Electronic Banking and E-Loyalty of Deposit Money Banks in Port Harcourt

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Abstract: This study examined the relationship between Electronic banking and E-loyalty of Deposit money banks in Rivers State and the moderating effect of network service on this relationship. The study adopted the survey research design and based on the research questions, a research questionnaire was designed and three hundred and ninety nine (399) copies were distributed. Three hundred and eighty one (381) copies were retrieved and analyzed. The Pearson Product Moment Correlation was used to test the hypotheses. Also, in testing the moderating variable using partial correlation, it was revealed that network service has a significant effect on the relationship between Electronic banking and E-loyalty. The study concluded that Electronic banking and its measures, has a significant relationship on E-loyalty as well as its dimensions. The study recommends among others that bank apps and sites should be designed and developed with optimum simplicity and security to ensure ease of use, perceived usefulness and trust. This will increase customer's level of trust on electronic banking.

Keywords: Electronic Banking, E-loyalty, ATM, Internet Banking, Mobile Banking, Intention to Use, Satisfaction, Referral

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Introduction

It is expected that Information Technology (IT) in the banking industry should promote efficiency and customer satisfaction. This is because the days of high customer commitment are declining hence there is a need to find out what it takes to keep a customer loyal in the electronic space. The process of on boarding customers on the Electronic banking platform should be time saving and straight forward and the technology should provide reliability and transaction convenience. This is in a bid to restore trust and confidence in the system. However, with the introduction of Electronic banking, customers still crowd the banking halls and are skeptical of the functionality of these online services introduced by banks, (Jayawardhena & Foley, 2000). This is worrisome and poses a challenge to gaining customer loyalty.

Also, there is inefficiency and inconsistency with the online services and these issues smears the trust and confidence that is supposed to be associated with the service delivery. A review of previous literature on Electronic banking portrays the major issues that researchers and practitioners have dealt with in time past, one of such is security. According to Martins (2008) security appears to be the main obstacles for some customers who at one point or the other wished to go online. Many customers fear that the apps or website where they carry out

their electronic transaction are not secured enough and are prone to hackers. Again, lack of privacy is another problem hampering the banks from milking the full benefit offered by electronic banking. Shehu *et al*. (2013) opined that these could bring about financial and reputational damage due to wrong processing of transactions, data privacy and confidentiality, unauthorized access to the banks' data base, which will in turn, take a heavy toll on their profitability and overall performance. With the introduction of Electronic banking, the prediction of customer loyalty is likely difficulty.

The last challenge of Electronic Banking is trust. Moormaan *et al*. (1992), defines trust as the willingness to rely on an exchange partner in whom one has confidence. Also, Shaupp and Belanger,(2005) posits that trust is a veritable antecedent in most models measuring relationships between loyalty and satisfaction. Trust helps in reducing the perceived risk associated with adoption of a technology and this is very vital in attracting customers.

For the aforementioned reasons, this study is being undertaken to discuss Electronic banking and E-loyalty of deposit money banks in Port Harcourt

Aim and Objectives of the Study

The study examined the relationship between Electronic banking and E-loyalty of deposit money banks in Port Harcourt.

The specific objectives of this study were to;

(1) Determine the relationship between internet banking and E-loyalty of deposit money banks in Port Harcourt.

(2) Determine the relationship between mobile banking and E-loyalty of deposit money banks in Port Harcourt.

(3) Determine the relationship between ATM and E-loyalty of deposit money banks in Port Harcourt.

(4) Determine the moderating effect of network service on electronic banking and E-loyalty of deposit money banks in Port Harcourt.

Research Questions

The research question was deduced from the objectives of the study and they were intended to throw more light into the subject under investigation as the researcher attempts to provide answers to them. The following were the research questions:

1. To what extent does internet banking relate with E-loyalty of deposit money banks in Port Harcourt?
2. To what extent does mobile banking relate with E-loyalty of deposit money banks in Port Harcourt?
3. To what extent does ATM relate with E-loyalty of deposit money banks in Port Harcourt?

4. To what extent does network service relate with Electronic banking and E-loyalty of deposit money banks in Port Harcourt?

