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; Oyeniyi & Abiodun, 2008; Oyeniyi & 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 $1.2billion, $4billion, $8.5billion and $18billion, 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; Awoleye, et al., 2012; NCC, 2012; Oyeniyi & Abiodun, 2009; Sagagi, 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 options of attitudes or preferences, economic strengths and competitive efforts to upset the relationship (Toporex, 2011).

As such increasing consumers loyalty would no doubt entails 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 there 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 (Gremler, 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 stand point 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, Gharbieh, & 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, & Havrika, 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](image)

**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, etc. 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:

**H 1a:** Customer orientation has significant influence on customer satisfaction of telecommunication services.

**H 2a:** 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 organisational 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:

**H 1c:** Knowledge management of telecommunication customers has significant influence on customer satisfaction.

**H 2c:** 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(DuNu & Hālmājan, 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; Almossawi, 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 loyaltyin 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

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

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

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<th>Dimensions</th>
<th>Items</th>
<th>Source</th>
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<tbody>
<tr>
<td>Knowledge Management</td>
<td>(1.) My organization have adequate information regarding customers needs</td>
<td>Yueh et al. (2010); Wang et al. (2006); Sin et al. (2005); Yim et al. (2005)</td>
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<td></td>
<td>(2.) My organization customers can anticipate correctly when services will be delivered</td>
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<td></td>
<td>(3.) My organization provides</td>
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<td></td>
<td>(3.) Customers can expect prompt service from employees of my organization</td>
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### Technology based CRM

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

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

Measures of Customer Loyalty

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

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Items</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Satisfaction</td>
<td>(1.) My organization’s customers are satisfied</td>
<td>Caruana (2002); Blömer et al. (1998)</td>
</tr>
<tr>
<td></td>
<td>(2.) Our customers are happy to be with the organization</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3.) Our customers are satisfied with our offer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4.) Customers are not regretting transacting with our firm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(5.) Our services are very effective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(6.) How do you feel about the whole organizational operations</td>
<td></td>
</tr>
</tbody>
</table>

Measures of switching cost

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

Reference


