

THE MEDIATED EFFECT OF CRM SYSTEMS ON CUSTOMER LOYALTY: A STUDY OF THE NIGERIAN RETAIL BANKING INDUSTRY

Akinyemi Paul Omoge*

Ibukun Sokari**

Abstract

Findings from literature have established that banks have made significant investment in customer relationship management (CRM) systems and technology. The reasons for this have been traced to their emergent need to gain competitive advantage through greater knowledge of their customers thus increasing their customer base, customer satisfaction and achieving greater customer retention and customer loyalty. The purpose of this research is to examine the direct and mediated effect of CRM adoption in the Nigerian banking industry on customer loyalty through customer satisfaction and customer retention. A structured questionnaire was used to collect data with 400 usable responses from retail bank customers across Nigeria. Structural Equation Modelling was employed to analyse data and test hypotheses. The results showed that there is a direct and an indirect relationship between CRM and customer loyalty. Also, CRM

***Akinyemi Paul Omoge recently completed his Ph.D. from the Robert Gordon University, UK. He also holds MBA., MSc., BSc., and PgCert. in research methods. His teaching interests include: CRM/Digital marketing, Principles of Marketing, Consumer Behavior and his research interest areas involve CRM/Technology Adoption, Acceptance and Usage, Online Banking, and Consumer Behavior.**

**** Ibukun Sokari: Doctoral researcher, department of management Robert Gordon University, Aberdeen UK. She is a policy analyst and ardent researcher. Teaching and research interests include: Policy analysis; innovation technology management; strategic management as well as entrepreneurship**

implementation affects customer satisfaction and customer retention, and both customer satisfaction and retention have significant relationships with customer loyalty.

Keywords: CustomerRelationship Management (CRM), Customer loyalty, Customer satisfaction, Structural Equation Modelling (SEM), Mediation, Moderation, Process.

1.0.Introduction

The banking industry across the world including Nigeria is experiencing difficulty in gaining customer loyalty, and retaining both existing and prospective new customers (Dowling, 2002; Mishra *et al.*, 2011). According to Dowling, (2002) and Lee-Kelley et al., (2003), attracting, retaining and gaining customer loyalty can be achieved through excellent customer satisfaction by being responsive to customers' needs and by exceeding customers' expectations. Previous studies have found that loyal and satisfied customers have a high tendency to buy more products from the organisation by way of up-buying and cross-buying (Javadin *et al.*, 2012). There is evidence that satisfied customers also refer the company to other prospective consumers through word of mouth (Dowling, 2002; Javadin et al., 2012). Scholars have identified that in the modern era of strategic market relationship management, Customer Relationship Management (CRM) emerges as the answer to gaining competitive advantage, trust, customer satisfaction and customer loyalty (Onut *et al.*, 2008; Zeithml and Bitner, 2003). Also, the necessity for banks to maintain their customer database, understand customer dynamics and their changing needs can be achieved through the help of CRM (Luck and Lancaster, 2003; Roberts-Lombard and Plessis, 2012; Xu et al., 2002). As stated by Verhoef and Langerak, (2002) and Gartner, (2000), the adoption of CRM by banks and other sectors in recent years is as a result of the need for customer data warehouses, sales force automation, interactive communication techniques and statistical decision support tools. However, Payne and Frow, (2005) opined that the need for CRM reaches beyond the scope of the factors listed above. They argued that CRM can be integrated and adapted by organisations for many other purposes. knowledge through CRM is not limited to data about who the customers are in terms of their market segment, but also the knowledge about the manner of their buying behaviour. Undoubtedly, the essence of banks' adoption of CRM and establishing quality customer relationships is to get both their newly gained and existing customers to become advocates for the company's brand (products and

services). Essentially, this research will assess the mediated effect of CRM on customer loyalty through customer satisfaction and customer retention in the Nigerian banking industry.

1.1. Statement of research problem and significance

Despite the introduction of the cashless society policy by the Apex bank in Nigeria, Central Bank of Nigeria (CBN), Nigeria can still be classified as a cash-based economy. This is because for most retail and commercial business activities payment transactions are still carried out in cash. According to a study by CBN, 99% of Nigerian bank customers' commercial activities are cash related. The report unveiled that single cash-based transactions in excess of N150,000 (or 10% of total cash transaction) account for about 71% of the total cash-based activities. This implies that the majority of the cash-based transactions are above the CBN cash-based threshold of N150,000 (CBN, 2012; Odior and Banuso, 2012). According to CBN, the new cash policy was necessitated for some fundamental reasons. These include its primary objective to drive technology adoption in the banking industry, the development of information technology (IT) based banking and the modernisation of the Nigerian payment system in accordance with the Nigerian vision 2020 which among other reasons is to ensure that Nigeria in on the top 20 economies. They also hope to reduce banking services costs, improve the effectiveness of their monetary policy and get the Nigeria banking industry to catch up with the developed world and operating in tune with global trends in banking technology. Consequently, the CBN cash policy in a broad way has mandated all the banks in Nigeria to adopt technology in their customer serving business processes. Prior to the introduction and adoption of CRM enabled channels (Online banking, ATM, POS etc.) in the delivery of banking services in Nigeria, previous research has identified peculiar characteristics of Nigerian banks' customer experience, including transaction delays, long queues, issues with money transfers and technology down time (Ogbadu and Usman, 2012; Ogunnaike and Ogbari, 2008). These experiences are factors that have the potential to impair customer satisfaction, retention and loyalty. According to Ezuwore et al., (2014), improving or possibly eradicating all the challenges of long queues, tally numbering, and the loss of valuable work hours while serving banks' customers has led to the adoption of technology, which is a product of the cashless policy. Therefore, it is upon the basis of this evidence that this study is set up to assess the effect of CRM on customer loyalty. This study

therefore intends to evaluate the direct and mediated effect of CRM on customer loyalty in the Nigeria banking industry.

1.2. Main objectives

- To examine the direct effects of CRM system on customer loyalty
- To assess the mediated effects of CRM system on customer loyalty through customer satisfaction
- To assess the mediated effects of CRM systems on customer loyalty through customer retention.

1.3. Literature review: What is Customer Relationship Management (CRM)?

CRM has been of interest to industry and to researchers for decades, but this grew in the 1990s (Ling and Yen, 2001; Xu *et al.*, 2002). Although the marketing term CRM has attracted the attention of many scholars, nevertheless, researchers and marketing professionals or practitioners who have given numerous definitions argue there is presently no definition that is generally accepted (Payne and Frow, 2006). This is because they have all defined CRM based on their different research perspectives and specialities. CRM as defined by Swift, (2001 p.12) is an “enterprise approach to understanding and influencing customer behaviour through meaningful communications in order to improve customer acquisition, customer retention, customer loyalty and customer profitability”. Another comprehensive definition according to Parvatiyar and Sheth, (2001 p.5) defines CRM as “a comprehensive strategy of acquiring, retaining, and partnering with selected customers to create superior value for the company and the customers. It involves the integration of marketing, sales, customer service and supply chain functions of the organisation to achieve greater efficiency and effectiveness in delivering customer value”. CRM as defined by Payne and Frow, (2005 p.168) “is a strategic approach that is concerned with creating improved shareholder value through the development of appropriate relationship with key customers and customer segments”. CRM helps bring together possible relationships with marketing strategies and Internet technology in order to achieve profitability, long-term customer relationship by using data to deeply know customers and their needs so as to mutually create value for them (Payne and Frow, 2005). In a relatively similar context but from a marketer’s perspective, Anton and Hoek, (2002) described CRM as a detailed layout marketing strategy

which incorporates technology, marketing process and every other area of the organisation's business activities around their customers. Also from the customers' perspective, CRM is defined by Brown, (2000) as a process that involves the acquisition of new customers, retaining existing customers, as well as knowing, anticipating and managing the needs of both existing and potential prospective customers. These definitions are built around the opinion of Mylonakis, (2009) who posits that CRM is a developing procedure that brings about a long-term mutual and beneficial relationship and gaining trust.

Some researchers have recently proposed new definitions from a broader perspective. Peelen, (2005 p.6) posits that "CRM is to be regarded as a business strategy that is aimed towards developing long-term, mutually profitable, individual customer-supply relationships and is placed on an IT infrastructure to be developed, one that enables well-defined and controlled processes, and place capable personnel in a position to function optimally". The view of CRM in this research is a significant business strategy, as expressed by Buttle, (2009 p.22) who stated that "CRM is a core business strategy that integrates internal processes and functions, and external networks, to create and deliver value to targeted customers at a profit". Albeit, some scholars have contended that CRM is not all that important as to re-define marketing. Swift, (2001) and Payne and Frow, (2006) submit that for CRM to be efficiently and effectively used successfully, a firm will need to have personnel who have customers' interest at heart and as their primary target. In the same view, Starzyczna and Pellešová, (2007) opined that CRM is fundamentally based on customers that are exceptional to the firm and the culture of the firm. Therefore, CRM is to be acknowledged as a firm philosophy rather than just a mere computer programme. As reviewed in this section, many definitions have been given to CRM from a range of research and theoretical perspectives. The key variances in these different CRM descriptions are the technological and the relationship position of CRM (Onut *et al.*, 2008). They argued that while some of the scholars from a marketing field put emphasis on technological aspects of CRM, the other researchers intensify attention on the IT view of CRM. Authors view of CRM definition align with that of Swift (2001).

1.4. The philosophy of CRM

The study of CRM has been covered extensively in the academic literature (Berry, 1995; Chen and Popovich, 2003; Morgan and Hunt, 1994; Payne and Frow, 2005; Sheth and Parvatiyar, 1995) thus establishing its relevance to marketing practice. This can be observed in how much banks have significantly invested in CRM (Lemon *et al.*, 2002; Reinnartz and Kumar, 2003; Reinartz *et al.*, 2004). Studies have shown that CRM brings about long-term valued customer relationships and customer- and service-centric high quality services (Eisingerich and Bell, 2006; Gan *et al.*, 2006; Gronroos, 1990; Varki and Colgate, 2001), aids management of customer complaints (Achumba 2006; Gilly *et al.* 2001), service delivery turnaround time (Reinartz and Kumar, 2003), ease of account opening and customer satisfaction (Khalifa and Liu, 2002; Mokhlis *et al.*, 2011; Morgan and Hunt, 1994; Torcy, 2002), customer loyalty (Reichheld and Schefter, 2000) and customer retention (Morgan and Hunt, 1994; Payne and Frow, 2005; Swift, 2001; Zineldin, 2000). Essentially, it can be deduced from the above definitions that CRM constructs are basically centred on customer acquisition, customer retention, customer satisfaction and customer loyalty (Meyer, 2010; Ngai, 2005;). Therefore, as part of the process of achieving the aim of this study, these factors would be considered as antecedents, which would serve as a basis to determine if CRM has either a negative or positive effect on the factors thereby effecting customer loyalty.

