EFFECT OF ELECTRONIC PAYMENT CHANNELS ON THE PERFORMANCE OF COMMERCIAL BANKS IN NIGERIA

ABSTRACT

This study employed a descriptive survey research design to investigate the effect of electronic payment channels on the performance of commercial banks in Nigeria. The target population comprised over 2,500 relationship officers of Stanbic IBTC Bank Plc, from which a purposive sample of 120 respondents was selected. Data were collected through structured questionnaires. The reliability and consistency of the research instrument were assessed using Cronbach's alpha, which yielded a value of [insert value], indicating acceptable internal consistency.

The data were analyzed using both descriptive and inferential statistics. Specifically, frequency counts, percentages, multiple regression, and chi-square tests were employed to examine the relationships between electronic payment channels—Automated Teller Machines (ATM), Point of Sale (POS), Mobile Banking, and Internet Banking—and bank performance. The results showed a significant relationship between electronic payment channels and the performance of commercial banks in Nigeria. ATM, POS, and Mobile Payment Systems positively impacted bank efficiency, while Web Payment showed mixed effects. The findings highlight the importance of digital financial services in enhancing banking operations and customer satisfaction.

This study contributes to the growing knowledge on electronic banking and financial performance, providing practical insights for policymakers, banking institutions, and regulators. It underscores the need for continuous investment in secure and efficient e-payment infrastructures to optimize bank profitability and customer experience.

Keywords: *Access Products, ATM card, Automated Teller Machine (ATM), Chip Card, Point of Sales (POS), Electronic Data Interchange (EDI), Electronic Money, Electronic Recruitment, Electronic Web Collection, Internet Banking, Mobile Banking, Payment System, Smart Card, Transaction Alert.*

1 Introduction

One of the fastest-growing economies in the world is the Nigerian economy, mainly due to its increasing population and rich resources, which have also made Nigeria an attractive market for investors. In Nigeria, electronic payment has improved over time, evolving from manual processing of transactions to a semi-use of technology; however, this development has only been at the banking end, thus a need for 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, and provide retailers with efficient and integrated tools for accepting online offline and NFC Payments (Apochi, 2017). Presently, all commercial banks in Nigeria have uniquely customized platforms for payment, like credit and debit cards, and 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, given the cashless policy of the Central Bank of Nigeria and the emergence of technological innovations in the banking industry [5,6]. Today, the Nigerian banking industry is characterized by deploying 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 improved banking services incredibly and provided 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 undoubtedly invested much in technology and have widely adopted electronic and telecommunication networks to deliver a wide range of value-added products and services. They have changed from manual to automated systems in the last few years. Before, they used ledger cards, but today, banking has been connected to information technology networks, facilitating inter-banking and inter-branch banking transactions [7-10].

Like worldwide, the banking sector is vital to Nigeria's financial system. It accounts for over 75% of the entire Nigerian financial market performance. Its role as an intermediary and agent for allocating funds from the lenders to users of funds is enhanced using e-channel platforms (Salehi &Alipour, 2010). The number of ATM terminals nationwide has improved dramatically from the post-consolidation era of about 5,000 ATM terminals compared to 2017, when 7,712 ATM terminals were released by the NIBSS e-payment fact sheet for January – June 2017.

The Statement of the Problem for this Research Electronic banking has gained much recognition in the Nigerian banking system. This is reflected in the rising volume of transactions carried out through e-channels. Despite the vast volume of transactions through electronic payment channels, it has not come without some challenges. One of the significant challenges negating against electronic payment channels is the increase in fraud alerts on the e-channel platforms. Also, repeated cases of system error where

customers have been debited despite failed transactions and illiteracy on the part of some customers to embrace technological change.

These acts have become a source of fear and worry to electronic payment users and have even discouraged some from onboarding into the electronic payment channels. Ultimately, the commercial banks may have been adversely affected since the volume of transactions that would have boosted their profitability has been reduced.

Several results from the present literature show mixed reactions and relationships between the identified variables. This research 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), and 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).

This study aimed to investigate the effect of electronic payment channels on the performance of commercial banks in Nigeria; other specific objectives include Examining the relationship that exists between Automated Teller Machine (ATM) transactions and the performance of commercial banks in Nigeria., To examine the relationship between Point of Sale (POS) and the performance of commercial banks in Nigeria. To determine the relationship between the Mobile Payment System and the performance of commercial banks in Nigeria. Moreover, the relationship between web or online payment systems and the performance of commercial banks in Nigeria must be evaluated.

2. Materials and Methods

2.1 Research Design

Research methodology is a systematic means of finding the answer to a defined problem. The research instrument used was a sample and sampling procedure, as well as data collection and analysis. The research design is a guide showing how the data or information regarding a research problem will be collected and analyzed within the research settings and economy of time and material (Ayiaw, Idahosa, and Ibeh 2005). The research design adopted in this study was a survey design, not an experimental one. Situations were studied and scientifically analyzed. However, the research will also analyse and evaluate data gathered from the questionnaires.

