BRJ BASIC RESEARCH JOURNALS

Basic Research Journal of Business Management and Accounts ISSN 2315-6899 Vol. 6(1) pp. 01-10 January 2017
Available online http//www.basicresearchjournals.org

Full Length Research Paper

The role of e-banking on operational efficiency of banks in Nigeria

[1]Taiwo, J.N, [2]Agwu, M. E*

[1]Senior Lecturer, Department of Banking and Finance, Covenant University, Ota, Ogun State
[2]Associate Professor of Strategic Management, Department of Business Management, College of Business and Social Sciences, Covenant University, Ogun State, Nigeria AND Adjunct Lecturer/External dissertation supervisor for Global MBA students at Manchester Business School, United Kingdom

*Corresponding author email: edwinagwu@yahoo.co.uk or edwin.agwu@covenantuniversity.edu.ng or joseph.taiwo@covenantuniversity.edu.ng

Accepted 28 January 2017

ABSTRACT

With the proliferation of the internet, coupled with the growing acceptance of the digital lifestyle and the world becoming increasingly addicted to e-business, the trend of cash transactions is now giving way to electronic payment system. Considering the rapid spread in the adoption of electronic banking as a channel for performing various bank transactions among banks in Nigeria, this study investigated the roles e-banking adoption has played in the performance of organizations using a case study of commercial banks in Nigeria. Hence the objective of the study was to determine the role of e-banking on the operational efficiency of commercial banks in Nigeria. In pursuance of this objective, primary data were obtained by administering questionnaires to staff of four purposively selected banks (Ecobank, UBA, GTB and First bank). Pearson correlation was used to analyse the results obtained using the Statistical Package for Social Sciences (SPSS) and it was observed that banks' operational efficiency in Nigeria since the adoption of electronic banking has improved compared to the era of traditional banking. This improvement was noticed in the strength of banks, revenue and capital bases, as well as in customers' loyalty. It was concluded that the introduction of new channels into their e-banking operations drastically increased bank performances, since the more active customers are with their electronic transactions the more profitable it is for the banks.

Keywords: Electronic Banking, Traditional Banking, Nigerian Banking Sector, Operational Efficiency

Background of the study

With the proliferation of the internet, coupled with the world increasingly addicting to e-business, the trend of cash transactions is now giving way to electronic payment system. This growing acceptance of the digital lifestyle, as stated in Salehi and Alipour (2010), has brought a significant transformation in customers' expectations from their financial service providers. According to Offei and Nuamah-Gyambrah (2016), customers are now seeking for a faster and convenient technology with more rewarding banking experience. Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are two factors mentioned in Davis's Technology Acceptance Model (TAM) that influences users' decision to use a particular technology system (Surendran, 2012), users will eventually lose interest in e-banking if they feel that it is no longer useful even if the system is somewhat easy to handle (Obiri-Yeboah et al., 2013). Therefore banks that fail to respond to the emergence of e-banking

in the market are likely to lose their customers (Salehi and Alipour, 2010); Lee (2009) stressed that its adoption seem not to be yielding the anticipated results, thereby creating a gap between the actual returns and its proposed objectives.

Besides the high cost of transactions and epileptic network connections associated with e-banking system in Nigeria, the introduction of e-banking into banking operations brought an increase both in the volume of deposits, as well as fraudulent practices (Agwu and Carter, 2014). Even with the aim of using it to decongest banking halls, these halls are most of the time still full with customers. If these situations are not dealt with accordingly, it could result into some negative consequences since the more active customers are with their electronic transactions the more profitable it is for the banks and a dis-satisfied customer leaves an organization with negative word of mouth publicities about the organization (Hoseiniand& Dangoliani, 2015). In this light, this paper investigated the role which e-banking has played in the operational efficiency of banks in Nigeria. Specifically, can we say the traditional banking has been more profitable than E-Banking?

