Original Article

Electronic Channels and Bank Performance: Empirical Evidence from Nigeria

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Abstract - The study examined the relationship between electronic banking and bank performance in Nigeria, adopting data sourced from the Central Bank of Nigeria (CBN) bulletin for the period 2009 to 2017. Regression Analysis was used to test the strength and nature of the relationship between the dependent and independent variables. The performance of the Nigerian banking sector was proxied by Total Bank Deposit while transaction values of Automated Teller Machine (ATM Debit Cards), Mobile Banking, Point of Sales (POS), and Web Pay were used as a proxy for electronic banking. This study became necessary considering the increasing popularity of e-channel products in Nigerian banks and the world over. The correlation results show that electronic channel products (ATM, POS, Web pay, Mobile Pay) are positively and significantly related to bank performance. The regression result also showed that all the predictors are highly correlated to each other.

Keywords - Electronic Banking, E-Channels, Bank Performance, Total Bank Deposit

I.INTRODUCTION

The Nigerian economy is one of the fastest-growing economies in the world, largely attributed to its growing population and abundant resources, which has also made Nigeria an attractive market for investors. The payment system in Nigeria has improved over time, evolving from manual processing of transactions to a semi-use of technology; however, this evolution has only been at the banking end, hence a need for the end-user experience. According to Oyewole, Abba, Gambo, and Arikpo (2013), explosive growth in ICTs has removed the narrowed digital divide and turned the business sphere into an electronic world.

The evolving eco-system of payment in the country is proffering massive dynamics in the e-commerce industry, enabling customers to pay for goods and services, receive money transfers as well as providing retailers with efficient and easy to integrate tools for accepting online, offline, and NFC Payments (Apochi, 2017). Currently, all commercial banks in Nigeria have customized platforms for payment like credit and debit cards, as well as the operation of ATM switch networking systems (Oyewole *et* al., 2013). This evolution which commenced in the early 2000s, was characterized by the prevalent adoption of electronic banking by almost all the banks in Nigeria in view of the cashless policy of the Central Bank of Nigeria and the emergence of technological innovations in the banking industry. Today, the Nigeria banking industry has been characterized by the deployment of ATMs, the internet, phones, and Point of Sale (POS) as electronic payment tools (Okoro, 2014)

Innovations and investments in high-tech IT applications and business models have no doubt improved banking service greatly and also provided for efficiency and safety in payment systems through innovative payment solutions such as web pay channels, Point of sale terminals, ATMs, etc. Babatunde and Salawudeen (2017) opine that Nigerian banks have no doubt invested much in technology and have widely adopted electronic and telecommunication networks for delivering a wide range of value-added products and services. They have in the last few years transformed from manual to automated systems. Unlike before when ledge cards were used, today, banking has been connected to information technology networks, thereby facilitating the practice of inter-banking and inter-branch banking transactions.

Like it is all over the world, the banking sector plays a vital role in the entire financial system in Nigeria. It accounts for over 75% of the entire Nigerian financial market performance. Its role as intermediary and agent for the allocation of funds from the lenders to users of funds is enhanced with the use of e-channel platforms (Salehi & Alipour, 2010). The numbers of ATM terminals nationwide have improved greatly from the post-consolidation era of about 5,000 ATM terminals compared to 2017 of 17,712 as released by NIBSS e-payment fact sheet for January – June 2017.

A. Statement of Research Problem

Electronic banking has gained much popularity in the Nigerian banking system. This is reflected in the increasing volume of transactions carried out through e-channels. Despite the high volume of transactions carried out through electronic channels, can we conclude that electronic banking

has a strong relationship with bank performance? Several results from extant literature show mixed reactions and relationships between the identified variables. This work seeks to address this problem by adjusting the electronic channels used by other authors to validate existing results.

Also, several studies have used return on assets (ROA), Return on Equity (ROE), Profitability (Njeru & Omagua 2018, Sujud & Hasmen 2017, Abaenewe, Ogbulu & Ndugbu 2013, Kharwish, 2011,), etc. as a proxy for bank performance with scanty work preferring bank deposit (Ugwueze & Nwezeaku, 2016).