2.2 Population of the Study

According to Omotosho (1990), a population is defined as an object that may be living in an area of interest. Such an object may be finite or infinite. The population used in this study covers over 2500 relationship officers of Stanbic IBTC Bank Plc. The information gathered is from primary data (the questionnaires administered). The population selected was designed to obtain adequate and diverse views about the level and effect of electronic payment channels in Stanbic IBTC Bank Plc.

2.3 Sampling Techniques and Sample Size

A sample is that part of the population on which further analysis is sought. At the same time, sampling, as Chinelo (1996) opined, "is the process of selecting a subset of observations from among many possible observations, to conclude the larger set of possible observations". The purposive sampling technique was used for this research; it is a method which allows the researcher to objectively select the sample units from the researcher population based on his knowledge of the population. The technique is used to ensure that all the segments of the population are included in the sample. The sample is drawn from the 120 relationship officers of Stanbic IBTC Bank Plc.

2.4 Methods of Data Collection

It is evident that data must be collected to achieve the study's objectives and have a broad knowledge of it. The data collected for the study comprises primary data and secondary data. Primary data are information sourced from respondents through the administration of questionnaires, interviews or by act participation and observation for better clarification, while the secondary data are data sourced from Central Bank electronic banking guidelines, annual report of Stanbic IBTC Bank PLC and Central Bank annual report.

2.5 Techniques of Data Analysis

The techniques of data analysis were applied to examine the collected data. Descriptive statistics were computed, including frequency counts and percentages. Additionally, inferential tests, such as t-tests and regression analysis, were conducted to assess the relationships between the variables. The analysis aimed to determine the impact of electronic payment channels on the performance of commercial banks in Nigeria.

2.6 Test of Hypothesis and Inference

The researcher employed multiple regression to test the significance of responses from the 120 relationship officers of Stanbic IBTC Bank Plc. The multiple regressions are performed by defining the numbers categories, observing the number of cases falling into each category, and knowing the expected number of cases fully in each category.

2.7 Decision Rule and Justification

A set of decision rules is the verbal equivalent of the graphical decision tree, which specifies class membership based on a hierarchical sequence of (contingent) decisions. Therefore, each rule in a set of decision rules generally takes the form of a horn clause where the conjunction of contingent observations implies in-class membership.

3 Result

3.1 Data Presentation

150 questionnaires were distributed to the various relationship officers of Stanbic IBTC Bank Plc Lagos State branches. After the questionnaires were filled by the respondents and collected, they were screened and sorted. The details of the returned questionnaires show that out of 150 sent out, 120 were completed and returned. 25 were not returned, and 5 were rejected because they were not correctly completed. Hence, 80% of the respondents returned their questionnaires.

The questionnaire was used as the primary data to obtain the information, which was analysed using Descriptive Statistics like count, percentage, and graphs and Inferential Statistics like the Chi-square test and multiple linear regressions to measure the significant relationship at the 5% level of significance. The results of the analyses are interpreted below.

Decision Rule: If the Probability Value denoted as (sig. or p-value) is less than the level of significance (α), the null hypothesis H_0 will be rejected, and the test will be significant; if otherwise, vice versa.

Meaning of some Notations and Abbreviations:

N- Number of respondents

P-value: - Probability of significance.

X^2-- Chi-square value; Calculated Value

r-value: Correlation value

df:- Degree of freedom

R^2:- Goodness of Fit

NR – Non-Response

3.2 Personal, Socio-economic and Demographic Characteristics of the Respondents

This aspect deals with the descriptive part of the analysis in relation to the respondents' personal, socioeconomic, and demographic characteristics.

Table 1: Academic Qualification of the Respondents

Level of Education	Frequency (N)	Percentage (%)
OND	12	10
HND	25	20.8
BSc	76	63.3
MSc/MBA	7	5.8
Total	**120**	**100**