Review of literature

As a result of the insatiable desire for efficient services, electronic banking is fast becoming one of the pillars for organizational sustainability in the banking sector. Oni and Ayo (2010) put it that electronic banking is the most current conveyance procedure to be offered by retail banks in numerous nations. However, the changing business environment has not only extended the boundaries of e-banking but has created a problem in defining its scope. As a result, most banks have to introduce new electronic channels, but, the quality and effectiveness of these channels can only be validated with their level of acceptance. According to Hossain et al. (2013), electronic banking, though generally viewed as a means of providing traditional services in a modern way, is aimed at providing much speedier and time efficient transactions for clients with little or no paperwork involved. Compared to the traditional banking operation, the cost of offering e-banking services is less than the cost of keeping branch banking (Salehi and Alipour, 2010). Similarly, information is delivered faster between the customer and service provider and in addition, money is carried in credit cards and other electronic means (Kujur and Shah, 2015). Electronic banking, therefore, is the use of electronic means to transfer funds directly from one account to another, rather than by cheque or cash. Electronic banking was defined by Jahangir and Begum, (2008) as a term used to describe the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution. The authors further emphasized that this system uses an automated delivery approach to deliver both new and traditional banking products and services directly to customers. According to Agwu and Murray (2014), this optimal integration of all the activities of a bank through the deployment of modern information technology is based on bank process and in accordance with the organizational structure of banks. Therefore, electronic banking employs the use of information communication technology to drive banking business for immediate and future goals, hence for the banks, it is a strategic weapon used in achieving competitive advantage and increasing their market share (Agwu and Murray, 2015); Chau and Lai (2003) explains that in order to offer value added service and convenience to their customers as well as sustain their business competitiveness, more and more banks are converting from their traditional approach of “bricks and mortar” into that of “clicks and mortar” (Kujur and Shah, 2015). Investigating the e-payment system and tele-banking services in Nigeria, Agwu and Carter, (2014) revealed the existence of a very modest move away from cash payments to electronic payments. According to the authors, over fifty per cent of transactions are now being handled through electronic channels; representing a massive shift. Investment in e-banking by these banks is largely motivated by the prospects of minimizing operating costs and maximizing operating revenue. Examining the effects of electronic banking instruments on monetary policy efficiency in Nigeria, Ewubare and Tuaneh (2016) reveal that e-banking has impacted greatly on the financial efficiency of the Nigerian economy. However they made use of quarterly time series data of 2008-2011. This significant relationship existing between the practice of e-banking and operational efficiency of Nigerian banks was also found in Ekwueme et al. (2012). Empirically assessing the operational efficiency of electronic banking in Nigeria, they also found the practice of e-banking significantly increasing operational efficiency of Nigerian banks, even with the existence of some security-related issues. In the same vein but from bank growth perspective, Abubakar (2014) discovered the existence of a significant relationship between mobile banking and total deposits, as well as internet banking and total asset of deposit money banks in Nigeria. However, in the other way round, no significant relationship was found for each. According to Khrawish and Al-Sa'di (2011) e-banking services do attract high profitability for banks, as the absolute unit cost is lower than that of the fee collected from clients, but in Hossain et al. (2013), management are of the view that the cost of operating and maintaining e-banking facilities is quite high, while customers on the other hand believe the service charges are quite expensive. Nevertheless studies (Khrawish and Al-Sa'di,

2011; Abaenewe et al., 2013; John and Rotimi, 2014; Hoseini and Dangoliani, 2015), have shown the existence of a significant relationship between the quality of electronic banking services provided and customer satisfaction, as well as e-banking adoption and profitability. Furthermore, electronic banking was found in Ekwueme et al. (2012) to have immensely enhanced the keeping money administrations of banks to their clients, though the study was confined to only six banks, operating in Lagos State, Nigeria. Examining the e-banking services offered by some selected commercial banks in Bangladesh, Hossain et al. (2015) discovered that these banks' adoption of online banking do increase their customer diversity and also improve the quality of their clients. Electronic banking was concluded to have a positive impact on socioeconomic development. Khrawish and Al-Sa'di (2011), on the other hand, tested the impact of e-banking on the profitability of bank in Jordan for a period of 2000 -2009. They saw the effect of e-banking services on the profitability (measured with Return on Asset-ROA and Return on Equity- ROE) of banks in Jordan to be 'not significant'. Similarly, investigating the profitability performance of Nigerian banks following the full adoption of electronic banking system, Abaenewe et al. (2013) found out that the adoption of electronic banking has improved returns on the equity of Nigeria banks significantly but no positive improvement was established in relation to their returns on assets. However, having an understanding of the risks associated with e-banking services and evaluating the resulting risk management costs against the potential return on investment prior to offering e-banking services should be the concern of any financial institution's board and management (Kujur and Shah, 2015).

