Impact of Customer Relationship Management (CRM) on the Performance of Deposit Money Bank in Nigeria.

Salihu Adam Jiddah, Adamu Mohammed Sani, Musa Idris Umar , Ibrahim Toro Lawal, Abba Kabir Alkantara

Abstract*-This research seeks to examine the impact of CRM on the performance of deposit money banks in Nigeria between 1999 and 2013. The researchers uses OLS multiple regression to examine the impact of complaint management, timeliness in service delivery, security of money and ease of opening account on ROA, ROE and ROI of deposit money banks. The co-integration test carried out showed that there is the existence of long-term equilibrium relationship between CRM and deposit money banks performance. Furthermore, the result from the analysis showed that CRM had greatly impacted on ROA and ROI of deposit money banks. The models for ROA and ROI showed there is a significant relationship between CRM and deposit money bank performance, but the ROE model showed otherwise. reminiscent from the analysis therefore are that deposit money banks in Nigeria need to extend more branches to clustered areas and locations as a strategy of diversifying investment opportunities. This will enable the banks handle the timeliness in service delivery efficiently for maximization of ROE.*

Index Terms: Customer Relationship Management, Bank Performance, Deposit Money Banks, Return on Assets, Return on Investments, Return on Equities, Nigeria.

1. INTRODUCTION

Nigeria bank operates in a very dynamic marketing environment as a result of rapid changes in technology, consumer tastes, economic and social forces. The worldwide flux in the financial market has affected the conditions for operations in the market as well, and bank have experience a radical change during the last decade. In order to survive, the banking industry like all other organization must adapt to the changing business environment, including changing customer need and wants. To effectively adapt to the changing environment, achieve set goals and objective as well as improve organizational performance, organization need to design different marketing strategies and policies that focus on the forces of service delivery rather than the service itself and Customer Relationship Management is one of such strategies (Eisingerich & Bell, 2006).

Banks in their capacity as financial intermediaries channel savings and investments from the surplus unit to the deficit unit of the econmy, thereby increasing the volumes of the national savings and investments; and consequently the national output. CRM identifies the present and future markets, selects the market to serve and identifies the progress of existing and new services. Onut (2007) saw CRM as a business strategy to identify the banks most profitable customers and prospects, and devotes time and attention to expanding account relationships with those

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customers through individualized marketing, reprising, discretionary decision making, and customized service all delivered through the various sales channels that the bank uses. Nigerian bank are often making efforts to satisfying big customers, that is, profitable customers with large balances are being pampered with premium services. While small saver with law balance are considered unprofitable, and are left to get cold. Accounts average balance, account activity, service usage, branch visits and other variables are being used to assess profitable and non profitable customers.

Nigeria Banks have fall short of the expectations of their customers in recent time. Customers have experienced challenges ranging from delays, stock out, non-availability of staff at service points, unprofessional conduct or rudeness by the staff of the bank, poor standard of records or improper information, failed promises among others.

In the words of Ogunnaike and Ogbari (2008), customer service in our banking industry can be mistaken to mean customer delay and frustration. According to the Authors almost every Nigeria bank encounters similar problem in meeting customers' expectation of services and customer satisfaction. The issue of money transfer in banks is one major problem that customers of certain banks have been made to experience. In most cases, the customer hardly receives the payment of the money transferred in his account immediately.

Literature Review

Concept of Customer Relationship Management

Everyone has different perception from customer relationship management strategies and because of this issue different definitions have been presented for this concept. Some authors consider customer relationship management as a revolted version of relationship marketing and define it as creation, development, and improvement of individual relationships with customers in order to maximize their total life cycle value (Payan & Frow, 2009). Another definition refers to customer relationship management as a technology that is aimed to create and maintain the individual relationships with profitable customers through appropriate use of the information and communication technologies (Seeman & Hara, 2006). On the other hand, customer relationship management is a systemic managerial process for creating, maintaining, and developing relationships with customers in every position in order to maximize relationship value Richards & Jones (2008). Also customer relationship management refers to the participative and interactive relationship between business and its customers for acquiring a comprehensive view about customers and predicting and satisfying their needs and wants through efficient and effective efforts that are tangible for every customer.

