

Customer Support and Maritime Operations Performance in the Nigeria Port Authority in Rivers State

Okechukwu Agburum and Chidube C. Nwigwe
Department of Management, Faculty of Management Sciences
Rivers State University, Port Harcourt

Abstract

The study investigated the empirical relationship between customer support and maritime operations performance in the Nigerian Port Authority. The study adopted customer support as its predictor variable while maritime operations performance which is the criterion variable was measured with customer satisfaction and efficiency. The research provided answers to two questions and tested two hypotheses aimed at determining the conjectural postulation that there is no significant relationship between customer support and maritime operations performance in the Nigerian Port Authority. The study adopted the cross-sectional research design. The study population comprised of six (6) major Port terminals in Nigeria. The study selected five (5) top management staff from each of the Ports under study making it a total sample of thirty (30) respondents. Quantitative data were generated from the respondents by the use of structured questionnaire. The Cronbach Alpha value scale threshold of 0.7 was exceeded which indicated the reliability of the scales used in the study while supervisors guide and approval and personal validation ensured the validity of the instrument. Statistical analysis was carried out at two levels; descriptive statistics and charts were done at the primary level while Pearson's Product Moment Correlation was used at the secondary level with the aid of Statistical Packages for Social Science (SPSS) version 23.0. The study concludes that due to the level of competition that characterized modern shipping operations and varying customers' need, Nigerian port authority cannot achieve operational excellence without effective customer support. Thus it was recommended that Port Authority should ensure steady customer support as this can enhance their operations and overall business performance.

Keywords: *Customer Support, Maritime Operations Performance, Customer Satisfaction, Efficiency*

Introduction

The history of Port development in Nigeria dates back to the middle of 19th century. This was long after the onset of sea borne trade and transactions which followed the adventures of early explorations on the African coasts (Emeka, 2006). Prior to this time, explorative and trade activities involving European missionaries and businessmen in Africa made the existence of a Port on the wide coastal stretch from Calabar to Lagos imperative. Specifically, in the 15th century the Europeans opened marine contract and discovered the rich natural resources in the West and Central African region that were needed for their economic and industrial revolution (Oyediran, 1980). Within the first eleven years of its existence as a corporate body, Nigerian Ports Authority (NPA) focused on fundamental issues vital to the success of the ports industry and equally relevant to the overall national economy.

In recognition of the importance of having trained hands on its payroll and in response to the policy of localizing Ports operations in the years preceding independence in 1960, the Nigerian Ports Authority embarked on an elaborate manpower development through Cadetship Training Awards. Emphasis was on Marine Nautical Engineering, Accountancy, General Management, Civil, Mechanical and Electrical Engineering. By the early sixties, beneficiaries of these trainings awards had begun to graduate and to form the core of Nigerian professionals to shape the future of the ports industry (Ndubisi & wah, 2005). The Authority also within this period continued to sustain the efforts already made towards expansion of ports facilities in Lagos and Port Harcourt. In Lagos, six berths of 943 meters

were added to the existing ones, while four berths with a total quay length of 506 meters were added to the facilities and steps were taken to mechanize the traffic operations in these ports. In this era, port development approach became tailored along declared national objectives. The Authority's development strategy became programmed to fall in line with the first National Development Plan –1962 –1968. The second Apapa Wharf Extension was executed and so also were further improvements of port facilities in Port Harcourt. The sum N45M was spent during this period on the two ports.

During the administration of Olusegun Obasanjo, a Ports reform program was put in place to reduce inefficiency at the Ports. The result was the concessioning of about 24 terminals to private operators for a certain period of time (Hisham, 2011). This privatization ushered in fierce competition among other variables thus maritime operators are leveraging on competitive strategies to avoid entropy and remain relevant within the industry. One of such strategies is effective customer support services. This is because it helps organizations boost their operations performance and wedge war against the competition (Emeka, 2006). Customer support is an important customer management because presently, it is really difficult to attract new customers because of competition. Therefore, to operate efficiently and satisfy customers, it is vital to build strong relationship and to look over things which are required in building strong relationship with customers. It is also important to understand which factor affects the long-term relationship.

