

Journal of International Business and Economics
June 2014, Vol. 2, No. 2, pp. 107-131
ISSN: 2374-2208 (Print) 2374-2194 (Online)
Copyright © The Author(s). 2014. All Rights Reserved.
Published by American Research Institute for Policy Development

A Review of the Inconsistency in CRM Measurement: Evidence from the Telecommunication Industry

Bashir Danlami Sarkindaji¹, AliyuOlayemi Abdullateef & Noor Azmi bin Hashim

Abstract

This study explores the varying contradictions in CRM measurements and proposed a conceptual model in association with customer loyalty in the telecommunication industry. The model was developed based on observed practical issues, industry reports and explicit review of empirical literatures on CRM in multifaceted disciplines using qualitative technique. Findings from this research revealed an optimistic relationship between CRM measurements, customer satisfaction, switching costs and customer loyalty. Although few literature have established the influence of CRM measurements on customer loyalty effectiveness, this study has further availed scholars/practitioners knowledge of the theoretical ties and the role CRM maintenance as key measurement has in predicting successful CRM implementation. Furthermore, it is recommended that CRM implementing organizations integrate the need for CRM maintenance as a prerequisite for CRM sustainability in organizations.

Keywords: CRM Dimensions, Customer Satisfaction, Switching Cost, Customer Loyalty

Introduction

The accelerating complexities of managing and satisfying customers' needs in the 21st century business environment had resulted in no alternative than for organizations' to develop and implement appropriate relationships strategy (Azila & Noor, 2011; Toor, 2008).

¹ College of Business, University Utara Malaysia.

CRM implementation has become an essential competitive strategy that organizations require to establish and retain long-term customer-retention and loyalty (A. O. Abdullateef, S. S. M. Mokhtar, & R. Z. Yusoff, 2010; Adhikari, 2009; Becker, Greve, & Albers, 2009; Reinartz, Krafft, & Hoyer, 2004). CRM main focus is in understanding how organizations could effectively build and maintain their customer's commitment and confidence resulting in continuous purchasing of their goods and services and recommending same to friends and associates (Dagger, David, & Ng, 2011). Undoubtedly, advancement in technology have enhanced customer consciousness such that loyalty is not simply attained by just offering quality products/services at reduced price, instead accompanied with effective customer relationship management (A.O. Abdullateef, et al., 2010; Kuusik & Varblane, 2009).

Globally, telecommunication companies are very much ardent at developing innovative strategies to make the most of loyal customers (Azila & Noor, 2011; Bull, 2003). Unfortunately, the *industry suffers most from customer churn and switching behaviour* (Kuusik & Varblane, 2009) and with global average annual churn rates of between 10% and 67% (Hughes, 2007). Studies have adduced this situation has resulting in continuous fight and inability of the telecommunication operators around the globe to manage relationships and retain the loyalty of customers (Khan, Jamwal, & Sepehri, 2010; Mendzela, 1998; Patrick, 2012). While studies have established the importance of CRM implementation on customer loyalty, few researchers investigated CRM in the Nigerian context (Awoleye, Okogun, Ojuloge, Atoyebi, & Ojo, 2012; Ogechukwu, 2012; Patrick, 2012; Tella, Amaghionyeodiwe, & Adesoye, 2007). Moreover, existing studies on CRM implementation on telecommunication companies have focused narrowly on customer loyalty (Adeleke & Aminu, 2012; Oyeniya & Abiodun, 2008; Oyeniya & Abiodun, 2009). Based on the prevailing situation this research proposed and develop a conceptual model of the varying contradictions in CRM measurements in order to authenticate the theoretical ties connecting CRM measurements, customer satisfaction, switching costs and customer loyalty in the telecommunication industry.

Hence, it is divided into three sections consisting of the introduction, theoretical background and conceptual model and concluding remarks.

Overview of Nigeria Telecommunication Industry

The historical development of Telecommunication infrastructure in Nigeria dates back to the colonial era in 1886 (Tella, et al., 2007). By 1960 when the country had independence total telephone lines in use is approximately 18, 724. From the period 1960 – 1985, the industry comprised a Department of Posts and Telecommunications (P&T) providing internal telecommunications and the Nigerian External Telecommunication (NET) for external/foreign networks with actual analogue installed switching capacity of 200,000 lines by 1985 as opposed planned capacity of 460, 000. By January 1985 P&T was merged with NET given rise to Nigerian Telecommunications Limited (NITEL) in charge of overall telecommunication affairs. By November 1992 the federal government instituted the Nigeria Communications Commission (NCC) aimed at integrating private sector participation which had little or no success. Unfortunately, NITEL had not more than 500 active lines against 100 million Nigerian populace coupled with fluctuations in services visa vies poor management. Since the introduction of Digital Switches and Transmission Systems (DSTS) in the 80s Nigeria adopted digital technology. Also by early 90s NITEL had equally engaged in offering Mobile Cellular Services (MCS) including paging and electronic mail, though the telephone density ratio was extremely low. Surprisingly, there was a new government deregulation policy in between 1999 - 2000 that led to the emergence GSM operators as well as privatization of NITEL. Private capital investment (PCI) into the Nigerian telecommunication sector has increased tremendously from \$1.2 billion, \$4 billion, \$8.5 billion and \$18 billion, also its percentage contribution to GDP increases from 0.62%, 1.06%, 1.91% and 3.66% in 2001, 2003, 2006 and 2009 respectively (NCC, 2012).

The sudden rise in the Nigeria's telecommunication market has thrown up intense rivalry and competition among the GSM operators that resulted adversely in; market saturation, large customer call-drops, unnecessary fluctuation in tariff, high operations costs, reduction in revenue, high attrition rate, undue introduction of new and innovative products, advertising blitz, sales promotion hike, innovative customer service, and little retention opportunity (Adebayo, 2008; Adeleke & Aminu, 2012; Awolaye, et al., 2012; NCC, 2012; Oyeniya & Abiodun, 2009; Sagaji, 2005; Urama & Oduh, 2012). The situation is exacerbated by poor quality service and excessive switching-behaviour which manifest in the frequency of customers churn rate (Adeleke & Aminu, 2012).

The annual churn rate of Nigeria's telecommunication subscribers' increases from 2.0%, 8.7%, 18.5%, 18.6%, 26.8%, 27.9%, 48.4%, 44.0% and 41.8% in 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, and 2009 (Research, 2010). Studies have revealed Nigeria's average annual churn rate of GSM subscribers to be 26.3% (Oghojafor, Mesike, Bakarea, Omoera, & Adeleke, 2012).