B. Research Questions

i.   Do automated teller machines have any significant relationship with bank performance in Nigeria?
ii.   Does Point of Sale have any significant relationship with bank performance in Nigeria?
iii.   Does the mobile payment system have a strong relationship with bank performance in Nigeria?
iv.   Is the web pay system strongly related to bank performance in Nigeria?

C. Objective of the Study

The objectives of this study are as follows:
i.   examine the relationship that exists between automated teller machine transactions and bank performance in Nigeria.
ii.   Examine the relationship that exists between Point of Sale and bank performance in Nigeria.
iii.   Determine the relationship between Mobile Payment systems and bank performance in Nigeria.
iv.   Evaluate the relationship between the web payment system and bank performance in Nigeria.

D. Research Hypothesis

The hypotheses to be tested are stated in null forms as:
i.   Automated teller machine transactions and bank performance in Nigeria are not significantly related.
ii.   Point of sale does not have any significant relationship with bank performance in Nigeria.
iii.   Mobile payment systems and bank performance are not significantly related in Nigeria.
iv.   the web payment system is not significantly related to bank performance in Nigeria

E. Significance of Study

This work focuses on the relevance of electronic banking in Nigeria and attempts to evaluate the relationships that exist between electronic banking products and bank performance. This study is an improvement on existing works with variations in the choice of independent variables, the period covered, and methodology. Finally, this work will contribute to the existing literature by empirically examining the impact and strength of the relationship between the identified

electronic channels and bank performance in Nigeria measured in terms of bank deposits.

F. Scope of Study

This work examined the relationship between electronic banking channels and bank performance in Nigeria. Concentration is of the top electronic banking channels in Nigeria in terms of volumes and value. The following variables were selected as proxies for electronic banking (point of sale, automated teller machine transactions, mobile payment systems, and web pay). These are the grossly used e-channels in Nigeria (Saidi, 2018). The period captured by this work is 2009 to 2017. The choice of this date range is to ensure uniformity of years as data was not available for the independent variables until the year 2009. Finally, this work is an improvement on Shehu, Aliyu, and Musa (2013).

II. REVIEW OF RELATED LITERATURE

### A. Background of Electronic Banking in Nigeria

World economies have designed policies to promote cashless financial systems by creating several electronic channels products. In Nigeria, as it is in many developing countries, cash has been the most preferred mechanism for trading and payments. With the advent of cashless policy in Nigeria in 2011, the Central Bank of Nigeria (CBN) succeeded in changing the economy from a cash-based system to a cashless system. This is a deliberate attempt to promote the use of electronic channels for payment instead of cash.

A cashless economy is not mean an absolute dearth of cash transactions in the economic settings but one in which the amount of cash-related transactions are kept to the lowest minimum (Apochi, 2017, Ezeamama, Ndubuisi, Marire, & Mgbodile 2014). It is an economic system in which transactions are not done predominantly in exchange for actual cash. To this end, banks deployed more innovation and technology by creating more channels with the intent of customer acquisition and increased deposit mobilization.

Furthermore, it is estimated that over 65% of the total cash in circulation (CIC) in the Nigerian economy is outside of the banking system and out of the control of the Central Bank of Nigeria in economic stabilization and price control. The CBN, in line with the global trend, enforced the cashless policy by ensuring that the majority of payments in Nigeria are tilted towards cheques, and e-payments, rather than raw cash as it has been before 2011. Saidi (2018) opines that deposit money banks offer several kinds of electronic payment platforms to address customer payment needs. Of all these platforms, the grossly used platforms consist of the Automatic Teller Machine (ATM), Point of Sale (POS), Mobile Money Transfer (MMT), and internet services (Web). No wonder the total value of transactions

consummated through cheques has continued to drop in the past years.