Customer Relationship Management has developed as an approach based on maintaining positive relationships with customers, increasing customer loyalty and expanding customer lifetime value (Brassingtor & Pattit, 2000). Customer Relationship Management is defined as a firm's practices to systematically manage its customers to maximize value across the relationship lifecycle (Martin, 2010). Furthermore customer relationship management is defined as the overall process of building and maintaining profitable customer relationship by delivering superior customer value and satisfaction. (Kotler & Armstrong, 2010). Moreso, it could be defined as managing detailed information about individual customers and carefully managing customer "touch points" maximize customer loyalty (Kotler,S 2010).Understanding the needs of customers and offering value added services are recognized as factors that determine the success or failure of companies. Customer relationship management is increasingly important to firm as they seek to improve their profit through long-term relationships with customers. Many years ago, economists introduced the concept of value maximization, whereby a firm maximizes profits and business maximizes utility.

In the marketing literature, the term customer relationship management and relationship marketing are used interchangeably. Thus, (Shain, 1992) have defined relationship marketing as an integrated effort to identify, maintain and build up a network with individual consumers and to continuously strengthen the network for the mutual benefit of both sides, through interactive individualized and value-added contacts over a long period of time (Giudici & Passerone, 2002, Kubat, 2003). Customer relationship management has different types that some of them have been indicated in the following section.

Operational customer relationship management: in this system, an employee is asked to undertake all functions of customer relationship management from marketing and sale to post-purchase services and customer feedback. Operational customer relationship management includes public business section (sale force automation), customer service and support, and enterprise marketing automation (Richards and Jones, 2008).

Analytical customer relationship management: the collected data from operational customer relationship management is analyzed for categorizing the customers and recognizing the up-selling and cross-selling. In the ideal condition, the commercial decisions are screened based on the resulted feedback from past decisions and analysis during time. It is possible to decrease the customer losses through analytical customer relationship management implementation. This can be done through recognizing the customers may leave the organization and effort to increase their loyalty. As a result, the goals of profitability and costs decrease can be done (Greenberg, 2002).

Participative customer relationship management: this technique facilitates the interactions between organization and customers through several communication channels (such as telephone, post, internet, e-mail, and face-to-face communications). Also the coordination between team of the employees and communication channels is supported in this model. The participative customer relationship management is asystem that integrates the employees, processes, and data so that the organizations can deliver favorable services for their customers. On the other hand, participative customer relationship management results in the efficient and effective interactions with customers through all of the communication channels. Indeed, the use of internet-based cooperation and participation can decrease the customer services costs. Participative customer relationship management facilitates the multi-channel interaction between individual customers through services centers integration (Greenberg, 2002).

Concept of Performance

Organizational performance is described as the net result of the combined efforts of all individuals and groups in the organization. It is what the organization as a collectivity of management and employees succeed in achieving (Khandwalla, 1977). Organizational performance is one of the most important constructs in management research and without a doubt the singularly most important measure of the success of a commercial enterprise. Performance refers to the assessment of progress, at different organizational levels, toward achieving predetermined goals (Bourne et al., 2003). Prior research has studied business performance from different perspectives, such as financial performance, business unit performance, or organizational performance (Venkatraman and Ramanujam 1986). To measure organizational performance, one must consider the financial and non-financial performance of a firm (Avlonitis, Papastathopoulou, and Gounaris 2001; Gounaris, Papastathopoulou, and Avlonitis, 2003).

Financial Performance

Financial performance refers to a measure of how well a firm uses assets from its primary mode of business to generate revenues, while non – financial is a long-term operational objective that emphasizes the importance of increasing customer loyally, attracting new customers and enhancing the image and reputation of a form (Blazevic and Lievense 2004). It is also to create better profits and sales performance especially the financial service sector.

Investing in Customer Relationship Management (CRM) enhances a stronger, more trusting relationship between the customer and the organization (Morgan and Hunt, 1994) as well as improved organizational performance (Dewulf, Odikerken Schroder and Issobucci 2001).CRM explicitly recognizes the long-run value of potential and current customers, and seeks to increase revenues, profits, and shareholder value through targeted marketing activities directed towards developing, maintaining, and enhancing successful company –customer relationship (Berry, 1983; Morgan and Hunt, 1994). All these require an in – depth understanding of the CRM variables and the effect that is expected to have on customers and organizational performance.

Empirical Review of CRM and Performance

Different researches have been done about CRM frameworks but there has been limited academic effort about the issue of the CRM process and firm performance. Some researches tried to understand the consequences of CRM (Ryals & Knox, 2001; Ryals & Payne, 2001) .There is some evidence focus on CRM's impact on organizational performance (Reinartz, Krafft, & Hoyer, 2003; Day & Van den Bulte, 2002). Different articles showed the positive impact of CRM on different aspects of performance, for example aspects that are related to the company (Palmatier, et al, 2007) or aspect that are related to customers(Gustafsson, Johnson, & Roos, 2005; Mithas, Krishnan, & Fornell, 2005).