After several years of GSM operations in Nigeria, the focus gradually shifted from network coverage to quality services. Dissatisfaction by subscribers gives rise to high rate of subscribers' churn and low revenue for the operators (Datong, 2011). The performance of the network has a direct impact on the revenues and ultimately profit. Statistics provided by the NCC showed that mobile telecommunications service providers deploying the CDMA technology lost a total of 1,140,865 subscribers from February 2012 to January 2013 out of 4,031,820 active subscribers. This showed a decline of 28.3% active subscribers (Punch, 2013).

Theoretical Background and Conceptual Model

In marketing the concept of customer loyalty has been defined from varying perspectives by scholars and practitioners, predominantly from the behavioural and attitudinal perspectives (Bello, 2012; Dick & Basu, 1994; Oliver, 1999; Toporex, 2011). Studies from the behavioural perspective have conceived customer loyalty as consumer's consistent repeat purchasing behaviour of a product or service (Bodet, 2008; Rauyruen & Miller, 2007; Söderlund, 1998), in spite of attitudes or preferences, economic strengths and competitive efforts to upset the relationship (Toporex, 2011).

As such increasing consumers loyalty would no doubt entail focusing on increasing the volume of their repeated purchase actions (Jacoby & Kyner, 1973; Ladhari, 2009). Even though this perception had received greater degree of acceptability, studies have warned considering loyalty mainly as repeated purchase behaviour (Day, 1969), hence the need to develop and extend its contextual meaning and measurement approaches (Baldinger & Rubinson, 1996). Their opinion posited difficulties for organizations to identify who exactly are their loyal customers and extent of their loyalty by mere repeated purchase measures (Amine, 1998).

Studies have conceived attitudinal loyalty as a "state of mind" that drives a customer towards purchasing a specific company product/service due to his positive or preferential attitude regarding it (Bandyopadhyay & Martell, 2007; Bennett & Rundle-Thiele, 2002). For this reason, the customer likes the company, its products or service, and consequently prefers to continuously purchase from the company, than from its competitors (Toporex, 2011). The emphasis here is on "willingness," rather than on real behaviour. Hence, companies that are committed to increasing attitudinal loyalty need to specifically focus on developing its product, image, and other components of their customer's experience, comparative to its competitors.

With respect to both perspectives, customer loyalty is described as the extent to which a consumer is committed at doing business with a firm through repeated purchase actions, exhibition of positive character towards a service provider and making use of only his services when need arises (Gremier, Gwinner, & Brown, 2001; McIlroy & Barnett, 2000). Thus, often results in other subordinate benefits to the firm such as brand advocacy, direct referrals, purchase rate, word-of-mouth, and price insensitivity that ultimately leads to firm performance (Kheng, Mahamad, Ramayah, & Mosahab, 2010; Singh, 2006; Toporex, 2011). Loyalty has for long been the major concern of marketing researchers which has reproduced in the rate and difficulty researchers have investigated to develop customer loyalty antecedents (Devaraj, Matta, & Conlon, 2001; Taylor, Celuch, & Goodwin, 2004). Hence, this study focused its own perception of loyalty from the behavioural standpoint that has conceived customer loyalty as consumer's consistent purchasing behaviour.

Despite the enormous increasing significance of CRM implementation in establishing and retaining long-term customer loyalty, and also in predicting the success and survival of businesses around the globe, not many studies have focused on CRM applications using dimensions such as customer orientation, CRM organization, knowledge management, and technology based CRM (Sin, Tse, & Yim, 2005; Yim, Anderson, & Swaminathan, 2005). The few studies that have used these constructs are mainly Asian, Middle East in that order, with least attention on empirical studies on CRM in Africa. (A.O. Abdullateef, et al., 2010; Akroush, Dahiyat, Gharaibeh, & Abu-Lail, 2011).

In support of the aforementioned argument, researches have revealed that switching behaviour, and disloyalty is a function of poor customer satisfaction and relationships which is directly associated with lack of successful CRM implementation in organizations (Bello, 2012; Callcentre.net, 2008; Oyeniyi & Abiodun, 2009), and is invariably caused by absence of an established CRM implementation tool such as customer orientation, CRM organization, knowledge management, and the technology based CRM (McNally, 2007; Sin, et al., 2005; Wang, Huang, Chen, & Lin, 2010; Yim, et al., 2005; Yueh, Lee, & Barnes, 2010).

Few studies conducted on CRM implementation in Asia and Middle East have refused to consider one key operational variable called "CRM Maintenance" that has been argued to be a strong CRM variable that can influence customers' relationship quality, satisfaction and performance (Reinartz, et al., 2004). Thus, this study intends to establish the relationship that CRM Maintenance as a construct have on customers' relationship quality, satisfaction and loyalty. Furthermore, while researches have established positive association between CRM dimensions, customer satisfaction and loyalty (Adeleke & Aminu, 2012; Akbar & Parvez, 2009; Lee, Lee, & Feick, 2001; Mohammed & Rashid, 2012), unfortunately, others have found inconsistent or weak results (Akroush, et al., 2011; Almossawi, 2012; Boohene & Agyapong, 2010; Miranda, Konya, & Havrila, 2005; Smith & Chang, 2010). Given rise to the need for this study to examine the mediating function of customer satisfaction on CRM measurements and customer loyalty.

Although some researchers have studied the relationships between switching costs and loyalty (Aydin, Özer, & Arasil, 2005; Caruana, 2004; Goode & Harris, 2007; Wang, et al., 2010; Wong & Mula, 2009). A few specifically points out the role of switching costs as moderating variable in their studies.

(Aydin, et al., 2005; Wong & Mula, 2009). And that not much interest has been concentrated by researches as to why and when exchange relationships ends, especially with reference to CRM in the services industry (Åkerlund, 2005; Halinen & Tähtinen, 2002; Mohammed & Rashid, 2012).