According to Kristensen *et al.*, (1992); McColl-Kennedy and Schnider, (2000) and Zeithaml *et al.*, (1996), it has been substantiated that pleased customers are of fundamental importance to a to long period of business achievement (Gilbert and Veloutson, 2006). This forms the basis for the introduction of CRM by businesses. Overall, the purpose for which businesses use CRM is to effectively and efficiently acquire, as well as retain profitable customers, through building and maintaining a good marketing relationship with their customers (Payne and Frow, 2006). In response to the increase in competition in the banking industry, firms are actively employing CRM as a tool and measure to develop, monitor and evaluate the quality of their products and service offerings to customers, so as to ensure they gain competitive advantage (Parvatiyar and Sheth, 2001). As far as this study is concerned, CRM system in this study is referred to as CRM enabled channels such as Online banking, Point of Sales (POS), ATM among others. These channels are technological facilitated platforms or mediums through which bank customers can

carry out their banking transactions as well as being a communication mode between the bank and their customer for complaints and feedback purposes. Therefore, the aspect of CRM measured in this study is CRM tools effectiveness as a means to support, automate and integrate delivery channels, which is referred to in this study as CRM enabled channels (tools). Similarly, this study is from the customer's perspective rather than from an organisational perspective. Thus, CRM is measured by accessing customer experience, usefulness, and orientation of the automated channels.

1.5. CRM system and customer satisfaction

CRM developed from firms' relationship management with the aim of increasing customer retention as an outcome of effective customer relationship management (Robert-Lombard and Du Plessis, (2012). As argued by Reinartz and Kumar, (2003), the approach of CRM has been adopted by marketers to highlight the significance of customer lifetime value and long-term relationships. Empirically, customer satisfaction has been established to be the prevalent measuring parameter used to identify and achieve the customer's tendency to remain in or defect from a buying relationship (Capraro et al., 2003). Though customer satisfaction is described to be an inclusive assessment of service quality attributes (Boulding, et al., 1993; Fornell, et al.1996; Johnson and Fornell, 1991), CRM implementation has been found to be a service quality improvement enabler and leads to enhanced customer satisfaction (Sigala, 2008; Zineldin, 2005). Bolton *et al.*, (2004) and Morales, (2005) affirmed that there is a significance relationship between customer satisfaction and firms' financial performance. In particular, Bolton, (1998) and Fornell, (1992) found that customer satisfaction has an adverse effect on numbers of customer complaints and a positive effect on customer loyalty and buying behaviour. This supports the position of Bolton et al., (2000), adding that customer loyalty increases the degree of customer patronage. Customer satisfaction may also help banks to be assured of future revenue, reduces customer defection and improves cost effectiveness (Rust et al., 2001; Anderson and Sullivan, 1993; Mithas et al. 2002).

CRM implementation has the potential to have an impact on customer satisfaction because it enables banks to customise and develop products that match the need of individual and segmented (targeted) customers, individual customer product and service offerings, and

according to Mithas et al., (2005), products and services personalisation improves customer perceived quality of their banks. Moreover, CRM enables banks to manage customers' information such as accessing, storing, sharing across departments/branches and using the same for effective customer acquisition, upkeep and general account management (Reinartz et al., 2004). Thus, it can be inferred that CRM system seems to have an impact on customer satisfaction.

1.6. CRM system and customer retention

As mentioned earlier, CRM implementation enables banks to collect, store, process and manage customer data thereby aiding product and service offerings. This will enhance banks' knowledge of their customer needs and how to meet them. According to Zineldin, (2006 p 434), "A retention orientation approach requires companies to be responsive to customer concerns by keeping open dialogues with them". As postulated by Zineldin, (2006) that customer retention comprises effective procedures of obtaining and acting on customers' complaints, customer satisfaction data analysis and developing long-term customer relationship. Hence, it can arguably be inferred that CRM implementation is a tool that can be said to help banks achieve customer retention therefore, the study hypothesises that there is a link between CRM implementation and customer retention.

1.7. CRM system and customer loyalty

According to Mudie and Cottam, (1999) and Wilmshurst and Mackay, (2002), the justification for CRM implementation strategy is fundamental upon business performance improvement through increased customer satisfaction and customer loyalty. As mentioned earlier, successful CRM implementation can bring about several benefits for the banks, however, the level of CRM implementation influence on customer loyalty increase is a function of some variables such as: customer satisfaction level and service quality. Also, according to Swift, (2000) is a tool through which consumer behaviour is understood through strong communication that leads to customer loyalty. Based on this argument and that of Chen and Popovich, (2003) that firms with successful CRM implementation stand to gain customer loyalty and long-term profitability, the study proposes that CRM has a direct association to customer loyalty.

1.8. Customer satisfaction in banks and customer loyalty

Having demonstrated that CRM impacts customer satisfaction, retention and loyalty, it is imperative to theoretically substantiate the relationship between customer and customer loyalty. According to Kashif et al., (2015), satisfaction is said to be ascribed to customers' feelings of delight when their expectations are met by their banks. Also, as argued by Lee et al., (2001) and Oliver, (1979) both attitudinal and behavioural customer loyalty result in positive word of mouth that can give the service provider a competitive advantage as well as increase a bank's performance. Delighted customers are characterised by their willingness to repurchase or rebuy consistently in the future and recommend their service provider's product and services. These attributes are what define customer loyalty according to Ndubisi, (2007) and Lewis and Soureli, (2006). Also, a study by Wang et al., (2004) revealed that the CRM model is established on factors that have to do with customer behaviour (repurchasing, cross and up selling, level of customer acquisition) and factors relating to quality of relationship with their customers (customer satisfaction and loyalty). The study collected data randomly from 400 selected customers of two large Chinese security firms. The research showed that customer behaviour based on CRM has a positive impact on customer and brand loyalty. As averred by Fornell, (1992), customer satisfaction and customer loyalty as a broad-spectrum rule are very closely associated. Customer satisfaction serves as an antecedent to customer loyalty. According to Wattilete et al., (2013), customer satisfaction prevents customer churn and increases customer retention, hence resulting into customer loyalty. Furthermore, it is known that CRM system improves service quality, therefore, achieving a good level of service quality will bring about satisfaction as an outcome, which in turn leads to customer loyalty and word-of-mouth/recommendation (Falk et al., 2010; Lee et al., 2011). This study thereby proposes that customer satisfaction impacts customer loyalty.

1.9. Customer retention and customer loyalty

Some researchers have carried out studies to examine the connection that exists between retained customers and their loyalty from varied framework. While some of the authors established that there is a significant relationship between the two constructs, some authors' findings disagree, as they revealed a negative relationship to exist between them (Khan, 2012). Patterson, (2004) conducted a study on a contingency model of behavioural intention in s service context

considering retention and loyalty of customer as constructs. His study revealed that though there is a relationship between customer retention and customer loyalty, however this link depends on factors such as switching cost, set up cost, psychological cost and economical cost. These factors were identified as switching barrier elements (Burnham, et al., 2003; Guiltan 1989; Jackson, 1985). Similarly, findings from the studies of Wong et al., (2009) showed that a firm that has an established exceptional relationship with their customer would have a significant effect on its customer loyalty. Likewise, researchers such as Bolton, et al., (2000), Hallowell, (1996) and Rust and Zahorik, (1993) admitted that customer retention has a positive relationship with customer loyalty. On the contrary, findings from the study of Smith and Chang, (2009) submitted that there is no connection between customer retention and customer loyalty with reference to shareholders' value. Similarly, Khan, (2012) examined the prominence of potential customer relationships through customer satisfaction and customer retention on customer loyalty within the context of the Pakistan telecom industry. He found that the relationship between customer retention and customer loyalty is insignificant. Notably, the variables measured alongside customer retention in these studies are different from that of the current study and so are the industries. Therefore, this study proposed to establish whether there is statistical association between customer retention and customer loyalty with respect to the variables in the current study, sample population and industry. The theorised paths are presented below and depicted in figure 1.

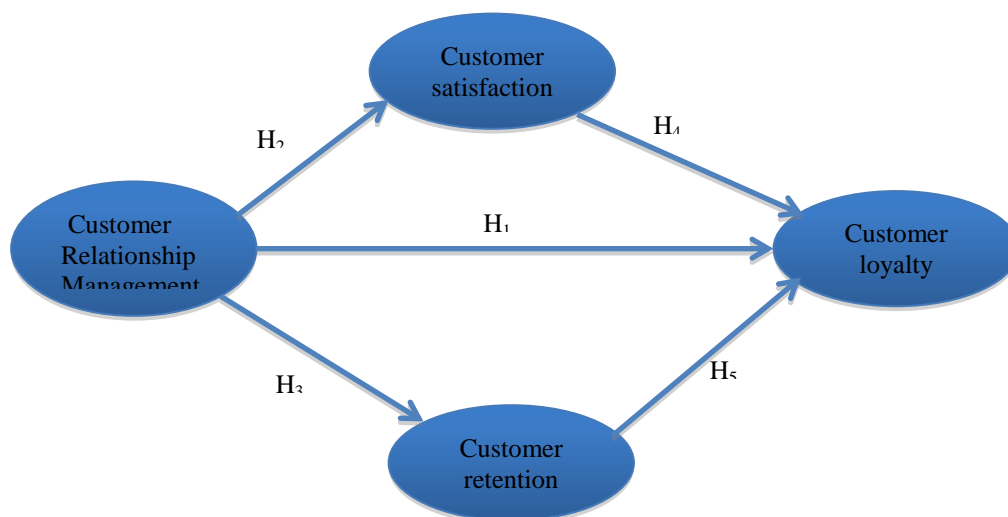


Figure 1: Conceptual framework**Hypothesis A:**

- 1: CRM system has a direct positive effect on customer loyalty
- 2: CRM system positively affects customer satisfaction
- 3: CRM system positively affects customer retention
- 4: Customer satisfaction has a direct and positive effect on customer loyalty
- 5: Customer retention has a direct and positive effect on customer loyalty

Hypothesis B:

- 1: CRM system positively affects customer loyalty, but its effect is jointly mediated by customer satisfaction and customer retention
- 2: CRM system has a positive indirect effect on customer loyalty, which is mediated by customer satisfaction
- 3: CRM adoption has a positive indirect effect on customer loyalty, which is mediated by customer retention

1.10. CRM and Nigeria banking industry

The banking system is globally known to be the strength of a nation's financial intermediation through the generation and distribution of financial resources (Bello, 2005). The Nigerian banking industry is one of the country's most regulated sectors. As a major player in the economy, the significance of CRM adoption in financial services rendering to bank customers is worth emphasising. Following the consolidation and the introduction of the cashless policy, the banks have witnessed an increase in their customer base and competition has become more intense (Ajayi, 2005; Melodi and Gbadomosi, 2012). According to Koch, (1999), bank customers require four basic services from their banks and these include convenient banking hours, faster services, feeling wanted as well as fair and immediate resolution of complaints. The author further averred that providing these services to customers increases the bank's revenue and aids in retaining existing customers. In the present day, the Nigerian banks have fully realised the prominence of CRM system and its potential to lead to new customer acquisition, satisfying and retaining existing customers (Ogbadu and Usman, 2012). Onut et al., (2008) posit that CRM is a business strategy that is used to identify a bank's valued customers and expand on

relationship management. Hence, the banks have invested in technology adoption in order to gain competitive advantage in customer acquisition, satisfaction, retention and loyalty. In the same vein, Onut et al., (2008) argued that the purpose of CRM adoption in the banking industry is to integrate technology and human resources in order to access understanding of customer values and their behaviour. Consequently, this will enable them to deliver improved customer service, make CRM enabled customer centres more effective, and improve the ease of marketing and sales processes. Similarly, Sheth, (2005) stated that CRM has the potential to bring about customer satisfaction and retention thereby leading to customer loyalty.