Although the use of cheques has also enhanced the cashless policy in Nigeria, it is not an e-payment channel. There has been a constant drop in the volume of transactions consummated by cheques in Nigeria compared to other noncash channels. For instance, the total value of non-cash transactions consummated with cheques was valued as of 2009 was N29.4billion. It has dropped severely to N5.38billion as of the end of the year 2017. Furthermore, the 3rd quarter 2016 report by the national bureau of statistics shows that of the major 7 noncash transaction channels, the cheque is the least rated payment channel, while the ATM payment channel was rated number one in terms of volume. However, cheque payment is rated 3rd in terms of value compared to ATM, which is in the 5th position. This position occupied by ATMs is majorly affected by the maximum limits set on ATM transactions.

Value of Cheque Transaction
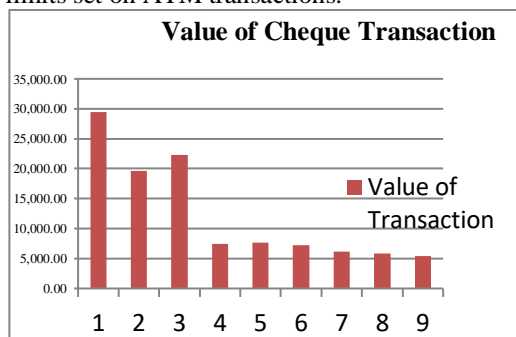
This has not been the case in the total transaction volume and value of electronic payment channels. This is an indicator of the general acceptance of electronic banking by bank customers and e-channel product users. Furthermore, the growing acceptance of digital banking and the proliferation of the internet has expanded the e-business space in Nigeria. Taiwo, J.N & Agwu, M.E. (2017) observed that banks' operational efficiency in Nigeria since the adoption of electronic banking has improved compared to the era of traditional banking.

B. Benefit of Electronic Channels

The transition to electronic banking in Nigeria has several benefits and advantages. Chemtai (2016) opines that electronic banking offers major opportunities in terms of competitive advantage, especially in the area of customer confidence and retention.

Apochi (2017) identifies several benefits accruing from the use of the electronic channel. Some of the benefits identified in his work include convenience, reduced risk of cash-related crimes, more service options, cheaper access to out-of-branch banking services, access to credit, and ease of using accounts anywhere in the world. In support of the above, Ahaiwe (2011) examined the effect of automated teller

machines on banks' services in Nigeria and addressed the issue of consumer behaviors with respect to quality services, and concludes that ATM deployment by banks saves time, encourages competition and reduces bank risk.
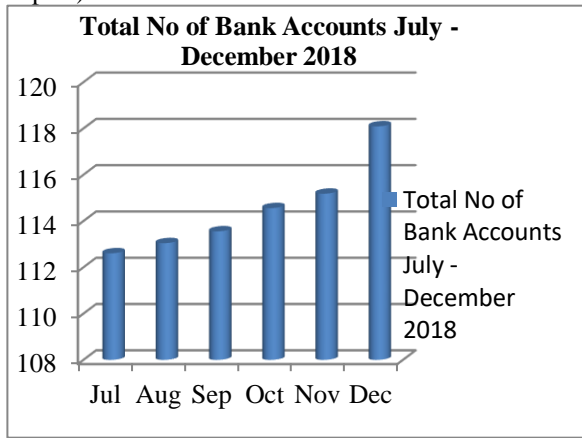
Electronic banking is not only beneficial to individuals. The government also shares in the benefit. In their work, Muyiwa, Afaha, John, and Tunmibi Sunday (2013), found that cashless policy promotes employment; reduce cash related robbery, and thus reducing the risk of carrying cash; the study concludes that cashless policy will also reduce cash related corruption and attract more foreign investors to the country. Also, Nimoh (2016) assess electronic banking on bank performance in Ghana, sampling one hundred and ninety-six (196) respondents made up of 30 employees of Barclays Bank Staff comprising departmental and unit heads and Tellers and one hundred and sixty-six (166). The customers were selected using accidental sampling. Data was collected through questionnaires. The study revealed that some benefits of E-banking are reduction in banks' cost of operations, increased number of customers, increased banks revenue, public image enhancement, new market opportunities, wider market, increased profitability by the bank, and increased contribution to Corporate Social Responsibility.