Considering how price sensitive Nigerian subscribers are, it is anticipated switching costs could serve a moderating role between customer satisfaction and loyalty in the telecommunication sector. Based on the aforementioned practical and theoretical gaps, this study is aimed at conceptualizing and proposing a model that will empirically investigate the relationship between CRM measurements, customer satisfaction, switching costs and loyalty in the Nigeria's telecommunication industry. Figure 1 above illustrates the impact of CRM measurements on customer loyalty of telecommunication services:

CRM Dimensions

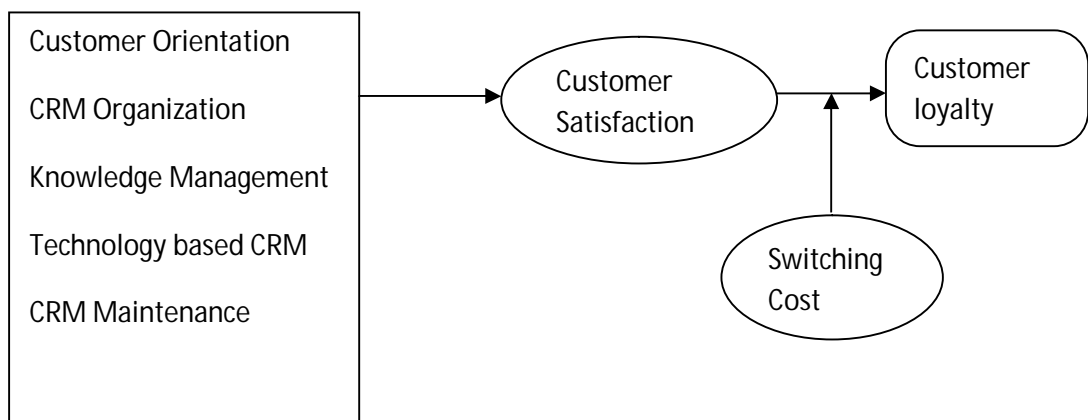


Figure 1: Proposed Framework of CRM Measurements in the Telecommunication Industry

Customer Relationship Management (CRM)

CRM has been broadly acknowledged as an essential business approach, there is absence of universally agreed definition of the term, to date. The underpinning philosophy of CRM is that customer relationships, similar other organizational resources can be successfully developed and managed to achieve long-term organizational success (Kavitha & Palanivelu, 2012; Yim, et al., 2005). As a concept CRM came into being from the United States of America in the late 1990's, and mainly focused on key customers (Akroush, et al., 2011; Wetsch, 2006).

Most managers conceptualized CRM as data or software application, e-commerce applications, IT applications, marketing initiatives such as web sites, loyalty programs, personalized e-mails, e.t.c. which are very narrow in context (Payne & Frow, 2005), and failed to yield the anticipated outcomes in terms of increased retention rates (Thomas, Blattberg, & Fox, 2004). Broader perspectives lies in studies that have viewed CRM as an organizational strategy developed and implemented through the integration of people, processes and technology that focus on establishing and maintaining lasting profitable relationships (Reinartz, et al., 2004), through superior customer value and satisfaction delivery, for both the company and its customers (Kotler & Keller, 2009; Parvatiyar & Sheth, 2001) and with a well-established cross functional organizational system (O'Brien & Marakas, 2007). These definitions emphasized value and satisfaction as the basis of marketing and the belief that successful CRM implementation is the foundation stone of establishing and retaining loyal customers (Dowling, 2002).

Other scholars have focused on managing and gaining customer knowledge as well as making of intelligent use of the acquired knowledge to establish long- lasting customer relationships (Adhikari, 2009; Boulding, Staelin, Ehret, & Johnston, 2005). Thus, emphasized the "customer- oriented" approach of CRM (A. O. Abdullateef, S. Mokhtar, & R. Z. Yusoff, 2010; Sin, et al., 2005; Vandermerwe, 2004). Furthermore studies have emphasized the need for managers to ponder beyond the technological perspectives of CRM to expansive perspective that considers CRM implementation as an organizational philosophy geared towards creating, developing, and enhancing relationships centred on maximizing customer value, satisfaction, and overall profitability that would increase shareholders value (Payne & Frow, 2005; Yim, et al., 2005).

Customer Orientation

Undoubtedly, customer is one of the core components behind the establishment of every profit oriented organization. Kotler and Keller (2009) lamented that a customer is 'king' in every marketing activity of an organization. The competitive nature of business environment has shifted organizations from product or brand centred to customer's oriented (Kuusik & Varblane, 2009; Ogbadu & Usman, 2012). Mohammed and Rashid (2012) emphasized that customer oriented behaviours in organization is geared towards long term satisfaction and loyalty.

Studies have aptly pointed out that implementing customer oriented philosophy significantly influence organizational performance(Reimann, Schilke, & Thomas, 2010).

Ryals(2005) in his study of UK banks and European insurance firms found that developing appropriate CRM strategies of an organization influences performance as life time value of a customer changes. This has coincided with the findings of several researches that the effective execution of CRM activities produces superior company performance as soon as managers centre on increasing the worth of their customers (Reichheld & Teal, 1996). For organizations to achieve the desired service quality, customer satisfaction and loyalty greater than its rivals sound customer orientation is most desirable (Yim, et al., 2005). Vandermerwe(2004), states that the ultimate aim of customer orientation is achieving successful relationships through which the business retains its most profitable customers. Furthermore, literatures have shown that customer orientation combined commitment to customers' needs and customer feedback (Dean, 2007).

On this note, Yim et al.(2005) emphasized that successful CRM implementation lies in an organization's ability to develop and maintain a customer focused structure, culture, policy, and reward system that would retain long lasting customer relationship.Solid relationship with customers and business associates results in company performance, for instance an increase in price of a firm's products or services could still call for recommendations from customers (Srivastava, Shervani, & Fahey, 1999).

Accordingly, Kaur et al. (2012) opined that managing customers' in terms of their lifetime and referral value is essential for organizations to expand profitability and company value in the long run.Realizing the fact that customer orientation is a key component of organizational CRM measurements as established by numerous studies (Mohammed &Rashid, 2012; Reinartz, et al., 2004; Sin, et al., 2005). The study proposed the following hypotheses:

H1a: Customer orientation has significant influence on customer satisfaction of telecommunication services.

H2a: Customer orientation has significant influence on customer loyalty of telecommunication services.

CRM Organization

For philosophy of customer orientation to be fully instilled a well structured organizational system is a pre-condition. Mohammed and Rashid (2012) stated that "to enhance service employees to conduct-customer oriented behaviours, organizations have to develop an appropriate environment for service in work, for instance, providing staff with the modern tools, and technology, customer-satisfaction tracking and complaints management systems, and appropriate rewards systems". Studies have argued that organizations despite their advancement in technology and adoption of customer oriented strategy hardly implement successful CRM without proper integration within organizational system (Yim, et al., 2005). Effective CRM organization is a necessary medium of meaningful transformation of how companies coordinate and conduct its operations within and around customers (Wang, et al., 2010).

However, CRM implementation success depends on a combination of technology, systems and operations procedures, employee's participation, managerial commitment, and favourable environment (Payne & Frow, 2005; Tamilarasan, 2011). Considering the fact that companies at present are paying much attention to improve their customer expectations through sound CRM organizational structure, and with commitment on workers responsibilities (Sin, et al., 2005). This study hypothesizes as follows:

H1b: CRM organization has strong positive influence on customer satisfaction of telecommunication services.