Development of electronic banking

Electronic banking is not one technology, but an attempt to merge several different technologies but each evolving in different ways (Onodugo, 2015). The first applications of the computer age within banks are the use of mainframes and minicomputers. These were used to process data such as customer accounts, bank inventories, personnel records, and accounting packages. At that period, technology was used as a support tool for banking operations, and the idea of direct customer services was less clear. Technology was then used to assist staff in doing their work faster, more conveniently, and with less human errors. According to Kondabagil (2007), the first visible face of electronic banking, Automated Teller Machine (ATM), came into commercial use in 1968. The ATM, later evolved from being a mere currency dispenser into a multifunctional device that enables customers to conduct a whole range of transactions from account management, fund transfer, to bill payments. In the latter half of the 1990s, but with the development of the Internet and the World Wide Web (WWW), customers could bank from the comfort of their homes (Salehi and Alipour, 2010) and since then, as affirmed in Offei and Nuamah-Gyambrah (2016), the banking industry has been undergoing changes, in form of innovative use of information technology and development in electronic commerce. For this reason, the emergence of e-banking can be said to be one of the advantages of e-commerce in relation to the needs of business to conduct easy, quick and precise banking operations (Hoseini and Dangoliani, 2015). With the e-banking system, settlement of transaction either national or international level is speedup; thereby bridge the gap between customer and the bank. Most of the services are being offered through several distribution e-channels with activities ranging from balance inquiry, cash withdrawals, bill payments, fund transfer, electronic payment, and loan applications, among others (Agwu and Carter, 2014). Nevertheless, e-banking system can broadly be classified into the Mobile/telephone banking, Internet banking and Smart card banking. Hossain, et al (2013); Okechi and Kepeghom (2013) explain these three classes as follows:

1. Mobile/Telephone Banking: "Mobile banking is an innovation that has progressively rendered itself in pervasive ways cutting across several financial institutions and other sectors of the economy" and with this facility any person having a mobile number is able to use his/her number as a bank account. This service uses an automated phone answering system with instructions passing via voice or short messages (SMS) to the remote computer. The computer decrypts the message and executes the instructions through a highly coded device, and then the response is given back to the customer. SMS services are operated using both the push messages (wherein banks chooses to send information to a customer's mobile phone without the customer initiating a request for the information) and pull messages (in this case, the customer initiates the request). Customers can are privileged with services like funds transfer, utility bill payment, air time top-up, balance inquiry, etc. However it has been reported that, though offered by banks in Nigeria, this service has not really gained recognition among the banking public and is still a far cry from what is expected in terms of its usage.
2. Internet banking: Though facilitates other transactions, e-commerce one area greatly facilitated by this service. Internet banking allows customers of a financial institution to conduct financial transactions on a secure website operated by the institution, which can be a retail or virtual bank, credit union or building society. To access the online banking facility,

customers have to register with the institution for the service, and set up some password (under various names) for customer verification. Though some banks do experience high patronage of this service, report by banks' staff the general patronage of this service is somewhat between low and medium.

3. Smart Card Banking: this is the conduct of banking transactions through the use of electronic cards (value card, verve card, naira credit card, visa card, master card). The smart card system makes it easy for bank customers to have access to cash, carry out transfers and make enquiries about their accounts without visiting the banking hall. The Verve card is the first chip card accepted on all available payment channels in Nigeria; allowing holders to conveniently pay for goods and services on all ATMs, Point of Sale (POS) machines, Web, etc connected to the InterSwitch network. The chip technology guarantees that information stored is not accessible to unauthorized persons. The ATM still remains the most widely used form of e-Banking service because of its convenience, ease of use, time saving ability and fitting to customers' transaction needs.

Advantages of electronic banking

The transition to electronic banking, as opined in Chemtai (2016) offers major opportunities in terms of competitive advantage. Specifically, it provides banks with the opportunity to develop a stronger and more durable business relationship with their customers. For instance, it makes access to finance from banks attractive with funds appearing to be much more available (Salehi and Alipour, 2010), and customers are given the opportunity to conduct banking transactions with great peace of mind and at their convenience (Offei and Nuamah-Gyambrah, 2016). Before the introduction of electronic banking, transactions took a lot of time to execute and this was tiring. Now, services are rendered quicker with transactions much more accurate hereby saving time, as well as reducing human errors and clerical overhead cost. Some other benefits derived from e-banking are increased customer satisfaction, expanded product offerings and extended geographic reach. These have helped to attract more customers since the level of satisfaction is high and also helped to conserve the energy of employees therefore giving them the opportunity to put in their best into the roles they have to play in the bank. The advantages of e-banking can thus be summarized into increased bank productivity (Chemtai, 2016), increased comfort and timesaving, quick and continuous access to information, better cash management (Salehi and Alipour, 2010) and improved customer experience (Onodugo, 2015).

Disadvantages of electronic banking

It must be noted that, while electronic banking provides many benefits to customers and banks, the cost of its implementation and maintenance is high. Equipment and machines used to aid electronic banking are quite expensive and may not be easily affordable. Fraud is another major downturn; for example credit card fraud, foreign exchange fraud, stolen cheques, etc. Most perpetrators of fraud use their knowledge of information technology to the detriment of others by creating malicious programs that are used to tamper with vital information. As affirm in Kujur and Shah (2015), compared to developed countries, developing countries face many impediments while implementing e-banking initiatives since if not well managed, could aggravate traditional banking risks such as Transaction/Operations risk arising from fraud, processing errors, system disruptions, or other unanticipated events, strategic risk resulting from poor e-banking planning and investment decisions and security risk wherein customers' rights and information are not adequately safeguarded and provided for. Some other disadvantages of e-banking include unemployment, insufficient skilled personnel with information security expertise, and low level of IT appreciation among customers with over dependence on cash for all types of transactions. In addition, e-banking encourages excessive spending since customers can easily make payments any time and place and also have access to cash even on non-working days via the ATMs, (Karjaluoto et al., 2009).