Nevertheless, the adoption of electronic banking (e-banking) has brought major challenges to the banking industry in terms of risk exposure. The volume of deposits has increased as well as the fraudulent practices experienced by Nigerian banks since its adoption in the economy (Abaenewe *et* al. 2013). This implies that a functional electronic payment channel is expected to result in increasing deposits in the bank as a result of the confidence, satisfaction derived from the functional systems.

Electronic banking channels also have a great impact on the performance of banks in Nigeria. This is so as cashless banking system help in financial inclusion by deepening bank deposits, thereby increasing funds available for banking businesses. Since electronic banking increases participation in the financial system as a result of the confidence and transparency the system brings, we can imply that an effective e-channel system is a gateway into the banking sector and a powerful engine for growth.

This is reflected in the increasing number of bank accounts in Nigeria. For instance, as of December 31, 2018, there were about a 118million accounts in Nigeria Banks. This figure has grown to 120million as of February 28, 2019 (NIBBS

Report).

Total No of Bank Accounts July - December 2018

Nigeria (Okon & Amaegberi 2018). Inadequate education coupled with poor enlightenment of bankers and customers on various aspects and issue of electronic payment transactions and cashless policy before launching the scheme has made the strategies for marketing the project fall short of expectations (Ajayi, 2014). In a study on analysis of the impact of electronic banking on customers' satisfaction in Nigeria, Babatunde and Salawudeen (2017) stated that financial institutions operate under an unpleasant business environment and are exposed to deep challenges internet challenges such as security, quality of service, epileptic power supply, the dominance of cash transaction in the economy, low level of awareness among Nigerians.

C. Factors affecting the Performance of Electronic Banking in Nigeria

Odusina (2014), in a study on automated teller machines and customer satisfaction in Nigeria using a chi-square statistical tool, found that there is a positive and significant relationship between ATM Usage and Customers' Satisfaction. The study, however, shows that despite the increasing number of ATM installations in Nigeria. Customers' needs are not satisfactorily met as customers are always seen on queue in large numbers at various ATM designated centers, as well as poor service delivery of some of these machines. This implies that poor service is a major factor hindering the efficiency of the use of debit cards on Nigeria's automated teller machine points.

Sometimes, banks may have several ATM pay points, but only one or very few of the ATMs will be functional. Some even restrict payout amounts to a lower range, thereby increasing the time and frequency per user. This is one of the reasons for the increasing queues in ATM terminals.

A research study by Akhalumeh & Ohioka (2011) showed that 34% of the respondents identified the problem of internet fraud, 15.5% cited the problem of limited POS/ATM, and 19.6% cited the problem of illiteracy among the people as some of the challenges militating against the smooth operation of the cashless policy in Nigeria. Eshun, Adu, and Akenten's (2016) study on the adoption of Electronic Banking: Evidence from Ghana sample 520 customers using convenience sampling method observed that 86% of respondents often have difficulty using the channels and requires support and assistance before using the product.

Poor knowledge of the use and operations of electronic payment platforms is considered by many as a major cause for the nonusage of the e-products. High illiteracy among the Nigerian population has also affected the successful implementation and operation of electronic banking in
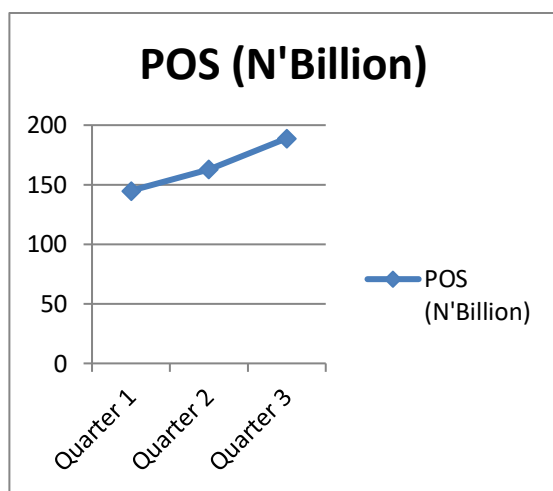
D. Performance of the Nigerian Payment Channel