Reinartz (2004) attempts to relate CRM activities that lead to satisfaction of different business performance measures. There are some other studies that show a relationship between the activity of customer satisfaction and business performance (Kamakura, de Rosa, & Mazzon, 2002). There is also some study that expresses the association between activities that lead to customer loyalty and commitment - profitability and retention (Reinartz & Kumar, 2000 ; Verhoef, 2003). Reinartz et al. (2004) also tried to establish a link between CRM and organizational performance. As mentioned before they found CRM has three distinct customer relationship-related stages: initiation, maintenance, and termination. They found CRM has an impact on perceptual performance across the three stages. In the initiation and maintenance stages, some support was found for CRM's impact on Performance, but little support was found for CRM's impact on the termination stage. Some researchers stress that sales force efficiency and effectiveness will improve by applying the CRM process (Jones, Sundaram, & Chin, 2002). Rigby et al., 2002 expressed that one potential CRM benefit that did not make the list includes improved employee motivation Lošťáková ,(2007) Believed an organization can Develop time of product modification for a customer compared to competition and increase a number of newly introduced products compared to the competition . She also expressed CRM cause increase sales volume of individual customers and also sales revenue with individual customers. Customer satisfaction and loyalty is as consequences of CRM process too. Kim, Suh & wang (2003) also suggested a model that emphasizes CRM process can improve customer satisfaction, increase customer loyalty, and reduce customer cost and increase customer revenue and profit for organizations. The length of interaction with customers will be increased and also the time of delivering services to customers will be decreased for organizations that apply CRM (Khirallah, 2004). La Valle & Scheld (2004) expressed that CRM can decrease the marketing and sale cost. It can also decrease the customer loose rate and increase customer value. Customer relationship management helps to improve customer perception about product and service. So it can lead the increment of revenue (Dutu & Halmajan, 2011). Chang (2007) emphasized that CRM can impact on different measures of performance. He showed CRM can decrease the marketing and service cost. The revenue of the company also increases by cross /up selling. CRM possess stress on customer segmentation based on customer needs and information. So the company can improve product /service quality. Ullah & Al-Mudimigh,2009 and O, Reilly,2000 expressed if companies notice on CRM process, it can help them to increase their profit and also the shareholder revenue. Due to one of the important activities of CRM process is gathering data about current and potential customers and creating a database, so the employee has access to important information about customers and their needs and can improve their service based on their requirements so it can leads employee satisfaction.

The Traditional and Modern Theory of CRM

The traditional and modern theory of CRM was cited in Gifford (2002). The modern CRM theory refers to the idea of integrating the customer: this new way of looking at the business involves integrating the customer (more precisely the customer's relevant people and processes) into all aspects of the supplier's business, and vice versa. This implies a relationship that is deeper and wider than the traditional arms-length supplier-customer relationship. The modern approach to customer relationship management is based on satisfying all of the needs people, system, processes etc-across the customer's organization, such as might be affected and benefited by the particular supply.

The Structural Theory of Performance

Over time, the traditional structural approach usually relies on the economics of cost minimization or profit maximization, where the performance equation denotes a cost function or a profit function. Occasionally, the structural performance equation denotes a production function. While estimating a production function might tell us if the firm is *technically efficient*, i.e., if managers organize production such that the firm maximizes the amount of output produced with a given amount of inputs (so that the firm is operating on its production frontier), we are more interested in *economic efficiency*, i.e., whether the firm is responding to relative prices in choosing its inputs and outputs to minimize cost and/or to maximize profit, which subsumes technical efficiency. Risk plays no explicit role in these performance functions, although some papers include one or more dimensions of risk in the estimation as control variables.

The Non-Structural Theory of Performance

However, the non-structural approach to bank performance measurement usually focuses on achieved performance and measures performance in equation by a variety of financial ratios, e.g., return-on-asset, returnon- equity, or the ratio of fixed costs to total costs. However, some applications have used measures of performance that are based on the market value of the firm (which inherently incorporates market-priced risk), e.g., Tobin's q-ratio (which is the ratio of the market value of assets to the book value of assets); the Sharpe ratio (which measures the ratio of the firm's expected excess return over the risk-free return to the volatility of this excess return (as measured by the standard deviation of the excess return)); or an event study's cumulative abnormal return, CAR (the cumulative error terms of a model predicting banks' market return around a particular event). Other applications have measured performance by an inefficiency ratio obtained by estimating either a non-structural or structural performance equation as a frontier. The non-structural approach then explores the relationship of performance to various bank and environmental characteristics, including the bank's investment strategy, location, governance structure, and corporate control environment. For example, the non-structural approach might investigate technology by asking how performance ratios are correlated with asset acquisitions, the bank's product mix, whether the bank is organized as a mutual or stock-owned firm, and the ratio of outside to inside directors on its board. While informal and formal theories may motivate some of these investigations, no general theory of performance provides a unifying framework for these studies.