H2b: CRM organization has strong positive influence on customer loyalty of telecommunication services.

Knowledge Management

Improving the processes of acquiring, integrating and usage of knowledge is the main goal of management. Numerous scholars have defined knowledge management as a business strategy that creates, accumulate, organize and utilize knowledge to enhance organizational performance (Finnegan & Currie, 2010; Rašula, Bosilj Vukšić, & Indihar Štemberger, 2012), and to optimize its value change in terms of strategies, procedures, organizational structures and technology (Wang, et al., 2010).

Researchers have confirmed that Knowledge management results in organizational invention, product advancement and workers improvement (Yueh, et al., 2010). Organizations need sufficient and useful information about customers through interactions or other means and to transform them into customer knowledge within the organization (Kuusik & Varblane, 2009; Mohammed & Rashid, 2012; Piccoli, Brohman, Watson, & Parasuraman, 2009). Studies have established that continuous increased in organizational markets and competitive advantage resulting in overall performance is likely to build when knowledge management is combined with CRM (Aliyu Olayemi Abdullateef, et al., 2010). Hence, organizations as they understand their individual customer interest and adopt customization strategy can be much more customer oriented and no doubt manage request for service from customers.

Furthermore, emphasizing on the significance of organizational knowledge management Yueh, Lee and Barnes (2010) lamented that the presence of today's worldwide marketing problems resulted from poor information handling, and that organizations can only survive competition when they have perfect knowledge about market situations and investigate and make judicious use of their present customer knowledge (Schierholz, Kolbe, & Brenner, 2007). On this note, this research proposed the following hypotheses:

H1c: Knowledge management of telecommunication customers has significant influence on customer satisfaction.

H2c: Knowledge management of telecommunication customers has significant influence on customer loyalty.

Technology Based CRM

Successful CRM implementation is dependent on organizational technology status and application and that so many CRM oriented activities hardly function without modern technology (Sin, et al., 2005; Yim, et al., 2005). CRM activities revolves around technology applications in updating database programs to better understand and respond to changing customer needs and establishing sustainable relationships (Adhikari, 2009; Kotler & Keller, 2009; Mohammed & Rashid, 2012). CRM strategy implementation would result in absolute failure without adequate technological support (DuÑu & Hålmåjan, 2011).

Studies conducted on the effect of organizational information technology on overall performance pointed to the fact that adopting customer centric approach by organizations hardly achieves the desired objectives with absence of adequate information technology (Kuusik & Varblane, 2009; Mohammed & Rashid, 2012). Organizations that combine CRM with information technology application tend to have increased efficiency and customer satisfaction that impact on its overall profitability (Oghojafor, et al., 2012). Furthermore, one basic reason for incorporating technology based- CRM is in its ability to enhance customer satisfaction, increased loyalty, and most importantly ensuring long term relationships (Becker, et al., 2009).

A good number of service companies for example telecommunications, insurance, pensions and banks are making effective use of IT in delivering efficient services to their respective customers (Kyootai & Joshi, 2007). Customer confidence in organizations is reinstated where technological competence is inbuilt in CRM implementation, and merged by means of training and further organizational changes (Eid, 2007). On this note, this study hypothesizes as follows:

H1d: Technology based CRM positively influence customer satisfaction of telecommunication services.

H2d: Technology based CRM positively influence customer loyalty of telecommunication services.

CRM Maintenance

Despite several empirical studies that have established CRM measurements such as customer orientation, CRM organization, knowledge management, technology based CRM as strong predictors of customer relationship management successes in organizations (Sin, et al., 2005)(Aliyu Olayemi Abdullateef, et al., 2010; Mohammed & Rashid, 2012; Yim, et al., 2005). Researchers have argued strongly for the integration of CRM maintenance (Jambekar, 2000; Reinartz, et al., 2004). CRM maintenance has been defined as a continuous improvement and preservation of all organizational CRM components aimed at establishing and maintaining long term customer retention and loyalty. However, Dagger et al. (2011) stressed that organizations' must be acquainted with maintaining relationships to institute committed and loyal relationships with customers. The primary concern of their opinion is the need for organizations to sink in large amount of their resources to ensure customer relationship maintenance is effectively inculcated into their CRM strategy.

Accordingly, only when businesses are able to effectively recognize their customers' value to the firm's existence, that they will be keen at maintaining their customers' relationships (Reinartz, et al., 2004).

They will be more sensitive at maintaining individual customer relationships and more effectively determine the benefits of relationship maintenance to overall firm profitability. Becker, Greve and Albers (2009) empirically confirmed that customer relationship maintenance aimed to achieve greater customer satisfaction, relationships spread-out, reduction in switching behaviour, employee satisfactions and intensify organizational incomes. The basis of the aforementioned argument follows that if organizations are able to effectively inculcate CR maintenance into their CRM strategy, they will not only be customer focused, well organized, customer knowledge consciousness and technologically competitive. Instead on a continuous basis enhance and preserve these components and invariably leads to higher customer value, satisfaction and loyalty (Dagger, et al., 2011; Jambekar, 2000; Reinartz, et al., 2004).

Furthermore, some scholars' have attested that customer relationships maintenance is the brain behind the success of every CRM implementation plan, and that numerous organizations such as banking, insurance, automobiles, e.t.c., have succeeded in their CRM strategy due to relationships maintenance (Parvatiyar & Sheth, 2001). However, this research hypothesizes the following relationships as follows:

H1e: CRM maintenance has strong significant influence on customer satisfaction of telecommunication services.

H2e: CRM maintenance has strong significant influence on customer loyalty of telecommunication services.

Customer Satisfaction

Several empirical researches have examined the association between customer satisfaction and loyalty (Adeleke & Aminu, 2012; Almosawi, 2012; Miranda, et al., 2005). The more customers' are satisfied with organizational products or services in meeting their expectations the greater their level of loyalty (Adeleke & Aminu, 2012).

CRM must be effectively implemented for service quality and loyalty to be achieved in organizations (Santouridis & Trivellas, 2010), and that a greater satisfaction level is assumed to be highly related with increased loyalty (Lee, et al., 2001; Santouridis & Trivellas, 2010). Similarly, researches have established negative correlation linking satisfaction to loyalty (Boohene & Agyapong, 2010). Their argument stressed on the need for organizations to focus on service quality and built sound relationships with adequate consideration to personnel training and rendering favourable services. Berndt, Herbst and Kloper (2007) emphasized that sometimes customer satisfaction does not necessarily result in loyalty and that 40% of satisfied customers' switch to other suppliers. Yet, satisfied customers have higher tendency of retention and oppose to alternative options (Anderson & Sullivan, 1993). Hence, this study hypothesizes as follows:

H1f: Customer satisfaction has strong positive influence on customer loyalty of telecommunication services.