The Nigerian electronic payment channels have witnessed profound acceptance by bank customers and e-payment channel users. This is evident in the increasing number of users of these payment channels in the past years since the emergence of the policy and implementation by the central bank of Nigeria. In the E-payment fact sheet released by the Nigeria Interbank settlement system (NIBSS) in 2017, the total number of ATMs as of June 2017 stood at 17,712, a total number of active cards as of September 2016 was 29.24million, total transaction volume as of June 2017 was N336.77million. Total transaction in terms of value, however, stood at N3.05trillion compared to N1.2trillion as of September 2016. ATM payment channel is rated highest amongst all the other electronic payment platforms in terms of transaction volume (NBS, 2016).

Eshun *et* al.'s (2016) study on the adoption of Electronic Banking: Evidence from Ghana sample 520 customers using convenience sampling method found that of all the electronic banking products, ATM was rated high on the attribute of simplicity, enjoy-ability and less difficult when it comes to its usage. In addition, ATM was the preferred choice of the respondents in relation to the security of the various e-banking products and how comfortable the products have made banking easier.

ATM (N'Trn)
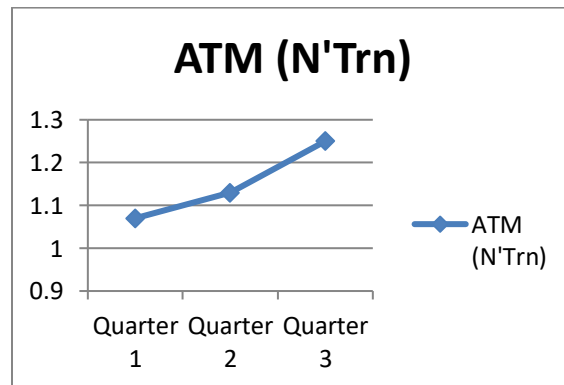
<u>Performance of Point of Sale (POS) Payment Channel as at the end of 3rd Quarter 2016.</u>

Aside from the use of ATM (Debit Cards), the Point of sale (POS) channel has also gained the confidence of Nigerians. The total volume of transactions consummated using POS stood at 16.02million as of September 2016. This volume increased by over 270% to N59.42million as of June 2017 to N59.42million. POS transaction value as of June 2017 is N610billion. The POS is rated number three in the performance of payment channels report released by the national bureau of statistics 3rd quarter report for 2016 with an average daily transaction volume of 328,297. A total of 156,394 and 125,608 POS was registered as of June 2017 and deployed, respectively.

POS (N'Billion)

Performance of Mobile Banking Payment Channel as at the end of 3rd Quarter 2016.
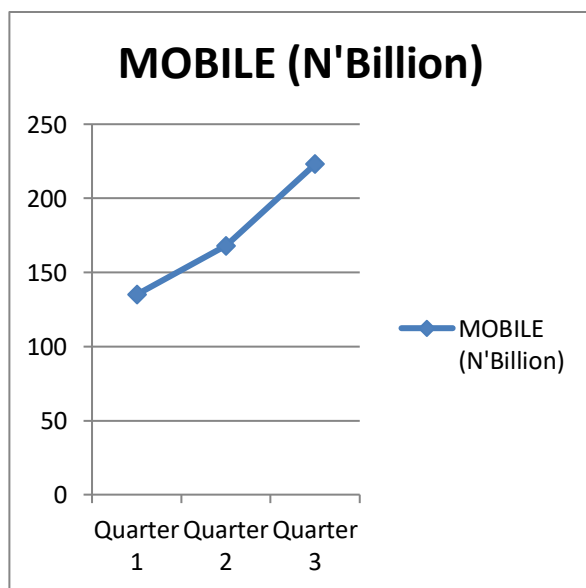
MOBILE (N'Billion)

In Nigeria, the use of the phone for banking and payments has come to stay. Mobile banking was rated number five amongst the popular electronic channels in Nigeria by the national bureau of statistics in 2016, with over an N223billion transactions consummated through mobile banking. This figure increased to N555.83billion as of June 2017. There are over 2million bank customers signed up for mobile banking as of June 2017. In Kenya, Njeru & Omagwa (2018) opines that most customers were carrying out most transactions via their mobile devices and thus had a positive effect on profitability as compared to electronic funds transfer services and customization

F. Empirical Review

The growing acceptance of the digital lifestyle and the increasing usage of electronic channels in Nigeria is an indicator of the successful implementation of the cashless policy of the central bank of Nigeria. It is, however, important to note that electronic banking requires functional systems and technological advancement. Salehi and Alipour (2010) observe that electronic banking has brought a significant transformation in customers' expectations from their financial service providers.