Using the frontier methods in a non-structural approach, Hughes, et al. (1997) proposed a proxy for Jensen and Meckling's agency cost: a frontier of the market value of assets fitted as a potentially nonlinear function of the book-

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value investment in assets and the book value of assets squared. This frontier gives the highest potential value *observed* in the sample for any given investment in assets. For any bank, the difference between its highest potential value and its noise-adjusted achieved value represents its lost market value – a proxy for agency cost (*X*-inefficiency). Several studies have used either this systematic lost market value or the resulting noise-adjusted q-ratio to measure performance: Baele, De Jonghe, and Vander Vennet (2006), Hughes, et al. (2003), DeJonghe and Vander Vennet (2005), Hughes and Moon (2003), Hughes, et al. (1999), Hughes, Mester, and Moon (2001), and Hughes and Mester (forthcoming).

Habib and Ljungqvist (2005) specified an alternative market-value frontier as a function of a variety of managerial decision variables, including size, financial leverage, capital expenditures, and advertising expenditures. Thus, the peer grouping on whom the frontier is estimated is considerably narrower than the wide grouping based on investment in assets, and inefficient choices of these conditioning values are not accounted for in the measurement of agency costs.

Methodology

This study employed both descriptive and survey research. Both primary and secondary data was used for the study with questionnaire as research instrument. Questionnaire was administered to raise data meant for triangulation and the results analyzed to establish the relation between customer relationship management and organization performance of some selected bank in Nigeria (First Bank, UBA, Zenith Bank, Sky bank, fidelity bank, Eco Bank, GT Bank and Diamond banks)

S/N	COMMERCIAL BANKS	POPULATION
1	Access Bank, Nigeria Plc	5.7 million
2	Diamond Bank Nigeria Plc	4.3 million
3	Eco-Bank Nigeria Plc	9.6 million
4	Fidelity Bank Nigerian Plc	2.3 million
5	First Bank Nigeria Plc	8.5 million
6	Guaranty Trust Bank Plc	4.4 million
7	United Bank for Africa Plc	7 million
8	Zenith Bank Nigeria Plc.	2 million
	Total	43800000

Population for this consists of all the deposit commercial banks. The sample of banks for the study was determining using simple random sampling. Since all these banks operate in the same environment under the same policy etc. while respondent sampling was determined using Yamane sampling determination formular.

Table 1: Commercial Banks and Customer base in Nigeria

Source: CAC, 2013

$$n = \frac{N}{1+N(e)^2}$$

Where,

n = sample size;

N = population size;

e= Level of precision required;

1 = constant

In determining the sample size, the following variables were used:

Confidence interval = 95 %

e = Margin of error = 0.05

Substituting into the formula,

b. Sample size for the number of customers to be used

$$n = \frac{N}{1+N(e)^2}$$

$$n = \frac{43,800,000}{1+43,800,000\,(0.05)^2}$$

$$n = \frac{43800000}{1+43,800,000(0.0025)}$$

$$n = \frac{43,800000}{1+109500}$$

$$n = \frac{43800000}{109501}$$

n = 399 customers

Table 2: Selected Commercial Banks and Sampled Customers base- Nigeria

S/N	COMMERCIAL BANKS	POPULATION	SAMPLED CUSTOMER PER BANK
1	Access Bank, Nigeria Plc	5.7 million	$\frac{399*5700000}{43800000} = 5$

2	Diamond Bank Nigeria Plc	4.3 million	$\frac{399*4300000}{43800000} =$
3	Eco-Bank Nigeria Plc	9.6 million	$\frac{399*9600000}{43800000} =$
4	Fidelity Bank Nigerian Plc	2.3 million	$\frac{399*2300000}{43800000} =$
5	First Bank Nigeria Plc	8.5 million	$\frac{399*8500000}{43800000} =$
6	Guaranty Trust Bank Plc	4.4 million	$\frac{399*4400000}{43800000} =$
7	United Bank for Africa Plc	7 million	$\frac{399*7000000}{43800000} =$
8	Zenith Bank Nigeria Plc.	2 million	$\frac{399*2000000}{43800000} =$
Total			399

Source: CAC, 2013

The questionnaire was the instrument used in data collection and distribution was by me, the respondents was required to read each question carefully and indicate their agreement or disagreement with the statement using a 5 – point liker scale. On the other hand secondary data was used from the statement of the account of the various banks performance as three of the variables of the research.