Research Hypotheses

To provide solution to the research questions, the following hypotheses were formulated;

Ho_1: Internet banking has no relationship with intention to use banking services of deposit money banks in Port Harcourt.

Ho_2: Internet banking has no relationship with customer satisfaction of deposit money banks in Port Harcourt.

Ho_3: Internet banking has no relationship with viral referral of deposit money banks in Port Harcourt.

Ho_4: Mobile banking has no relationship with intention to use banking services of deposit money banks in Port Harcourt.

Ho_5: Mobile banking has no relationship with customer's satisfaction of deposit money banks in Port Harcourt.

Ho_6: Mobile banking has no relationship with viral referral of deposit money banks in Port Harcourt.

Ho_7: ATM has no relationship with intention to use banking services of deposit money banks in Port Harcourt.

Ho_8: ATM has no relationship with satisfaction of deposit money banks in Port Harcourt.

Ho_9: ATM has no relationship with viral referral of deposit money banks in Port Harcourt.

Ho_{10}: Network service has no relationship with Electronic banking and E-loyalty of deposit money banks in Port Harcourt.

Literature Review

Theoretical Foundation

The theoretical foundation of this study is based on the Diffusion of Innovations theory (DOIs), Decomposed theory of planned behavior (DTPB), and Technology acceptance model (TAM).Most empirical studies have relied on these theories when discussing Electronic baking and E-loyalty.

Diffusion of Innovation Theory

The concept of Diffusion of Innovations theory was developed by Everret M. Rogers in 1962. Rogers (2003) defines diffusion of innovation as the process in which an innovation is transmitted via certain channels over time among members of a social system. He asserts that

an individuals' intention to adopt a technology follows through a procedure required to carry out that activity. He further explains how a technology is been adopted, why it is adopted and also the adoption rate. Medlin (2001); & Parisot (1995), affirmed that Rogers' diffusion of innovations theory is the most appropriate for investigating the adoption of technology in higher education and educational environments. The main critical factors that determine the adoption of an innovation at the general level are: relative advantage, compatibility, complexity, triability and observability.

Researchers like Tan &Teo (2000), Gerrard & Cunningham (2003), and MdNor and Pearson (2008), had tested the theory on the Electronic banking adoption. According to them, the nominalized factors are complexity, triability and observability. In fact, much diffusion research involves technological innovations so Roger uses the word "technology" and "innovation" synonymously.

Rogers (2003), postulated that a technology is a design for instrumental action that reduces the uncertainty in the cause-effect relationships involved in achieving a desired outcome that is composed of two parts: hardware and software. He further states that the hardware is the tool that embodies the technology in the form of a material or physical object, while the software is the information base for the tool. Since software (as a technological innovation) has a low level of observation, its rate of adoption is quite slow. As expressed in our study, communication and service channel represents ATM, internet (PC), and mobile banking time, and social system are the four key components of the diffusion of innovations.

Theory of Planned Behaviour
The theory of planned behavior otherwise known as the Decomposed Theory of Planned Behavior (DTPB) was propounded by Taylor &Todd in 1995. Taylor and Todd (1995), defined the decomposed theory of planned behavior as an individual's intention to use a technology which is being influenced by his attitude, subjective norm and perceived behavioral control. Stating from the research conducted by Md Nor and Pearson (2008) and Cheung and Chang (2009), certain influencing factors were selected which are attitude towards a behavior and the perceived behavioral control.

Taylor and Todd (1995) opined that attitude towards the behavior reflect the extent to which this behavior is either favorably or unfavorably evaluated. Pavlou *et al* (2016), described subjective norm as a person's perception of the important others' expectations (i.e. reference groups)about a specific behaviour. He further explains that the result of the subjective norm on behaviour intention is called the "compliance effect". Van (2002); submit that perceived behavioral control is "a person's perception of how easy or difficult it would be to carry out behaviour" .Also that this is affected by the perception of one's own skills but also by the eventual constraints or facilitators in the context of the decision.

Technology Acceptance Model
The third model is technology Acceptance Model theory which was developed by Fred Davis in 1985. Ozuru (2015), submit that technology acceptance model is an information system theory that outlines how consumers come to terms with a technology and also how they use it.