The development of electronic banking in Nigeria

Banking in Nigeria has come a long way from the time of ledger cards and other manual filling systems (Offei and Nuamah-Gyambrah, 2016). Then, it was a very tedious and a cumbersome profession, with bulky files kept and retrieved manually, and customers having to stand on long queues for a long time and sometimes might at the end of the day not achieve their aim. Now, there is no bank in the country that does not render one form of e-banking service or the other, even banks in the most remote parts of the world (John and Rotimi, 2014). In the bid to catch up with the changing nature of modern banking, the ATM was introduced into the Nigerian banking system in 1989 as an electronic delivery channel and followed by the introduction of mobile telephone in 2001. Mobile banking is an innovation that has progressively rendered itself in pervasive ways cutting across several financial institutions and other sectors of the economy. The growth of electronic banking in Nigeria can therefore be associated to the decision of banks to make greater use of e-banking facilities to provide better

services (Abaenewe et al., 2013; Agwu and Murray, 2014).

Though electronic banking officially came into inception in 1996 (Ekwueme et al., 2012); Abubakar (2014) puts it that, the evolution of electronic banking in Nigeria can be traced to 1986 when the banking sector was deregulated resulting into a far- reaching transformation through computerization and improved bank service delivery. However, the non-provision of adequate security for fraud prevention as well as high literacy level, do negatively impact on e-banking in Nigeria. Similarly, the epileptic network connectivity services and erratic power supply, in general, is a great concern to the use of e-banking in Nigeria, as customers are not likely to be able to transact business at their own convenience, thereby hindering the development of an efficient monetary transfer system. This is because, as suggested in Onodugo (2015), to ensure the efficient application of electronic banking in Nigeria, critical infrastructure such as power, security and telecommunication should be strengthened. In the same vein, John and Rotimi, (2014) confirmed that e-banking has increased banking cost and charges for both the banks and their customers respectively. However, they were of the opinion that the availability of sufficient support and in-depth knowledge from the bank and its employees will contribute significantly in encouraging customers to use the technology. Outside this, with the introduction of e-banking, customer can be said to have easily carry out most bank transactions without having to visit the banking halls; bills can now be paid and even phones can be recharged via the use of ATMs, POS, online and mobile banking, and so on. Furthermore, the rate at which cash are being carried is quite much reduced.

Organizational performance

Most recent operations-related researches have this basic assumption that technological innovation has a direct bearing on performance improvement (Chemtai, 2016); Abubakar (2014) explained that, e-banking has the potentials to improve productivity, growth and profitability performance of banks due to low cost advantages associated with the delivery of its services. The concept of organizational performance is connected to the ideas of growth and sustainability and businesses typically try to perform well in a number of areas. First they try to perform well financially, that is, realize a good return on their investment. Secondly, they try to gain much of the market share and thirdly, they try to create more value for their stakeholders. Creation of sustainable growth is a prime concern of businesses, however, achieving this goal is no easy task, given the rapidly changing political, economic, competitive, and consumer trends. Abaenewe et al. (2013) related bank performance, generally to how it has fared within a trading period in relation to the realization of its objectives. Indeed, there are many parameters a company can select to measure its growth but the most meaningful yardstick is the one that shows progress with respect to the ultimate goal of making profit, such that the size of the bank, the volume of deposit and its profitability were seen to be more reliable in measuring banks' performance (Abaenewe et al., 2013). However, according to Ekwueme et al. (2012), operational efficiency of e-banking can be assessed by critically evaluating the banking operations between the pre and post e-banking period.

METHODS

This study was designed to ascertain bank's staff perceptions on the role of electronic banking on organizational performance; for this reason the survey design was employed to evaluate the effectiveness of the following e-banking channels- internet banking, smart card banking and mobile/telephone banking in the performance of deposit money banks in Nigeria. There are currently 21 deposit money banks in Nigeria with different branches spread across the 36 states of the country, but only four of these banks- Ecobank Nigeria Plc, United Bank of Africa (UBA), Guarantee Trust Bank (GTB) and First Bank Nigeria Plc (FBN) were purposely selected. However, their Ogun state and Lagos state branches were used for this study due to their proximity and for a clear and precise study. Primary data were collected with the aid of the questionnaire which was administered personally to staffs of these branches, who are the key developers, administrators and users of this service. A total of 100 questionnaires were administered using the simple random sampling technique to 25 respondents each from the four selected banks' branches. Secondary data were also used in the study but collected from the Central Bank of Nigeria's electronic banking guideline, financial statement of the selected banks, Nigeria Deposit Insurance Corporation (NDIC) annual reports and symposium papers on topics related to the study.