1.11. Operationalisation of the constructs

Operationalisation of the variables used need to be considered and clearly defined prior to designing the instrument for data collection (Davis and Cosenza, 1993). It refers to the process through which how a concept is defined, measured, observed or manipulated in a study by the researcher (Burnette, 2007). The inferred meanings of this study constructs are presented in table 1.

Table 1: Constructs meanings

Variab les	Definition	Operationalisation of variables	Sources
CRM	CRM system referred to as “IT enabled channels such as internet, ATM, POS etc. allow a one-to-one dialogue with a current and perspective customer, in which the product configuration, price and required service can be individually negotiated” (Wilson et al., 2002. p.	. Customer CRM orientation . Customer experience	Padmavathy et al., 2012; Payne and Frow, 2005; Wilson et al., 2002

	1).		
CRM orientation	Customer orientation of their bank's CRM system	<ul style="list-style-type: none"> . My bank uses latest technology enabled channels to offer quality service . My bank make effective use of technology enabled channels to enhance customer service . My information is available at every banking point of contact 	Padmavathy et al., (2012); Yim et al., (2004)
Customer experience	The experience of customers when using the CRM enabled channels and other contact medium with their bank	<ul style="list-style-type: none"> . My bank attends to customer complaints promptly . My bank takes genuine interest in customer's problems . My bank effectively communicates with customers . My bank uses CRM system to evaluate my evolving needs 	Cho et al., (2003); Jain et al., (2007); Padmavathy et al., (2012)
Customer satisfaction	Customer's opinions on expected pleasure or dissatisfaction arising from the use of CRM enabled channels as compared to the CRM enabled channels' perceived performance.	<ul style="list-style-type: none"> . I am satisfied with my bank's CRM enabled channels . I am satisfied with the quality of services provided by me bank . I am satisfied with the way this bank has fulfilled my expectations . Overall, I am completely happy with my bank's CRM system level 	Abubakar et al., (2014); Hau and Ngo, (2012); Liverin and Liljander, (2006); Parasuraman et al., (1985); Singh, (1990)

Customer loyalty	Customers' behavioural act of repurchase, recommendation through positive word of mouth and intention to continue purchase or usage	. I say positive things about my bank to others . I encourage friends and relatives to use the services offered by the bank . I conduct all my banking transactions with my bank . Overall, I consider myself loyal to the bank	Beerli et al., (2002); Bettencourt, (1997); Ehigie, (2006); Zeithaml et al., (1996)
Customer retention	Decision-based outcome of customers to continue to patronise, buy more products and services from the same bank without switching to other banks as a result of positive perception formed or satisfaction received from the use of CRM enabled channels.	. I intend to continue to be a customer of the bank for a long time . I will buy more products and services of the bank in future . I would switch to other bank with higher level of technology enabled channels	Morgan and Hunt, (1994); Renaweera and Prabhu, (2003); Russ and Zahorik, (1993); Zeithaml et al., (1996)

Source: Author developed for the study

2.0. Research Method

The study intends to establish the relationships that exist between CRM and customer loyalty with customer satisfaction and customer retention as mediated variables. This extends to the examination of the degree to which CRM adoption (Using CRM orientation and customer experience as CRM measures) predicts customer loyalty through customer satisfaction and customer retention with the use of structural equation modelling. Therefore, a causal model was developed and tested to ascertain if customer satisfaction and customer retention mediate the relationship between CRM and customer loyalty. The study used CRM orientation and customer experience as CRM measures earlier developed by Padmavathy et al., (2012). These scales were

further used to examine their stability by evaluating the scale structure using the Nigerian retail bank customers.

2.1. Data collection approach

Research data for this study were collected through a field survey with systematic data sampling approach and a structured questionnaire. Using questionnaire as a means of data collection has been deemed appropriate for this study because it involves individual bank customers (large sample size), a large geographical area and the analysis technique selected Structural Equation Modelling (SEM). The questionnaire was developed such that each construct has its related questions under them for clarity and simplicity. There are five constructs in the study with 18 items. Concurring with the theory of subject to ratio, 7 to 20 cases per variable makes a suitable sample size should the exact sample size not be determinable (Hair, 2010). This study has 18 items and a total of 400 cases are used for this research, which makes a ratio of about 20:1. According to Hair, (2010), for research with a SEM approach, a subject to ratio 20:1 is acceptable.

2.2. Data sampling, measurement and statistical technique

Data were collected through a self-administered questionnaire in Nigeria using a systematic sampling approach. The respondents are the Nigerian retail bank customers and the data was collected across the four major ethnic groups (North, South, West and East). The respondents deemed suitable for this study are those who are aged 18 and above but less than 65 years who have an account with at least one bank and are the sole signatory to their account. A total of 504 questionnaires were administered but a total of 400 were adjudged usable for this study. Reasons for rejection include unengaged respondents, part completed due to time, respondents who indicated that they have never used CRM enabled technology for banking such as ATM, POS, Online banking etc. Each participant responded on their feeling and perception of CRM usage in terms of their technology/CRM orientation, customer experience as CRM measure and their judgement about the relationships between CRM and customer satisfaction, retention and loyalty. For CRM adoption measures, three items were used to measure technology/CRM orientation. These are: “my bank uses the latest technology enabled channels to offer quality services”, “my bank makes effective use of technology enabled channels to enhance customer

service” and “my information is available at every banking point of contact”. For customer experience, four items were used. These are: “my bank attends to customer complains promptly”, “my bank takes genuine interest in customer problems”, “my bank effectively communicates with customers” and “my bank uses CRM to evaluate my evolving needs” adopted from Jain et al., (2007), Padmavathy et al., (2012) and Yim et al., (2004). Customer satisfaction was measured using four items “I am satisfied with my bank’s CRM enabled channels”, I am satisfied with the quality of services provided by my bank”, I am satisfied with the way this bank has fulfilled my expectations” and “Overall, I am completely happy with my bank’s CRM implementation level” adopted from Singh, (1990); Padmavathy et al., (2012). Four items were used to measure customer loyalty “I say positive things about the bank to other people”, “I encourage friends and relatives to use the services offered by the bank”, I will buy more products/services from the bank in future” and “I will switch to other banks with higher technology enabled channels (reversed)” adopted from Bettencourt., (1997) and Padmavathy et al., (2012). Lastly, three items were used to measure customer retention “I intend to continue to be a customer of the bank for a long time”, “I will buy more products/services from the bank in future” and “I will switch to another bank with higher technology enabled channels (reversed)” adopted from Morgan and Hunt, (1994); Renaweera and Prabhu, (2003) and Zeithaml et al., (1996). A seven point Likert scale was used to measure the items ranging from 1 “strongly disagree” to 7 “strongly agree”. Although there are other scales that could be used for this study, seven-likert scale has been used for ease of use and consistency.

The data analysis technique used in this study for testing of research hypotheses was SPSS (for descriptive analysis), a regression-based macro approach developed by Hayes, (2013) (for mediation and moderation test) and structural equation modelling (SEM) (for inferential analysis on direct effects and validity). SEM as the major statistical technique used in the current study has been established to be a prevailing statistical approach for multivariate analysis. The use of this method in this study followed the principles of Gerbing and Anderson, (1988), which involve using SEM to analyse associations between multiple dependent and independent variable involving observed and unobserved variables concurrently. The process includes conducting confirmatory factor analysis (CFA) for test of reliability and validity as well as model global fit and structural analysis for relationships testing.

2.3. Method of mediation analysis

This study adopted a mediation analysis technique to assess the mediating effects of customer satisfaction and customer retention on the relationships between CRM system and customer loyalty. In addition to the mediation approach performed through bootstrapping in AMOS, this process was performed with a bias-correlated bootstrapping through the macro developed by Preacher and Hayes, (2008) and macro process, a regression-based approach to mediation and moderation effect analysis developed by Hayes, (2013). The bias-correlated bootstrapping permits the researcher to examine indirect effects significance as well as obtaining the confidence interval. In the present study, the bootstrapping was on the basis of 5000-bootstrapped sample size as suggested by Preacher and Hayes, (2013). Bootstrapping has been selected due to the established fact that it produces the best power and often times the most accurate confidence intervals as against other approaches such as Sobel test and causal steps methods (MacKinnon et al., 2004; William and MacKinnon, 2008). While the Baron and Kenny, (1986) causal steps technique for examining mediation is said to have low power and tendency to omit real effects, the Sobel test as one of the ways of the product of coefficient approach assesses the mediational effects by testing the joint significance of indirect paths (*ab* paths). The products of coefficient method produce a *Z* value under the assumption of normality of data distribution (MacKinnon et al., 2007).

2.4. Moderation

In order to further deepen the understanding of the impact of CRM system on customer loyalty, some variables were included in the model to serve as moderators. Customer length of patronage, gender and age were controlled in the mediation association among CRM system, customer satisfaction and customer loyalty. Using a different analysis, we further examined if the direct path between CRM system and customer loyalty, CRM system and customer satisfaction and customer satisfaction and customer loyalty were moderated by gender, age and length of patronage. The length of patronage was categorised into low, average (medium) and higher.

3.0. Results and Analysis

3.1. Internal reliability

Likert scale was used in this study therefore; its reliability needs to be checked. Generally, Cronbach Alpha is used for this purpose. The acceptable reliability estimate ranges from 0 to 1 however, a score of 0.6 is regarded as a minimum level and the closer to 1 the better the reliability. Although the scales used in this research have already been used and tested, due to application of the same scales to a different geographical locale and nationality, the researcher carried out a further reliability test and the Alpha score for this study is 0.879 which indicates that the scale is reliable to measure the constructs. Table 3 Shows the Cronbach Alpha for each of the items with the least being 0.867.

3.2. Research sample demographic profile

As shown in table 2 all the respondents have a bank account and are the sole signatory to their accounts (for respondents' reliability). This indicated that the opinions of the respondents are not shared expressions of feelings and are therefore their personal perceptions of the research variables. Only 24% of the respondents appeared not to be loyal or can be referred to as newly acquired customers. Customers who have been patronising their primary bank for over 5 years (about 34%) are regarded as loyal and customers over 10 years (23%) can further be classified as retained and loyal customers (Leverin and Liljander 2006; Gremler and Brown 1998). Interestingly, in agreement with the findings from this study (see section 3.4) this implies that the Nigerian bank customer possesses retention and loyalty buying characteristics. Moreover, about 59% have accounts with more than one bank, which explains that they practice multiple banking. These descriptive findings are consistent with the studies of Gerrard and Cunningham (1999) and Kaynak and Kucukemiroglu (1992).

