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Digital Banking and Performance of Deposit Money Banks in Makurdi Metropolis, Benue State-Nigeria

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Abstract: *The study examined the effect of digital banking on customer satisfaction of Deposit Money Banks in Makurdi Metropolis, Benue State, Nigeria. The study specifically examined the effect of internet banking, automated teller machine and point of sales on customer satisfaction of Deposit Money Banks in Makurdi Metropolis, Benue State-Nigeria. The Technology Acceptance Model forms the foundation of the study. The study was conducted using a survey research design. 403,684 clients of six deposit money banks chosen in Benue state for the study comprise the study's population. The respondents were chosen by accidental sampling, and the Taro Yamane 1967 formula was used to calculate the sample size of 400 customers. A structured questionnaire was used to collect the study's data, which were then analyzed using descriptive statistical tools like tables and straightforward percentages. Multiple regressions were also employed for additional analysis and hypothesis testing. The study's conclusions showed a substantial relationship between several aspects of digital banking and deposit money bank customers' satisfaction in Makurdi Metropolis, Benue State, Nigeria. The analysis showed that the point of sale had β = 0.102, t=2.893, P=0.004, internet banking had β =0.213, t=5.781, P=0.000, and automated teller machines had β =0.270, t=7.199, P=0.000. Based on research findings, the study came to the conclusion that customer satisfaction of deposit money banks in Makurdi Metroplois, Benue State, Nigeria, is positively and significantly impacted by the use of digital banking through internet banking, automated teller machines, and point of sale systems. The study's conclusion suggested that, among other things, deposit money banks should carry out more research to find new online banking services and products to market, as well as should step up their efforts to educate the public about these services and products, in order to improve performance and draw in more clients.*

Keywords: *Digital banking, internet banking, automated teller machine, point of sales, customer satisfaction.*

1.0 INTRODUCTION

The introduction of electronic banking via Information and Communication Technology (ICT) has led to improvements in Deposit Money Banks' (DMBs') performance in terms of profitability and customer service. Deposit Money Banks are financial institutions that hold liabilities in the form of deposits that can be used to make payments, be transferred by check, or be payable on demand. The primary engine of growth and development in Nigeria's economy has been banking, a subsector of the financial sector. The remarkable performance of banks on the Nigerian Stock Exchange market serves as proof of this. Banks focus on receiving deposits and paying customers for goods and services. Since the payment component of banking activities was the primary focus

of digital banking operations, the majority of technological advancements support payment activities. The most recent developments in e-payments have brought about the emergence of payment channels and the ensuing financial technology companies (Mustapha, 2018). In a similar vein, Gbanador et al. (2022) asserted that technological advancements allow banks to serve clients more effectively.

In Nigeria, the use of electronic banking services is expanding quickly. Numerous digital banking channels have been introduced, including point of sale systems, internet banking, and automated teller machines. The new problem in the banking sector that is growing quickly is digital banking, particularly in African nations. Nigerian banking operations have relied more and more in recent years on the advancement of information and communication technology (ICT). Customers now receive more services thanks to the implementation of universal banking practices in Nigeria and Deposit Money banks' adoption of electronic banking. This is a result of the financial market's rapid development and rapid advancement in technology (Ozuru et al. 2010). Customer satisfaction is a crucial component of business since, according to Edward and Sahadev (2011), a company's ability to retain customers through service and customer satisfaction plays a major role in its ability to grow. Chang et al. (2017) state that effective customer service should increase customer engagement and relationships, which in turn should lead to higher customer satisfaction. According to González et al. (2007), a high level of service quality is associated with customer satisfaction and increases a company's ability to compete in the market.

