

Effect Of Mobile Banking On Customer Satisfaction In First Bank Plc, Plateau State Of Nigeria

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Abstract

The study investigates the effect of mobile banking on customer satisfaction in First Bank Plc, Plateau State of Nigeria. The total population of the study was 56837 according to First Bank of Nigeria Plc report in 2015 and a sample size of 397 was derived using Taro Yamani formula. A point in time data was applied from primary data source using questionnaires. Simple regression and e-view statistical software package were used to analysis data and findings revealed that there was a significant relationship between mobile banking and customer satisfaction in terms of customer loyalty in First Bank Plc in Plateau State of Nigeria. It is therefore recommended that First Bank Plc in Plateau State of Nigeria should emphasis more on mobile banking insecurity control, minimization of network failure problem and reduction of double debt when using paypal transaction since it help in achieving customer satisfaction in terms of customer loyalty.

Keywords: Mobile banking, Morogoro branch, Bank Nigeria Plc, Jos Metropolis, Plateau State of Nigeria.

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1.0 INTRODUCTION

Mobile Banking involves the use of mobile devices where customers of First Nigeria Plc, Jos Metropolis used in assessing or transferring money to other customers of banks even within the same bank or other bank customers in order for the bank customer to ensure satisfaction at any point in time. Customers use their mobile phones to carry out financial transactions through internet in mobile phone networks to carry out wire transfers at any time in First Nigeria Plc, Jos Metropol. Mobile Banking as the term connotes is banking "on the move" with the aid of a mobile telecommunication device. It is also known as M-Banking or in some instances Short Message Service (SMS) Banking, the term used when balance checks are performed and transactions are made via a mobile device. The process begins when a message is transmitted through a mobile device and it ends up on the bank's IT infrastructure which then processes the transaction and gives feedback to the originator through the same mobile device. Mobile devices remain the most convenient means to provide mass market as against branch banking in First Nigeria Plc, Jos Metropolis.

The one of the major problems of mobile banking in First Nigeria Plc, Jos Metropolis is that network does not covered in all local Government areas in Jos Metroplis and villages and there is also problem of electricity in charging mobile phone. So many customers of the banks does not have mobile banking services in their phone since some of the them use Nakia 2310 or phone they not recharge with data plan. There is insecurity in transaction which posed lack satisfaction to the customers of the banks. There is delay in transaction and sometime there is double debt of transaction when using mobile banking especially Pay pad transaction which make customers of the

bank to be dissatisfied in their transaction.

Previous studies such as Abigael, Sangoro and Philemon ^[1] study the effects of mobile banking on customer satisfaction with specific interest on Equity bank of Eldoret town while Jane (2015) assess the effectiveness of mobile banking on customers satisfaction in banking services with reference to KCB Bank in Morogoro branch. Muhsina and Imran ^[2] identify the most influential factors of customer satisfaction of mobile banking of second - generation banks. Zohra and Kashif ^[3] identify the key factors of mobile technology adoption which influence customer satisfaction in Pakistan. Adewoye ^[4] examining the impact of mobile banking on service delivery in the Nigeria commercial banks. There is a need to carry this study since no studies from the previous studies have address mobile banking problems using First Bank Nigeria Plc, Jos Metropolis, Plateau State of Nigeria.

The objective of this study is to examine the effect of mobile making on customer satisfaction in First Bank Nigeria Plc, Jos Metropolis, Plateau State of Nigeria and the specific objectives are stated below: to determine the effect of mobile banking on customer royalty in First Bank Nigeria Plc, Jos Metropolis, Plateau State of Nigeria.

The scope of this study is restricted to mobile making and customer satisfaction in First Bank Nigeria Plc, Jos Metropolis, Plateau State of Nigeria. The period of study is Jan, 2017 to May, 2017. A 5 months study and this period is chosen because it is period Nigeria involved in recession and every customers or individuals of the bank including bankers are seriously finding ways to get money some people used mobile banking to robe other customers.

The hypothesis is slated in a null form and it is slated

below:

H01: Mobile banking does not affect customer loyalty in First Bank Nigeria Plc, Plateau State.