According to Davis (1989), users' motivation can be explained by three key factors: perceived ease of use, perceived usefulness, and attitude toward using the system. He further hypothesized that the predisposition of a consumer towards a system was a major determinant of whether he or she will get to use or reject the system. Klöckner, and Matthies (2004), postulate that the attitude of auser is considered to be influenced by two major beliefs: perceived usefulness and the perceived ease of use, with perceived ease of use having a direct influence on perceived usefulness. These three theories focus on how consumers come to terms with new technology. Ovia (2001), submits that Electronic banking is a new technology , especially in Nigeria and theoretically it should be one that when adopted ,the consumer should derive optimum satisfaction hence deposit money banks are to deploy need satisfying and easy to use Electronic banking platforms.

Conceptual Framework
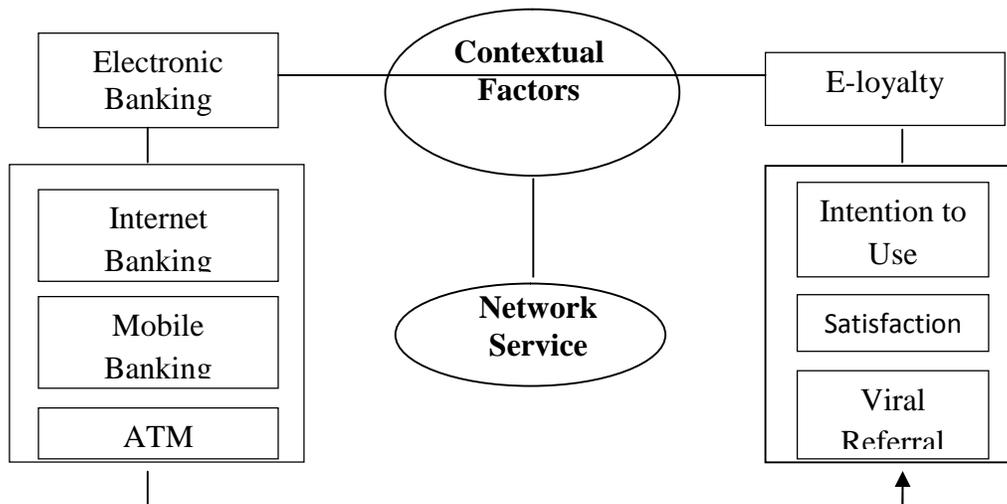
Fig. 1.1: Conceptual Frame Work of Electronic Banking and E-loyalty.
Source: Researcher conceptualization from review of related literature, 2018.
The context of this study is focused on the discussion of Electronic Banking and E-loyalty of deposit money banks in Port Harcourt. The independent variable is Electronic banking, whereas the dependent variable is E-loyalty. Network Service is used to moderate the relationship between the independent and the dependent variable. The independent variable and its dimensions are discussed in details in relationship with the measure of the dependent variable.

Empirical Review

Relationship between Internet Banking and E-loyalty
Several studies have been done on the relationship between internet banking and customer loyalty with most agreeing that there is a significant relationship between this two. Researchers like Martensen *et al*. (2000) explored the relationship between internet banking and e-loyalty in the banking industry using Hand bank in Sweden. The methodology and empirical parts of the study were carried out using the quantitative and survey method. Both Internet survey and

personal survey method were used to administer the questionnaire to a sample size of 221 respondents, based on multiple regression analysis and statistical report as well as on Hans's banks internal documents. The findings of the study revealed that there is a significant role of internet banking in forming customer loyalty in the electronic space and that there is a positive effect on E-loyalty resulting from continued activities of internet banking transactions.

According to Ribbink *et al.* (2004), he postulated that when customers feel okay with a specific banks' internet banking platform, they are willing to continually use the bank, they are satisfied and eventually refer people to the bank to try the product as well. Moreover, other researchers have found a direct effect of internet banking on customer e-loyalty. Similarly, in a study by Cyr *et al*. (2007), in Malaysia, where data was collected using primary data collection method and 130questionnaires were distributed to target respondents who are students of a public university using multiple regression analysis revealed that internet banking efficiency is the prime factor which can determine the success of online customer relationship hence e-loyalty.