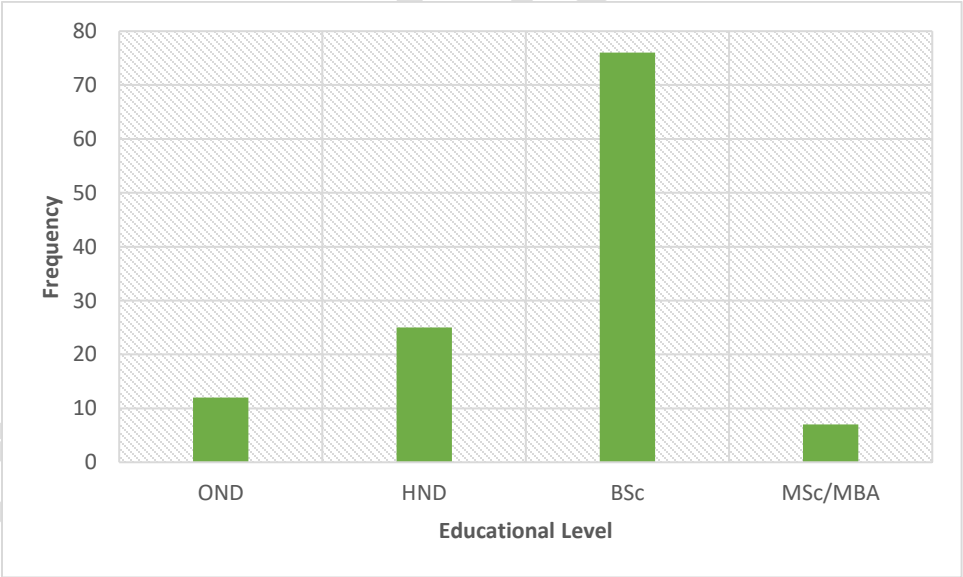

Figure 1: Distribution of Educational Level

The table/figure above depicts that more than half of the respondents who participated in this research attained a B.Sc level: 76(63.3%), 25(20.8%) had HND, 12(10%) attained OND, and just 7(5.8%) had

MSc/MBA as the level of education. The result shows that the majority of the respondents had tertiary education.

Table 2: Service Length of the Respondents

Length of Service	Frequency	Percentage (%)
1 – 5years	72	60
6 – 10years	45	37.5
11 – 15years	2	1.7
16 – 20years	1	0.8
Total	**120**	**100**

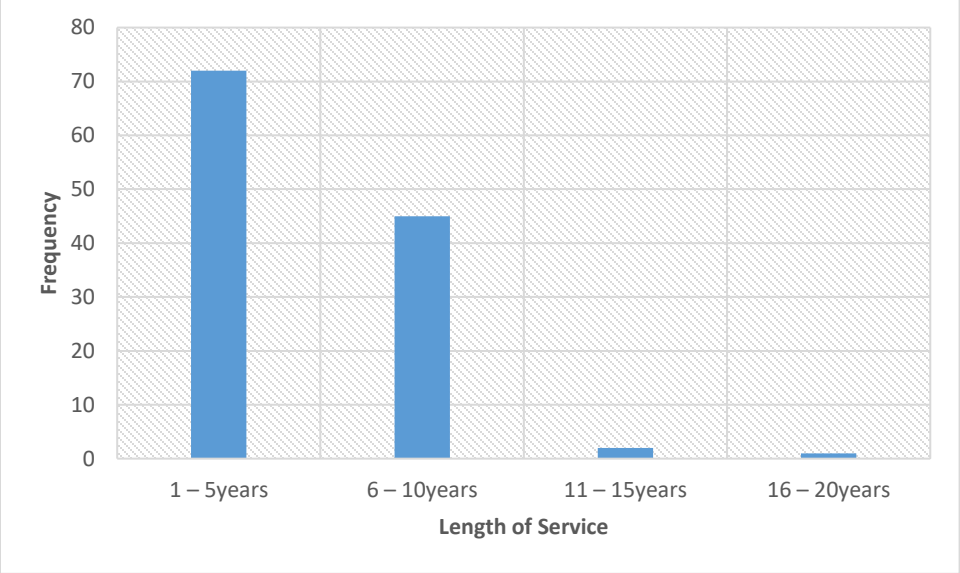

Figure 2: Distribution of Service Length

The above table and Figure 2 established that out of 120 respondents who participated in the research, 72(60%) claimed to have spent between 1-5 years in the service, and 45(37.5%) of them have spent between 6-10 years in the service. In contrast, 2(1.7%) and 1(0.8%) had spent between 11-15years and 16-20years respectively. It implies that most respondents had spent between 1 to 5 years.

Table 3: Cadre of the Respondents

Category of Cadre	Frequency	Percentage (%)
Entry Level	10	8.3
Assistant Bank Officer	40	33.3
Bank Officer	20	16.7
Senior Bank Officer	43	35.8
Assistant Manager	7	5.8
Total	**120**	**100**

It is shown from the analysis above that a bit more than one quarter of the respondents fell in the cadre category of Senior Bank Officer with 43(35.8%), 40(33.3%) of them fell in the cadre category of Assistant Bank Officer, 20(16.7%) fell in the category of Bank Officer, 10(8.3%) fell in the category of Entry level and just 7(5.8%) fell in the category of Assistant Manager. This implies that lower and higher cadres are more predominant in the study area.