Data collection instrument

A comprehensive research instrument was developed for this study to address the following research questions:

1. What role does electronic banking play in operational efficiency of deposit money banks?
2. How viable is electronic banking in deposit money banks in Nigeria?

3. Is electronic banking secure enough to ensure adequate patronage for good performance in the financial services industry?

Instrument validity and reliability

The instrument validity was ascertained using a number of ways, which include discussing the questionnaire with colleagues and masters in this field and then pre-testing the instrument in a pilot study after which the content validity was measured. Comments were received on the acceptability of the instrument vis-à-vis its length and ethical considerations. These comments as well as all other necessary adjustments were later taking into consideration in designing the final questionnaire that was used to generate data for the study. The reliability of the instrument was established by using the test-retest method. This was done by administering the same instrument to another set of respondents.

Method of data analysis

The gathered information was processed using the Statistical Package for Social Sciences (SPSS) and the correlation analysis was exercised in order to test the hypothetical questions of the study. The Pearson correlation method was used to test the relationship between electronic banking adoption and operational efficiency of deposit money banks in Nigeria. Analysis of response from respondents was also presented in tables, charts and percentages.

Data presentation and discussion of result

Presentation of data collected

A total of 100 questionnaires were administered to the selected four banks, out of which 82 (representing 82 percent response rate) where properly completed and returned. Out of these 82 respondents, majority were male (63.4% were male while 36.6% were female), and 39 percent have been working in the bank for less than 3 years, 37.8 percent for 4 to 6 years, 17.1 percent for 7 to 9 years, and 6.1 percent have been working for over 9 years (*see appendix)*. Similarly, only 3.7 percent of the respondents hold the WASSCE/GCE qualification and 86.6 percent strongly agree to understanding what e-banking channels are; suggesting that most of the respondents did provide relevant information. In the same vein, all respondents were in agreement with their banks having some effective and efficient e-banking channels as well as their customers making use of more than one e-banking channel but only 80.5 percent agreed to their customers having an understanding of e-banking channels. Nevertheless, 51.2 percent of the banks' staff did prefer the use of e-banking services to the traditional one while 46.3 percent preferred vice versa. However, 95.1 percent agreed to e-banking having more of its overall performance on the bank than traditional banking but 4.9 percent of the respondents could not point out a clear distinction between both approaches overall performance.

RESULTS

The role of electronic banking on banks' performance and its viability in Nigeria

On the role of electronic banking on banks' performance (*see appendix 1*), all respondents agree to e-banking channel services having improved their banks' operational efficiency than the traditional ones but only 95.1 percent agreed to e-banking services having improved the strength of their bank compared to the traditional ones. 3.7 percent could not see a difference. As regard e-banking channel services having improved their banks' profit level, 86.6 percent were in support whereas 6.1 percent disagreed; whereas in relation to banking fraud reduction, 80.5 percent did agree and 3.7 percent disagreed.

As also seen from the appendix, greater percent could not say if electronic banking has increased their banks income in the last year, but 93.9 percent agreed. Likewise, 96.3 percent agreed to some increase in their customers' loyalty as a result of e-banking but 1.2 percent disagreed. In relation to the introduction of more channels to help improve their banks' performance, 98.8 percent were in support but 81.7 percent agreed to e-banking having something to do with the increase in their banks' gross earnings as well as revenue and capital base. Though majority (93.9 percent) of the staffs were in support of the introduction of e-banking services in Nigeria banks, indicating Nigeria do follow the world trends, majority (96.3 percent) did also agree that inadequate ICT awareness can distort its development. However, security measures are positioned in these banks to prevent website information from being altered, staffs are properly educated on the operations of the channels introduced, and measures are in place to encourage customers to use these channels. This all of the staffs, 98.8 percent and 92.7 percent agreed to respectively.

Pearson Correlation

H_0 = Electronic banking is better and more profitable in increasing banks' operational efficiency in the Nigerian

Table 1. Correlation Result

		More of traditional banking should be adopted by banks to increase banks operational efficiency	Banks will attain high level of profit if e-banking is used and adapted by all customers
More of traditional banking should be adapted by banks to increase banks operational efficiency	Pearson correlation	1	.029
	sig. (2-tailed)		.796
	N	82	82
Banks will attain high level of profit if e-banking is used and adapted by all customers	Pearson correlation	.029	1
	sig. (2tailed)	.796	
	N	82	82

Source: SPSS print out, 2016

banking system than the traditional banking approach.