Switching Costs

Several studies have empirically tested the association between switching costs, customer satisfaction and loyalty (Kaur et al., 2012; Boohene & Agyapang, 2011; Aydin, et al., 2005; Oyeniyi & Abiodun, 2009; Yang & Peterson, 2004). The Question is how switching costs affect customer loyalty (Yang & Peterson, 2004). For instance, Oyeniyi and Abiodun (2009) established that switching costs positively influence the extent to which customers are loyal to products/services. Aydin et al. (2005) examined 1,662 mobile subscribers and found switching costs to have strong moderating relationship between customer satisfaction and trust. Existence of switching costs discourages loyal customers not satisfied to remain with their operators (Lee, et al., 2001). Hence, studies have suggested the direct influence of switching costs in strengthening association between customer satisfaction and loyalty (Kaur, et al., 2012). Within the internet-based market is only considered to be positively correlated when satisfied customers feel products/services value is reasonable (Yang & Peterson, 2004). Consumers' level of perceived risk or costs is greater where he finds it difficult to evaluate service quality that ultimately results in customer satisfaction before buying (Singh, 2006). Srinuan, Annafari, and Bohlin (2011) affirmed that subscriber's characteristics such as age, government official, self-employed, etc. are the significant determinants of the switching behaviours of Thai mobile subscribers. Switching costs produce inactive loyalty, whereas barriers inspire relationship-enhancements (Burnham, Frels, & Mahajan, 2003).

Besides, regulating the influence of satisfaction and loyalty, customer relationships and switching costs simultaneously improve customer loyalty (Boohene & Agyapong, 2010). Thus this study hypothesizes the following relationship:

H1g: Switching costs is positively related to customer loyalty of telecommunication services.

Conclusion, Limitations and Future Research

Firstly, from the review of previous and current empirical studies, it has been affirmed that the components of an organization's CRM measurements positively influence its CRM implementation success.

Unfortunately, despite the fundamental role of CRM maintenance in enhancing and preserving the effectiveness of CRM strategy implementation, studies have neglected to integrate this variable as a component of CRM measurements (Dagger, et al., 2011; Jambekar, 2000; Reinartz, et al., 2004). Numerous evidences by researchers have adduced this situation has led to the inability of the telecommunication operators around the globe to manage relationships and retain long-term loyalty of customers (Khan, et al., 2010; Mendzela, 1998; Patrick, 2012). *As confirmation to the above argument sources have provided that dissatisfactions give rise to high rate of subscribers churn and low revenue for the telecommunication companies (Datong, 2011), and is invariably caused by absence of an established CRM implementation tool such as customer orientation, CRM organization, knowledge management, and the technology based CRM (McNally, 2007; Sin, et al., 2005; Wang, et al., 2010; Yim, et al., 2005).*

One main theoretical contribution of this study is in its ability to identify and fill in a vacuum that separates the Western and Asian CRM measurement perspectives. This study has develop and proposed a conceptual model of CRM measurements that integrates CRM maintenance as a fundamental components of CRM. Hence, the investigations of this study confirmed that there is a strong need to incorporate CRM maintenance into the existing CRM measurements in order to achieve desired result. More so as the study intends to look at the association between CRM implementation, customer satisfaction, switching costs and customer loyalty in the telecommunication industry.

It is hoped that it will contribute immensely to the body of knowledge and ensuring that telecommunication operators in Nigeria build and maintain long-term relationships with their respective customers.

Secondly, like every other empirical research, one of major limitations of this study is in its strength to completely rely on qualitative approach thereby restricting its generalization ability. Although the study is aimed at proposing a conceptual model of the varying contradictions in CRM measurements in association with customer loyalty specifically in the telecommunication industry, yet suggestions are not empirically supported by quantitative and suitable statistical test to effectively prove the proposed theoretical ties existing between CRM measurements, customer satisfaction, switching costs and customer loyalty, hence further constraining its projection strengths. Furthermore, future research should quantitatively and empirically test the proposed framework to authenticate its generalizability.

More so, it is vital for future researchers to interview practicing CRM managers about their opinions when developing/proposing CRM measurements.

Appendix: Measurement Items of CRM Constructs

Customer Orientation

| Construct | Items | Source |
|----------------------|--|---|
| Customer Orientation | (1.) A firm's long-term planning focus on customer | Yueh et al (2010); Sin et al (2005); Yim et al (2005) |
| | (2.) The organization is fully devoted to meeting the requirements and expectations of customers | |
| | (3.) There is an existing framework for obtaining and enhancing customer's records | |
| | (4.) The organization implement varying processes for tracking customer's expectations | |
| | (5.) My organization's management advocates the use of customer knowledge in decision making process | |

CRM Organization

| Construct | Items | Source |
|-------------------------|---|--|
| CRM Organization | (1.) Performance criteria based on customer focus are instituted and scrutinized at various customer contact points | Yueh et al. (2010); Sin et al. (2005); Yim et al. (2005) |
| | (2.) My organization has the marketing and resources strengths to be successful in CRM | |
| | (3.) Our training programs are designed to develop employees with talents in building long term relationships with customers | |
| | (4.) My organization has established clear business goals related to customer acquisition, development, retention, and reactivation | |
| | (5.) Measuring and rewarding of employees performance is tied to their meeting and satisfying customer requirements successfully | |
| | (6.) Our organizational composition is fully designed to focus on customers | |

Knowledge Management

| Dimensions | Items | Source |
|-----------------------------|---|--|
| Knowledge Management | (1.) My organization have adequate information regarding customers needs | Yueh et al. (2010); Wang et al. (2006); Sin et al. (2005); Yim et al. (2005) |
| | (2.) My organization customers can anticipate correctly when services will be delivered | |
| | (3.) My organization provides | |
| | (3.) Customers can expect prompt service from employees of my organization | |

Technology based CRM

| Construct | Items | Source |
|-----------------------------|--|---|
| Technology based CRM | (1.) My organization is equipped with the necessary technology and skilled manpower to handle customer relationships | Yueh et al (2010); Sin et al (2005); Yim et al (2005) |
| | (2.) Our organization has a complex data Base containing customer information | |
| | (3.) There is an existence of individual Customer information at every contact point | |
| | (4.) Ourfirm's computer technology can help built customized product offerings to customers | |
| | (5.) CRM technology has enhance Relationships management | |