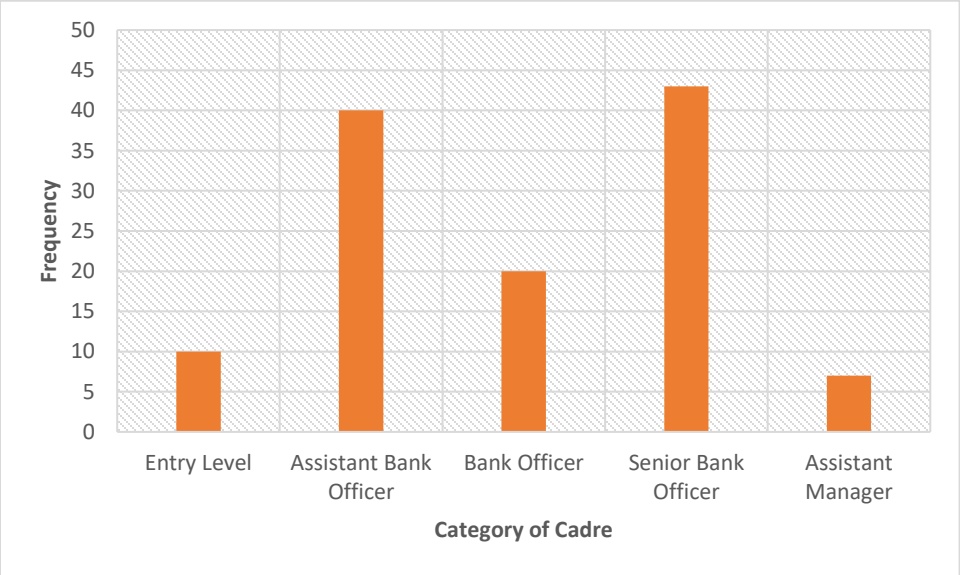

Figure 3: Distribution of Cadre Category

Table 4: Personal Qualification of the Respondents

Personal Qualification	Frequency (N)	Percentage (%)

ACA	15	12.5
CIBN	29	24.2
Certified Auditor	21	17.5
CIPM	43	35.8
NR	12	10
Total	**120**	**100**

It is shown from the above analysis that 15(12.5%) of the respondents claimed to have acquired ACA, 29(24.2%) acquired CIBN, 21(17.5%) acquired Certified Auditing, 43(35.8%) acquired CIPM and 12(10%) gave no response. It implies that majority of the respondents claimed to have acquired CIPM.

Figure 4: Distribution of Personal Qualification

Table 5: Departmental Office of the Respondents

Office Department	**Frequency**	**Percentage (%)**
Operations	10	8.3
Personal/Business Banking	7	5.8

IT	20	16.7
HR	43	35.8
Clearing Unit	40	33.3
Total	**120**	**100**

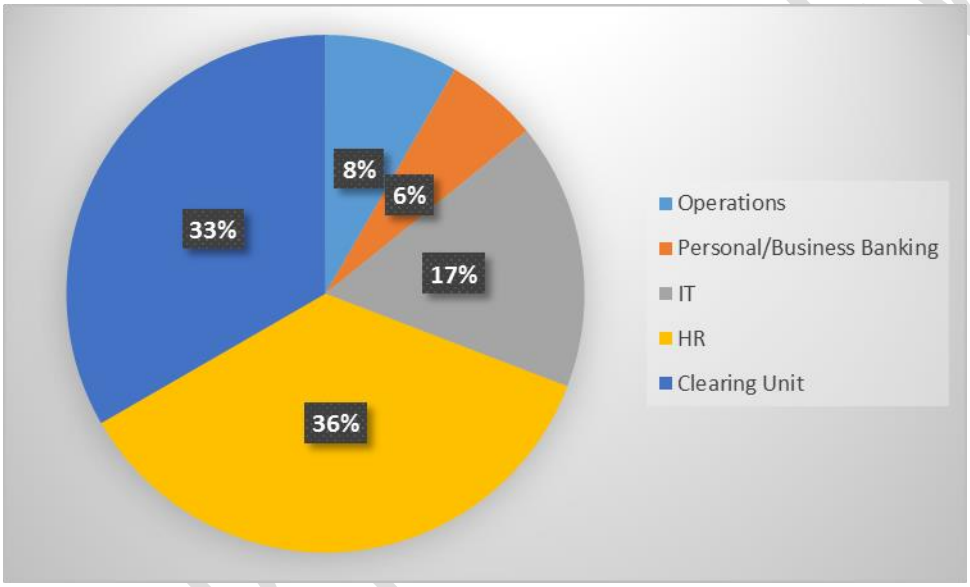

Figure 5: Distribution of the Departmental Office

It is indicated from the table/figure of the analysis that 43(35.8%) of the respondents claimed to be at HR department, 40(33.3%) claimed to be at Clearing unit in terms of department, 20(16.7%) claimed to be at IT department, 10(8.3%) claimed to be at Operations. In comparison, just 7(5.8%) claimed to be at the Department of Personal/Business Banking. The result implies that each of the respondents who participated in this research claimed at least one department.