Also as submitted by Neuborne (2000), internet banking makes bank customers become loyal to a bank such that they become adamant in trying other banks Electronic banking application this in a nut shell is the height of E-loyalty. Kim *et al*. (2004), submit that internet banking was regarded as an essential feature for winning customer E-loyalty in the electronic world of banking today.

Lastly, Morgan and Hunt (1994) concluded that internet banking, influences customers E-loyalty at such banks should leverage on that for sustained market share growth.

Relationship between Mobile banking and E-loyalty

Research have been carried out by scholars on the impact of mobile banking on e-loyalty and most have unanimously agreed that a banks' mobile banking app plays a major role in enhancing the competitive edge of that bank over the others hence fostering E-loyalty. According to Fabunmi, (2011), he posits that customer retention is by far more economical than acquiring new ones and this is what mobile banking helps in doing.

Pu'schel, Mazzon and Hernandez (2010), examined the effect of mobile banking on e-loyalty. The population of the study included all working banks in Pakistan which have sites on the internet for the periods of 2005-2010. The result from the data analysis that was gathered from the study instrument (270 questionnaires) showed that there is a correlation between mobile banking and e-loyalty. Results of the analysis revealed that mobile banking is essential and has a positive impact on E-loyalty as it enhances the customers' access to the bank and also his ability to easily reach out to his deposit in the bank. This kind of mechanism he added has a way of fostering relationship and ultimately, E-loyalty. Also given the high number of phone users and its affordability, this dimension of Electronic banking is open and accessible to all and sundry with no hitches, hence this makes it easy for that relationship between the banks and its customers (Amin *et al*., 2007).

Similarly, Onodugo (2015) concluded that mobile banking has a significant relationship with E-loyalty as the former smolders banker customer relationship, makes the customer trust

his bank and gives the bank a sense of relief with the consciousness that he is a "phone-away" from his bank and his funds.

Relationship between ATM and E-loyalty

A stream of researchers have argued that in banking sector, the strategic focus of banks is to remain competitive in order to retain as many customers as possible Cohen *et al*. (2006).In a study by Ogunlowore and Oladele (2014), in Nigeria, using the sample survey method where he administered questionnaires to 120 respondents, using the simple percentage to analyze and chi square to test, revealed that ATM has a significant relationship with E-loyalty.

Similarly, Fanawopo (2014) submits that ATM has a positive turn out with E-loyalty as the Automated teller machine has really helped banks in getting their customers close to them thereby enhancing customer loyalty. Frame and white (2012)concluded that ATM, influences customers E-loyalty as Customers virtually carry their funds in a card and are able to pay bills etc. with the card at ease. It further posits that there is indeed a relationship between ATM and E-loyalty.

Relationship between Network Service, Electronic Banking and E-loyalty

The application of network is essential for an effective information communication technology enabled system which is especially true in the case of banks with a branch network. This is because Electronic banking services are not carried out in space but rather are aided by networks either local area network(LAN) or wide area network (WAN) that facilitates the transfer of customer financial data among banks on different platforms, (Carys, 2005).

According to Laudon and Laudon (2009,) banks require networks to allow access to remote machines such as the file transfer protocol (FTP) which is a standard protocol for transferring files from computer to computer. This enables for electronic banking through connections to bank for a wide variety of services like mobile banking, internet banking and ATM. Also Osabuohien (2005) asserts that the network used for the transmission of customers financial data ought to meet specified confidentiality and integrity requirements.

In a recent study by Ameako (2012), in Ghana, where data was collected using the survey method and questionnaire was administered to a sample size of 100 respondent, using the multiple regression analysis. Results of the analysis revealed that the efficiency and effectiveness of a bank's network server affects the performance of its electronic banking services which in turn affects the loyalty status of customers. Similarly, Akinuli (2009) conducted a study in Nigeria trying to find out the relationship between network efficiency and loyalty of electronic banking adopters. Using GTB as a study with the survey method where 80 copies of questionnaires were administered to the bank customers and retrieved and analyzing with the chi square statistical tool. The study showed that there exist a significant relationship between Electronic banking and customer loyalty when the network is efficient.