Table 2: Demographic information for 400 respondents

Items	N	%
<i>Gender</i>		
Male	220	55
Female	180	45
<i>Age (years)</i>		
18-25	61	15.3
26-40	258	64.5

41-65	80	20
Above 65	1	0.3
<i>Education</i>		
Undergraduate	44	11
Graduate	225	56.3
Post-graduate	105	26.3
Professional	17	4.3
Others	9	2.3
<i>Occupation</i>		
Unemployed	14	3.5
Private sector	189	47.3
Public sector	96	24
Self-employed	51	12.8
Student	41	10.3
Others	9	2.3
<i>Ownership of bank account</i>	400	100
Sole signatory to account	400	100
<i>CRM enabled channels usage (ATM, Online banking etc.)</i>		
Yes	259	64.8
No	141	35.3
<i>Relationship with primary bank (years)</i>		
Less than 1	24	6.0
Between 1-5	137	34.3
Between 6-10	146	36.5
Above 10	93	23.3
<i>Number of banks</i>		
Single	163	40.8
Multiple	237	59.3

3.3. Evaluation of measurement model (Confirmatory factor analysis (CFA))

CFA is a confirmatory approach that shows how the hypothesised model is built to evaluate a population covariance matrix so as to get the minimum difference that exists between the measured and observed variables (Schreiber et al., 2006; Bentler, 1990). CFA is employed to test how research data fit the hypothesised model as well as assessing the unidimensionality, validity and reliability of the measurement model. This is expected to meet a certain given requirement before SEM can be applied or modelled. Table 3 provides the model fitness indexes that have been extracted from literature as guidelines. These indices are divided into three categories: absolute fit; incremental fit; and parsimonious fit. For assessment of model goodness of fit, it is required that any distinctive empirical study meet three or four of the 12 goodness of fit measurements but do not necessarily meet all the criteria (Hair, 2010; Kline, 1998) As established by Hair, (2010), using four to five goodness of fit indexes is regarded as adequate for evaluating a model's viability. To assess goodness of fit for this study, Goodness of Fit (GFI), Adjusted Goodness of Fit (AGFI), Root Mean Square Error Approximation (RMSEA), Comparative Fit Index (CFI), Tucker-Lewis Coefficient Index (TLI), chi square/df values and p close were used.

Table 3: Goodness of fit indexes recommended benchmarks

Name classification	Name of Index	Level of Acceptance	Reference from literature
Factor loading	Standardised Regression Weight	Weight > 0.5	Hair et al., (2006)
Absolute Fit	Chi-Square RMSEA GFI	P>0.05 RMSEA<0.08 GFI>0.9	Brown and Cudeck, (1993); Joreskog and Sorbom, (1984); Wheaton et al., (1977)
Incremental Fit	AGFI CFI TLI NFI	AGFI > 0.9 CFI > 0.9 TLI > 0.9 NFI > 0.9	Bentler, (1990) Bentler and Bonett, (1980) Bollen, (1989) Tanaka and Huba, (1985)
Parsimonious Fit	Chi-Square/df	Chi-Square/df < 5.0	Marsh and Hocevar, (1985)

Source: Author extracted from Chong et al. (2014 p. 111)

3.4. Discriminant validity and Convergent reliability (CR)

This is the extent to which the scores on a test are not correlated with scores loadings from other tests that are not expected to measure the variable. According to Chong et al., (2014), correlation coefficient between measures of a construct and that of other different variables are commonly used as evidence of discriminant validity. This procedure allows for correlation linkage of exogenous variables in a model in order to evaluate if the exogenous variables are highly correlated. If the correlation among the variables is higher than 0.85, it is assumed that multi-collinearity problem exists hence, to achieve discriminant validity, the correlations should be ≤ 0.85 (Farrell, 2009/2010; Zainudin, 2012). Alternatively, the estimation of the factor correlation matrix with the square root of the average extracted variance (AVE) can be used to assess discriminant validity. In order to have good discriminant validity, the square root of the AVE should not be less than its correlation with any of the factors (Farrell 2010; Mackenzie et al., 2011). Likewise, as a general rule of thumb, the recommended threshold for AVE should be anything greater than 0.5 (> 0.5) and for the CR should be greater than 0.7 (> 0.7) while both MSV and ASV should be less than the value obtained for AVE (Hair et al. 2010; Malhotra and Dash, 2011). As shown in figure 2 none of the correlations are more than 0.85, hence there is no problem of discriminant validity. Similarly, as presented in table 4, the obtained AVE and CR values for each of the constructs satisfies the recommended benchmark, implying that there are no convergent validity issues and that the variables correlate adequately with each other. This means that the latent variables are perfectly measured by their various observed variables.

Before a test on the research hypotheses were carried out, a confirmatory factor analysis (CFA) was performed with AMOS 22 to ascertain the validity and reliability of the measurement scale (Anderson and Gerbing, 1988). The outcome shows that unidimensionality and convergent validity were acceptable as the results presented in table 1 indicate that CFI, TLI and RMSEA values are above the cut off benchmarks (Garver and Mentzer, 1999; Hu and Bentner, 1999). Also, all pairs of the standardised residual value are more than absolute value of 2.58, all the expected parameter change (EPC) were less than absolute value of 0.3, all the variables' t-values were significant at an absolute t-value of 1.96 and all the factor loadings on individual variables are were more than 0.5 (Hair et al., 1998; Hair et al., 2006).

Table 4: Measurement model and reliability test results

Constructs	Items	Cronbach's Alpha	Standardised factor loadings	AVE	CR	Mean	SD
Customer Relationship Management (CRM)	CRMO		0.68	0.672	0.802		
	CE		0.90				
	CRMO1	.876	0.75			5.0	2.0
	CRMO2	.875	0.64			4.8	1.8
	CRMO3	.874	0.72			4.9	1.8
	CE1	.871	0.89			4.9	1.9
	CE2	.873	0.82			5.0	1.8
	CE3	.870	0.87			5.0	1.7
Customer Experience (CE)	CE4	.868	0.88			5.0	1.9
	CS1	.869	0.75	0.676	0.893	5.0	1.5
	CS2	.868	0.87			4.9	1.6
	CS3	.869	0.87			4.7	1.6
CS4	.868	0.79	4.8			1.6	
Customer Retention (CURT)	CURT1	.883	0.67	0.668	0.856	4.8	1.8
	CURT2	.880	0.93			4.9	1.9
	CURT3	.880	0.84			5.0	1.7
Customer Loyalty (CL)	CL1	.868	0.82	0.591	0.850	5.0	1.7
	CL2	.867	0.89			5.1	1.6
	CL3	.869	0.72			5.0	1.8
	CL4	.872	0.63			5.0	1.8
Based on CFA model fit indices of: Chi-square = 198.00, DF = 124, CMIN/DF = 1.597, CFI = 0.982, GFI = 0.948, TLI = 0.977, IFI = 0.982, RMSEA = 0.039, SRMR = 0.040, PCLOSE = 0.972.							

3.5. Research measurement model (Confirmatory factor analysis results)

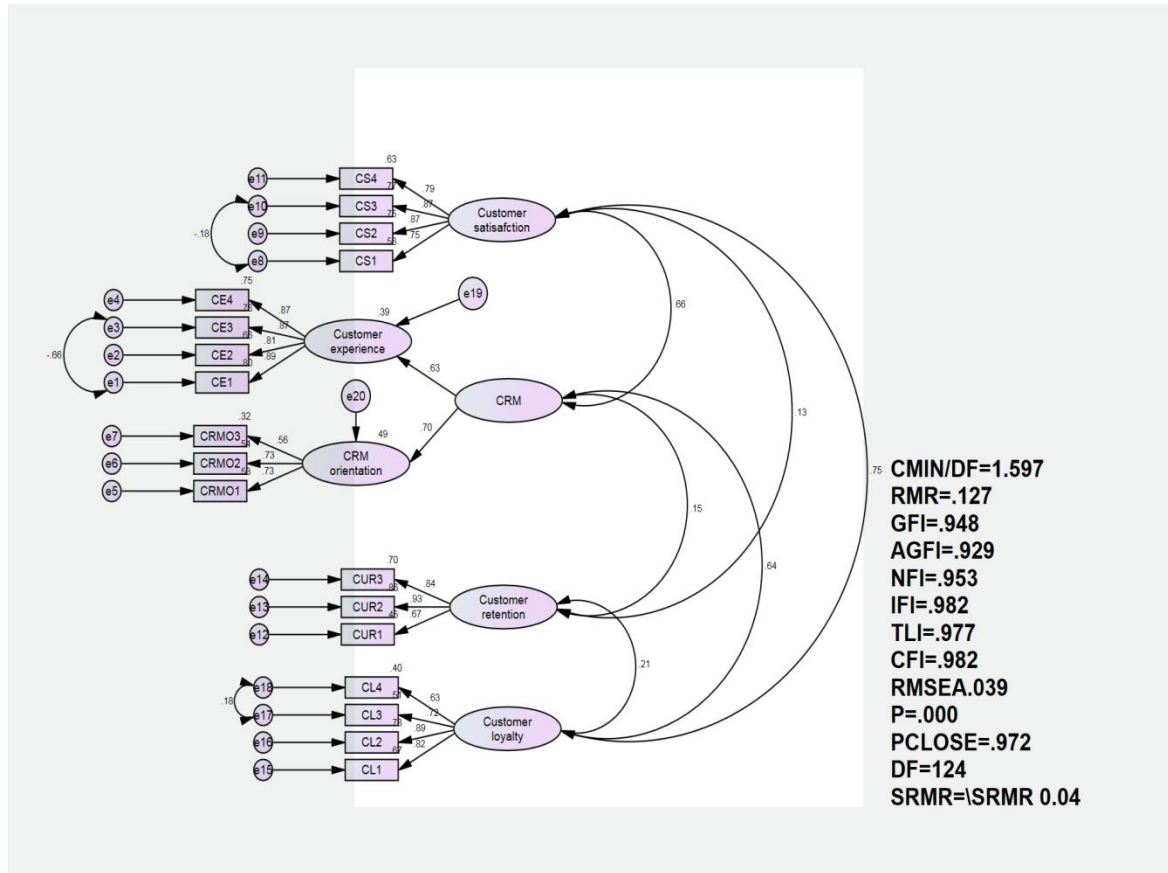


Figure 2: Measurement model (CFA)

Figure 2 is the pooled CFA model for this study. The measurement model shows that all the item loadings are greater than the threshold of 0.5 and significant at 0.01 level and all the indexes for assessment of model goodness of fit are above the recommended values with X^2 (chi square/df) = 198.007/124 = 1.5, $p=0.00$, GFI= 0.948, AGFI=0.929, CFI= 0.982, TLI= 0.977, P close=0.972 and RMSEA = 0.039 (See table 3). Hence, this implies that the model is a good fit and the researcher can proceed to the structural model testing (hypothesis testing).