Based on the fact that Ports statistics indicated operational increase between 1970 and 1995, government in that line made efforts to improve the services and revenue yielding potential of the Nigerian Ports Authority. This led to the commercialization of the organization in 1992 under the name "Nigerian Ports Plc" (Ndubisi & Wah, 2005). However, considering the fact that the organization was still hundred percent owned by Federal Government of Nigeria, it was reverted to its former name Nigerian Ports Authority in October 1996. Following the heightened competition occasioned by government deregulation, most maritime companies are folding up and leaving the sector due to the inability to compete favorably in the sector. This laggard behaviour towards competition can be blamed on maritime operators' inability to initiate customer relationship management strategy such as customer support to help them improve operational performance and wedge war against the competition (Emeka, 2006).

It is undoubtedly true that there are several researches that empirically and theoretically elucidate the superfluous relationship between customer relationship management and maritime operations performance, to the best of our knowledge, there are little or no empirically evidenced proof showing the relationship between the above concepts particularly within the Nigerian Ports Authority thus this is probably one of the factors militating against maritime operations performance in Nigeria and can only be remedied by the adoption and application of customer relationship management skills in the operations. This study therefore sought to investigate the empirical relationship between customer support and maritime operations performance in the Nigerian Ports authority.

Conceptual Framework

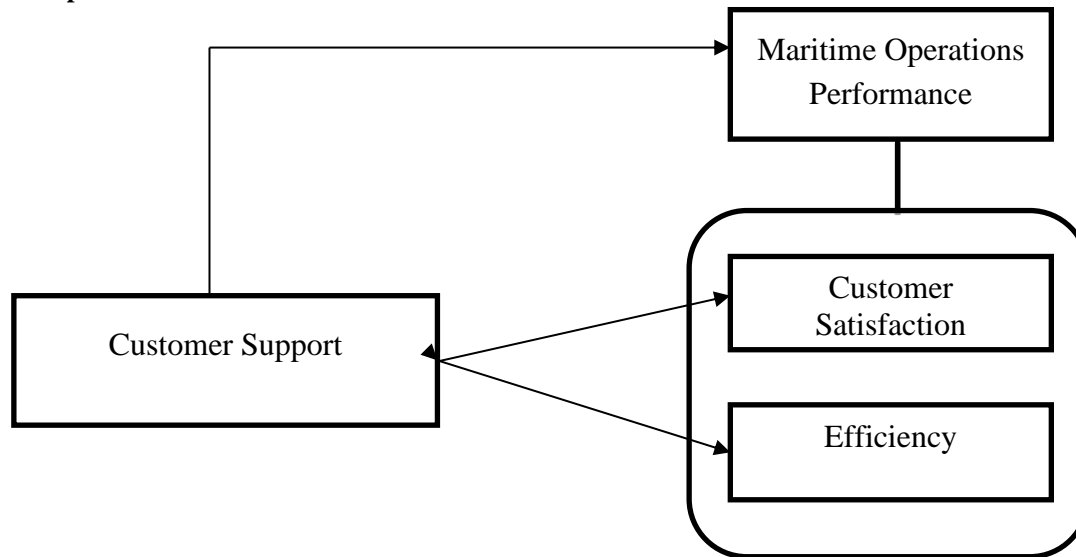


Fig.1: Conceptual Framework of Customer Support and Maritime Operations Performance
Source: Desk Research, 2021

Purpose of the Study

The main thrust of this study was to investigate the empirical relationship between customer support and maritime operations performance in the Nigerian Ports Authority. Thus, the objectives of the study are:

- i. To determine the extent of relationship between customer support and maritime customer satisfaction in the Nigerian Ports Authority.
- ii. To determine the extent of relationship between customer support and efficiency in the Nigerian Ports Authority.

Research Questions

The study was guided by the following research questions:

1. How does customer support relate with customer satisfaction in the Nigerian Ports Authority?
2. How does customer support relate with efficiency in the Nigerian Ports Authority?

Research Hypotheses

The following null hypotheses were formulated for the study.

H₀₁: There is no significant relationship between customer support and customer satisfaction in the Nigerian Ports Authority.

H₀₂: There is no significant relationship between customer support and efficiency in the Nigerian Ports Authority.

Theoretical foundations

In this study social exchange theory was used. The social exchange theory was propounded by Homans in 1958 and has continued to gain grounds in the 21st century more than ever (Yang, Wang & Su, 2006). The sociologist and originator of this theory George Homans defined social exchange theory as this exchange of activity, tangible or intangible and more or less rewarding or costly, between at least two persons. Homan explained the system of social exchange theory in three dimensions; success proposition-if a person is rewarded for doing something, the individual will continue that same behaviour, the second variable is stimulus proposition and the third dimension, deprivation.