This model is developed by the researchers to guide this research since there was no previous model to best explain the researcher ideas or view point in this aspect. The researchers believes that mobile is brings about insecurity, network failure and double transaction especially when customers use paypal to transact money from one bank to the other. This process according to this mode will actually lead to customer dissatisfaction in the banking industry and will make the customers of banks to disloyal in patronizing the banks when it is not normal banking hours. However, this model has been tested by the researcher using regression to ascertain the cause-and-effect relationship that existed between the variables and visual mode have been drawing indicating their relationship. It is the view of the researcher that mobile banking lead to customer satisfaction if there is proper control of insecurity in terms of 419, thieves, mobile crime, network failure and double transaction reduction in the banking industry. This study can also be applied not only the banking sector but other sectors that uses mobile banking in transaction. The theory is not applicable to firms that does not transact businesses using mobile banking or individual that does not transact business by mobile banking.

2.0 Concept of Mobile Banking

Mobile Banking is a process of no branch banking which provides financial services to unbanked communities in both urban and rural areas at affordable cost. Mobile banking is safe, fast, and cheap to operate which are qualities that have led to its success globally. ^[5] Timaru and Buse (2007) assert that mobile banking is provision and availing of banking and financial services with the use of mobile telecommunication devices.

Mobile banking is the facility which provides banking services such as balance enquiry, funds transfer, bill payment, and transaction history via a users' mobile phone. Kondabagil (2007) assert that mobile banking is occurrence that indicate when customers access a banks' networks using cellular phones, pagers, personal digital assistants, or similar devices through telecommunication wireless networks. Mobile banking is an application of mobile commerce that enables

customers to bank virtually at any convenient time and place. Tiwari et al (2006) believes is built by m-banking and many banks are taken advantage of this innovation in order to increase customer satisfaction, manage cost, increase profits and bring positive transformation of payment system in the economy.

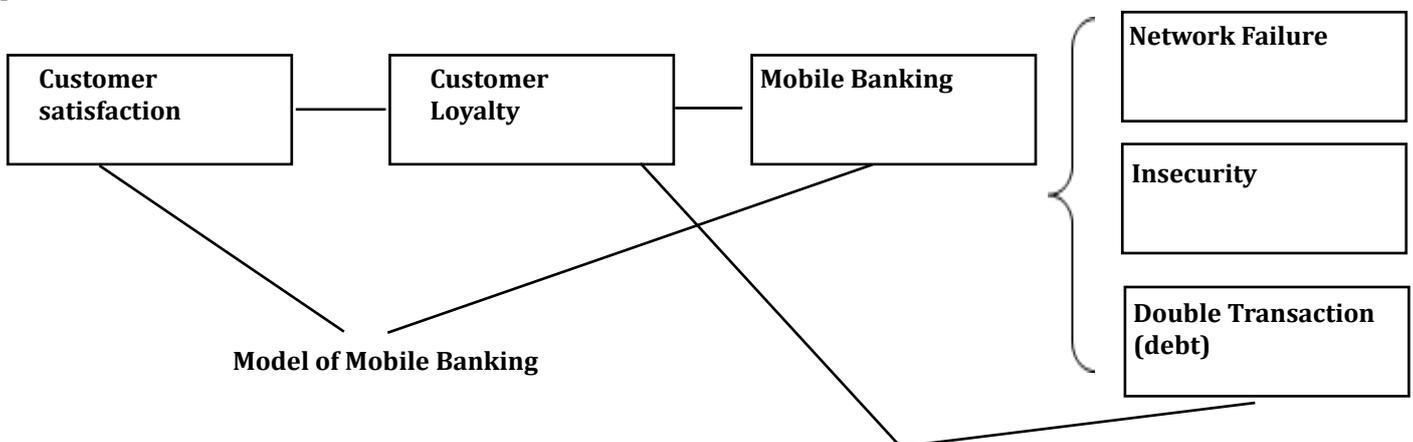
The mobile banking faced with network failure, insecurity and double reduction of cash when using paypal transaction. Insecurity in mobile banking is the process whereby customers face with 419 and thieves while network failure causes customers to loss their money, waste their time, pay additional running cost to retrieved their money and even queue on the line to be attended to in a traditional banking system. To him also, there is double transaction that is cause by mobile making especially when customers transact business using paypal and if the customers loss the RRR number, the customer cannot get back his/her money.