3.6. Structural model and hypotheses A test results

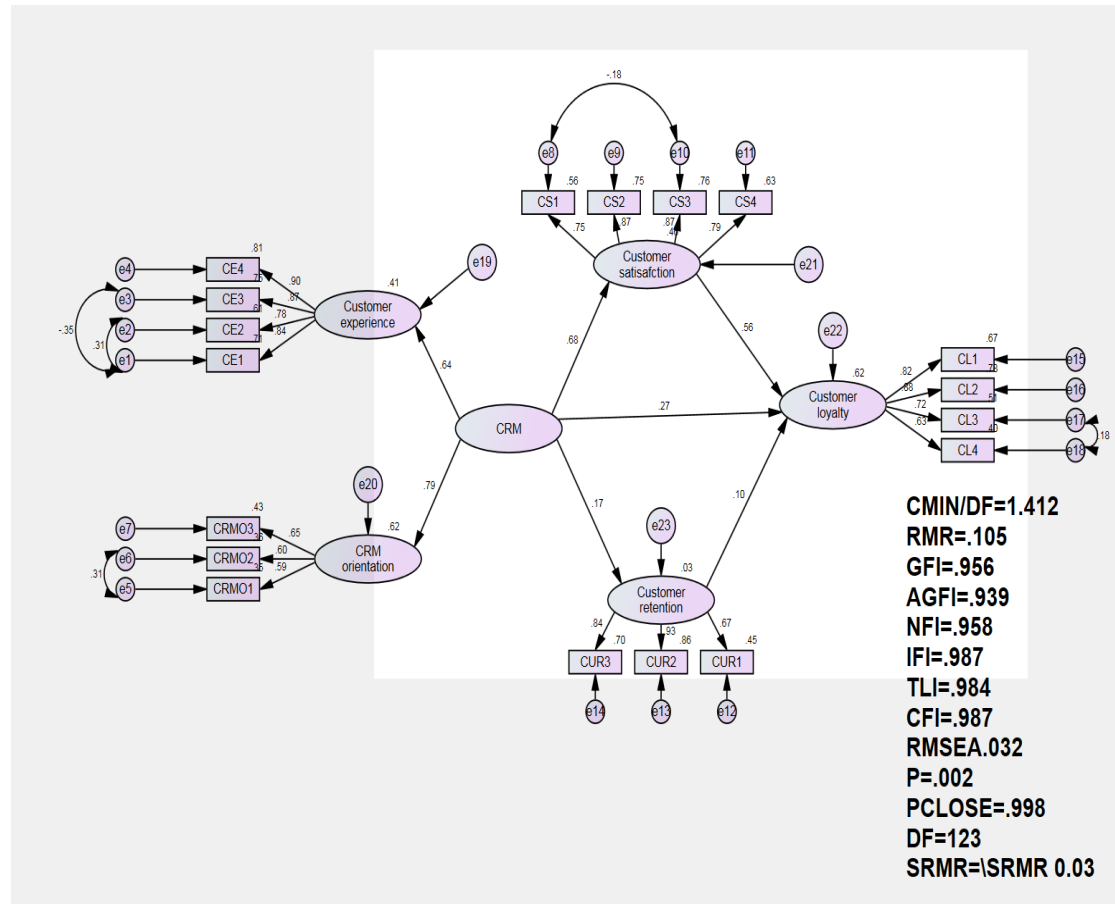


Figure 3: SEM model and hypotheses testing

The SEM model was accepted based on the fit indexes of Chi-square =173.720, DF= 123 given $X^2= 1.4$, GFI=0.95, AGFI= 0.93, TLI= 0.98, CFI= 0.987, P= 0.000, P close= 0.998 and RMSEA of 0.032. The result of the SEM as shown in table 5 and figure 3 indicated that a positive and significant relationship ($\beta=0.67$, $p < 0.001$) was found between customer relationship management (CRM) and customer satisfaction. This result supports research hypotheses **H₂**. Results also showed that CRM has a direct effect on customer loyalty (**H₁**) with a significant indication of ($\beta=0.26$, $p < 0.01$) and CRM also has positive and significant relationship ($\beta=0.17$, $p < 0.05$) with customer retention (**H₃**). These results imply that CRM directly affects customer satisfaction, customer retention and customer loyalty and that if bank customers have positive feelings, experiences and orientation about their bank's CRM adoption, the customer level of

satisfaction, retention and loyalty will be improved. In the same vein, as anticipated, both customer satisfaction and customer retention have positively influenced customer loyalty ($\beta=0.52$, $p < 0.001$) (**H₄**) and ($\beta=0.09$, $p < 0.05$) (**H₅**) respectively. An indirect effect of CRM on customer loyalty was observed through customer satisfaction ($\beta_1 * \beta_2$) $\square \square 0.67 * 0.56 = 0.37$ while an indirect effect between CRM and customer loyalty through customer retention gives $0.17 * 0.095 = 0.015$. Although both parts are found to mediate CRM effect on customer loyalty, the strongest part is the part with customer satisfaction as the mediator. The researchers further adopted Zhao et al., (2010) and Preacher and Hayes, (2008/2013) to examine the mediation effects using bootstrapping in AMOS. The results reveal that there is mediation between CRM and customer loyalty. This, is the case because, the standardised regression weights and the significant levels of both parts are not different from absolute value of $p < 0.005$ achieved from direct and indirect effects. These findings imply that CRM system in the Nigerian banking industry is both directly and through mediators substantial in achieving customer loyalty.

Table 5: Results of the structural model

Hypothesis A paths	Standardised coefficient path (β)	<i>t-value</i>	Hypothesis results
CRM $\square \square$ CL(H₁)	0.26	2.79**	Supported
CRM $\square \square$ CS(H₂)	0.67	6.76***	Supported
CRM \square CURT(H₃)	0.17	2.58*	Supported
CS $\square \square$ CL(H₄)	0.52	6.79***	Supported
CURT $\square \square$ CL(H₅)	0.09	2.23*	Supported
Model fit indices: Chi-square = 173.72, DF = 123, CMIN/DF = 1.412, CFI = 0.987, GFI = 0.956, TLI = 0.984, IFI = 0.987, RMSEA = 0.032, SRMR = 0.033, PCLOSE = 0.998, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.			

3.7. Mediation based hypotheses test and results (Hypothesis B paths)

In order to further assess the mediating effects of customer satisfaction and customer retention on the relationships between CRM system and customer loyalty, while inputting gender, length of patronage and age as covariate, a regression based mediation and moderation approached macro

developed by Fayes (2013) was used. Based on standardised regression coefficient for every path in the model, the results revealed that the total statistical multiple mediation model (total effects) explained a significant proportion of the variance in customer loyalty with effect size $\eta^2 = 1.20$, $SE = 0.045$, $p < 0.001$. The total indirect effects (**HB1**) from the bias correlated results obtained from the 5000 bootstrapped test for the indirect effects on the *ab* paths produce an effect size of 0.6530, $SE = 0.07$, $Z = 10.7$, $p < 0.001$ with lower and upper confidence interval of 0.5182 and 0.7878, implying it does not contain 0 (See table 6). Hence, the total indirect effect is significant at 0.05. The *c* path (the relationships between CRM system and customer loyalty) has effect size $\eta^2 = 0.55$, $SE = 0.08$, $p < 0.001$. The coefficient paths *a* between CRM and customer satisfaction yield effect size $\eta^2 = 1.02$, $SE = 0.036$ and $p < 0.001$ and CRM and customer retention has an effect size $\eta^2 = 0.26$, $SE = 0.07$, $p < 0.001$ were statistically significant with adequate large effect sizes. Similarly, the coefficient path *b* from customer satisfaction to customer loyalty produces an effect size $\eta^2 = 0.60$, $SE = 0.06$, $p < 0.001$ and the path between customer retention and customer loyalty effect size $\eta^2 = 0.10$, $SE = 0.03$, $p = 0.01$ ($p < 0.05$) were significantly related to customer loyalty also with reasonably large effect sizes. The included covariates in the model such as gender, age and length of patronage were not significantly related with customer loyalty at effect size $\eta^2 = -0.018$, $SE = 0.07$, $p = 0.79$ ($p > 0.05$), $\eta^2 = 0.10$, $SE = 0.06$, $p = 0.13$ ($p > 0.05$) and $\eta^2 = -0.008$, $SE = 0.044$, $p = 0.85$ ($p > 0.05$) respectively. These results indicate support for hypotheses **B2** and **B3**. By implication of these results, particularly on the level of significance on the *c* paths, it appears that even when the mediating variables were accounted for in the model, the *c* path was still significant at the same level of $p < 0.001$. This implies that both customer satisfaction and customer loyalty mediate the relationships between CRM system and customer loyalty. Notably, the indirect effect of customer satisfaction on customer loyalty is stronger than that of customer retention with customer satisfaction having $Z = 10.4982$, $p < 0.001$ and customer retention having $Z = 2.5771$, $p < 0.05$.

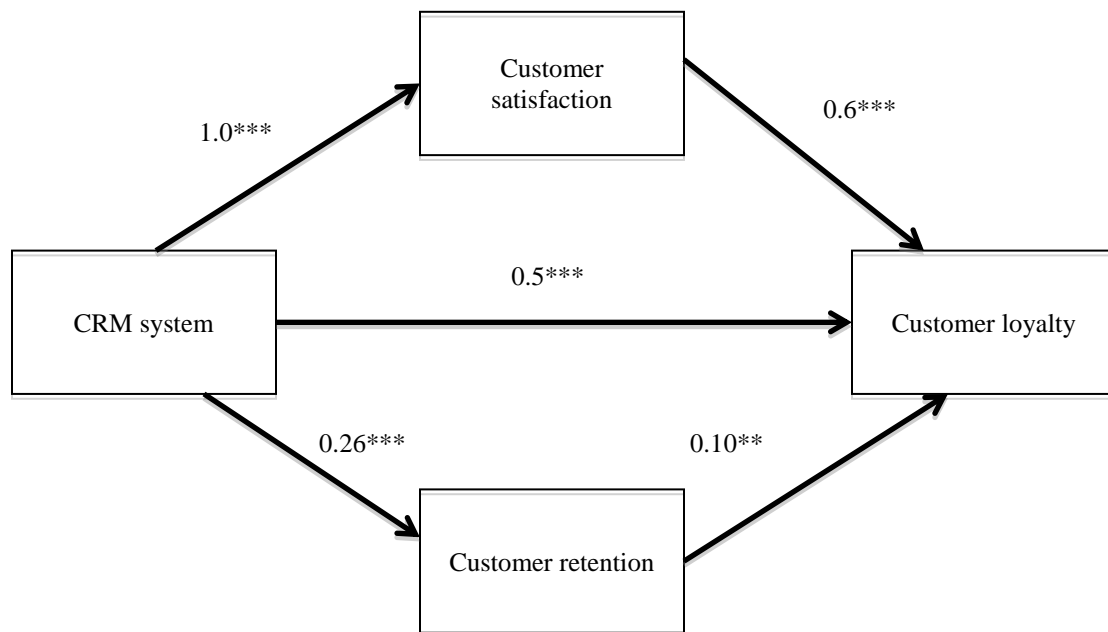


Figure 4: Mediation model for *a*, *ab* and *c* paths: Note: This model included gender, age and length of patronage as covariates. ** $p < 0.01$, * $p < 0.001$.**

It is of interest to note that the direct effect results from SEM presented in table 4 are slightly different from the direct effects outcomes from the Preacher and Hayes macro developed for multiple mediation analysis. While each of the direct effects are significant at $p < 0.001$ with slightly higher effects sizes as shown in figure 4, results in table 5 reveal that only the relationships between CRM and satisfaction and the direct effect of customer satisfaction on customer loyalty are significant at $p < 0.001$ with others being significant at $p < 0.01$ for CRM to customer loyalty and $p < 0.05$ for CRM to customer retention and customer retention to customer loyalty. Apparently, these differences were due to the inclusion of covariates in the mediation analysis model, thereby carrying some influence to the data in the model. Additionally, because paths estimate in SEM was based on maximum likelihood.