The result in Table 1 above, obtained from the Pearson correlation test, indicates a correlation of r = 0.029. This signifies a very weak positive correlation, which implies that though there exist a difference between the effect of traditional banking on banks' operational efficiency and that of electronic banking on banks' operational efficiency, the line of difference is very thin. Hence the null hypothesis is not accepted. On the other hand, a p-value of 0.796 was obtained and this is greater than the significance level (0.05), therefore we cannot reject the null hypothesis. As a result, we cannot say traditional banking is better and more profitable than electronic banking to the Nigeria banking system.

Summary, recommendation and conclusion

Summary

Emanating from the need to shed more light on the Nigerian banking system as it relates to banks performance through the use of e-banking channels, this research study examined the role of electronic banking and its effect on commercial banks operational efficiency. Four banks were purposively selected and the results generally indicate that with the adoption of electronic banking, banks' operational efficiency in Nigeria compared to that of the traditional banking has been improved. The difference was found to be fairly significant which could be as a result of inadequate ICT awareness. This is because, result from the study did indicate that inadequate ICT awareness have distorted the development of electronic banking in the Nigerian banking sector. However, e-banking services have specifically improved the strength of these banks, increased their gross earnings as well as revenue and capital base, and also increased their customers' loyalty. This is in line with Abaenewe, et al (2013) and Khrawish and Al-Sa'di (2011). They were of the opinion that the adoption of e-banking services do impact on banks' profitability. In addition, security measures are being positioned in these banks to prevent information from being altered, staffs are properly educated on the operations of the channels introduced, and measures are in place to encourage customers to use the channels introduced.

CONCLUSION

It is evident that electronic banking plays a significant role in banks operational efficiency in Nigeria and it is obvious that it is one of the major sources of increase in banks' general performance. Though it is still to be secured enough to ensure adequate patronage, it is possible that with the introduction of new channels, alongside technology advancement, performances of banks in Nigeria can be drastically increased. Most especially if efforts are put in place for an efficient implementation.

RECOMMENDATION

1. Result of the study discloses that most of the banks' customers have no understanding of e-banking channels despite that most of these banks e-banking channels are effective and efficient. It is therefore advised that measures should not just be put in place to encourage customers to use these channels but should be inclusive of how to educate them on how they are operated. Some banks have lost customers due to poor implementation of e-banking (Lee, (2010); John and Rotimi, 2014). Banks should not

just invest in more e-channels but rather also see to it that these channels are efficient and effective in relation to services each of them performs.

2. To increase the smooth functioning of the payment system, the government also has a major role to play in the aspect of financing and training so as to come up with improved forms of e-channels.

Recommendation for further studies

Researchers with the intention of carrying out research in this area should look into the effect of an increase in e-banking channels on the Nigerian banking sector. Will it cause an increase in customer satisfaction, gross profit of the bank, and the economy as a whole? What is the survivorship of banks if e-banking channels are totally removed from the banking system?

REFERENCES

Abaenewe ZC, Ogbulu OM, Ndugbu MO (2013). Electronic banking and bank performance in Nigeria. *West Afri. J. Industrial and Acad. Res.*6(1), 171-187.

Abubakar A (2014). The effects of electronic banking on growth of deposit money banks in Nigeria. *Europ. J. Bus. Manag.*6 (33), 79 – 89.

Adoption'', *Academy of Marketing Studies Journal*, 14(1), 2-11

Agboola AA (2006). Electronic payment systems and tele-banking services in Nigeria. *J. Internet Banking Comm.*11(3), 1-10.

Agwu ME, Carter AL (2014) Mobile phone banking in Nigeria: benefits, problems and prospects. *Intern. J. Bus. Comm. 3(6): 50-70 Available at:* http://www.ijbcnet.com

Agwu ME, Murray PJ (2014). Drivers and inhibitors to e-Commerce adoption among SMEs in Nigeria; Journal of Emerging Trends in Computing and Information Sciences, Vol. 5, No.3 March 2014 ISSN 2079-8407, pp. 192-199 Available at: http://www.cisjournal.org/

Agwu ME, Murray PJ (2015) Empirical study of barriers to electronic commerce adoption by Small and Medium scale businesses in Nigeria. *Intern. J. Innov. in the Digital Economy, (IJIDE) 6(2), 1-19, April-June 2015*. Available at: http://www.igi-global.com/journal/international-journal-innovation-digital-economy/1133

and TPB with perceived risk and perceived benefit, *Electronic Commerce Research and Applications*, Forthcoming.