Osabuohien (2005) concluded that banks are expected to implement proxy type firewalls to secure customers data and hinder a link between the banks back end systems and the internet as this will prevent hackers from gaining information which are used to hold customers at ransom and ultimately bringing about dissatisfaction.

Methodology

This study focuses on establishing the relationship between Electronic Banking and E-loyalty and as such it is a causal research. The research adapted a cross-sectional design aspect of quasi-experimental design. The population of this study consist of customers of the 21 operational deposit money banks in Port Harcourt, who use one of form of Electronic banking platform or the other, and according to CBN Bulletin (2016), they are approximately 2 million in number (CBN Bulletin 2016). Taro Yamen formula was adapted to arrive at 399 sample size. Questionnaires were distributed to customers of the 21 deposit money banks, using the simple random sampling techniques, 19 copies were distributed to each bank branch to help us arrive at the sample size of 399. However, 381 of the distributed questionnaire were retrieved and used for the study. The relationships between the variables were ascertained with Pearson product moment correlation while Partial correlation was adapted to examine the impact of network service on their relationships.

Data Analysis and Result

Table 1. Correlation Analysis showing the relationship between internet banking, intention to use, satisfaction, and viral referral

Correlations

		Internet Banking	Intention To Use	Satisfaction	Viral Referral
Internet Banking	Pearson Correlation	1	635**	.556**	.612*
	Sig. (2-tailed)		.000	.000	.000
	N	381	381	381	381
Intention To Use	Pearson Correlation	.635**	1	*	.
	Sig. (2-tailed)	.008		.	.
	N	381	381	381	381
Satisfaction	Pearson Correlation	.556**	.	1	.
	Sig. (2-tailed)	.000	.		.
	N	381	381	381	381
Viral Referral	Pearson Correlation	.612*	**	*	1
	Sig. (2-tailed)	.000	.	.	
	N	381	381	381	381

**. Correlation is significant at the 0.05 level (2-tailed).

Source: Field Survey Data, 2018, SPSS 2.1 Output

Table 1 above reveals a Pearson's correlation coefficient of 0.635, 0.556 and 0.612 for internet banking in relation to intention to use, satisfaction, and viral referral respectively with probability value of 0.000 (**PV< 0.05**). This result indicates that internet banking has a strong

positive and significant relationship with intention to use and viral referral while a moderate (*significant*) relationship with satisfaction. Therefore, we reject the null hypotheses and accept the alternate hypotheses which state that internet banking has a relationship with intention to use, satisfaction and viral referrals of deposit money banks in Rivers State.

Table 2 Correlation Analysis showing the relationship between mobile banking, intention to use, satisfaction, and viral referral

Correlations

		Mobile Banking	Intention To Use	Satisfaction	Viral Referral
Mobile Banking	Pearson Correlation	1	.778[**]	.713[**]	.847[**]
	Sig. (2-tailed)		.000	.000	.000
	N	381	381	381	381
Intention To Use	Pearson Correlation	.778[**]	1	[**]	[**]
	Sig. (2-tailed)	.000		.	.
	N	381	381	381	381
Satisfaction	Pearson Correlation	.713[**]	[**]	1	[*]
	Sig. (2-tailed)	.000	.		.
	N	381	381	381	381
Viral Referral	Pearson Correlation	.847[**]	[**]	[*]	1
	Sig. (2-tailed)	.000	.	.	
	N	381	381	381	381

**. Correlation is significant at the 0.05 level (2-tailed).
Source: Field Survey Data, 2018, SPSS 21 Output

Table 2 above reveals a Pearson's correlation coefficient of 0.778, 0.713 and 0.827 for mobile banking in relation to intention to use, satisfaction, and viral referral respectively with probability value of 0.000 (**PV< 0.05**). This result indicates that mobile banking has a strong positive and significant relationship with intention to use and satisfaction while a very (*significant*) relationship with viral referral. Therefore, we reject the null hypotheses and accept the alternate hypotheses which state that mobile banking has a relationship with intention to use, satisfaction and viral referrals of deposit money banks in Rivers State.