Table 6: Indirect effect of mediators on customer loyalty

Bootstrapping				
Products	of	Percentile 95%	BC 95% CI	BCa 95% CI

Point Estimate	Coefficients			CI					
	SE	Z		Lower	Upper	Lower	Upper	Lower	Upper
<i>Indirect effects</i>									
Customer satisfaction	0.6216	0.0592	10.4928***	0.4767	0.7581	0.4787	0.7604	0.5026	0.7876
Customer retention	0.0265	0.0103	2.5771*	0.0087	0.0517	0.0097	0.0543	0.0096	0.0541
Total	0.6481	0.0602	10.771***	0.5027	0.7879	0.5035	0.7893	0.5026	0.7876

Note: The number of bootstrap sample was 5000, BC = bias corrected, BCa = bias corrected and accelerated, CI = confidence intervals. *** $p < 0.001$, * $p < 0.05$. CIs not containing zero are deemed significant at 0.05 levels.

3.8. Moderation effects

Although this study did not advance any hypothesis regarding moderating effects, the authors have decided to uncover more insight into the relationships between the independent and dependent variables in the model. A different test was conducted on the model while moderating the relationships path between CRM and customer loyalty with length of patronage and controlling for gender and age. This was done to assess if the inclusion of the moderated variable significantly influences the b path from customer satisfaction to customer loyalty and the c path from CRM to customer loyalty within a simple mediation model of CRM effect on customer loyalty through customer satisfaction. While moderating for length of patronage in the model, customer retention appears to have a slight interaction with customer satisfaction effect on customer loyalty having effect size = 0.1015, SE = 0.0310, Z = 3.2755, $p < 0.001$. Similarly, an assessment of the conditional direct effect of the c path (CRM to customer loyalty) at the values of the moderator (the means and plus or minus one standard deviation from the means) indicates that length of patronage moderation effect on the c path is significant at the lower level with effect size = 0.58, SE = 0.09, Z = 6.4, $p < 0.001$, average level has an effect size = 0.57, SE = 0.0833, Z = 6.9, $p < 0.001$ and higher level with effect size = 0.56, SE = 0.09, Z = 6.0, $p < 0.001$ for higher level. These results imply that customers at all levels of patronage i.e., lower, medium

and high, will be loyal to their banks even at different level of CRM enabled channels usage. It also shows that changes in the level of customer loyalty are not dependent on how long they have been using a bank. Nevertheless, the Loyalty level is higher at the different level of length of patronage. Hence, length of patronage does not change the direct relational effect of CRM system on customer loyalty.

Likewise, an examination of the moderated indirect effect of CRM on customer loyalty through customer satisfaction at various values of length of patronage did significantly mediate the relationships between CRM and customer loyalty (values range for each index range between: effect size, between 0.616 and 0.625, SE = between 0.40 and 0.448, confidence interval not containing zero).

4.0. Discussion and recommendation

The direct impact of CRM adoption by Nigerian banks on customer loyalty and its effect through customer satisfaction and customer retention has been confirmed by this study. The results showed that strong relationships exist among the all the variables and are supported by their significance level. Based on the results from the SEM model, CRM has a significant relationship with customer loyalty. Yim, et al., (2004) affirmed that the knowledge and support for CRM by firms is crucial to building long-term mutual relationship with their customers. This implies that if Nigerian banks can implement CRM systems in such a way that it enhances a longer relationship with their customers, then it is imperative that the banks improve their CRM efficiency in order to attain the loyalty of their customers as found by this study. Theoretically, customer loyalty is one of the top reasons for CRM adoption (Padmavathy et al., 2012). Moreover, other scholars argued that CRM system leads to an intense customer loyalty (Abratt and Russell, 1999; Farquahar, 2004). While this study is consistent with findings from previous studies by Anabila and Awunyo-Vitor, (2013), Chen and Popovich, (2003), Kocoglu and Kirmaci, (2012), Long et al., (2013) it disagrees with the studies of Ejaz et al., (2013) and Zali and Heydarian, (2012) whose study found that CRM does not have a direct relationship with customer loyalty. Albeit, the inconsistencies among the various studies may be attributed to the characteristics of the respondents, bank practices and policies across the different geographical locations where the studies were carried out, cultural practices and the research approach adopted

in the data collection. Findings from this research on the impact of CRM on customer satisfaction and customer satisfaction impact on customer loyalty support previous studies by Olajide and Israel, (2013), Khan, (2012), Long et al., (2013), Mithas, (2009), Yao and Khong, (2012), Saeed et al., (2013) and Wattilete et al., (2013).

The findings from this study revealed that is imperative for Nigerian banks to implement CRM in such a way that it will improve the development of strong relationships with their customers in order to achieve the expected outcome of customer satisfaction and retention thereby leading to customer loyalty. Also, if the banks can achieve satisfaction and retention of their customers, attaining customer loyalty is promised. On the basis of the CRM dimensions for this study, it is recommended that banks ensure customers have an exciting, positive feeling and perceptions regarding their technology (CRM) orientations and experiences with the use of available CRM enabled technologies for conducting their bank transactions. Moreover, the CRM enabled channels should be implemented effectively and efficiently such that system downtime is eradicated.

Generally, there are many elements that form CRM enabled channels that are used to carry out bank transactions, this study has used customer orientations with CRM usage and their experiences with CRM enabled channels. Hence, with regard to CRM adoption impact on the study's mediating variables and the dependent variable, the significant results from this study suggest that Nigerian banks should ensure they make use of the latest technology to offer quality services to their customers and also, make effective use of the CRM enabled channels to enhance customer service. Similarly, the banks need to ensure they attend to customers' complaints promptly, show genuine interest in their customers' problems, establish an effective channel for communications between the bank and the customers and other than using CRM only as a means to store customer's data, they should in addition use it to evaluate individual customer's needs. The customers (respondents) have clearly demonstrated that the positive impact or the availability of these CRM measures are what will make CRM enabled channels adoption in the Nigerian banking industry lead to customer satisfaction, retention and customer loyalty. It is therefore imperative that the banks adopt CRM not only to ease staff work load or process but to make the work process translate to service quality that will improve customer satisfaction.

According to Roh et al., (2005) firms that adopt CRM establish superior relationships with their customers, attain better customer loyalty, increase revenues and reduce costs. This is also consistent with the study of Gilaninia et al., (2011) who found that CRM adoption is crucial in communicating with customers in order to attract customers, retain customer and consequently leading to customer satisfaction. According to Beerli et al., (2004), most banks in the current era offer the same types of products and services and what makes a customer loyal is not the attribute of the products and services offered by the bank rather, the level of CRM implementation, the manner in which CRM is implemented and numbers of available and functioning CRM enabled channels for customer to carry out their bank transactions. Therefore, any bank that strategically desires to improve their customer loyalty needs to have improved and excellent CRM enabled channels and practices in place.

5.0. Conclusion

The purpose of this study is to examine the mediated effect of CRM adoption on customer loyalty in the Nigerian banking industry. From the findings, it is clear that CRM has a positive effect on customer loyalty directly and indirectly. With reference to the introduction of the cashless policy by the Nigerian Apex bank (CBN), which has in turn led to intensified and tremendously increased CRM systems adoption by the Nigerian banks, it can be inferred from this study that the CBN policy in a way has helped the banks to improve their service quality thereby leading to improved customer satisfaction and loyalty. Based on the aforementioned, this study has a limitation of not investigating the effect of CRM systems adoption on customer loyalty prior to the introduction of cashless policy and thereafter intensified adoption of CRM systems by the Nigerian banks. Hence, it is recommended that further study can cross-examine and compare the level of Nigerian banks' customer loyalty before and after the introduction of the cashless policy. Furthermore, this study collected data from individual bank customers who have savings and current accounts and are the sole signatories to their account. Further study can be done to include respondents from corporate/commercial, entrepreneur and business accounts holders.

References

- Abratt, R. & Russell, J. 1999, "Relationship marketing in private banking in South Africa", *International Journal of Bank Marketing*, vol. 17, no. 1, pp. 5-19.
- Achumba, I. 2006, *The Dynamics of Consumer Behaviour*, Mac-Williams Publishers.
- Ahmad, A.N.S. 2013, "Assessing the unidimensionality, reliability, validity and fitness of influential factors of 8th grades student's mathematics achievement in Malaysia", *International Journal of Advance Research*, vol. 1, no. 2.
- Ajayi, M. 2005, "Banking sector reforms and bank consolidation: Conceptual framework", *CBN bullion*, vol. 29, no. 2, pp. 2-10.
- Anabila, P. & Awunyo-Vitor, D. 2013, "Customer Relationship Management: A Key to Organisational Survival and Customer Loyalty in Ghana's Banking Industry", *International Journal of Marketing Studies*, vol. 5, no. 1, pp. p107.
- Anderson, E.W. & Sullivan, M.W. 1993, "The antecedents and consequences of customer satisfaction for firms", *Marketing science*, vol. 12, no. 2, pp. 125-143.
- Anderson, J.C. & Gerbing, D.W. 1988, "Structural equation modeling in practice: A review and recommended two-step approach.", *Psychological bulletin*, vol. 103, no. 3, pp. 411.
- Anton, J. & Hoeck, M. 2002, *Ebusiness Customer Service: the Need for Quality Assessment*, The Anton Press, Santa Monica, CA.
- Beerli, A. Martin, J.D. & Quintana, A. 2004, "A model of customer loyalty in the retail banking market.", *European Journal of Marketing*, vol. 38, no. 1/2, pp. 253-275.
- Bello, Y. 2005, "Banking System Consolidation in Nigeria and Some Regional Experiences: Challenges & Prospects", *The Bullion*, vol. 29, no. 2, pp. 47-54.
- Bentler, P.M. 1990, "Comparative fit indexes in structural models.", *Psychological bulletin*, vol. 107, no. 2, pp. 238.
- Bentler, P.M. & Bonett, D.G. 1980, "Significance tests and goodness of fit in the analysis of covariance structures.", *Psychological bulletin*, vol. 88, no. 3, pp. 588.
- Berry, L.L. 1995, "Relationship marketing of services-growing interest, emerging perspectives", *Journal of the Academy of marketing science*, vol. 23, no. 4, pp. 236-245.