The importance of this theory to the current business environment cannot be anytime more important than now as it illuminates people and organizations understanding of relationships in terms of why some relationships work while some dysfunctional, including business relationships. It explains the rational for individuals and firms' choice of commencing and remaining in some relationships. The communication and interaction between parties and the variables governing the connections in people is very laudable. The theory posits that in human interactions, man is rational to maximize profit individually (Yang, Wang & Su, 2006). This means that, humans decide whether or not to enter into relationship with one another or the firm that will maximize their social status, objective and standing in society. Most relationships are based on values of acceptance, affection, financial support, companionship etc. People tend to relate in spaces that they can benefit.

According to Burnet (2012), the imperatives of the social exchange theory can be explored in two folds; social exchange theory helps in driving buyer-supplier relationships as it graduates from mere relationship to deeper connections. Thus, individuals and organizations alike are aware of each other's challenges or problems, this inform communication among humans. Also, the theory is a valid prescription for investigating and explaining how individuals and organizations connect themselves through social networks, express their prescriptions and feelings and transmit information among themselves (Gold, Seuring & Beske, 2010). The importance of this theory to our study contest is that social interaction is a laudable contrivance that helps ports management to build and manage their relationships in ways that meet their objectives. Put best, the high point of this model is that humans strive for a positive outcome which means to maximize benefit and minimize cost when engaging in an exchange (Holthausen, 2013).

Customer Support

In today's business world, customer support has become one major function for every company, be it manufacturing or service based (Bitner, Ostrom & Morgan, 2008). The recent competitive market has compelled every company regardless of its nature to offer customer support as a means of survival. According to Loomba (1998), customer support can be defined as set of activities that ensures product availability for trouble free use to consumers over its useful lifespan. Goffin and New (2001) explained that customer support service can be generally viewed as added value after sales service which is aimed at satisfying the customer. Customer support provides competitive advantage over other homogeneous products and services (Goffin, 1998). Customer support plays very important role in improving service firms' satisfaction especially in this era of digitalization. Good customer support is an essential factor in delivering satisfaction to customers as it can increase success rate of services and can directly contribute to competitive advantage (Goffin & New, 2001). In customer relationship research, customer support has

often been viewed as isolated from the core service and studied focusing on critical proceedings subsequent in complaining and switching. The core service in marine transportation relies on infrastructure such as networks, and equipment for the use of broadband, fixed-line and mobile-phone service while the support service has the function of enabling and supporting the use of the core service and the resulting importance in use (Vargo & Lusch, 2004).

Hennig-Thurau et al (2002) during their study on understanding relationship marketing have mentioned that in addition to core service, there are other different factors which effect customers when they think about perceived benefits. Smith et al. (1999) mentioned support service as relating to challenging encounters to satisfaction. According to the authors it is difficult to recover from process problems as compare to the resulting problem from core service. Customers take poor contact more seriously than the core service; therefore, they separated core service and support system from each other. Customer support has played a vital role in customer and service provider's relationship.

According to Loomba (1998), Customer support can be simply defined as set of activities that ensures product availability for trouble free use to consumers over its useful lifespan. Customer support is also referred as product support, after sales service, technical support or simply service (Goffin & New, 2001). It is required for achieving customer satisfaction and long term relationships which is identified and emphasized by many researchers (Armistead & Clark, 1992). In customer relationship research, customer support has often been viewed as isolated from the core service and studied focusing on, e.g. critical incidents resulting in complaining and switching (Roos & Edvardsson, 2008). In current competitive market role of the customers is becoming more critical because customers are the base for the success of any business. Heinonen et al. (2010) developed a model in which they suggested that the customer's viewpoint does not only encompass the producer's service but also the customer's other activities and life. They argue that customers are center point for all activities.

Maritime Operational Performance

The term 'operational performance has been paraphrased in various ways as an indicator of productivity in the maritime transport and port logistics with regards to major indices of productivity assessment therein. Different authors call it different things. Some of the nomenclatures are wellness, success, effectiveness and so on. Understanding and determining exactly what is meant by the word performance is a critical issue for business environment. Vaidya, Yu, Soar and Turner (2003) opined that success in business operation is used interchangeably with performance. According to Lin (2009), success means well-being gained from the deployment and effective management of the components of a causal model that leads to the timely attainment of stated objectives within constraints specific to the firm and to the situation (cited in Valentine & Gray, 2009). The concept of performance concerns itself with what happened in the past or what is happening in the present instance and therefore it is observable and measurable. Hon (2005) views success as that which includes inputs, outputs, intermediate outcomes, end outcomes, net impacts and unintended outcomes (cited in Valentine & Gray, 2009). Operational performance may relate to economy, efficiency, effectiveness, customer satisfaction, productivity or equity (Folan *et al*, 2007; adopted in Valentine & Gray, 2009).