Table 3 Correlation Analysis showing the relationship between ATM, intention to use, satisfaction, and viral referral

Correlations

		ATM	Intention To Use	Satisfaction	Viral Referral
ATM	Pearson Correlation	1	.880[**]	.607[**]	.721
	Sig. (2-tailed)		.000	.000	.000
	N	381	381	381	381
Intention To Use	Pearson Correlation	.880[**]	1	.[**]	.[**]
	Sig. (2-tailed)	.000		.	.
	N	381	381	381	381
Satisfaction	Pearson Correlation	.607[**]	.[**]	1	.[*]
	Sig. (2-tailed)	.000	.		.
	N	381	381	381	381
Viral Referral	Pearson Correlation	.721	.[**]	.[*]	1
	Sig. (2-tailed)	.000	.	.	
	N	381	381	381	381

**. Correlation is significant at the 0.05 level (2-tailed).
Source: Field Survey Data, 2018, SPSS 21 Output

Decision:

Table 3 above reveals a Pearson's correlation coefficient of 0.880, 0.607 and 0.721 for ATM in relation to intention to use, satisfaction, and viral referral respectively with probability value of 0.000 (**PV< 0.05**). This result indicates that ATM has a *very* strong positive and significant relationship with intention to use while a strong relationship with satisfaction and viral referral. Therefore, we reject the null hypotheses and accept the alternate hypotheses which state that ATM has a relationship with intention to use, satisfaction and viral referrals of deposit money banks in Rivers State.

Table 4 Partial Correlation Analysis showing network service's moderating effect on Electronic Banking and E-loyalty.

Correlations

Control Variables			Electronic Banking	E-Loyalty
Network Service	Electronic Banking	Correlation	1.000	.712
		Significance (2-tailed)	.	.000
		Df	0	369
	E-Loyalty	Correlation	.712	1.000
		Significance (2-tailed)	.000	.
		Df	381	0

**. Correlation is significant at the 0.05 level (2-tailed).

Source: Field Survey Data, 2018, SPSS 21 Output

Table 4 above reveals a partial correlation coefficient of 0.712 and probability value of 0.000 (**PV< 0.05**). This result indicates that network service has a strong positive and significant relationship between electronic banking and e-loyalty. Therefore, we reject the null hypotheses and accept the alternate hypotheses which state that network service has a significant relationship with electronic banking and e-loyalty of deposit money banks in Rivers State.

Discussion of Findings

Relationship between Internet Banking and E-loyalty
The result of Ho_1: Internet banking has no relationship with intention to use, Ho_2**:** Internet banking has no relationship with customer satisfaction, Ho_3: Internet banking has no relationship with viral referral, indicated that a positive relationship exist among internet banking, intention to use, satisfaction, and viral referral with a Pearson's correlation of *0.635, *0.556 and *0.612 respectively. It also reveals that while strong relationship exists between internet banking and intention, and viral referral; there was a moderate relationship between internet banking and satisfaction.

More also, it has been revealed that the findings of the study are in affirmation with theoretical and empirical studies of other researchers in similar subject matter. For instance, Adewoye (2007) revealed that there is a significant role of internet banking in forming customer loyalty in the electronic space and that there is a positive effect on E-loyalty resulting from continued activities of internet banking transactions. Also, the study of Amin (2009), agreed that internet banking efficiency is the prime factor which can determine the success of online customer relationship and e-loyalty.

Relationship between Mobile Banking and E-loyalty
The result of Ho_4:Mobile banking has no relationship with intention to use,Ho_5:Mobile banking has no relationship with customer's satisfaction**,**Ho_6: Mobile banking has no relationship with viral referral, indicated that positive relationship exist among mobile banking, intention to use, satisfaction, and viral referral with a Pearson's correlation of *778, *0.713 and *0.847 respectively. It also reveals that while strong and positive relationship exists between mobile banking and intention, and satisfaction; there is a very strong and positive relationship between mobile banking and viral referral.