- Bettencourt, L.A. 1997, "Customer voluntary performance: customers as partners in service delivery", *Journal of Retailing*, vol. 73, no. 3, pp. 383-406.
- Bollen, K.A. 1989, "A new incremental fit index for general structural equation models", *Sociological Methods & Research*, vol. 17, no. 3, pp. 303-316.
- Bolton, R.N. 1998, "A dynamic model of the duration of the customer's relationship with a continuous service provider: the role of satisfaction", *Marketing science*, vol. 17, no. 1, pp. 45-65.
- Bolton, R.N., Kannan, P.K. & Bramlett, M.D. 2000, "Implications of loyalty program membership and service experiences for customer retention and value", *Journal of the academy of marketing science*, vol. 28, no. 1, pp. 95-108.
- Bolton, R.N., Lemon, K.N. & Verhoef, P.C. 2004, "The theoretical underpinnings of customer asset management: a framework and propositions for future research", *Journal of the Academy of Marketing Science*, vol. 32, no. 3, pp. 271-292.
- Boulding, W., Kalra, A., Staelin, R. & Zeithaml, V.A. 1993, "A dynamic process model of service quality: From expectations to behavioural intentions.", *Journal of Marketing Research (JMR)*, vol. 30, no. 1.
- Buttle, F. 2009, *Customer relationship management*, Burlington, MA: Elsevier.
- Capraro, A.J., Broniarczyk, S. & Srivastava, R.K. 2003, "Factors influencing the likelihood of customer defection: the role of consumer knowledge", *Journal of the Academy of Marketing Science*, vol. 31, no. 2, pp. 164-175.
- Chen, I.J. & Popovich, K. 2003, "Understanding customer relationship management (CRM): People, process and technology", *Business Process Management Journal*, vol. 9, no. 5, pp. 672-688.
- Dawes Farquhar, J. 2004, "Customer retention in retail financial services: an employee perspective", *International Journal of Bank Marketing*, vol. 22, no. 2, pp. 86-99.
- De Torcy, G. 2002, "A new wave in creating customer satisfaction", *Journal of Database Marketing*, vol. 9, no. 4, pp. 366.
- Dowling, G. 2002, "In B2C Markets, Often Less Is More", *California management review*, vol. 44, no. 3, pp. 87.

- Eisingerich, A.B. & Bell, S.J. 2006, "Relationship marketing in the financial services industry: the importance of customer education, participation and problem management for customer loyalty", *Journal of Financial Services Marketing*, vol. 10, no. 4, pp. 86-97.
- Ejaz, R., Ahmed, M.A. & Ahmad, Z. 2013, "Impact of CRM Practices on Customers' Behaviors", vol. 2, no. 7, pp. 79-88.
- Ezuwore-Obodoekwe, C., Eyisi, A., Emengini, S. & Chukwubuzo, A.F. 2014, "A Critical Analysis of Cashless Banking Policy in Nigeria.", vol. 16, no. 5, pp. 30-42.
- Falk, T., Hammerschmidt, M. & Schepers, J.J. 2010, "The service quality-satisfaction link revisited: exploring asymmetries and dynamics", *Journal of the Academy of Marketing Science*, vol. 38, no. 3, pp. 288-302.
- Farquhar, J.D. & Panther, T., 2008, "Acquiring and retaining customers in UK banks: An exploratory study.", *Journal of Retailing and Consumer Services*, vol. 15, no. 1, pp. 9-21.
- Farrell, A.M. 2010, "Insufficient discriminant validity: A comment on Bove, Pervan, Beatty, and Shiu (2009)", *Journal of Business Research*, vol. 63, no. 3, pp. 324-327.
- Farrell, A.M. & Rudd, J.M. 2009, "Factor analysis and discriminant validity: A brief review of some practical issues", *Anzmac*.
- Fornell, C. 1992, "A national customer satisfaction barometer: The Swedish experience.", *Journal of Marketing*, vol. 56, no. 1.
- Fornell, C., Johnson, M.D., Anderson, E.W., Cha, J. & Bryant, B.E. 1996, "The American customer satisfaction index: Nature, purpose, and findings.", *Journal of Marketing*, vol. 60, no. 4.
- Gan, C., Cohen, D., Clemes, M. & Chong, E. 2006, "A survey of customer retention in the New Zealand banking industry", *Banks and Bank System*, vol. 1, no. 4, pp. 83-99.
- Garver, M.S. & Mentzer, J.T. 1999, "Logistics research methods: employing structural equation modelling to test for construct validity", *Journal of business logistics*, vol. 20, pp. 33-58.

- Gerrard, P. & Barton Cunningham, J. 2003, "The diffusion of Internet banking among Singapore consumers.", *International Journal of Bank Marketing*, vol. 21, no. 1, pp. 16-28.
- Gilaninia, S. et al., 2011. CRM application impact on customer satisfaction in financial and credit institutions (case study: financial and credit institutions in Guilan, Iran). *Journal of Basic and Applied Scientific Research*, vol. 1, no. 8, pp. 956-963.
- Gilbert, G.R. & Veloutsou, C. 2006, "A cross-industry comparison of customer satisfaction", *Journal of Services Marketing*, vol. 20, no. 5, pp. 298-308.
- Gilly, M.C., Stevenson, W.B. & Yale, L.J. 1991, "Dynamics of complaint management in the service organization", *Journal of Consumer Affairs*, vol. 25, no. 2, pp. 295-322.
- Gremler, D.D. & Brown, S.W. 1996, "Service loyalty: its nature, importance, and implications", *Advancing service quality: A global perspective*, pp. 171-180.
- Gronroos, C. 1990, "Relationship approach to marketing in service contexts: The marketing and organizational behaviour interface", *Journal of Business Research*, vol. 20, no. 1, pp. 3-11.
- Hair, et al. 2009, "Multivariate data analysis". A global perspective. 7th edn. Upper Saddle River: prentice Hall.
- Hair, J.F., Anderson, R.E., Tatham, R.L. & William, C. 1998, "Black (1998), Multivariate data analysis".
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. & Tatham, R.L. 2006, *Multivariate data analysis*, Pearson Prentice Hall Upper Saddle River, NJ.
- Hu, L. & Bentler, P.M. 1999, "Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives", *Structural equation modelling: a multidisciplinary journal*, vol. 6, no. 1, pp. 1-55.
- Jain, R., Jain, S. & Dhar, U. 2007, "Curel: a scale for measuring customer relationship management effectiveness in service sector.". *Journal of Services Research*, vol. 7, no. 1.
- Javadin, S.S., Shafie, H. & Adbollahi, B. 2012, "Service Quality and Customer Loyalty in Software Companies of Iran: A Canonical Correlation Analysis", *Research Journal of Applied Sciences*, vol. 4.

- Johnson, M.D. & Fornell, C. 1991, "A framework for comparing customer satisfaction across individuals and product categories", *Journal of Economic Psychology*, vol. 12, no. 2, pp. 267-286.
- Kashif, M., Wan Shukran, S.S., Rehman, M.A., Sarifuddin, S., Estelami, H. & Heinonen, K. 2015, "Customer satisfaction and loyalty in Malaysian Islamic banks: a PAKSERV investigation", *International Journal of Bank Marketing*, vol. 33, no. 1.
- Kaynak, E. & Kucukemiroglu, O. 1992, "Bank and product selection: Hong Kong", *International Journal of Bank Marketing*, vol. 10, no. 1, pp. 3-16.
- Khalifa, M. & Liu, V. 2002, "Satisfaction with Internet-Based Services: The Role of Expectations and Desires", *International Journal of Electronic Commerce*, vol. 7, no. 2, pp. 31-49.
- Khan, O. 2012, "Towards understanding customer loyalty: An empirical study on emotional attachment", *International Journal of Innovations in Business*, vol. 1, no. 3, pp. 241-267.
- Kline, R. B. (1998). Principles and practice of structural equation modeling.
- NY: Guilford Press.
- Kocoglu, D. & Kirmaci, S. 2012, "Customer Relationship Management and Customer Loyalty-A survey in the sector of banking", *International Journal of Business and Social Science*, vol. 3, no. 3, pp. 282-291.
- Kristensen, K., Kanji, G.K. & Dahlgaard, J.J. 1992, "On measurement of customer satisfaction", *Total Quality Management*, vol. 3, no. 2, pp. 123-128.
- 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*, vol. 15, no. 1, pp. 35-48.
- Lee, J., Kim, H., Ko, Y.J. & Sagas, M. 2011, "The influence of service quality on satisfaction and intention: A gender segmentation strategy", *Sport Management Review*, vol. 14, no. 1, pp. 54-63.
- Lee-Kelley, L., Gilbert, D. & Mannicom, R. 2003, "How e-CRM can enhance customer loyalty", *Marketing Intelligence & Planning*, vol. 21, no. 4, pp. 239-248.

- Lemon, K.N., White, T.B. & Winer, R.S. 2002, "Dynamic customer relationship management: incorporating future considerations into the service retention decision", *The Journal of Marketing*, , pp. 1-14.
- Leverin, A. & Liljander, V. 2006, "Does relationship marketing improve customer relationship satisfaction and loyalty?", *International journal of bank marketing*, vol. 24, no. 4, pp. 232-251.
- Lewis, B.R. & Soureli, M. 2006, "The antecedents of consumer loyalty in retail banking", *Journal of consumer Behaviour*, vol. 5, no. 1, pp. 15-31.
- Ling, R. & Yen, D.C. 2001, "Customer relationship management: An analysis framework and implementation strategies", *Journal of Computer Information Systems*, vol. 41, no. 3, pp. 82-97.
- Long, C.S., Khalafinezhad, R., Ismail, W.K.W. & Rasid, S.Z.A. 2013, "Impact of CRM factors on customer satisfaction and loyalty", *Asian Social Science*, vol. 9, no. 10, pp. p247.
- Luck, D. & Lancaster, G. 2003, "E-CRM: customer relationship marketing in the hotel industry", *Managerial Auditing Journal*, vol. 18, no. 3, pp. 213-231.
- MacKenzie, S.B., Podsakoff, P.M. & Podsakoff, N.P. 2011, "Construct measurement and validation procedures in MIS and behavioural research: Integrating new and existing techniques", *MIS quarterly*, vol. 35, no. 2, pp. 293-334.
- McColl-Kennedy, J. & Schneider, U. 2000, "Measuring customer satisfaction: why, what and how", *Total Quality Management*, vol. 11, no. 7, pp. 883-896.
- Melodi, G., Olufayo, T. & Gbadamosi, T. 2012, "Appraisal of Customer Relationship Management in the Banking Sector: A study of four selected Banks in Lagos State", *International Journal of Arts and Commerce*, vol. 1, no. 5, pp. 224-234.
- Meyer, C. 2010, "Leading by Attraction: Collaborative leadership strategies for the wider world", Harvard Business Review Articles.
- Mishra, U.S., Mishra, B.B., Praharaj, S. & Mahapatra, R. 2011, "CRM in banks: A comparative study of public and private sectors in India", *European Journal of Social Sciences*, vol. 24, no. 2, pp. 265-277.