The major statistical analysis that was used in this study is regression analysis; simple regression analysis will be used. This analysis was used in order to find the linear relationship between independent variable, which CRM (complaint management, high quality services, security at money and friendliness of employee) and dependent variable which are organization performance (Return on Asset, Return on Equity, Return on Investment).

The simple regression result will be express as follow:

$$Y_i = \beta_0 + \beta_i X_i + \mu_t --------1$$

Where
Y = denotes the dependent variable
α = denotes the intercepts
β = denotes the coefficient of explanatory variable
μ_t = denotes the error term
x = denotes the independent variable

Model Specification
The model specification test three hypotheses and their as follows

ROA = $\beta_0 + \beta_1X_1 + \beta_2X_2\ 2 + \beta_3X_3 + \beta_4X_4 + \mu_t$ - - - - - - - 2

ROE = $\beta_0 + \beta_1X_1 + \beta_2X_2\ 2 + \beta_3X_3 + \beta_4X_4 + \mu_t$ - - - - - - - - 3

ROI = $\beta_0 + \beta_1X_1 + \beta_2X_2\ 2 + \beta_3X_3 + \beta_4X_4 + \mu_t$ - - - - - - - - 4

Where;
ROA = Return on Asset.
ROI = Return on Investment
ROE = Return on Equity.
X_1 = Complaint management
X_2 = Timeliness in service delivery
X_3 = Security of money
X_4 = Ease of opening account.

IV Findings and Discussion of Result

Co-integration Test. Hypothesis One

The evidence of co-integration implies that there is a long run relationship among the variables. The co-integration tests are undertaken based on the Johansen methodology (1990) maximum likelihood framework. The essence is to establish whether long-run relationships exist among the variables of interest .If two or more time series are not stationary, it is important to test whether there is a linear combination of them, which is stationary. Variables are cointegrated if they have a long term or equilibrium relationship between them (Gujarati, 2004). It is a pretest to avoid spurious regression situations.

Table 3: Results of Johansen Multivariate Co-integration Test
Date: 06/03/14 Time: 16:02
Sample (adjusted): 2001 2013
Included observations: 13 after adjustments
Trend assumption: Linear deterministic trend
Series: ROI ROA ROE X1
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.979130	90.42803	47.85613	0.0000
At most 1 *	0.891064	40.12531	29.79707	0.0023

At most 2	0.485417	11.30442	15.49471	0.1934
At most 3	0.185493	2.667240	3.841466	0.1024

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.979130	50.30272	27.58434	0.0000
At most 1 *	0.891064	28.82089	21.13162	0.0034
At most 2	0.485417	8.637177	14.26460	0.3176
At most 3	0.185493	2.667240	3.841466	0.1024

Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values
Source: Authors Computation, 2014 (Eview-7.0)

From the co-integrated result above in table 3, the trace test indicates two co-integrating equation at 5% level. Also, the Max-eigenvalue test indicates two cointegrating equation at 5 %level. The model thus shows that there exists a long-run equilibrium relationships among CRM variables and ROE, ROA and ROI used in the analysis. It shows that the variables move together in the long run. As such, we reject the first null hypothesis (H01).

Model Estimation and Discussion of Findings
Model One (Return on Asset Model)

$$ROA = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu_t \text{-------} 2$$

Table 4: Regression Result on ROA
Dependent Variable: ROA
Method: Least Squares
Date: 06/03/14 Time: 15:04
Sample: 1999 2013
Included observations: 15

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-26130904	11206728	-2.331716	0.0419
X1	4102307.	2075922.	1.976137	0.0764
X2	-122594.0	1149162.	-0.106681	0.9172
X3	3810964.	1465890.	2.599762	0.0265
X4	71697.09	1517680.	0.047241	0.9633

R-squared	0.516957	Mean dependent var	906886.6
Adjusted R-squared	0.323740	S.D. dependent var	1324948.
S.E. of regression	1089572.	Akaike info criterion	30.90167
Sum squared resid	1.19E+13	Schwarz criterion	31.13769
Log likelihood	-226.7625	Hannan-Quinn criter.	30.89915
F-statistic	22.675521	Durbin-Watson stat	1.687591
Prob(F-statistic)	0.0304274		

From the regression result, the R-squared was found to be 51.95 percent, which shows that the model has a good fit. The R-square value confirms that the CRM has a positive impact on the ROA of deposit money banks in Nigeria. It shows that complaint management, timeliness in service delivery, security of money and ease of opening account had a great impact on the deposit money bank return on assets. The model is also free of autocorrelation as the Durbin-Watson (DW) value of 1.68 (approximately 2.0) shows, and thus the model can be relied upon for policy making. The F-statistics showed that the overall model is statistically significant. The F-statistic value of 0.03(3%), which is less than 0.05 (or 5%) showed that there is a significant relationship between CRM and deposit money banks ROA.