Customers and users of electronic banking channels simply seek payment alternatives such as electronic channels but prefer a faster, convenient, and error-free e-payment channel. According to Offei and Nuamah-Gyambrah (2016), customers are now seeking faster and convenient technology with a more rewarding banking experience.

Can we say clearly that electronic banking impacts positively on the payment systems in Nigeria? Muyiwa *et* al. (2013), in their work on the impact of cashless policy on the Nigerian Economy using a questionnaire for the survey research, found that electronic banking or cashless policy will impact the modernization of Nigeria payment system positively, reduction in the cost of banking services, reduction in high security and safety risks and also curb banking-related corruptions.

Abaenewe *et* al. (2013) conducted a study on electronic banking and bank performance in Nigeria, adopting the judgmental sampling method for data collected from four Nigerian banks. The study revealed that the adoption of electronic banking has positively and significantly improved the returns on equity (ROE) of Nigerian banks. There are several studies that conclude that electronic banking channels are significantly and positively related to bank performance (Okon & Amaegberi 2018, Babatunde & Salawudeen 2017, Shehu *et* al. 2013)

In a review of selected electronic channels and bank profitability in Nigeria with a specific focus on mobile

banking and point of sale terminals, Okon and Amaegberi (2018) posit that the positive and statistically significant relationship between automated teller machines of old and new generation banks in Nigeria indicates that automated teller machine is a major factor that contributes to old and new banks performance in Nigeria. Similar results and impacts were found for point of sale (POS) terminals and mobile banking for old and new generation banks in Nigeria. The study adopts the Panel unit root and SURE model estimation technique to conduct quantitative analysis for the four selected old and new generation banks.

The electronic banking channel is a product of product innovations and customer satisfaction. Sujud and Hashem (2017), in a study of the effect of bank innovations on profitability and return on assets (ROA) of commercial banks in Lebanon, using data collected through a research questionnaire and statistical analysis, adopting the Package of Social Sciences Software (SPSS) found that there is a significant positive impact of bank innovations on profitability and return on assets of Lebanese commercial banks and significance tests also showed that the impact was statistically significant. This implies that e-channel product thrives only where there are technological innovations that boost quality service delivery.

On how whether e-banking contributes to the economy of Nigeria, Oloyede, Azeez, and Aluko (2015) assessed e-commerce and e-banking channels and their contributions to the Nigerian economy, sampling 100 respondents selected from banks and the general public. The study employed non-parametric statistics measures such as chi-square in testing the formulated hypothesis. The results of the test established that e-commerce and e-banking have a significant positive impact on the Nigerian economy.

In a study of electronic banking products and performance of Nigerian listed deposit money banks, Shehu *et* al. (2013) examined all the twenty-one Deposit Money Banks (DMBs) listed on the Nigerian Stock Exchange and selected six (6) banks as a sample for the study using a systematic sampling technique. The study revealed that electronic banking products (e-mobile and ATM transactions) strongly and significantly impact the performance of Nigerian banks.

Contrary to popular findings, Njeru and Omagwa (2018), in a study of mobile banking and bank profitability in Kenya, sourced primary data from 60 respondents through a structured questionnaire and analyzed the data using descriptive analysis and multiple regression analysis. The study found that transactions had a statistically significant effect on profitability, while electronic funds transfer services and customization did not have a significant effect on the profitability of tier 1 commercial banks in Kenya. Furthermore, Mohammad and Saad (2011) conducted a test on the impact of electronic banking on the Jordanian banks'

performance by conducting a panel data analysis of 15 Jordanian banks for the period 2000-2010. The results show that electronic banking has a significant negative impact on banks' performance. This negative impact is mainly linked to the continued use of traditional banking channels in banking operations in Jordan. Despite the increasing acceptance of ATM services in Nigeria and all over the world, Adeniran and Junaidu (2014), in their study on automated teller machines and user satisfaction adopting a sample of 100 customers of United Bank for Africa (UBA), found that ATM services in terms of availability of money are insignificant.