More also, it has been revealed that the findings of the study are in affirmation with theoretical and empirical studies of other researchers in similar subject matter. For instance, the study of Dick and Kunal (2004) revealed that mobile banking is essential and has a positive impact on E-loyalty. Similarly, Onodugo (2015) concluded that mobile banking has a significant relationship with E-loyalty. These studies justifies claim that there is positive connection between mobile banking and loyalty of mobile banking users.

Relationship between ATM and E-loyalty
The result of Ho_7: ATM has no relationship with intention to use, Ho_8: ATM has no relationship

with satisfaction, Ho$_9$: ATM has no relationship with viral referral indicated that positive relationship exist among ATM, intention to use, satisfaction, and viral referral with a Pearson's correlation of *880, *0.607 and *0.721 respectively. It also reveals that while strong and positive relationship exists between ATM and satisfaction and viral referral; there is a very strong and positive relationship between ATM and satisfaction.

More also, it has been revealed that the findings of the study are in affirmation with theoretical and empirical studies of other researchers in similar subject matter. For instance, Ogunlowore and Oladele (2014) revealed that ATM has a significant relationship with E-Loyalty. Other studies like Fanawopo (2014), and Frame and white (2012) agreed that ATM has a positive turn loyalty of E-banking users as it enables customers to make purchase and pay bills at ease.

More also, the multiple regression analysis reveals that all the dimensions of the independent variable (i.e. internet banking, mobile banking and ATM) had great impact on the variations of the measures of the dependent variables (intention to use, satisfaction and viral referral).

Relationship between Network Service, Electronic Banking and E-loyalty

The result of Ho$_{10}$, Network service has no relationship with Electronic banking and E-loyalty indicated that positive relationship exist among e-banking and e-loyalty with a Partial correlation of *712. The result revealed that there is a strong moderating effect of network service on E-banking and E-loyalty. This implies that network service has the ability to affect the activities of e-banking at the same time e-loyalty.

Our findings are also consistent with some other researchers view as the study of Laudon and Laudon (2009), agreed that banks require networks to allow access to remote machines such as the file transfer protocol (FTP) which is a standard protocol for transferring files from computer to computer. Even Ernest and Fadiya (2012) agreed that network server affects the performance of its electronic banking services which in turn affects the loyalty status of customers.

Conclusion

This study investigated the relationship between Electronic banking and E-loyalty of deposit money banks in Port Harcourt. And went further to ascertain the extent of the relationship between the dimensions of electronic banking (internet banking, mobile banking & ATM) and the measures of e-loyalty (intention to use, satisfaction and viral referral). Hence, the following conclusions were drawn from the study findings and hypotheses.

Electronic banking is strongly related to E-loyalty also that there is a significant relationship between internet banking and intention to use, internet banking and viral referral, mobile banking and intention to use, mobile banking and satisfaction, mobile banking and viral referral, ATM and intention to use, ATM and satisfaction, ATM and viral referral. Hence, easy to use and secured internet banking, mobile banking and ATM positively enhance intention to use, satisfaction and viral referral.

Internet banking has a moderate relationship with satisfaction. Therefore internet

banking does not really give optimum satisfaction to customers of deposit money banks in Port Harcourt.

Network service has a significant relationship with Electronic banking and E-loyalty. Thus a good network service on the dimensions of Electronic Banking will bring about E-loyalty by ways of intention to use, satisfaction and also viral referral.

Recommendations

From the research analysis and conclusions above, the following recommendations were made to help banks:

1. Bank technical team and system developers, should ensure that sites and apps are designed with optimum simplicity to ensure ease of use and reduce TAT (turnaround time).

2. Electronic banking platforms should have a two way authentication factor to ensure privacy and mitigate security risk. Also sites and apps should be updated continuously for improvement.

3. Banks should improve on its information management and audit online such that customers suggestions, can serve as pool for improvement while complaints should be attended to promptly.

4. Bank customers with new ideas about the sites and apps should be encouraged and motivated in order to be build confidence in the system and long term loyalty.

5. Since from the study, majority of electronic bank users are educated adults, bank sites and apps should be designed to pop up life nuggets, motivational quotes and job openings, in order to fill in emotional and financial needs.

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