3.0 Concept of Customer Satisfaction

According to East (1997), customer satisfaction is the feeling or attitude of a customer towards a product or service after it has been used. Customer satisfaction is the number of customers or percentage of total customers, whose reported experience with a firm, its products or its services (ratings) exceeds specified satisfaction goals (Farris & Paul, 2010). According to Saha and Zhao (2005), customer satisfaction is the collection of outcome of perception, evaluation and psychological reactions to the consumption experience with a product/service.

Power and Associates assert that customer loyalty as a deeply held commitment to frequently re-buy or re-patronize the same product or service, and though multidimensional in nature, it includes re-buy, repurchasing and resistance towards price increase. Michael noted that loyalty equates to a willingness to sacrifice on the part of the customer: a loyal customer may forgo a lower cost solution from a competitor or give you time to improve capabilities because they value other aspects of doing business with you. In a competitive marketplace where businesses compete for customers, customer satisfaction is seen as a key differentiator and increasingly has become a key element of business strategy.

Conceptual Framework



Opusunju and Murat Model of Mobile Banking

4.0 Empirical Studies

Abigael, Sangoro and Philemon study the effects of mobile banking on customer satisfaction with specific interest on Equity bank of Eldoret town. The study adopted a descriptive research design on a sample size of 213 respondents who were selected through stratified and purposive sampling from a target population of 2,130 consisting of employees, bank customers and agents. Data was collected by use of questionnaires and interview schedules and the data analyzed by the aid of Statistical Package of Social Scientists Program (SPSS). The findings were summarized using statistical measures of central tendency and measures of dispersion while data was presented using tables, charts and figures. Based on the study findings it was concluded that close to all those using mobile banking services at the moment were satisfied that indeed it was efficient and reliable.

The above study was conducted in 2013 and was in Eldoret town which they employed the used of SPSS which is not current and the researchers could have used e-view statistical package or minitab to analysis the data.

Jane [5] assess the effectiveness of mobile banking on customers" satisfaction in banking services with reference to KCB Bank, Morogoro branch. The study involved 110 KCB customers and 10 KCB officials. The sample was obtained through simple random and purposive sampling techniques. The sample size for the study was 120 respondents. Primary data was collected using questionnaires. Data collected were analyzed and processed through descriptive analysis, organized and presented using tables, charts. The results showed generally that; mobile banking services are accessible to KCB customers through Vodacom, Airtel and Tigo users. Additionally the study found that mobile banking services has great efficacy on customers" satisfaction.

Muhsina and Imran identify the most influential factors of customer satisfaction of mobile banking of second - generation banks. Study mainly followed a quantitative research methodology while structured questionnaire used as main data collection instrument. In collecting primary data, survey technique used as data collection tool and random sampling procedure used for selecting respondents of this study. Data analysis performed using through ANOVA, multiple regressions, and cross tabulation. Study found that, there exist strong associative relationships between the customer satisfactions with the selected factors.

Zohra and Kashif identify the key factors of mobile technology adoption which influence customer satisfaction in Pakistan. Questionnaires are used to conduct data collection and then analyzed using statistical techniques: regression analysis, correlation and factor analysis. The findings show that customer's concerns about security, authenticity and reliability of the technology are of significance.

Adewoye examining the impact of mobile banking on service delivery in the Nigeria commercial banks. The study was carried out in Lagos state with One hundred and forty (140) Questionnaires administered and distributed to both senior and junior staff of the selected banks, Thirty five (35) staff each were picked from the four (4) selected banks. One hundred and Twenty five (125) Questionnaires were found

useful for the purpose of the study representing 83.3% of the total questionnaire distributed. Data collected was analyzed using frequency table, percentage and mean score analysis while the non-parametric statistical test Chi- square was used to test the formulated hypothesis using STATA 10 data analysis package/software to examine the impact of mobile banking on service delivery and also look at the relationship between mobile banking and service delivery in the sampled banks. The results of the findings shows that Mobile banking improve banks service delivery in a form of transactional convenience, savings of time, quick transaction alert and save of service cost which has recuperate customer's relationship and satisfaction.

From the above studies, they use STATA, chi-square, table, percentage, mean score analysis and Regression and correlation, ANOVA, multiple regressions, and cross tabulation but non of these authors applied e-view statistical package to analysis the data but some authors used regression and correlation which is wrong. The researchers could have used only regression which implies that the researchers try to predict or forecast the relationship between the variables.