CRM Maintenance

| Construct | Items | Source |
|----------------|--|---------------------------------|
| CRMMaintenance | (1.) Our organization has a formal system of determining which of our current customers are of the highest value | Reinartz, Krafft & Hoyer (2004) |
| | (2.) We continuously track customer information in order to assess customer value | |
| | (3.) We actively attempt to determine the costs of retaining customers | |
| | (4.) We track the status of the relationship during the entire customer life cycle i.e. relationship maturity | |
| | (5.) We are structured to optimally response to groups of customers with different values | |
| | (6.) We provide individual incentives for valuable customers if they intensify their business with us | |
| | (7.) We provide current customers with incentives for acquiring new potential customers | |

Measures of Customer Loyalty

| Dimensions | Items | Source |
|------------------|---|---|
| Customer Loyalty | (1.) Our customers are always willing and ready to repurchase (2.) Our customers are ready to stay at the expense of better offer (3.) Our customers do recommend our products (4.) The organization's customers are less sensitive to competitor price (5.) Customers always tell others about our product/service | Lee et al. (2001); Aydin et al. (2005); Almossawi (2012); |

Measures of Customer Satisfaction

| Dimensions | Items | Source |
|-----------------------|--|--|
| Customer Satisfaction | (1.) My organization's customers are satisfied (2.) Our customers are happy to be with the organization (3.) Our customers are satisfied with our offer (4.) Customers are not regretting transacting with our firm (5.) Our services are very effective (6.) How do you feel about the whole organizational operations | Caruana (2002); Bloemer et al. (1998) |

Measures of switching cost

| Dimensions | Items | Source |
|----------------|---|---|
| Switching Cost | (1.) Switching to another service provider would be expensive (2.) Fear of losing better services offered by my service provider. (3.) Fear of tariff of a new provider (4.) Possibility of losing other gains (5.) Even if I have enough information, comparing the operators with each other could be energy, time and effort consuming. (6.) Fear of not able to accesses other services. (7.) Possibility of missing long-term established relationships. | Caruana (2004); Aydin et al. (2005); Wong & Mula (2009) |

Reference

- Abdullateef, A. O., Mokhtar, S., & Yusoff, R. Z. (2010). The impact of CRM Dimensions on Call Center Performance. *International Journal of Computer Science and Network Security*, 10(12), 184-195.
- Abdullateef, A. O., Mokhtar, S. S. M., & Yusoff, R. Z. (2010). The impact of CRM Dimensions on Call Center Performance. *IJCSNS*, 10(12), 184.
- Adebayo, G. (2008). Customer Satisfaction: A Key to Post Telecom Boom Success. Address delivered during the 3rd NCC/IT Telecom digest Stakeholders Forum on the Place of Consumers in the Nigerian Telecom Industry. Ikoyi - Lagos.
- Adeleke, A., & Aminu, S. A. (2012). The determinants of customer loyalty in the Nigeria's GSM market. *International Journal of Business and Social Science*, 3.No.14, 209 - 222.
- Adhikari, B. (2009). Managing customer relationships in service organizations. *Administration and Management Review*, 21(2), 64-78.
- Akbar, M. M., & Parvez, N. (2009). Impact of service quality, trust, and customer satisfaction on customers loyalty. *ABAC Journal*, 29(1), 24-38.

- Åkerlund, H. (2005). Fading customer relationships in professional services. *Managing Service Quality*, 15(2), 156-171.
- Akroush, M. N., Dahiyat, S. E., Gharaibeh, H. S., & Abu-Lail, B. N. (2011). Customer relationship management implementation: an investigation of a scale's generalizability and its relationship with business performance in a developing country context. *International Journal of Commerce and Management*, 21, 158-190.
- Almossawi, M. M. (2012). Customer Satisfaction in the Mobile Telecom Industry in Bahrain: Antecedents and Consequences. *International Journal of Marketing Studies*, 4(6), p139.
- Amine, A. (1998). Consumers' true brand loyalty: the central role of commitment. *Journal of strategic marketing*, 6(4), 305-319.
- Anderson, E. W., & Sullivan, M. W. (1993). The antecedents and consequences of customer satisfaction for firms. *Marketing science*, 12(2), 125-143.
- Awoloye, O. M., Okogun, B. A., Ojuloje, B. A., Atoyebi, M. K., & Ojo, B. F. (2012). Socio-economic effect of telecommunication growth in nigeria: an exploratory study. *interdisciplinary journal of contemporary research in business*, 4, No 2, 256 - 262.
- Aydin, S., Özer, G., & Arasil, Ö. (2005). Customer loyalty and the effect of switching costs as a moderator variable: A case in the Turkish mobile phone market. *Marketing Intelligence & Planning*, 23(1), 89-103.
- Azila, N., & Noor, M. (2011). Electronic customer relationship management performance: its impact on loyalty from customers' perspectives'. *International Journal of E-Education, E-Business, E-Management and E-Learning*.
- Baldinger, A. L., & Rubinson, J. (1996). Brand loyalty: the link between attitude and behavior. *Journal of advertising research*, 36, 22-36.
- Bandyopadhyay, S., & Martell, M. (2007). Does attitudinal loyalty influence behavioral loyalty? A theoretical and empirical study. *Journal of Retailing and Consumer Services*, 14(1), 35-44.
- Becker, J. U., Greve, G., & Albers, S. (2009). The impact of technological and organizational implementation of CRM on customer acquisition, maintenance, and retention. *International Journal of Research in Marketing*, 26, 207-215.
- Bello, O. W. (2012). *Mobile Telecommunication Customer Loyalty in Nigeria: Determining factors*: GRIN Verlag.
- Bennett, R., & Rundle-Thiele, S. (2002). A comparison of attitudinal loyalty measurement approaches. *The Journal of Brand Management*, 9(3), 193-209.
- Berndt, A., Herbst, F. J., & Klopper, H. B. (Ed.). (2007). *Product Management*: (Pty) Ltd, South Africa.
- Bodet, G. (2008). Customer satisfaction and loyalty in service: Two concepts, four constructs, several relationships. *Journal of Retailing and Consumer Services*, 15(3), 156-162.
- Boohene, R., & Agyapong, G. K. (2010). Analysis of the antecedents of customer loyalty of telecommunication industry in Ghana: The case of Vodafone (Ghana). *International Business Research*, 4(1), p229.
- Boulding, W., Staelin, R., Ehret, M., & Johnston, W. J. (2005). A customer relationship management roadmap: what is known, potential pitfalls, and where to go. *Journal of marketing*, 155-166.
- Bull, C. (2003). Strategic issues in customer relationship management (CRM) implementation. *Business Process Management Journal*, 9(5), 592-602.
- Burnham, T. A., Frels, J. K., & Mahajan, V. (2003). Consumer switching costs: a typology, antecedents, and consequences. *Journal of the academy of marketing science*, 31(2), 109-126.
- Callcentre.net. (2008). *White papers and Case studies*.