Chemtai F (2016). The effects of electronic plastic cards on the firm's competitive advantage: A case of selected commercial banks in Eldoret town, Kenya. *Intern. J. Sci. Educ. Stud.* 2(2), 29-39.

Ekwueme CM, Egbunike PA, Okoye A (2012). An empirical assessment of the operational efficiency of electronic banking: Evidence of Nigerian banks. *Review of Public Administration and Management*, 1 (2), 76 -110

Ewubare DB, Tuaneh GL (2016). Impact of electronic banking instruments on monetary policy efficiency in Nigeria *Academy Of Management and Economics*, 1 (1), 1-5.

Hoseini A, Dangoliani SK (2015). Investigating the effect of electronic banking services quality on the customer satisfaction *J. Intern. Econ. Bus.* (1), 37- 42.

Hossain MM, Irin D, Islam MS, Saha S (2015). Electronic-banking services: A study on selected commercial banks in Bangladesh. *Asian Business Review*, 3(3), 53-61.

John OA, Rotimi O (2014). Analysis of electronic banking and customer satisfaction in Nigeria *Europ. J. Bus. Soc. Sci.* 3(3), 14-27

Karjaluoto H, Jarvenpaa L, Kauppi V (2009), ''Antecedents of online banking

Khrawish HA, Al-Sa'di NM (2011) The impact of e-banking on bank profitability: Evidence from Jordan. *Middle Eastern Finance and Economics*, 13, 142-158

Kondabagil J (2007). *Risk Management in Electronic Banking: Concepts and Best Practices*. Singapore: John Wiley and Sons Pte Ltd. pp. 10-18

Kujur T, Shah MA (2015). Electronic banking: Impact, risk and security issues *Intern. J. Engin. Manag. Res.* 5(5), 207-212

Lee JW (2010). ''The role of demographics as the Perceptions of Electronic Commerce

Lee MC (2009). Factors influencing the adoption of internet banking: An integration of TAM

Obiri-Yeboah K, Kyere-Djan R, Kwarteng KA (2013). The role of information technology on banking service delivery: A perspective from customers in Ghana. *Intern. J. Innov. Res. Manag.* 2 (6), 1-12.

Offei MO, Nuamah-Gyambrah K (2016). The contribution of electronic banking to customer satisfaction: A case of GCB bank limited–Koforidua. *Intern. J. Manag. Inform. Technol.* 8(1), 1-11.

Okechi O, Kepeghom OM (2013). Empirical evaluation of customers' use of electronic banking systems in Nigeria. *Afri. J. Comp. ICT*, 6(1), 7-20.

Oni AA, Ayo CK (2010). An empirical investigation of the level of users' acceptance of e-banking in Nigeria. *J. Intern. Banking and Comm.* 15 (1), 1-13.

Onodugo IC (2015). Overview of electronic banking in Nigeria *Intern. J. Multidiscipl. Res. Dev.* 2 (7), 336 -342.

Salehi M, Alipour M (2010). E-banking in emerging economy: Empirical evidence of Iran. *Intern. J. Econ. Finan.* 2(1), 201-209

satisfaction and loyalty; evidence from Finland'', *Intern. J. Electr. Finan.* 3(3): 253-269

Surendran P (2012). Technology acceptance model: A survey of literature. *Intern. J. Bus. Soc. Res.* 2(4), 175-178.

APPENDIX

		Frequency	Percent	Valid percent	Cumulative percent
Sex	Male	52	63.4	63.4	63.4
	Female	30	36.6	36.6	100.0
	Total	82	100.0	100.0	
Age	18-25	5	6.1	6.1	6.1
	26-33	46	56.1	56.1	62.2
	34 & above	31	37.8	37.8	100.0
	Total	82	100.0	100.0	
Qualification	WASSCE/GCE	3	3.7	3.7	3.7
	OND/NCE	12	14.6	14.6	18.3
	B.SC/HND	44	53.7	53.7	72.0
	MSC/MBA	17	20.7	20.7	92.7
	Valid ACCA	1	1.2	1.2	93.9
	ICAN	3	3.7	3.7	97.6
	CIBN	2	2.4	2.4	100.0
	Total	82	100.0	100.0	
How long have you been with the bank?	0-3	32	39.0	39.0	39.0
	4-6	31	37.8	37.8	76.8
	7-9	14	17.1	17.1	93.9
	10 & above	5	6.1	6.1	100.0
	Total	82	100.0	100.0	
I understand what E-Banking Channels are	SA	71	86.6	86.6	86.6
	A	10	12.2	12.2	98.8
	UN	1	1.2	1.2	100.0
	Total	82	100.0	100.0	
Do customers use more than one E-Banking channels?	SA	66	80.5	80.5	80.5
	A	16	19.5	19.5	100.0
	Total	82	100.0	100.0	
Customers have full knowledge and understand the usefulness of E-Banking channels	SA	31	37.8	37.8	37.8
	A	35	42.7	42.7	80.5
	UN	10	12.2	12.2	92.7
	D	4	4.9	4.9	97.6
	SD	2	2.4	2.4	100.0
	Total	82	100.0	100.0	
E-Banking is preferred to traditional banking	SA	30	36.6	36.6	36.6
	A	12	14.6	14.6	51.2
	UN	2	2.4	2.4	53.7
	D	27	32.9	32.9	86.6
	SD	11	13.4	13.4	100.0
	Total	82	100.0	100.0	
My bank has effective and efficient E-Banking channels	SA	56	68.3	68.3	68.3
	A	26	31.7	31.7	100.0
	Total	82	100.0	100.0	
E-Banking has more of its overall performance on the bank than traditional banking	SA	47	57.3	57.3	57.3
	A	31	37.8	37.8	95.1
	UN	4	4.9	4.9	100.0
	Total	82	100.0	100.0	