Table 6: Respondents' Category of Threat

Category of Threat	Frequency (N)	Percentage (%)
Adequate Security	10	8.3
Legal Threat	19	15.8

ATM Fraud risk	23	19.2
Communication Bank	68	56.7
Total	**120**	**100**

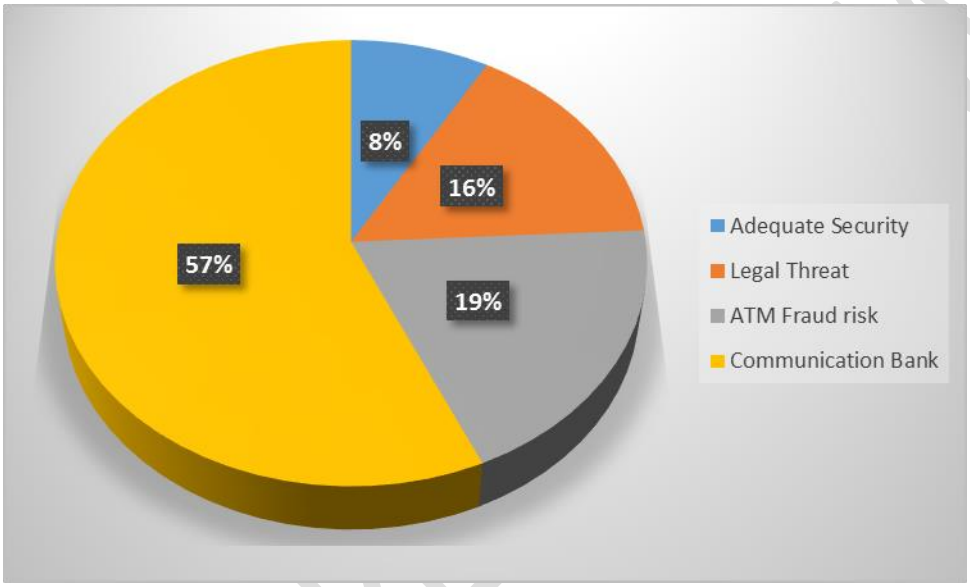

Figure 6: Distribution of Threat Category

It can be affirmed from the table and figure above that 10(8.3%) of the respondents who participated in the research declared Adequate security in terms of the category of threat via impression, 19(15.8%) declared legal threat, 23(19.2%) declared ATM fraud risk and majority 68(56.7) declared Communication Bank. This indicates that many respondents claimed communication bank in terms of the category of threat that Stanbic IBTC Bank placed more impression.

3.3 Testing of the Research Questions

3.3.1 The Performance of Stanbic IBTC Bank Electronic Payment Channels System

This section assesses the overall performance of Stanbic IBTC bank electronic payment channels system (EPCS).

Table 7: What are the Performance of Electronic Payment Channels System

Statement	Excellent (%)	Very good (%)	Fair (%)
How can you assess the overall performance of Stanbic IBTC Bank electronic payment channels system	114 (95)	5(4.2)	1(0.8)
Statement	High (%)	Low (%)	Moderate (%)
How can you assess the incidence threat of Stanbic IBTC Bank electronic payment channels system	5(2.5)	120 (60)	44(22)

In terms of the overall performance of the electronic payment channels system, 114(95%) of the respondents claimed excellent in the study area, 5(4.2%) claimed very good and just 1(0.8%) claimed fair. For the incidence threat of electronic payment channels system; 120(60%) claimed low, 44(22%) claimed moderate and 5(2.5%) claimed high.

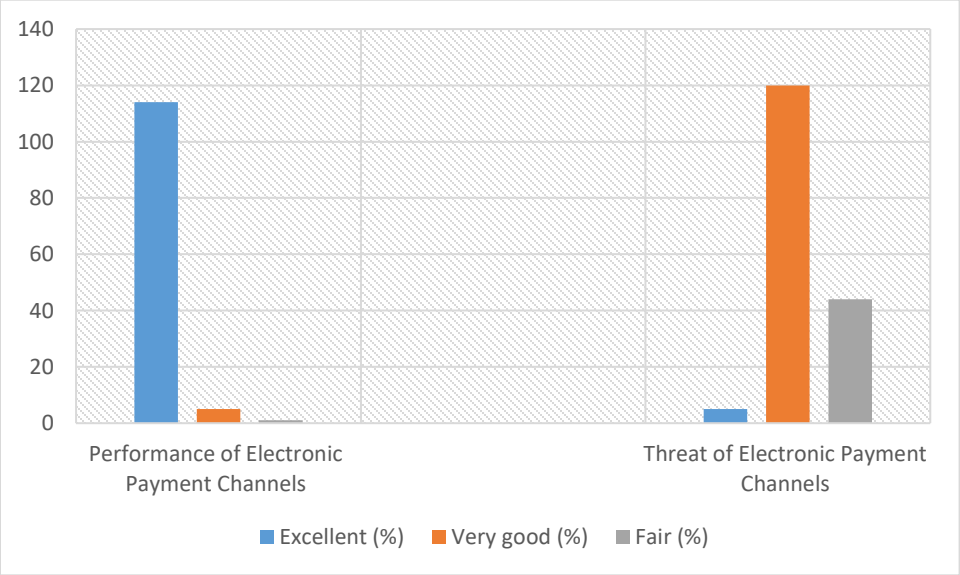

Figure 7: Distribution of Overall Performance and Threat of EPCS

3.3.2 The Introduction and Significance of Electronic Payment Channels System (EPCS)

This section assesses the introduction and significance of electronic payment channels systems (epics)in terms of the level of agreement.