- Caruana, A. (2004). The impact of switching costs on customer loyalty: a study among corporate customers of mobile telephony. *Journal of Targeting, Measurement and Analysis for Marketing*, 12(3), 256-268.
- Dagger, T. S., David, M. E., & Ng, S. (2011). Do relationship benefits and maintenance drive commitment and loyalty? *Journal of services marketing*, 25(4), 273-281.
- Datong, G. (2011). A Markov Chain Model Analysis of GSM Network Service Providers Marketing Mix. *International Journal of Engineering & Technology IJET-IJENS*, Vol: 11 No: 04.
- Day, G. S. (1969). A two-dimensional concept of brand loyalty. *Journal of advertising research*, 9(3), 29-35.
- Dean, A. M. (2007). The impact of the customer orientation of call center employees on customers' affective commitment and loyalty. *Journal of Service Research*, 10(2), 161-173.
- Devaraj, S., Matta, K. F., & Conlon, E. (2001). Product and service quality: the antecedents of customer loyalty in the automotive industry. *Production and Operations Management*, 10(4), 424-439.
- Dick, A. S., & Basu, K. (1994). Customer loyalty: toward an integrated conceptual framework. *Journal of the academy of marketing science*, 22(2), 99-113.
- Dowling, G. (2002). In B2C Markets, Often Less Is More. *California Management Review*, 44(3), 87.
- DuÑu, C., & Hälrmäjan, H. (2011). The effect of organizational readiness on CRM and business performance.
- Eid, R. (2007). Towards a successful CRM implementation in banks: An integrated model. *The Service Industries Journal*, 27(8), 1021-1039.
- Finnegan, D. J., & Currie, W. L. (2010). A multi-layered approach to CRM implementation: An integration perspective. *European Management Journal*, 28(2), 153-167.
- Goode, M. M., & Harris, L. C. (2007). Online behavioural intentions: an empirical investigation of antecedents and moderators. *European Journal of Marketing*, 41(5/6), 512-536.
- Gremler, D. D., Gwinner, K. P., & Brown, S. W. (2001). Generating positive word-of-mouth communication through customer-employee relationships. *International Journal of Service Industry Management*, 12(1), 44-59.
- Halinen, A., & Tähtinen, J. (2002). A process theory of relationship ending. *International Journal of Service Industry Management*, 13(2), 163-180.
- Hughes, A. (2007). Churn reduction in the telecom industry. Retrieved from www.teleco1n-marketing.com/index.php.
- Jacoby, J., & Kyner, D. B. (1973). Brand loyalty vs. repeat purchasing behavior. *Journal of marketing research*, 1-9.
- Jambekar, A. B. (2000). A systems thinking perspective of maintenance, operations, and process quality. *Journal of Quality in Maintenance Engineering*, 6(2), 123-132.
- Kaur, G., Sharma, R., & Mahajan, N. (2012). Exploring customer switching intentions through relationship marketing paradigm. *International Journal of Bank Marketing*, 30(4), 280-302.
- Kavitha, K., & Palanivelu, P. (2012). Customer Satisfaction. *JOURNAL OF INDIAN MANAGEMENT*, 99.
- Khan, A. A., Jamwal, S., & Sepehri, M. (2010). Applying data mining to customer churn prediction in an internet service provider. *International Journal of Computer Applications IJCA*, 9(7), 24-28.

- Kheng, L. L., Mahamad, O., Ramayah, T., & Mosahab, R. (2010). The impact of service quality on customer loyalty: A study of banks in Penang, Malaysia. *International Journal of Marketing Studies*, 2(2), p57.
- Kotler, P., & Keller, K. (2009). *Marketing Management* (4th ed.). New Jersey: Pearson International
- Kuusik, A., & Varblane, U. (2009). How to avoid customers leaving: the case of the Estonian telecommunication industry. *Baltic Journal of Management*, 4(1), 66-79.
- Kyootai, L., & Joshi, K. (2007). An empirical investigation of customer satisfaction with technology mediated service encounters in the context of online shopping. *Journal of information technology management*, 18(2), 18-37.
- Ladhari, R. (2009). A review of twenty years of SERVQUAL research. *International Journal of Quality and Service Sciences*, 1(2), 172-198.
- Lee, J., Lee, J., & Feick, L. (2001). The impact of switching costs on the customer satisfaction-loyalty link: mobile phone service in France. *Journal of services marketing*, 15(1), 35-48.
- McIlroy, A., & Barnett, S. (2000). Building customer relationships: do discount cards work? *Managing Service Quality*, 10(6), 347-355.
- McNally, R. C. (2007). An exploration of call centre agents' CRM software use, customer orientation and job performance in the customer relationship maintenance phase. *Journal of Financial Services Marketing*, 12(2), 169-184.
- Menzela, E. (1998). Managing customer risk. *Chartered Accountants Journal of New Zealand*, 77, 27-30.
- Miranda, M. J., Konya, L., & Havrila, I. (2005). Shoppers' satisfaction levels are not the only key to store loyalty. *Marketing Intelligence & Planning*, 23(2), 220-232.
- Mohammed, A. A., & Rashid, B. (2012). Customer Relationship Management (CRM) in Hotel Industry: A framework Proposal on the Relationship among CRM Dimensions, Marketing Capabilities, and Hotel Performance. *International Review of Management and Marketing*, 2(4), 220-230.
- NCC. (2012). Quarterly Summary of Telephone Subscribers in Nigeria, industry statistics.: Nigerian Telecommunications Commission.
- O'Brien, J. A., & Marakas, G. M. (2007). *Enterprise information systems*: McGraw-Hill Irwin.
- Ogbadu, D., & Usman, A. (2012). Imperatives of Customer Relationship Management In Nigeria Banking Industry.
- Ogechukwu, A. D. (2012). Is relationship marketing an acceptable marketing strategy to be used by nigerian commercial banks. *Universal Journal of management and Social Sciences*, 2 No.1, 17 - 49.
- Oghojafor, B., Mesike, G., Bakarea, R., Omoera, C., & Adeleke, I. (2012). Discriminant Analysis of Factors Affecting Telecoms Customer Churn. *International Journal of Business Administration*, 3(2), p59.
- Oliver, R. L. (1999). "Whence Customer Loyalty". *Journal of Marketing*, 63, (4) ((Special Issue)), 33-44.
- Oyeniya, J. O., & Abiodun, J. (2008). Customer service in the retention of mobile phone users in Nigeria. *African Journal of Business Management*, 2(2), 026-031.
- Oyeniya, J. O., & Abiodun, J. A. (2009). Switching cost and customers loyalty in the mobile phone market: the Nigerian experience. *Business Intelligence Journal*, 3(1), 41-52.
- Parvatiyar, A., & Sheth, J. N. (2001). Customer relationship management: emerging practice, process, and discipline. *Journal of Economic and Social Research*, 3(2), 1-34.

