Inflation, Evidence from Causality Test for Jordan. *International Journal of Humanities and Social Science*, 4(4), 103-111.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Reviewer Acknowledgements

International Business Research wishes to acknowledge the following individuals for their assistance with peer review of manuscripts for this issue. Their help and contributions in maintaining the quality of the journal are greatly appreciated.

International Business Research is recruiting reviewers for the journal. If you are interested in becoming a reviewer, we welcome you to join us. Please find the application form and details at <http://recruitment.ccsenet.org> and e-mail the completed application form to ibr@ccsenet.org.

Reviewers for Volume 10, Number 7

Abedalqader Rababah, Arab Open University, Oman
 Alina Badulescu, University of Oradea, Romania
 Alireza Athari, Eastern Mediterranean University, Iran
 Amran Awang, Head of Entrepreneurship Center, Malaysia
 Anca Gabriela Turtureanu, "DANUBIUS" University Galati, Romania
 Andrea Carosi, University of Sassari, Italy
 Anna Paola Micheli, University of Cassino and Southern Lazio, Italy
 Arash Riasi, University of Delaware, USA
 Ashford C Chea, Benedict College, USA
 Benjamin James Inyang, University of Calabar, Nigeria
 Cheng Jing, eBay, Inc. / University of Rochester, USA
 Cristian Marian Barbu, "ARTIFEX" University, Romania
 Gilberto Marquez-Illescas, Clarkson University, USA
 Giuseppe Granata, University of Cassino and Southern Lazio, Italy
 Grzegorz Zasuwa, The John Paul II Catholic University of Lublin, Poland
 Hanna Trojanowska, Warsaw University of Technology, Poland
 Hung-Che Wu, Nanfang College of Sun Yat-sen University, China
 Ionela-Corina Chersan, "Alexandru Ioan Cuza" University from Iași, Romania
 Jorge Mongay-Hurtado, ESIC Business and Marketing School, Spain
 Karen Gulliver, Argosy University, Twin Cities, USA
 Manlio Del Giudice, University of Rome "Link Campus", Italy
 Maria do Céu Gaspar Alves, University of Beira Interior, Portugal
 Maria J. Sanchez-Bueno, Universidad Carlos III de Madrid, Spain
 Maria Teresa Bianchi, University of Rome "LA SAPIENZA", Italy
 Maria-Madela Abrudan, University of ORADEA, Romania
 Miriam Jankalová, University of Zilina, Slovakia
 Mohamed Abdel Rahman Salih, Taibah University, Saudi Arabia
 Mohamed Rochdi Keffala, University of Kairouan, Tunisia
 Mohsen Malekalketab Khiabani, University Technology Malaysia, Malaysia
 Mongi Arfaoui, University of Monastir, Tunisia
 Ozgur Demirtas, Turkish Air Force Academy, Turkey
 Radoslav Jankal, University of Zilina, Slovakia
 Rafiuddin Ahmed, James Cook University, Australia
 Raphaël Dornier, Université Savoie Mont Blanc, France
 Roberto Campos da Rocha Miranda, University Center Iesb, Brazil
 Roxanne Helm Stevens, Azusa Pacific University, USA

Sang-Bing Tsai, University of Electronic Science and Technology of China, China

Valeria Stefanelli, Università degli Studi Niccolò Cusano, Italy

Vassili JOANNIDES de LAUTOUR, Grenoble École de Management (France) and Queensland University of Technology School of Accountancy (Australia), France

Vincent Grèzes, University of Applied Sciences Western Switzerland (HES-SO Valais-Wallis), Switzerland

Yan Lu, University of Central Florida, USA

➤ CALL FOR MANUSCRIPTS

International Business Research (IBR) is a peer-reviewed, open access journal, published by Canadian Center of Science and Education. It publishes original research and applied articles in all areas of business, marketing, management, finance, economics, accounting. Authors are encouraged to submit complete unpublished and original works, which are not under review in any other journals. We are seeking submissions for forthcoming issues. All manuscripts should be written in English. Manuscripts from 3000–8000 words in length are preferred. All manuscripts should be prepared in MS-Word format, and submitted online, or sent to: ibr@ccsenet.org