Operational performance is a relatively new concept in transportation and logistics management with multiple dimensions and definition. The phenomenon is applied in different contexts and are classified into two basic dimensions (profit and non-profit). For any organization to remain competitive, it needs to recognize the central role of measuring success thus performance measurement capability is very crucial for organizations' success compared to lower performing firms (Forslund, 2007). However, it has become a challenge for most organizations to measure their success (Valentine & Gray, 2009), the reason being that they relate to multiple service metrics such as lead times and on time delivery which are well related to one another. Having formal means of measuring performance or performance is important in order to achieve competitive advantage in future (Harrison & New, 2002).

Customer Satisfaction

According to Mittal and Frennea (2010), customer satisfaction refers to the post-consumption analysis by individuals after using a product or service. Practically, customer satisfaction means performance over expectation. Oliver (2010) likens service quality to when the results of the performance of a product or service matches or goes beyond prior expectations. Customer satisfaction with a firm's product is often seen as key to success and long-term competitiveness (Hennig-Thurau & Klee, 1997). Customer satisfaction is also viewed as a central determinant of customer retention. It measure show well a firm's product meet or exceed customer expectation (Smith, 2007), enhances the quality of relationship between customers and service providers and increases repeat purchase behavior (Nakhleh,2012).The importance of customer satisfaction as a predictor of customer retention is embedded in the fact that customer dissatisfaction has the potential to diminish an organization's customer base, require the firm to rely on a more volatile customer mix and erode the firm's reputation (White & Yanamandram, 2007).

In relationship marketing literature, customer satisfaction has been thought of as a key performance indicator for evaluating the quality of relationships between service providers and customers (Nakhleh, 2012). Expectations of customers regarding costs and benefits of the relationship mainly depend on past experience, even as satisfying experiences increases the motivation and the likelihood that an individual will desire future purchases and stay in the relationship (Nakhleh, 2012; Mouri, 2005). Customer satisfaction is an important issue which affects all business organizations that have given acceptance to the customer focus orientation and the resulting principles of continuous improvement. Ismail and Yunan (2016) posit that the concept of satisfaction has attracted a growing attention amongst scholars and managers of organizations lately (Azman and Norashyikin, 2009). This is because the hub of every organization is to amplify gains at a diminished cost; essentially, of the known factor that predicts increased sales is customer satisfaction, because it helps to engender customer loyalty, referrals and repeat buys (Wilson *et al.*, 2008).

Efficiency

Shipping lines have always pursued high efficiency in ship operation to strengthen their competitiveness and maximize profit in competitive markets. To achieve this goal, during the last couple of decades, shipping lines have focused on the improvement of operational productivity to maximize transport capability with minimizing input assets using various operational strategies (Tongzon, 2001). These strategies have enabled shipping lines to not only minimize operating costs with less financial risks but also raise the quality of service. In recent times, a strategic goal in terms of efficiency of ship operation has been changed in liner shipping. Under the intensive pressure of high fuel prices and low freight rates, shipping lines are focusing on more efficient ship operation.

Efficiency is defined as the relative production capacity over a given time period either within a firm or amongst firms (Wang *et al.*, 2006). Efficiency involves measuring the use of the firm's own production potential by computing the productivity level over time relative to a firm-specific Production Frontier, which refers to the set of maximum outputs given the different level of inputs. Efficiency measures the performance of a particular firm relative to its best counterpart(s) available in the industry (Lansink *et al.*, 2001). Brooks and Pallis (2013) intimated that, for a productive supply chain and maritime transport system to be achieved, ports must attain an efficiency status through an efficient cargo-handling operation at the berth, this phenomenon makes berth performance a key issue for any port management system. The importance of analyzing operational success at the port has increased as are sort of the intense competition among ports, increase in containerization, supply chains and the development of new production distribution-consumption systems as well as fluctuation in the shipping market.