Examining the correlation that exists between bank profitability (ROA) and ATM, POS electronic funds transfer, and internet banking, Sujud and Hashem (2017) using a package of social sciences software (SPSS), found that all electronic channels adopted as independent variables exhibited negative correlations with bank profitability accept debit and credit cards. Also, Ene (2014) found a negative relationship between mobile banking and bank performance. The result is as a result of the increasing number of unsuccessful transactions, which discourage individuals from using the medium. One can infer that such failures are associated with poor technological infrastructures, power failure, and knowledge gap in the operations of mobile banking.

III. METHODOLOGY
A. The Study
The ex-post facto research design was adopted for this study. It is a cause and effect study examining the relationship between a dependent and an independent variable and the relationship that exists between them. There are over ten electronic payment channels in Nigeria currently; therefore, an appropriate sampling technique has to be used to obtain an unbiased sample for the study (Creswell, 2012). The sampling technique used for this study is judgmental sampling, while secondary data was adopted for this work. Data sourced from the published Central Bank of Nigeria Statistical Bulletins for the period under review (2009 - 2017). The choice of a 9 year period is as a result of unavailable prior year's data for electronic payment channels, and 2018 figures were not available as at the time of the research work

B. Model Specification

Following the analytical framework presented in the previous section, this study seeks to econometrically examine the correlation between electronic payment channels and bank performance in Nigeria. The dependent variable in this study is bank performance, and it is represented by total bank deposit (TBD). The independent or explanatory variables adopted in this work are automated teller machine (ATM), point of sale (POS), mobile banking (MOB), and web pay

(WEP). This work is an improvement on Shehu *et* al. (2013), who adopted return on equity as a proxy for bank performance and ATM and e-mobile as a proxy for electronic channels.

The population equation is presented as

$Y = \beta o + \beta 1$ ------------------------------------- 1

Where

β_o = Slope

β_1 = Intercept

Modifying, we examine the relationship between electronic payment channels and bank performance as follows:

$TBD = f$ (ATM, POS, MOB, WEP) …………….…… 2

The functional relationship above can be represented in OLS linear regression equation form as shown below:

$TBD = \beta o + \beta 1 ATM + \beta 2\, POS + \beta 3 MOB + \beta 4 WEP$ …………………………….…………. 3

Where: TBD = Total Bank Deposit, ATM = Transactions consummated through Automated Teller Machines , POS = Point of Sale, MOB = Mobile Banking, WEP = Web Pay, and β_o , β_1, β_2, β_3, β_4, represent the parameters to be estimated.

IV. DATA ANALYSIS & RESULT

To determine whether there is a correlation between the dependent and independent variables, Pearson correlation analysis was conducted at one significant tailed level. Significant level (α) is put at 0.05. The inferential statistical estimation technique was used for data analysis with the aid of SPSS.

A. Presentation and Interpretation of Results

Table 1: Correlation Regression Analysis Result

		Total Dep	ATM Vol	POS	WEB pay	Mobile Pay
Pearson Correlation	total deposit	1.000	0.860	0.789	0.718	0.831
	ATMVolume	0.860	1.000	0.923	0.832	0.951
	POS	0.789	0.923	1.000	0.933	0.988
	WEBpay	0.718	0.832	0.923	1.000	0.928
	MobilePay	0.831	0.951	0.988	0.928	1.000
Sig. (1-tailed)	total deposit	.	0.001	0.006	0.015	0.003
	ATMVolume	0.001	.	0.000	0.003	0.000
	POS	0.006	0.000	.	0.000	0.000
	WEBpay	0.015	0.003	0.000	.	0.000
	MobilePay	0.003	0.000	0.000	0.000	.
N	total deposit	9	9	9	9	9
	ATMVolume	9	9	9	9	9
	POS	9	9	9	9	9
	WEBpay	9	9	9	9	9
	MobilePay	9	9	9	9	9