Paper Selection and Publishing Process

- a) Submission acknowledgement. If you submit manuscript online, you will receive a submission acknowledgement letter sent by the online system automatically. For email submission, the editor or editorial assistant sends an e-mail of confirmation to the submission's author within one to three working days. If you fail to receive this confirmation, please check your bulk email box or contact the editorial assistant.
- b) Basic review. The editor or editorial assistant determines whether the manuscript fits the journal's focus and scope. And then check the similarity rate (CrossCheck, powered by iThenticate). Any manuscripts out of the journal's scope or containing plagiarism, including self-plagiarism are rejected.
- c) Peer Review. We use a double-blind system for peer review; both reviewers' and authors' identities remain anonymous. The submitted manuscript will be reviewed by at least two experts: one editorial staff member as well as one to three external reviewers. The review process may take two to four weeks.
- d) Make the decision. The decision to accept or reject an article is based on the suggestions of reviewers. If differences of opinion occur between reviewers, the editor-in-chief will weigh all comments and arrive at a balanced decision based on all comments, or a second round of peer review may be initiated.
- e) Notification of the result of review. The result of review will be sent to the corresponding author and forwarded to other authors and reviewers.
- f) Pay the publication fee. If the submission is accepted, the authors revise paper and pay the publication fee.
- g) Send printed journals by post. After publication, two hard copies of the journal will be sent to the corresponding author.
- h) Publication notice. The authors and readers will be notified and invited to visit our website for the newly published articles.

More Information

E-mail: ibr@ccsenet.org

Website: <http://ibr.ccsenet.org>

Paper Submission Guide: <http://submission.ccsenet.org>

Recruitment for Reviewers: <http://recruitment.ccsenet.org>

➤ JOURNAL STORE

To order back issues, please contact the editorial assistant and ask about the availability of journals. You may pay by credit card, PayPal, and bank transfer. If you have any questions regarding payment, please do not hesitate to contact the editorial assistant.

Price: \$40.00 USD/copy Shipping fee: \$20.00 USD/copy

ABOUT CCSE

The Canadian Center of Science and Education (CCSE) is a private for-profit organization delivering support and services to educators and researchers in Canada and around the world.

The Canadian Center of Science and Education was established in 2006. In partnership with research institutions, community organizations, enterprises, and foundations, CCSE provides a variety of programs to support and promote education and research development, including educational programs for students, financial support for researchers, international education projects, and scientific publications.

CCSE publishes scholarly journals in a wide range of academic fields, including the social sciences, the humanities, the natural sciences, the biological and medical sciences, education, economics, and management. These journals deliver original, peer-reviewed research from international scholars to a worldwide audience. All our journals are available in electronic form in conjunction with their print editions. All journals are available for free download online.

Mission

To work for future generations

Values

Scientific integrity and excellence

Respect and equity in the workplace

CONTACT US

General

Tel: 1-416-642-2606

Fax: 1-416-642-2608

E-mail: info@ccsenet.org

Website: www.ccsenet.org

Mailing Address

1120 Finch Avenue West

Suite 701-309

Toronto, ON., M3J 3H7

Canada

Visiting Address

9140 Leslie St., Suite 110

Richmond Hill, Ontario, L4B 0A9

Canada

The journal is peer-reviewed

The journal is open-access to the full text

The journal is included in:

CrossRef

EBSCOhost

EconBiz

EconLit

ECONIS

EconPapers

ERA

Google Scholar

IDEAS

JEL

LOCKSS

MIAR

Open J-Gate

PKP Open Archives Harvester

RePEc

SHERPA/RoMEO

Ulrich's

Universe Digital Library

ZBW

International Business Research Monthly

Publisher Canadian Center of Science and Education

Address 1120 Finch Avenue West, Suite 701-309, Toronto, ON., M3J 3H7, Canada

Telephone 1-416-642-2606

Fax 1-416-642-2608

E-mail ibr@ccsenet.org

Website <http://ibr.ccsenet.org>

ISSN 1913-9004



9 771913 900176 07