Customer Support and Maritime Operations Performance

Venetis and Ghauri (2004) examined the extent to which customer service support could contribute to the establishment and growth of long-term relationships with customers. Through interviews, data was collected by an investigation list. The outcome numbers of investigation lists (1112) were sent to 705 advertising agencies. 241 lists were sent back, achieving a response rate of almost 31%. The study concluded that customer service support strongly contributes to the maintenance of long-term relationships with customers. Zablah & et al. (2004) identified the concept of CRM and building a comprehensive framework to aid marketers to achieve CRM successfully. The study showed that perceiving relationships with customers as a continuous process helps maximize and save the profits from declining. Swaminathan (2004) studied the relationship between CRM and the performance (customer outcomes). The researcher conducted a random sampling from the work directory of Hong Kong coming out with 1223 service companies. The sample included a number of different organizations such as banks, investment companies, insurance companies and other institutions characterized by good relationships with customers. Data was collected from senior managers in these organizations by means of an investigation list. 215 full lists were received, which means a response rate of 17.6%. The study concluded that there are four dimensions of CRM. Three of these four dimensions, (customer support, organizing around and managing knowledge) directly and indirectly affected the performance-customer's satisfaction, customer retention and the growth of sales. However, the fourth dimension (technology) did not lead to increasing the customer's satisfaction and loyalty in the long run.

Ndubisi and Wah (2005) tried to show the relationship between relationship marketing and customer's satisfaction. The bank customers of Kota Kinablu city in Malaysia represented the society of the study. The number of banks in the city was 20 but only 15 banks agreed to have their customers interviewed by the researchers inside the banks. Likewise, only 400 customers of the banks' customers agreed to fill the investigation lists. Only 220 usable lists were authenticated and the response average was 55%. The study concluded that all dimensions were related to the customer's satisfaction and that the dimension of the strongest relationship was represented in the improvement in the customer support with the customer in general terms; the correlation coefficient was 0.88 with less than 0,05 level of significance. Payne and Frow (2005) emphasized on the role of CRM in achieving value for customers and contributors, shareholders and employees and reducing costs. The study mentioned customer's satisfaction and customer retention have been achieved in 36% and 51% of the companies respectively when it applied CRM.

Methodology

Research design refers to the structuring of investigation that is aimed at observing variables and their relationship with one another. It serves as a meaningful guide to the researcher in his attempt to gather data for his study. A research design is a plan, structure or strategy for investigation, a strategy for answering research questions and control variances. However, this study adopted a cross-sectional research design since the study was conducted in a non-contrived setting. The population of the study was 30 management staff of the 6 ports studied. Also, based on the population size, it was adopted as the study sample size. The study data were sourced through structure questionnaire administration while its analysis was done using Pearson's Product Moment Correlation with the help of the Statistical Package for Social Sciences (SPSS), version 23.0.

Data Analysis

H01: There is no significant relationship between customer support and customer satisfaction in the Nigerian Ports Authority.

Table 1: Relationship between Customer Support and Customer Satisfaction

| | | Customer Support | Customer Satisfaction |
|-----------------------|---------------------|------------------|-----------------------|
| Customer Support | Pearson Correlation | 1 | .684** |
| | Sig. (2-tailed) | | .000 |
| | N | 30 | 30 |
| Customer Satisfaction | Pearson Correlation | .684** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 30 | 30 |

** . Correlation is significant at the 0.01 level (2-tailed).

Table 1 shows a correlational coefficient of 0.684; indicating that there is a strong, significant and positive relationship between customer support and satisfaction. Again, the probability value is less than the critical value (i.e, $0.000 < 0.05$), which means that there is a strong significant relationship between customer support and customer satisfaction in the Nigerian port authority. This further indicates that some of the changes in the dependent variable (customer satisfaction) are attributable to the independent variable (customer support), while other changes are caused by externalities. We therefore, reject the null hypothesis that there is no significant relationship between customer support and customer satisfaction in the Nigerian Ports Authority and accept an alternate hypothesis, that there is a strong significant relationship between customer support and customer satisfaction in the Nigerian Ports Authority.

H02: There is no significant relationship between customer support and efficiency in the Nigerian Ports Authority

Table 2: Relationship between Customer Support and Efficiency

| | | Customer Support | Efficiency |
|------------------|---------------------|------------------|------------|
| Customer Support | Pearson Correlation | 1 | .567** |
| | Sig. (2-tailed) | | .001 |
| | N | 30 | 30 |
| Efficiency | Pearson Correlation | .567** | 1 |
| | Sig. (2-tailed) | .001 | |
| | N | 30 | 30 |

** . Correlation is significant at the 0.01 level (2-tailed).

Table 2 shows a correlational coefficient of 0.567; indicating that there is a moderate, significant and positive relationship between customer support and efficiency. Again, the probability value is less than the critical value (i.e, $0.000 < 0.05$), which means that there is a moderate significant relationship between customer support

and efficiency in the Nigerian port authority. This further indicates that some of the changes in the dependent variable (efficiency) are attributable to the independent variable (customer support), while other changes are caused by externalities. We therefore, reject the null hypothesis that there is no significant relationship between customer support and efficiency in the Nigerian Ports Authority and accept an alternate hypothesis, that there is a moderate significant relationship between customer support and efficiency in the Nigerian Ports Authority.