Table 8: What are the Introduction and Significance of EPCS?

Statements	S.A (%)	A (%)	D (%)	S.D (%)	U (%)
Stanbic Bank Plc's training and development factors in electronic payment channels increased effectiveness at jobs.	53(44.2)	53(44.2)	8(6.7)	5(4.2)	1(0.8)
Introduction of electronic payment channels system eased banking transaction.	35(29.2)	66(55)	7(5.8)	5(4.2)	7(5.8)
Introduction of electronic payment channels payment improve customer satisfaction.	32(26.7)	54(45)	18(15)	9(7.5)	7(5.8)
Electronic payment channels system enhances the effectiveness and efficiency of Stanbic IBTC Bank.	55(45.8)	53(44.2)	8(6.7)	3(2.5)	1(0.8)
Stanbic IBTC Bank electronic payment channels have impact on the overall performance of the bank.	94(78.3)	20(16.7)	3(2.5)	_	3(2.5)
Adoption of electronic payment channels enhances the fortune of the bank.	40(35.8)	43(35.8)	20(16.7)	7(5.8)	10(8.3)
Stanbic IBTC Bank electronic payment channels improve its bank and customers relationship.	87(72.5)	29(24.2)	1(0.8)	_	3(2.5)
Stanbic IBTC bank electronic payment guidelines comply with CBN electronic banking guidelines.	61(50.8)	41(34.2)	10(8.3)	6(5)	2(1.7)

The table above revealed the introduction and significance of the Electronic Payment Channels System (EPCS), with the respondents 53(44.2%) strongly agreeing and 53(44.2%) agreeing to the fact that Stanbic Bank Plc training and development factors in electronic payment channels increased effectiveness at jobs. In comparison, 8(6.7%) disagreed, 5(4.2%) strongly disagreed and just 1(0.8%) were unable to decide. In terms of the Introduction of electronic payment channels system eased banking transactions, item 2 affirmed that 35(29.2%) strongly agreed, 66(55%) agreed, 7(5.8%) disagreed, 5(4.2%) strongly disagreed, and 7(5.8%) did no decide. Item 3, 32(26.7%) strongly agreed, and 54(45%) agreed that the introduction of electronic payment channels payment improves customer satisfaction while 18(15%) disagreed, 9(7.5%)

strongly disagreed, and 7(5.8%) undecided. Item 4, 55(45.8%) respondents strongly agreed, and 53(44.2%) agreed that the electronic payment channels system enhances the effectiveness and efficiency of Stanbic IBTC Bank, while 8(6.7%) disagreed, 3(2.5%) strongly disagreed and minority 1(0.8%) were unable to decide. Item 5, 94(78.3%) respondents strongly agreed, 20(16.7%) agreed to the fact that Stanbic IBTC Bank electronic payment channels have an impact on the overall performance of the bank, just 3(2.5%) disagreed, and 3(2.5%) undecided. Item 6 revealed the opinion of the respondents on the adoption of electronic payment channels enhances the fortune of the bank; 40 (33.3%) strongly agreed with the claim, 43(35.8%) agreed, 20(16.7) disagreed, and 7(5.8%) strongly disagreed. In comparison, 10(8.3%) did not decide. Item 7, the majority of 87(72.5) of the respondents strongly agreed, and 29(24.2%) agreed that Stanbic IBTC Bank electronic payment channels improve its bank and customers' relationship, while 1(0.8%) disagreed, and 3(2.5%) undecided. Item 9 revealed the opinion of the respondents on Stanbic IBTC bank electronic payment guidelines compliance with CBN electronic banking guidelines: 61(50.8%) strongly agreed on the claim, 41(34.2%) agreed, 10(8.3) disagreed, 6(5%) strongly disagreed. In comparison, 2(1.7%) did not decide.

3.3.3 Significant Level of Electronic Payment Channels System (EPCS)

This section assesses the level of significance of the EPCS based on the research questions: Does Automated Teller Machines (ATM) have any significant relationship with the performance of commercial banks in Nigeria? Does Point of Sale (POS) have any significant relationship with the performance of commercial banks in Nigeria? Does the mobile payment system have a strong relationship with the performance of commercial banks in Nigeria?Is web pay or online payment system strongly related to the performance of commercial banks in Nigeria?