Model Two (Return on Equity Model)

$$ROE = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu_t \text{-------} 3$$

Table 5: Regression Result on ROE
Dependent Variable: ROE
Method: Least Squares
Date: 06/03/14 Time: 15:05
Sample: 1999 2013

Included observations: 15

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	799596.2	1091594.	0.732503	0.4807
X1	22958.62	202205.7	0.113541	0.9118
X2	-31735.62	111934.4	-0.283520	0.7826
X3	-19193.47	142785.3	-0.134422	0.8957
X4	-118094.2	147830.0	-0.798851	0.4429

R-squared	0.136259	Mean dependent var	298438.3
Adjusted R-squared	-0.209237	S.D. dependent var	96512.25
S.E. of regression	106130.0	Akaike info criterion	26.24392
Sum squared resid	1.13E+11	Schwarz criterion	26.47994
Log likelihood	-191.8294	Hannan-Quinn criter.	26.24140
F-statistic	0.394388	Durbin-Watson stat	1.147900
Prob(F-statistic)	0.808279		

From the regression result of ROE, it was observed that the R-squared is very weak as captured by the 13.62percentage value. This means that about 13.62 percentage changes in ROE is explained by complaint management, timeliness in service delivery, security of money and ease of opening account, while the greater percentage value of 86.38percent is captured by the error term . It therefore shows that CRM has no impact on the ROE of deposit money banks. It appears that the complaint management, timeliness in service delivery, security of money and ease of opening account has not improved the return on equity of deposit money banks in Abuja. This poor impact was also confirmed by the overall insignificancy of the model. The F-static value of 0.39(or 39%) was found to be greater than the probability value of 5%. This thus showed that there is no significant relationship between CRM and deposit money banks ROE in Nigeria.

Model Three (Return on Investment Model)

$$ROI = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu_t -------4$$

Table 6: Regression Result on ROI
Dependent Variable: ROI
Method: Least Squares
Date: 06/03/14 Time: 15:06
Sample: 1999 2013

Included observations: 15

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2469370.	8293851.	0.297735	0.7720
X1	428897.7	1536344.	0.279168	0.7858
X2	-1556889.	850469.5	-1.830624	0.0971
X3	-932654.4	1084872.	-0.859691	0.4101
X4	1617591.	1123202.	1.440161	0.1804

R-squared	0.772756	Mean dependent var	1011514.
Adjusted R-squared	0.261858	S.D. dependent var	938562.6
S.E. of regression	806367.7	Akaike info criterion	30.29967
Sum squared resid	6.50E+12	Schwarz criterion	30.53569
Log likelihood	-222.2475	Hannan-Quinn criter.	30.29715
F-statistic	12.241637	Durbin-Watson stat	2.148955
Prob(F-statistic)	0.027052		

The regression model of return on Investment is presented in table 4.4.3. The result showed the R-squared value 77.27percent confirms that model has a very good fit. It showed that about 77.27percent variations or changes in ROI is explained by CRM variables, while the remaining 22.73percent unaccounted variable is captured by the error term. This result thus showed that CRM has a strong impact on deposit money banks ROI. The complaint management, timeliness in service delivery, security of money and ease of opening account had improved the return on investment of deposit money banks in Abuja. The F-statistic value of 0.027, which is less than the critical value of 0.05, showed that model is statistically significant. This thus confirms that complaint management, timeliness in service delivery, security of money and ease of opening account had a significant relationship with the return on investment of deposit money banks in Abuja. The Durbin-Watson (DW) value of 2.14 showed that the model is not serially correlated and can be relied upon for policy analysis.

V Conclusion

It was identified that the bank resolves customers' complaints within a short period and has put in place channels to address such grievances that are brought before the banks officials. More so, the ease of opening accounts and security of money had been a viable CRM towards ensuring effective service delivery. The overall CRM strategies put in place by the banks were also matched against what the customers identify to be effective and all these had greatly impacted on the performance of deposit money banks in the area of ROI, ROA and ROE. The banks management is therefore encourage pursuing customer relationship management programmes with rigour so that they can survive in the present competitive business environment.