Discussion of Findings

The results of the analysis revealed that there is a correlation coefficient of 0.684; indicating that there is a strong, significant and positive relationship between customer support and satisfaction. Again, the probability value is less than the critical value (i.e, $0.000 < 0.05$), which means that there is a strong significant relationship between customer support and customer satisfaction in the Nigerian port authority; there is a correlation coefficient of 0.567; indicating that there is a moderate, significant and positive relationship between customer support and efficiency. Again, the probability value is less than the critical value (i.e, $0.000 < 0.05$), which means that there is a moderate significant relationship between customer support and efficiency in the Nigerian port authority. Also, there is a correlation coefficient of 0.570; indicating that there is a moderate, significant and positive relationship between customer support and productivity. Again, the probability value is less than the critical value (i.e, $0.000 < 0.05$), which means that there is a moderate significant relationship between customer support and productivity in the Nigerian port authority. The study findings converge with Venetis and Ghauri (2004) on the extent to which customer service support could contribute to the establishment and growth of long-term relationships with customers. Through interviews, data was collected by an investigation list. The study concluded that customer service support strongly contributes to the maintenance of long-term relationships with customers. The findings also corroborate with the findings of Swaminathan (2004) who studied the relationship between CRM and the performance (customer outcomes). The researcher conducted a random sampling from the work directory of Hong Kong coming out with 1223 service companies. The study concluded that there are four dimensions of CRM. Three of these four dimensions, (customer support, organizing around and managing knowledge) directly and indirectly affected the performance-customer's satisfaction, customer retention and the growth of sales.

Conclusion and Recommendations

Following the finding of this study which showed that customer support is significantly and positively related with maritime operations performance in the Nigerian Port Authority. The study concludes that due to the level of competition that characterized modern shipping operations and varying customers' need, Nigerian port authority cannot achieve operational excellence without effective customer support. Thus it was recommended that Port Authority should ensure steady customer support as this can enhance their operations and overall business performance.

REFERENCES

- Bitner, M.J., Ostrom, A. L., & Morgan, F.N. (2008). Service blueprinting: A practical technique for service innovation. *California Management Review*, 50 (3), 66-94.
- Emeka, O. (2006). Nigeria ports concessioning policy and legal implications. *This Day: Tuesday, 7 Mar. 2006*. Retrieved April 4, 2020.
- Goffin, K., & New, C. (2001). Customer support and new product development. *International Journal of Operations & Production Management*, 21 (3), 275-301.
- Hennig-Thurau, T., Hilary, T. I., Elias, E., & Luard, E. (2002). Understanding relationship marketing. *Journal of Services Research* 4(3), 88-97
- Ismail, H.B. (2007). Technology dimension of CRM: The orientation level and its impact on the business performance of SMEs in Malaysia. *International Journal Electronic Customer Relationship Management*, 1 (1), 66-76.
- Mouri, N. (2005). A consumer-based assessment of alliance performance: An examination of consumer value, satisfaction and post-purchase behaviour. Retrieved August 2015
- Ndubisi, N.O., & Wah, C. K. (2005). Factorial and discriminant analyses of underpinnings of relationship marketing, and customer satisfaction. *International Journal of Bank Marketing*, 23 (7), 29-43.
- Payne, A., & Frow, P. (2005). A strategic framework for customer relationship management. *Journal of Marketing*, 4 (2), 12-23.
- Swaminathan, S. (2004). Customer relationship Management: its dimensions and effect on Customer outcomes. *Journal of Personal Selling & Sales Management*, 7(7), 98-103.
- Venetis, K.A., & Ghauri, P.N. (2004). Service quality and customer retention: Building long- term relationships. *European Journal of marketing*, 38 (11), 12-23.
- Zablah, A. R. (2004). An evaluation of divergent perspectives on customer relationship management: Towards a common understanding of an emerging phenomenon. *Industrial Marketing Management*, 3(3), 39-54.