- Patrick, O. O. (2012). Moderating Customer Relationship Management (CRM) To Enhance Firm Performance Through Continous Product Development. *Australian Journal of Business and Management Research* 2(01), 01-08.
- Payne, A., & Frow, P. (2005). A strategic framework for customer relationship management. *Journal of marketing*, 167-176.
- Piccoli, G., Brohman, M. K., Watson, R. T., & Parasuraman, A. (2009). Process completeness: Strategies for aligning service systems with customers' service needs. *Business Horizons*, 52(4), 367-376.
- Punch. (2013). CDMA operators lose 1.14 million telephone subscribers, *Punch Newspaper*. Retrieved from <http://www.punchng.com/business/business-economy/cdma-operators-lose-1-14-million-telephone-subscribers/>
- Rašula, J., Bosilj Vukšić, V., & Indihar Štemberger, M. (2012). The impact of knowledge management on organisational performance. *Economic and Business Review*, 14(2), 147-168.
- Rauyruen, P., & Miller, K. E. (2007). Relationship quality as a predictor of B2B customer loyalty. *Journal of Business Research*, 60(1), 21-31.
- Reichheld, F. F., & Teal, T. (1996). *The loyalty effect: The hidden force behind growth, profits, and lasting value*: Harvard Business Press.
- Reimann, M., Schilke, O., & Thomas, J. S. (2010). Customer relationship management and firm performance: the mediating role of business strategy. *Journal of the academy of marketing science*, 38(3), 326-346.
- Reinartz, W., Krafft, M., & Hoyer, W. D. (2004). The customer relationship management process: Its measurement and impact on performance. *Journal of marketing research*, 293-305.
- Research, P. (2010). *Telecommunication Subscribers Churn Rate*. <http://www.pyramidresearch.com.ng.gov>
- Ryals, L. (2005). Making customer relationship management work: the measurement and profitable management of customer relationships. *Journal of marketing*, 252-261.
- Sagagi, M. S. (2005). Achieving international compositeness in manufacturing: An insight from nigerian textile industry, *guru ghasdidias. Business Intelligence Journal*, 1(1), 4 -62.
- Santouridis, I., & Trivellas, P. (2010). Investigating the impact of service quality and customer satisfaction on customer loyalty in mobile telephony in Greece. *The TQM Journal*, 22(3), 330-343.
- Schierholz, R., Kolbe, L. M., & Brenner, W. (2007). Mobilizing customer relationship management: A journey from strategy to system design. *Business Process Management Journal*, 13(6), 830-852.
- Sin, L. Y. M., Tse, A. C. B., & Yim, F. H. K. (2005). CRM: conceptualization and scale development. *European Journal of Marketing*, 39(11/12), 1264-1290.
- Singh, H. (2006). *The Importance of Customer Satisfaction in Relation to Customer Loyalty and Retention*. Asia Pacific University College of Technology & Innovation Technology Park Malaysia.
- Smith, M., & Chang, C. (2010). Improving customer outcomes through the implementation of customer relationship management: Evidence from Taiwan. *Asian Review of Accounting*, 18(3), 260-285.
- Söderlund, M. (1998). Customer satisfaction and its consequences on customer behaviour revisited: The impact of different levels of satisfaction on word-of-mouth, feedback to the supplier and loyalty. *International Journal of Service Industry Management*, 9(2), 169-188.
- Srinuan, P., Annafari, M. T., & Bohlin, E. (2011). An analysis of switching behavior in the Thai cellular market. *info*, 13(4), 61-74.

- Srivastava, R. K., Shervani, T. A., & Fahey, L. (1999). Marketing, business processes, and shareholder value: an organizationally embedded view of marketing activities and the discipline of marketing. *the Journal of Marketing*, 168-179.
- Tamilarasan, R. (2011). Customer Relationship Management in Banking Services. *Advances In Management*.
- Taylor, S. A., Celuch, K., & Goodwin, S. (2004). The importance of brand equity to customer loyalty. *Journal of product & brand management*, 13(4), 217-227.
- Tella, S. A., Amaghionyeodiwe, L., & Adesoye, B. (2007). Telecommunications Infrastructure and Economic Growth Evidence from Nigeria. Paper presented at the Being a Paper Submitted for the Un-Idep and Afea Joint Conference on Sector-Led Growth in Africa and Implications for Development Dakar, Senegal.
- Thomas, J. S., Blattberg, R. C., & Fox, E. J. (2004). Recapturing lost customers. *Journal of marketing research*, 31-45.
- Toor, T. P. S. (2008). Creating competitive edge through improved customer relationship management. *Business Strategy Series*, 10(1), 55-60.
- Toporex. (2011). The definition of customer loyalty: my own thought. www.google.firefox.com
- Urama, N. E., & Oduh, M. O. (2012). Impact of Developments in Telecommunications on Poverty in Nigeria. *economics and Sustainable Development*, 3, No.6, 25 - 34.
- Vandermerwe, S. (2004). Achieving deep customer focus. *MIT Sloan Management Review*, 45(3), 26-34.
- Wang, C., Huang, Y., Chen, C., & Lin, Y. (2010). The influence of Customer Relationship Management process on management performance. *The International Journal of Organizational Innovation*, 2(3), 40-50.
- Wetsch, L. R. (2006). Trust, satisfaction and loyalty in customer relationship management: an application of justice theory. *Journal of relationship marketing*, 4(3-4), 29-42.
- Wong, C.-B., & Mula, J. M. (2009). The moderating effect of switching costs on the customer satisfaction-retention link: retail internet banking service in Hong Kong. Paper presented at the Proceedings of the 11th IBIMA Conference: Innovation and Knowledge Management in Twin Track Economies.
- Yang, Z., & Peterson, R. T. (2004). Customer perceived value, satisfaction, and loyalty: the role of switching costs. *Psychology & Marketing*, 21(10), 799-822.
- Yim, F. H., Anderson, R. E., & Swaminathan, S. (2005). Customer relationship management: Its dimensions and effect on customer outcomes. *Journal of Personal Selling and Sales Management*, 24(4), 263-278.
- Yueh, C. L., Lee, Y., & Barnes, F. B. (2010). The Influence of Customer Relationship Management on management performance. *The International Journal of Organizational Innovation*, 2(3), 40-50.