Table 9: Significance of EPCS

Statement	Yes (%)	No(%)
Is there relationship between Automated Teller Machine (ATM) transactions and performance of commercial banks in Nigeria	91(75.8)	29(24.2)
Is there relationship between Point of Sale (POS) and performance of commercial banks in Nigeria	103(85.8)	17(14.2)
Is there relationship between Mobile Payment System and performance of commercial banks in Nigeria	94(78.3)	26(21.7)

Is there relationship between web payment or online payment system and performance of commercial banks in Nigeria	109(90.8)	11(9.2)

It can be depicted from the analysis that the majority, 91(75.8%), claimed "Yes" that there is the relationship between Automated Teller Machine (ATM) transactions and the performance of commercial banks in Nigeria, while 29(24.2%) claimed "No". Many of the respondents, 103(85.8%), claimed "Yes" that there is the relationship between Point of Sale (POS) and the performance of commercial banks in Nigeria, while 17(14.2%) claimed "No". 94(78.3%) of them claimed that there is a relationship between the Mobile Payment System and the performance of commercial banks in Nigeria, while 26(21.7%) claimed "No". 109(90.8%) claimed that there is a relationship between web payment or online payment systems and the performance of commercial banks in Nigeria, while 11(9.2%) claimed No to the fact.

3.4 Testing of the Hypotheses

3.4.1 First Hypothesis Testing and Interpretation

H_0: There is no significant relationship between Automated Teller Machine (ATM) transactions and the performance of commercial banks in Nigeria.

H_1: There is a significant relationship between Automated Teller Machine (ATM) transactions and the performance of commercial banks in Nigeria.

Table 10: Analysis of Automated Teller Machine (ATM) and Commercial Banks in Nigeria

Variables	**N**	**χ^2 - Value**	**df**	**P-value**	**Remark**
ATM	120	32.033	25	0.000	Significant
Commercial Banks	120				

It is established from the table above that the p-value is lesser than the level of significance (α), i.e. 0.000< 0.05, which shows the significance of the first hypothesis set above. Therefore, the null hypothesis is said to be rejected by concluding that there is a significant relationship between Automated Teller Machine (ATM) transactions and the performance of commercial banks in Nigeria. Hence, the test is **significant.**

The result shows that ATMs are significantly related to the transaction performance of commercial banks in Nigeria at a 5% level of significance.

3.4.2 Second Hypothesis Testing and Interpretation

H_0: There is no significant relationship between Point of Sale (POS) and the performance of commercial banks in Nigeria.
H_1: There is a significant relationship between Point of Sale (POS) and the performance of commercial banks in Nigeria.

Table 11: Analysis of Point of Sale (POS) and Commercial Banks in Nigeria

Variables	**N**	**χ^2 - Value**	**df**	**P-value**	**Remark**
POS	120	61.633	19	0.000	Significant
Commercial Banks	120				

It is shown from the above table that the p-value is lesser than the level of significance (α), i.e. 0.001< 0.05, which shows the significance of the second hypothesis set above. Therefore, there is sufficient evidence to reject the null hypothesis, leading to the conclusion that there is a significant relationship between Point of Sale (POS) and the performance of commercial banks in Nigeria. Hence, the test is **significant.**

The result shows that the POS significantly relates to commercial banks' transactions at a 5% significance level.

3.4.3 Third Hypothesis Testing and Interpretation

H_0: There is no significant relationship between the Mobile Payment System (MPS) and the performance of commercial banks in Nigeria.
H_1: There is a significant relationship between the Mobile Payment System (MPS) and the performance of commercial banks in Nigeria.

Table 12: Analysis of Mobile Payment System (MPS) and Commercial Banks in Nigeria

Variables	N	χ^2 - Value	df	P-value	Remark
MPS	120				
Commercial Banks	120	38.533	12	0.000	Significant

From the table above, it can be revealed that almost all the p-values are lesser than the level of significance (α) except one, i.e. 0.000< 0.05, which shows the significance of the hypothesis set above. Therefore, there is enough evidence to reject the null hypothesis, leading to the conclusion of a significant relationship between the Mobile Payment System (MPS) and the performance of commercial banks in Nigeria. Hence, the test is **significant**.

The result shows that the MPS is significantly related to commercial banks' transactions at a 5% significance level.

3.4.4 Forth Hypothesis Testing and Interpretation

H_0: There is no significant relationship between web payment or online payment system and performance of commercial banks in Nigeria.

H_1: There is significant relationship between web payment or online payment system and performance of commercial banks in Nigeria.

Table 13: Analysis of Web Payment and Commercial Banks in Nigeria

Variables	N	χ^2 - Value	df	P-value	Remark
Web or Online Payment	120				
Commercial Banks	120	38.533	12	0.000	Significant

From the table above, it can be revealed that the p-value is lesser than the level of significance (α), i.e. 0.000< 0.05, which shows the significance of the hypothesis set above. Therefore, there is enough evidence

to reject the null hypothesis, leading to the conclusion of a significant relationship between web payment or online payment systems and the performance of commercial banks in Nigeria. Hence, the test is **significant**.

The result shows that Web or Online Payments are significantly related to commercial banks' transactions at the 5% level of significance.

