

The Role of E-Banking on Organization Performance in Nigeria - Case Study of Commercial Banks

Taiwo, J.N*

Agwu, M. E

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 role electronic banking adoption has played in performance of organizations using a case study of commercial banks in Nigeria. Hence the objective of the study is to determine the role of e-banking on the performance 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 analyze 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 is improved compared to the era of traditional banking. This improvement was noticed in the strength of banks, revenue and capital base, as well as in customers' loyalty. It was concluded that the introduction of new channels into their e-banking operations could drastically increase bank performance, since the more active customers are with their electronic transactions the more profitable it is for the banks.

Keywords: Electronic Banking, Traditional Banking, Organizational Performance, Nigerian Banking Sector

I. 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 & 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) and as stressed in Ramayah, Muhamad, Mohd and Mohd (2002), 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 (cited in Obiri-Yeboah, Kyere-Djan & Kwarteng, 2013, p.4). Therefore banks that fail to respond to the emergence of electronic banking in the market are likely to lose their customers (Salehi & Alipour, 2010), but as affirmed in Salehi and Alipour (2010), 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 electronic banking into banking operations brought an increase both in the volume of deposits, as well as fraudulent practices (Abaenewe, Ogbulu & Ndugbu, 2013). 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 (Hoseini & Dangoliani, 2015). In this light, this paper investigated the role which e-banking has played on banks performance since its adoption in Nigeria. Specifically, can we say the traditional banking has been more profitable than E-Banking?

II. 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 created nations. However, the changing business environment has not only extended the boundaries of electronic 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, Irin, Islam & Saha (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 & 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 & 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 Imiefoh (2012) as a term used to describe the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution (cited in Onodugo, 2015, p. 337). Onodugo further emphasize that this system uses an automated delivery approach to deliver both new and traditional banking products and services directly to customers. To Venus and Mokhtaran (2002), 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 (cited in Hoseini & Dangoliani, 2015, p.38). Therefore, electronic banking employs the use of information communication technology to drive banking business for immediate and future goals (Abaenewe, et al, 2013), hence for the banks, it is a strategic weapon use in achieving competitive advantage and increasing their market share. Chau and Lai (2003) elucidate 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” (cited in Kujur & Shah, 2015, p. 207). This was also established in Agboola (2006). Investigating the e-payment system and tele-banking services in Nigeria, Agboola revealed the existence of a very modest move away from cash payments to electronic payments. According to him, over 50 percent of transactions are now being handled through electronic channels; representing a massive shift. Investment in electronic banking by these banks is largely motivated by the prospects of minimizing operating costs and maximizing operating revenue (Simpson, 2002, cited in Abaenewe, et al, 2013, p.172). Examining the effects of electronic banking instruments on monetary policy efficiency in Nigeria, Ewubare & 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, Egbunike and Okoye (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 & Al-Sa'di, 2011; Abaenewe, et al, 2013; John & Rotimi, 2014; Hoseini & Dangoliani, 2015), have shown the existence of a significant relationship between the quality of electronic banking services provided and customer satisfaction, as well as electronic banking adoption and profitability. Furthermore, electronic banking was found in Agboola (2001) 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 (2013) discover that these banks' adoption of online banking do increase their customer diversity and also improve the quality of their clients. E-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 electronic 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 & Shah, 2015).

II.1 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 & Alipour, 2010) and since then, as affirmed in Kalakota and Whinston (1996), the banking industry has been undergoing changes, in form of innovative use of information technology and development in electronic commerce (cited in Kujur & Shah, 2015, p.209). For this reason, the emergence of electronic 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 & 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 (Agboola, 2006). Nevertheless, e-banking system can broadly be classified into the Mobile/telephone banking, Internet banking and Smart card banking. Hossain, et al (2013) and Okechi & 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” (Chemtai, 2016, p.31) 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 (Onodugo, 2015).
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 (Onodugo, 2015).
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, according to Oni and Ayo (2010), 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.

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 & Alipour, 2010), and customers are given the opportunity to conduct banking transactions with great peace of mind and at their convenience (Offei & 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 electronic 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 electronic 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 & Alipour, 2010) and improved customer experience (Onodugo, 2015).

In contrary to the advantages the electronic banking provides it also suffers from certain hindrances. It must be noted that, while e-banking provides many benefits to customers and banks, the cost of its implementation and maintenance is high. Equipment and machines used to aid e-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 & 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, electronic 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.

II.2 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 & 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 & 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). 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 electronic 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 electronic 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.

II.3 Concept of 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.

III. 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.

III.1 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 deposit money banks performance?
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?

III.1.1 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.