Source: Field survey, 2016

		Frequency	Percent	Valid percent	Cumulative percent
The use of E-Banking channel services has improved the banks profit level	SA	37	45.1	45.1	45.1
	A	34	41.5	41.5	86.6
	UN	6	7.3	7.3	93.9
	D	5	6.1	6.1	100.0
	Total	82	100.0	100.0	
The introduction of E-Banking channel payment services has improved the banks operational efficiency than traditional banking	SA	57	69.5	69.5	69.5
	A	25	30.5	30.5	100.0
	Total	82	100.0	100.0	
The introduction if E-Banking channel payment service has improved the banks financial strength than traditional banking	SA	43	52.4	52.4	52.4
	A	35	42.7	42.7	95.1
	UN	3	3.7	3.7	98.8
	D	1	1.2	1.2	100.0
	Total	82	100.0	100.0	
The relationship between the bank and her customers has increased and remains loyal since the introduction of E-Banking channels	SA	49	59.8	59.8	59.8
	A	30	3.6	36.6	96.3
	UN	2	2.4	2.4	98.8
	D	1	1.2	1.2	100.0
	Total	82	100.0	100.0	
E-Banking channels improved the banks income in the last financial year	SA	55	7.1	67.1	67.1
	A	22	26.8	26.8	93.9
	UN	5	6.1	6.1	100.0
	Total	82	100	100.0	
The introduction of more E-Banking channels will increase banks performance	SA	57	69.5	69.5	69.5
	A	24	29.3	29.3	98.8
	D	1	1.2	1.2	100.0
	Total	82	100.0	100.0	
E-Baking has increased the gross earnings of the bank than the traditional banking	SA	30	36.6	36.6	36.6
	A	37	45.1	45.1	81.7
	UN	14	17.1	17.1	98.8
	D	1	1.2	1.2	100.0
	Total	82	100.0	100.0	
E-Banking has increased the revenue and capital base of the bank than traditional banking	SA	35	42.7	42.7	42.7
	A	32	39.0	39.0	81.7
	UN	10	12.2	12.2	93.9
	D	5	6.1	6.1	100.0
	Total	82	100.0	100.0	
E-Banking has led to the reduction of banking fraud	SA	42	51.2	51.2	51.2
	A	24	29.3	29.3	80.5
	UN	13	15.9	15.9	96.3
	D	3	3.7	3.7	100.0
	Total	82	100.0	100.0	
Security measures are put in place to prevent web site information from being altered	SA	49	59.8	59.8	59.8
	A	33	40.3	40.3	100.0
	Total	82	100.0	100.0	
The banks staffs are properly educated on the operations of these channels	SA	52	63.4	63.4	63.4
	A	29	35.4	35.4	98.8
	SD	1	1.2	1.2	100.0
	Total	82	100.0	100.0	
Measures are set to encourage customers to use these E- channels	SA	34	41.5	41.5	41.5
	A	42	51.2	51.2	92.7
	UN	3	3.7	3.7	96.4
	D	3	3.7	3.7	100.0
	Total	82	100.0	100.0	
The introduction of E-Banking to Nigeria means that Nigeria follows the world trends	SA	50	61.0	61.0	61.0
	A	27	32.9	32.9	93.9
	UN	2	2.4	2.4	96.3
	D	3	3.7	3.7	100.0
	Total	82	100.0	100.0	
Inadequate ICT awareness can distort the development of E-Banking in the bank	SA	48	58.5	58.5	58.5
	A	31	37.8	37.8	96.3
	UN	3	3.7	3.7	100.0
	Total	82	100.0	100.0	

Source: Field Report, 2016