- Mithas, S., Krishnan, M.S. & Fornell, C. 2005, "Why do customer relationship management applications affect customer satisfaction?", *Journal of Marketing*, , pp. 201-209.
- Mithas, S., Jones, J.L. & Mitchell, W. 2002, "Non-contractible Factors as Determinants of Electronic Market Adoption.", *ICIS*, pp. 76.
- Mokhlis, S., Salleh, H.S. & Mat, N.H.N. 2011, "What Do Young Intellectuals Look For in a Bank? An Empirical Analysis of Attribute Importance in Retail Bank Selection", *Journal of Management Research*, vol. 3, no. 2.
- Morales, A.C. 2005, "Giving Firms an "E" for Effort: Consumer Responses to High-Effort Firms", *Journal of Consumer Research*, vol. 31, no. 4, pp. 806-812.
- Morgan, R.M. & Hunt, S.D. 1994, "The commitment-trust theory of relationship marketing", *The Journal of Marketing*, pp. 20-38.
- Mudie, P. & Cottam, A. 1999. *The management and marketing of services*, Routledge.
- Mylonakis, J. 2009, "Bank satisfaction factors and loyalty: a survey of the Greek bank customers", *Innovative Marketing*, vol. 5, no. 1, pp. 16-25.
- Ngai, E. 2005, "Customer relationship management research (1992-2002): An academic literature review and classification", *Marketing Intelligence & Planning*, vol. 23, no. 6, pp. 582-605.
- Odior, E.S. & Banuso, F.B. 2012, "Cashless banking in Nigeria: Challenges, benefits and policy implications", *European Scientific Journal*, vol. 8, no. 12.
- Ogbadu, D.R.E.E. & Usman, A. 2012, "Imperative of customer relationship management in the Nigeria banking industry", *Kuwait Chapter of Arabian Journal of Business and Management Review*, vol. 2, no. 1, pp. 59-72.
- Ogunnaike O.O. and Ogbari M. (2008). "Customer Service: A Determinant of customer Satisfaction", *International Journal of Business and Common Market Studies*, Vol.5, no.1 and 2.
- Olajide, O. & Israel, A. 2013, "Effect of customer satisfaction on customer loyalty among selected bank customers in Ado-Ekiti Metropolis, Nigeria", *Interdisciplinary Journal of*

Contemporary Research in Business. From <http://www.ijcrb.webs.com>. Retrieved, vol. 3, no. 11, pp. 228-236.

- Oliver, R.L. 1979, "Product satisfaction as a function of prior expectation and subsequent disconfirmation: New evidence", *New dimensions of consumer satisfaction and complaining behaviour*, pp. 66-71.
- Ndubisi, N. 2007, "Relationship marketing and customer loyalty", *Marketing intelligence & planning*, vol. 25, no. 1, pp. 98-106.
- Onut, S., Erdem, I. & Hosver, B. 2008, "Customer Relationship Management in Banking Sector and A Model Design for Banking Performance Enhancement", *Proceedings of the 4th International Conference on Complex Systems. Unifying Themes in Complex Systems IV: Springer Verlag. United States*, pp. 370.
- Padmavathy, C., Balaji, M. & Sivakumar, V. 2012, "Measuring effectiveness of customer relationship management in Indian retail banks", *International Journal of Bank Marketing*, vol. 30, no. 4, pp. 1-1.
- Parvatiyar, A. & Sheth, J.N. 2001, "Customer relationship management: emerging practice, process, and discipline", *Journal of Economic and Social Research*, vol. 3, no. 2, pp. 1-34.
- Payne, A. & Frow, P. 2006, "Customer relationship management: from strategy to implementation", *Journal of Marketing Management*, vol. 22, no. 1-2, pp. 135-168.
- Payne, A. & Frow, P. 2005, "A strategic framework for customer relationship management", *Journal of Marketing*, , pp. 167-176.
- Peelen, E., Beltman, R., Montfort, K. & Klerkx, A. 2006, *A Study into the foundations of CRM Success*.
- Preacher, K.J. & Hayes, A.F. 2008, "Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models", *Behaviour research methods*, vol. 40, no. 3, pp. 879-891.
- Ranaweera, C. & Prabhu, J. 2003, "The influence of satisfaction, trust and switching barriers on customer retention in a continuous purchasing setting", *International journal of service industry management*, vol. 14, no. 4, pp. 374-395.

- Reichheld, F.F. & Schefter, P. 2000, "E-loyalty: your secret weapon on the web", *Harvard business review*, vol. 78, no. 4, pp. 105-113.
- Reinartz, W., Krafft, M. & Hoyer, W.D. 2004, "The customer relationship management process: Its measurement and impact on performance", *Journal of Marketing Research*, , pp. 293-305.
- Reinartz, W.J. & Kumar, V. 2003, "The impact of customer relationship characteristics on profitable lifetime duration", *Journal of Marketing*, vol. 67, no. 1, pp. 77-99.
- Roberts-Lombard, M. & du Plessis, L. 2012, "Customer relationship management (CRM) in a South African service environment: An exploratory study", *African Journal of Marketing Management*, vol. 4, no. 4, pp. 152-165.
- Roh, T.H. Ahn, C.K. & Han, I., 2005, "The priority factor model for customer relationship management system success.", *Expert Systems with Applications*, vol. 28, no. 4, pp. 641-654.
- Rust, R.T., Lemon, K.N. & Zeithaml, V.A. 2001, "Where should the next marketing dollar go", *Marketing Management*, vol. 10, no. 3, pp. 24-28.
- Saeed, R., Lodhi, R.N., Nazir, S., Safdar, M., Mahmood, Z. & Ahmad, M. 2013, "Impact of Customer Relationship Management on Customer Satisfaction", *World Applied Sciences Journal*, vol. 26, no. 12, pp. 1653-1656.
- Schreiber, J.B., Nora, A., Stage, F.K., Barlow, E.A. & King, J. 2006, "Reporting structural equation modeling and confirmatory factor analysis results: A review", *The Journal of Educational Research*, vol. 99, no. 6, pp. 323-338.
- Sheth, Jagdish (2005), "The Benefits and challenges of shifting strategies," *customer management*", (MSI conference summary). Cambridge, MA: Marketing Science Institute, pp. 4-5.
- Sheth, J.N. & Parvatiyar, A. 1995, "Relationship marketing in consumer markets: antecedents and consequences", *Journal of the Academy of marketing Science*, vol. 23, no. 4, pp. 255-271.

- Singh, J. 1990, "Voice, exit, and negative word-of-mouth behaviours: an investigation across three service categories", *Journal of the Academy of Marketing Science*, vol. 18, no. 1, pp. 1-15.
- Starzyczna, H. & Pellešová, P. 2007, "The awareness level of CRM in Czech production organizations and services", *Acta Academica Karviniensia*, , pp. 162-170.
- Swift, R.S. 2001, *Accelerating customer relationships: Using CRM and relationship technologies*, Prentice Hall.
- Varki, S. & Colgate, M. 2001, "The role of price perceptions in an integrated model of behavioural intentions", *Journal of Service Research*, vol. 3, no. 3, pp. 232-240.
- Verhoef, P.C. & Langerak, F. 2002, "Eleven misconceptions about customer relationship management", *Business Strategy Review*, vol. 13, no. 4, pp. 70-76.
- Wang, Y., Lo, H.P., Chi, R. & Yang, Y. 2004, "An integrated framework for customer value and customer-relationship-management performance: a customer-based perspective from China", *Managing Service Quality*, vol. 14, no. 2/3, pp. 169-182.
- Wattilete, R., Pangemanan, S.S. & Pandowo, M. 2014, "The impact of customer relationship management to customer loyalty through customer satisfaction in cabal dining Manado", *jurnal riset ekonomi, manajemen, bisnis dan akuntansi*, vol. 1, no. 4.
- Wilmshurst, J. & Mackay, A. 2002, *The fundamentals and practice of marketing*, Routledge.
- Xu, M. & Walton, J. 2005, "Gaining customer knowledge through analytical CRM", *Industrial Management & Data Systems*, vol. 105, no. 7, pp. 955-971.
- Xu, Y., Yen, D.C., Lin, B. & Chou, D.C. 2002, "Adopting customer relationship management technology", *Industrial Management & Data Systems*, vol. 102, no. 8, pp. 442-452.
- Yao, H. & Khong, K.W. 2012, "Customer relationship management: is it still relevant to commercial banks in Taiwan?", *International Journal of Business and Management*, vol. 7, no. 1, pp. 151-160.

- Yim, F.H., Anderson, R.E. & Swaminathan, S. 2004, "Customer relationship management: Its dimensions and effect on customer outcomes", *Journal of Personal Selling and Sales Management*, vol. 24, no. 4, pp. 263-278.
- Zainudin, A. 2012, "Research Methodology and Data Analysis 5th Edition. Shah Alam: Universiti Teknologi MARA Publication Centre".
- Zali, R. & Heydarian, B. 2012, "The effect of customer relationship management on market performance. Case study from science and technology park of East Azarbaijan (Iran)", *International Journal of Natural and Engineering Sciences*, vol. 6, no. 3, pp. 99-103.
- Zeithaml, V.A., Berry, L.L. & Parasuraman, A. 1996, "The behavioural consequences of service quality", *The Journal of Marketing*, pp. 31-46.
- Zeithaml, V.A. & Bitner, M.J. 2003, *Services marketing: integrating customer focus across the firm*, 3rd edn, McGraw-Hill/Irwin, Boston, MA.
- Zhao, X., Lynch, J.G. & Chen, Q. 2010, "Reconsidering Baron and Kenny: Myths and truths about mediation analysis", *Journal of consumer research*, vol. 37, no. 2, pp. 197-206.
- Zineldin, M. 2000, "Beyond relationship marketing: technologicalship marketing", *Marketing Intelligence & Planning*, vol. 18, no. 1, pp. 9-23.
- Zineldin, M. 2006, "The royalty of loyalty: CRM, quality and retention", *Journal of consumer marketing*, vol. 23, no. 7, pp. 430-437.