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	0.872[a]	0.761	0.522	320.3632

a. **Predictors: (Constant), MobilePay, WEBpay, ATMVolume, POS**

Table 3: ANOVA[a] Table

Model	Sum of Squares	df	Mean Square	F	Sig
1 Regression	1305593.841	4	326398.460	3.180	0.144[b]
Residual	410530.388	4	102632.597		
Total	1716124.229	8			

Source: Author's Computation (2019) α = 0.05; R= 0.872; R^2 = 0.761

a. Dependent Variable: total deposit
b. Predictors: (Constant), MobilePay, WEBpay, ATMVolume, POS

Table 1 above shows that total deposit and ATM transactions are strongly correlated at 0.860 (86%) and with a P-Value of 0.001. Testing at an alpha level of 0.05, the P-value of 0.001 is less than the alpha level, so it is significant, and the null hypothesis (H$_1$) that states that there is no significant correlation between Automated Teller Machine Transactions and total bank deposit will be rejected. This finding is in tandem with the discovery of Sujud & Hashem (2017), Shehu *et al.* (2013),

Similarly, the correlation result shows that Point of Sale (POS) and total bank deposits are strongly related. The result shows a 0.789 correlation (78%) with a P-Value of 0.006. testing at an alpha level of 0.05%, the P-Value of 0.006 is less than the alpha level of 0.05. Therefore, we can conclude that there is a significant relationship between both variables. Therefore, we reject the H$_2$ that states that Point of Sale has no significant relationship with total bank deposit.

Also, testing the correlation between MobilePay and Total Bank Deposit, the result as shown in Table 1 above indicates a 0.831 (83%) correlation and a P-Value of 0.003. testing at a 5% level of significance, we reject H$_3$ that MobilePay and

Total Bank Deposit are not correlated since our calculated P-Value of 0.003 is less than 0.05. This result is in tandem with Shehu *et al.* (2013), Oloyede *et al.* (2015).

The correlation table shows that WEBpay and Total Bank Deposit are correlated at 0.718 (71%) and at a 0.015 significant level. Testing at a significant level of 0.05, the P-Value of 0.015<0.05, this implies that the independent variable, WEBpay, is significantly correlated with the dependent variable, Total Bank Deposit. We, therefore, reject the null hypothesis (H$_4$) that states that WEBpay is not significantly correlated with Total Bank Deposit.

Finally, the regression result shows that all the predictors (Constant), Automated Teller Machines (ATM), Point of Sale Transactions (POS), WEBpay, MobilePay are all significantly correlated. This implies that the independent variables contribute significantly to the performance of each other both in the short run and in the long run.

V. CONCLUSION & RECOMMENDATION

The conclusion of this study is based on the results and findings from the data analysis conducted.

A. Conclusion

The study examined the relationship between selected electronic channel products and bank performance proxied by total bank deposits. The result shows that ATM, POS, WEBpay, and MobilePay all exhibit a strong relationship with the dependent variable. It, therefore, implies that electronic banking channels are strongly and significantly correlated with bank performance in Nigeria.
However, findings from extant literature indicate that electronic banking in Nigeria is hindered by several factors ranging from poor service, long queues, illiteracy, a limited number of POS & ATM service points, increasing number of unsuccessful transactions, and unstable power (Akhalumeh & Ohioka, 2011; Odusina 2014; Ene 2014; Eshun e *tal* 2016).

B. Recommendation

In view of the identified challenges and contributions of Electronic Banking to the overall banking sector in Nigeria, we recommend that more funds should be channeled towards enhancing the efficiency and availability of electronic banking products. It is the author's belief that the potentials of electronic banking channels in earnings, customer satisfaction, and deposit mobilization can only be harnessed by banks in Nigeria with improved service, efficiency, stable electricity, and quick resolution of a dispute.

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