VI Recommendation

Based on the research findings, the following recommendations are made:

There is the need to ensure that the timeliness in service delivery is improved upon to enable the banks improve their performances. Considering the influx of people in Nigeria, and heavy traffic of bank service discharge, there is the need to extend more branches to clustered areas and locations as a strategy of diversifying investment opportunities. This will enable the banks handle the timeliness in service delivery efficiently.

There is need for them to concentrate more on customer focused services, complaint management, friendliness of employees, competitive charges on services, information and communication technology, high quality service, security of money, availability of credit and other CRM variables of the study as findings have shown that commitment to the use of these variables lead to customer satisfaction, customer retention, increase in profit and increase in number of customers for the deposit money banks in Nigeria.

REFERENCES

[1] Alex Bollen and Clair Emes (2008). Understanding Customer Relationship, How Important is the Personal Torch? http://ww.Ipos.Comloyalty/sites/ipsos.com.
[2] Asika, N. (2006). Research Methodology in the Behaviour Sciences. Lagos, Longman Publishers.
[3] Babin Porhharel (2011). Customer Relationship Management: Related Theories , Challenges and Application in Banking Sector, Banking Journal, Vol., 1 Issue 1.
[4] Baele, L., DeJonghe, O. and Vander Vennet, R. (August 2006). Does the stock market value bank diversification? Working Paper No. 2006/402, Department of Financial Economics, Ghent University.
[5] Beckett-Camarata, E.J., Camarata, M.R., Barker, R.T., 1998, Integrating Internal and External Customer Relationships Through Relationship Management: A strategic Response to Changing Global Environment, Journal of Business Research, 41, 71-81.
[6] Bora Hosver (2007). Customer Relationship in Banking Sector. http:www.Seribd.Com.
[7] Chen, I.J & Popivich, K. (2003). Understanding CRM: People, Process and Technology. Business Process Management Journal, 9 (5), 672-688.
[8] Clark, J. (1996). Economic cost, scale efficiency and competitive viability in banking, *Journal of Money, Credit, and Banking* 28, 342-364.
[9] Doney, Patricia M. & Joseph P. Cannon. (1997). An Examination of the Nature of Trust in Buyer-Seller Relationship". Journal of Marketing, 61 (April), 35-51.
[10] Ellen Gifford (2002. CRM Principles, Strategy, Solution, Applications, System, Software, and Ideas for effective Customer Relationship Management. htt//www.Businessballs.com>home>Business/Selling.
[11] Evanoff, D.D. (1998). Assessing the impact of regulation on bank cost efficiency, *Economic Perspectives*, Federal Reserve Bank of Chicago, 22, 21-32.
[12] Evanoff, D.D., Israilevich, P.R., and Merris, R.C. (1991). Relative price efficiency, technical change, and scale economies for large commercial banks, *Journal of Regulatory Economics*, 2, 281-298.
[13] Fiordelisi, F (2007). Shareholder value efficiency in European banking, *Journal of Banking and Finance* 31, 2151-2171.
[14] F. Robert Dwyer and John F. Tanner Jr. (1999), Business Marketing: Connecting Strategy, Relationships, and Learning, USA: Irwing/McGraw-Hall.
[15] Gujarati, D. & Porter, D. (2009). *Basic Econometrics*, 5th Edition. New York: McGraw-Hill.
[16] Habib, M.A. and Ljungqvist, A. (2005). Firm value and managerial incentives: a stochastic frontier approach, *Journal of Business* 78, 2053-2093.
[17] Hughes, J.P., Lang, W., Mester, L.J. and Moon C.-G. (1996). Efficient banking under interstate branching, *Journal of Money, Credit, and Banking* 28, 1045-1071.
[18] Hughes, J.P., Lang, W., Mester, L.J., Moon C.-G. and Pagano, M. (2001). Do bankers sacrifice value to build empires? Managerial incentives, Industry Consolidation, and Financial Performance, *Journal of Banking and Finance* 27, 417-447.
[19] Hughes, J.P., Lang, W., Mester, L.J. and Moon C.-G. (2000). Recovering risky technologies using the almost ideal demand system: an application to U.S. banking, *Journal of Financial Services Research* 18, 5-27.
[20] Hughes, J.P., Lang, W., Mester, L.J. and Moon C.-G. (1999). The dollars and sense of bank consolidation, *Journal of Banking and Finance* 23, 291-324.
[21] Injazz, Karen, J. Perrien P. Filiatrault, & L. Ricard. (2004). Relationship Marketing and Commercial Banking: A Critical Analysis . International of Bank Marketing, 10,25-29.
[22] International Institute of Sustained Dialogue (2004). The concept of Relationship. http://www.sustained dialogue com.
[23] John Egan (2001). Relationship Marketing-Exploring Relational Strategies in Marketing Prentice Hall.
[24] Jones, T., & Taylor, S.F. (2007). The Nature and Dimensionality of Service s Loyalty: How Many Dimensions? Journal of Services Marketing, 27 (1), 36-51.
[25] Kanji, G.K. (1998). Measurement of Business Excellence. Total Quality Management, 9, 633-643.
[26] Kim, J. et al. (2003). A Model for Evaluating the Effectiveness of CRM using the Balanced Scorecard. Journal of Interactive Marketing, 17 (2), 5-19.