III.2 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 e-banking adoption and performance of deposit money banks in Nigeria. Analysis of response from respondents was also presented in tables, charts and percentages.

IV. Data Presentation and Discussion of Result

4.1 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) were 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 II, table I). 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 electronic 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.

IV.2 Results

IV.2.1 The role of electronic banking on banks’ performance and its viability in Nigeria

On the role of electronic banking on banks’ performance 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.

Greater percent of respondents 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 electronic 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.

IV.2.2 Pearson Correlation

H_0 = Electronic banking is better and more profitable in increasing banks’ performance in the Nigerian banking system than the traditional banking approach.

Table 1: Correlation Result

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

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’ performance and that of electronic banking on banks' performance, 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.

V. Summary, Conclusion and Recommendation

V.1 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 performance. 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 e-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.

V.2 Conclusion

It is evident that electronic banking plays a significant role in banks performance 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.

V.3 Recommendation

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 (John & 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. 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.

References

- Abaenewe, Z. C., Ogbulu, O. M., & Ndugbu, M. O. (2013). Electronic banking and bank performance in Nigeria. *West African Journal of Industrial and Academic Research*, 6(1), 171-187.
- Abubakar, A. (2014). The effects of electronic banking on growth of deposit money banks in Nigeria. *European Journal of Business and Management*, 6 (33), 79 – 89.
- Agboola, A. A. (2006). Electronic payment systems and tele-banking services in Nigeria. *Journal of Internet Banking and commerce*, 11(3), 1-10.

- 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. *International Journal of Scientific and Educational Studies*, 2(2), 29-39.
- Ekwueme, C. M., Egbunike, P. A. & 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, D. B. & Tuaneh, G. L. (2016). Impact of electronic banking instruments on monetary policy efficiency in Nigeria. *Academy Of Management and Economics*, 1 (1), 1-5.
- Hoseini, A. & Dangoliani, S. K. (2015). Investigating the effect of electronic banking services quality on the customer satisfaction. *Journal of International Economy and Business*, (1), 37- 42.
- Hossain, M. M., Irin, D., Islam, M. S. & Saha, S. (2015). Electronic-banking services: A study on selected commercial banks in Bangladesh. *Asian Business Review*, 3(3), 53-61.
- John, O. A. & Rotimi, O. (2014). Analysis of electronic banking and customer satisfaction in Nigeria. *European Journal of Business and Social Sciences*, 3(3), 14-27.
- Khrawish, H. A. & Al-Sa'di, N. M. (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 & Sons Pte Ltd. Pp 10-18
- Kujur, T. & Shah, M. A. (2015). Electronic banking: Impact, risk and security issues. *International Journal of Engineering and Management Research*, 5(5), 207-212
- Obiri-Yeboah, K., Kyere-Djan, R. & Kwarteng, K. A. (2013). The role of information technology on banking service delivery: A perspective from customers in Ghana. *International Journal of Innovative Research in Management*, 2 (6), 1-12.
- Offei, M. O. & Nuamah-Gyambrah, K. (2016). The contribution of electronic banking to customer satisfaction: A case of GCB bank limited–Koforidua. *International Journal of Managing Information Technology*, 8(1), 1-11
- Okechi, O. & Kepeghom, O. M. (2013). Empirical evaluation of customers' use of electronic banking systems in Nigeria. *African Journal of Computing & ICT*, 6(1), 7-20.
- Oni, A. A. & Ayo, C. K. (2010). An empirical investigation of the level of users' acceptance of e-banking in Nigeria. *Journal of Internet Banking and Commerce*, 15 (1), 1-13.
- Onodugo, I. C. (2015). Overview of electronic banking in Nigeria. *International Journal of Multidisciplinary Research and Development*, 2 (7), 336 -342.
- Salehi, M. & Alipour, M. (2010). E-banking in emerging economy: Empirical evidence of Iran. *International Journal of Economics and Finance*, 2(1), 201-209.
- Surendran, P. (2012). Technology acceptance model: A survey of literature. *International Journal of Business and Social Research*, 2(4), 175-178

Authors

Taiwo, J.N.* PhD, ACIB

Senior Lecturer, Department of Banking & Finance, Covenant University, Ota, Ogun State,
joseph.taiwo@covenantuniversity.edu.ng

Agwu, M. E., PhD, MSc, MBA, BSc (Hons), NCE.

Associate Professor of Strategic Management and Marketing, School of Business, Covenant University, Ogun State, Nigeria AND Adjunct Lecturer and External dissertation supervisor for Global MBA students at Manchester Business School, United Kingdom.
edwinagwu@yahoo.co.uk, edwin.agwu@covenantuniversity.edu.ng