5.0 Methodolog

The survey research design is adopted in this study which involved the used of primary method and this method is used for data collections. Survey research design is used because the study uses questionnaire which is to obtain factual information and also for clarity of the analysis of the findings. The population included the customers of the First banks Nigeria Plc in Jos Plateau state. According to First Bank of Nigeria Plc report (2015) there are 56837 customers of the bank and a sample size of 397 derived using Taro Yamani and it is calculated below:

$$\begin{aligned} \text{Where } N & \text{ is the population size} \\ e & \text{ is the margin error (assume 5\%)} \\ 1 & = \text{constant} \\ e & = 0.05 \\ n & = n / 1 + n (0.05)^2 \\ n & = 56837 / 1 + 56837 (0.0025) \\ n & = 56837 / 143.09 \\ n & = 397 \end{aligned}$$

The questionnaire were administered to customers of First banks Nigeria Plc in Jos Plateau state. The questionnaire were design in five point likert scale and the researcher administered the questionnaire by involving the employees of the banks and the after two weeks the researcher get to the banks and obtained the copies of the questionnaire from the employees of the bank. The researcher used the questionnaire as was returned from the employees and customers were provided opportunities to fill the questionnaire and returned. This means the customers were free to go with questionnaire till it finished filling the questionnaire and this make the return rate of the questionnaire very poor. However, only 129 copies of questionnaire were returned which the researcher used it for proper analysis in this study.

The questionnaire were pre-administered to 10 people to enable the researcher test for reliability to ensure that the

questions being answered properly. The table below indicates the reliability value of the variables.

Table

Variables	Items	Cronbach's Alpha
Mobile Banking	3	0.78
Customer Satisfaction (customer loyalty)	3	0.78

However, the Alpha value are reliable.

The study adopted regression and this is because the researcher established the cause and effect relationship between the variables using mathematically formula in broad sense, it is stated below:

$$Y = \alpha + \beta x$$

Y= dependent variable (customer satisfaction measured with customer loyalty), α = intercept, β = coefficient and x is the independent variable (Mobile banking). However, the above model is elaborated in a simple by adopting a statistical model

in introducing error terms Thus, is expressed as:

$$CL = \alpha + \beta_1 MB + \beta_2 \mu + \dots \text{equation 1}$$

Where: CL =customer Loyalty and MB= mobile banking, β =coefficient, α = Intercept and μ = error terms

7.0 Discussion of Findings

From the analysis, the relationship between mobile banking (double transaction, network failure and insecurity) and customer satisfaction in terms of customer loyalty in First Bank Plc in Plateau State of Nigeria. This shows that there is a significant relationship between mobile banking (double transaction, network failure and insecurity) and customer satisfaction in terms of customer loyalty in First Bank Plc in Plateau State of Nigeria. The finding is in lined to the findings of Jane (2015) who found a positive significant relationship between mobile banking and customer loyalty. The study is also in lined with Lucy theory of mobile banking which state that mobile banking lead to customer satisfaction if there is proper control of insecurity in terms of 419, thieves, mobile crime, network failure and double transaction reduction in the banking industry.

6.0 Data Analysis

Table 1: Mobile Banking and Customer Loyalty in First Bank Plc,

Items	5	4	3	2	1
Mobile Banking					
There is more insecurity in terms 419 and thieves as well as cyber crime in Mobile banking adopted by first bank Plc, Plateau State	44(34.11)	23(17.82)	3(2.31)	17(2.32)	42(32.55)
There is frequent double transaction in mobile banking in first bank Plc, Plateau State	51(39.53)	26(20.15)	1(8.33)	20(15.50)	31(24.03)
There is frequent network failure when using mobile banking in first bank Plc, Plateau State	48(37.20)	39(30.23)	1(8.33)	18(13.95)	22(17.05)
Customer Loyalty					
Customers of First Bank Plc, Plateau State frequently patronize the bank	57(44.18)	34(26.35)	2(1.55)	26(20.15)	10(7.75)
The way and manner they attend to customers (approach) are encouraging	23(17.82)	18(13.95)	1(0.77)	59(45.73)	28(21.71)
The services of the bank are good and unique	28(21.71)	21(16.27)	2(1.55)	44(34.10)	33(25.58)

Source Field survey, 2021

The above table indicates the respondents' percentage in each secondary indicant's used in explaining the primary indicants in this study. However, the above respondents view is used to compute the mean value of the variables as shown below:

Variables for mobile banking	5	4	3	2	1	FX	N	Mean	Remarks	Sectional Mean
Insecurity	44	23	3	17	42	397	129	3.07	Good	3.32
double transaction	51	26	1	20	31	433	129	3.35	Good	
Network failure	48	39	1	18	23	458	129	5.55	Very Good	

Source: Authors Computation, 2021

The table above explained the acceptability of the variables used in the analysis at a mean value of 3.32 which is accepted. This implies that there is insecurity, double transaction and network failure in First Bank Plc in Plateau State of Nigeria as a result of mobile banking activities.

Variables for customer satisfaction (customers loyalty)	5	4	3	2	1	FX	N	Mean	Remarks	Sectional Mean
Patronage	57	34	2	26	10	489	129	3.79	Very Good	3.00
Approach	23	18	1	59	28	336	129	2.60	Poor	
services	28	21	2	44	33	351	129	2.72	Poor	

The table above explained the acceptability of the variables used in the analysis at a mean value of 3.00 which is accepted. This implies that there is customer patronage, ways and manners or approach they attend to customers, the services they offered is good and unique in First Bank Plc in Plateau State of Nigeria as a result of mobile banking activities.

Regression Result using

E-view Statistical software Package

$$CL = \beta_0 + \beta_1 MB$$

Dependent Variable: CL

Method: Least Squares

Date: 06/02/21 Time: 22:19

Sample: 1 129

Included observations: 129

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.151623	0.294285	3.913293	0.0001
MB	0.798479	0.026561	30.06238	0.0000
R-squared	0.876788	Mean dependent var		9.124031
Adjusted R-squared	0.875818	S.D. dependent var		4.111736
S.E. of regression	1.448953	Akaike info criterion		3.594941
Sum squared resid	266.6319	Schwarz criterion		3.639280
Log likelihood	-229.8737	Hannan-Quinn criter.		3.612957
F-statistic	903.7469	Durbin-Watson stat		1.072493
Prob(F-statistic)	0.000000			

Source: Data output using e-view 7.0 statistical package, 2021

Decision Rule: 1%, 5% and 10% level of significance

The coefficient for mobile banking is significant in achieving customer satisfaction in terms of customer loyalty in First Bank Plc in Plateau State of Nigeria. The $CL = 1.15 + 0.079MB$ which indicates that mobile banking (double transaction, network failure and insecurity) will increase by 79% for every 1% increase in customer loyalty in First Bank Plc in Plateau State of Nigeria. This implies that customer loyalty in First Bank Plc in Plateau State of Nigeria have 78% customer satisfaction (customer loyalty) as a result of mobile banking. The p-value of 0.00 is less than the t-statistic value of 30.06 and the standard error value of 0.02 is less than the t-statistic value. The f-statistic value of 903.7469 is significant at p statistic value of 0.00 and a Durbin Watson value of 1.07 which provides evidence of existence of linear relationship between

mobile banking (double transaction, network failure and insecurity) and customer satisfaction in terms of customer loyalty in First Bank Plc in Plateau State of Nigeria. The $R^2 = 0.87$ indicates that only 78% mobile banking (double transaction, network failure and insecurity) embarked upon by the First Bank Plc in Plateau State of Nigeria contributes immensely to customer satisfaction in terms of customer loyalty in First Bank Plc in Plateau State of Nigeria but 13% can explained by other factors not noted in the regression model which is refer to as error term. Therefore we accept the alternative hypothesis that there is a significant relationship between mobile banking (double transaction, network failure and insecurity) and customer satisfaction in terms of customer loyalty in First Bank Plc in Plateau State of Nigeria.

8.0 Conclusions and Recommendations

This study concludes that the relationship between mobile banking (double transaction, network failure and insecurity) and customer satisfaction in terms of customer loyalty in First Bank Plc in Plateau State of Nigeria is significant. This shows that there is a significant relationship between mobile banking and customer satisfaction in terms of customer loyalty in First Bank Plc in Plateau State of Nigeria. It is therefore recommended that First Bank Plc in Plateau State of Nigeria should emphasis more on mobile banking insecurity control, minimization of network failure problem and reduction of double debt when using paypal transaction since it help in achieving customer satisfaction in terms of customer loyalty.

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