[27] Laith Alrubaiee & Nahla Al-Nazer (2010). Investigate the Impact of Relationship Marketing Orientation on Customer Loyalty: The Customer's Perspective.

[28] Ling R. & Yen D. (2001). Customer Relationship Management: An Analysis Framework and Implementation Strategies . Journal of Computer Information Systems, (Spring).

[29] McAllister, P.H. and McManus, D. (1993). Resolving the scale efficiency puzzle in banking, *Journal of Banking and Finance* 17, 389-406.

[30] Mester, L.J. (1997). Measuring efficiency at U.S. banks: accounting for heterogeneity is important, *European Journal of Operational Research* 98, 230-242.

[31] Mester, L.J. (1993). Efficiency in the savings and loan industry, *Journal of Banking and Finance*, 17, 267-286.

[32] Mester, L.J. (2008). Optimal industrial structure in banking, Chapter 5 in *Handbook of Financial Intermediation and Banking*, Boot, A. and Thakor, A. (eds.) Amsterdam: North-Holland/Elsevier, 133-162.

[33] Mithas, S., Krishnan M.S. and Fornell C (2005): "Why Do Customer Relationship Management Applications Affect Customers Satisfaction?" Journal of Marketing, vol 6, no 4, pp 201-209.

[34] Morgan R.M. & S.D. Hunt. (1994). The Commitment Trust Theory of Relationship Marketing. Journal of Marketing, 58 (3), 20-38.

[35] Morgan. R.M. and Hunt, S.D. (1994): "The Commitment-Trust Theory of Relationship". Journal of Marketing, vol 58, no 3, pp 20-38

[36] Mosad Zineldin, (1995) "Bank-company interactions and relationships: some empirical evidence", International Journal of Bank Marketing, Vol. 13 Issue 2, pp.30-40

[37] Payne A Frow P (2005): "A Strategies Framework for Customer Relationship Management", Journal of Marketing, Vol. 69, pp. 167-176.

[38] Peppard, J., 200, Customer Relationship Management (CRM) in Financial Services, European Management Journal. Vol. 18, No, pp. 312-327.

[39] Philip Kolter and Gary Armstrong (2008). Principles of Marketing (l2th ed.), Upper Saddle River New Jersey: Pearson Education Inc.

[40] Philip Kotler and Kevin Lane Keller 2006). Marketing Management (12th ed.), Upper Saddle River New Jersey, USA: Pearson Prentice Hall.

[41] Ruth, N. Bolton and Crina O. Tarasi (2006). managing Customer Relationship. http://www.ruthnbolton.comiPublication.

[42] Ryals, L., & Knox, S., 2001, Cross-Functional Issues in the Implementation of Relationship Marketing Through Customer Relationship Management, European management Journal, Vol. 19, No. pp. 534-542.

[43] Schindler, D.R. and Cooper, P.S. (2001): Business Research Methods; C., H. (2003). Customer-oriented selling: a review, extension, and directions for future research. Journal of Personal Selling and Sales Management , 23, 2, 151-171.

[44] Semih Onut, Ibrahim Erdem and Bora Hosver (2007). Customer Relationship Management in Banking Sector and A Model Design for Banking ,performance Enhancement. http://www.ipdfsearchengine.comlpdfl

[45] Storbacka, K., Strandvik, T., and Gonroos, C. (1994): "Managing Customer Relationship for Profit: The dynamics of Relationship Quality: International Journal of Service Industry Management; vol 5, no 5, pp 21-38.

[46] Tim Berry (2010). Customer Relationship Management. http://www. Mplans com/customerrelation.

[47] Venkatraman, N. and Vasudevan Ramanujam (1986), "Measurement of Business Performance in Strategy Research: A Comparison of Approaches", Academic of Management Review, 11 (4), 801-814.

[48] Walpole, R.E. (1974). Introduction to Statistics, 2nd Edition, New York: Macmillan Publishing Co.

ISSN 2229-5518

[49] Webster, A.L. (1998). Applied statistics for Business and Economics: An Essential Version (3rd edition). New York: McGraw-Hill.