3.5 Multiple Linear Regression Model

This section deals with simple linear regression of each explanatory variable (independent) and respective response variable (dependent). It gives the model diagnostic as well at 5% level of significance in terms of individual tests (t-tests) and overall test (F-test) with the model; $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$ where Y is the performance of commercial banks of Nigeria (P) and X's are the products Electronic Payment Channels like: ATM, POS, MPS and WP.

Table 14: Multivariate Regression Model using Performance of CB as the Dependent

Dependent Variable: Performance of Comm. Banks (P)							
Explanatory variables	**Coefficients**	**Std. Error**	**t-Statistic**	**P-value**	**Remark**	**F-value (Sig.)**	**Durbin-Watson (Corr)**
Constant	2.514	0.563	4.470	0.000	Sig.	6.907 (0.000)	2.014 (0.44)
ATM	0.005	0.075	0.068	0.946	Not Sig.		
POS	0.049	0.072	0.687	0.493	Not Sig.		
MPS	0.445	0.096	4.623	0.00	Sig.		
WP	-0.081	0.095	-0.845	0.40	Not Sig.		

The above table affirms that a 0.5% increase in ATMs raises the performance of commercial banks in Nigeria, a 4.9% increase in POS raises the performance of commercial banks in Nigeria, a 44.5% increase in MPS raises the performance of commercial banks in Nigeria, and an 8.1% increase in WP or OP reduces the performance of commercial banks in Nigeria. Generally, the whole model showed that there is a significant relationship in the used model: P=2.514+0.005ATM+0.049POS+0.445MPS-0.081WP at a 5% level of significance by its probability value of 0.000.

4. Discussion

The regression results show that all predictors (constant), Automated Teller Machines (ATM), Point of Sale (POS), Internet Banking, and Mobile Banking transactions are significantly correlated. This implies that the independent variables contribute significantly to each other's performance both in the short run and in the long run.

The study reveals a positive and significant relationship between electronic payment channels and the profitability of commercial banks in Nigeria. This finding conforms to economic theoretical expectations because the more bank customers use electronic payment channels, the higher the profitability of the banks. Perhaps this result is attributed to the service charges associated with the use of digital channels in Nigeria.

5. Conclusion

The following conclusions were drawn based on the summary of the significant findings.

Adopting electronic payment channels has enhanced Stanbic IBTC Bank's efficiency by making it more productive and effective.

Electronic payment channels also substantially impact the overall banking performance by making workers' performance more effective and efficient.

The adoption of electronic payment channels has enhanced the fortunes of banks, which are achieved through bank charges.

Electronic payment channels have improved the Bank-customers relationship by rendering effective services. Customers can now access their accounts outside working hours to make withdrawals and attend to their needs.

The electronic payment guideline introduced by CBN strongly helps the ineffective electronic banking system. Withdrawals can be made anywhere at any time using any bank ATM machine. However, customers cannot withdraw more than a certain amount to allow other customers to have access to cash, and money can be transferred from one account to another through electronic payment channels.

Electronic payment channels have made banking transactions easier by bringing services closer to customers.

This present study recommends that the following strategies be recommended for further follow-up in order to give the growing trends of information and communication technology (ICT), which involve net banking and e-commerce in banks, a vision in the right direction: Banks must be focused on their needs and use the right technology to achieve goals rather than acquiring internet banking technology because other banks have it, Government participation in ensuring a focused telecommunication industry must be visible to

reduce or eliminate the avoidable costs of implementing e-commerce and internet banking., Regulatory authorities like the CBN (Central Bank of Nigeria) must stipulate standards for banks to follow to avoid making the Nigerian Banking Sector a dumping ground for outdated technological infrastructures., Training and Manpower development is another major problem that is militating against the growth of e-commerce in the country. The government must make the right IT policy by ensuring that computers, communication equipment and other IT infrastructures, to a large extent, are manufactured in the country so that our people can acquire the necessary skills firsthand. Government Policy that will guide against Money laundering, fraud and Security risks posed by net banking is inevitable. Establishing the necessary legal codes backing the industry will enhance its growth and counter the legal threat and security posed to net banking and e-commerce.

6. Areas for Future Studies

The study reveals that there is evidence that e-banking increases bank performance. Although this study was done only on commercial banks in Nigeria, it can also be extended to other financial markets, such as capital and insurance companies, to understand the implications of e-banking on the overall financial market in Nigeria.

We need to identify and understand the changes that electronic banking is causing in the banking sector and the payment system. This will allow us to examine in detail how the recent (and foreseeable) advances in ICT are affecting the sector and can affect its future evolution. Therefore, a study on the effects of ICT on the banking sector and the payments system is recommended.

Another related area of research should cover Internet banking service quality determinants. Banks need to know these determinants to improve their competitive advantage by adopting Internet banking strategies, eventually improving their performance.

COMPETING INTERESTS DISCLAIMER:

Authors have declared that they have no known competing financial interests OR non-financial interests OR personal relationships that could have appeared to influence the work reported in this paper.

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