The financial industry's distinct and ever-changing dynamics, coupled with the shift towards a cashless economy, have compelled the implementation of electronic banking systems that facilitate customer transactions without requiring physical bank visits. This is made possible by the fact that transactions are carried out utilizing the networks, hardware, software, and other pertinent equipment that comprise the information technology infrastructure and enable the provision of information technology-based services (Gbanador 2021). The financial performance and service delivery of Nigerian banks have improved thanks to e-payment technologies. This is because service delivery channels have undergone a profound transformation as a result of computerization. Because the infrastructure for information technology requires a lot of capital, this has also raised operating costs. Consequently, in order for banks to stay competitive, they must make significant investments in the advancement of e-payment technologies (Mustapha, 2018; Oluwatolani et al., 2011). However, information and communication technology is used in electronic banking to guide the banking industry toward immediate and subsequent goals (Malhotra and Singh, 2010).

According to Offer and Nuamah-Gyambrah (2016), consumers are looking for faster, more convenient banking experiences that also offer greater rewards. The use of computers, electronic media, and various network devices leads to this innovation. In industrialized and economically developed nations, electronic banking has quickly taken off, enabling people who live far apart to interact in both formal and informal ways instead of needing to travel for hours or days at a time. Electronic payment systems are replacing cash transactions, which were the standard practice in banking, due to the rapid growth of the internet and the global addiction to e-business (Taiwo & Agwu, 2017). Nonetheless, the increasing acceptance of e-business has resulted in a fundamental shift in what clients expect from their different financial service providers. Research on the various forms of electronic banking and their effects on the Nigerian financial sector's economy has been found to be lacking.

Any Deposit Money Bank that wants to thrive in this competitive business climate, like Nigeria and especially Benue State, has to do a lot better when it comes to implementing digital banking services like online banking, automated teller machines, and point of sale systems. These will help the bank keep up with the dynamic business cycles of the modern world brought about by globalization. Despite the widespread use of digital banking, which eliminates the need for in-person interactions with bank employees, a large number of people are still crammed into banking halls and waiting in line to complete transactions (Edemivwaye, 2019; Dhadeh, 2021). Does this imply that the introduction of digital banking to facilitate customer transactions has had no positive impact on the customers, as customers still wait in line to be served in these deposit money banks? This background serves as the foundation for the study, which aims to ascertain how Deposit Money Bank's performance in Makurdi Metropolis, Benue State, Nigeria, is impacted by digital banking.

The broad objective of the study is to determine the effect of digital banking on performance of deposit money banks in Makurdi Metropolis, Benue State-Nigeria. The specific objectives of the study are to;

i. determine the effect of internet banking on performance of Deposit Money Banks in Makurdi Metropolis of Benue state-Nigeria;
ii. examine the effect of Automated Teller Machine (ATM) on performance of Deposit Money Banks in Makurdi Metropolis of Benue state-Nigeria; and
iii. investigate the effect of Point of Sale (POS) on performance of Deposit Money Banks in Makurdi Metropolis of Benue state-Nigeria.

The study is further guided by the following hypotheses. They are;

H_{o1}. Internet Banking has significant effect on performance of Deposit Money Banks in Makurdi Metropolis of Benue state-Nigeria;

H_{o2}. Automated Teller Machine has significant effect on performance of Deposit Money Banks in Makurdi Metropolis of Benue state-Nigeria; and

H_{o3}. Point of Sale has significant effect on performance of Deposit Money Banks in Makurdi Metropolis of Benue state-Nigeria.

2.0 LITERATURE REVIEW

This section covers the theoretical framework, the conceptual framework as well as the empirical studies.

2.1 Theoretical Framework

2.1.1 Technology Acceptance Model: Researchers have developed and employed a variety of models to understand users' acceptance of information systems in an effort to predict, understand, and explain why people accept or reject them. Researchers have utilized the technology acceptance model (TAM), first presented by Davis, Bagozzi, and Warshaw (1989), to examine the fundamental elements that encourage users to embrace and utilize new information systems. This model has been cited the most. TAM's main objective is to explain the variables influencing computer applications' acceptance in general. Furthermore, this model assists practitioners and researchers

in determining the reasons behind the unacceptable nature of a given system (Davis, 1989). The Technology Acceptance Model (TAM) (Davies, 1989) serves as the theoretical foundation for this study. It states that users accept technology based on how easy and useful they perceive it to be. TAM measures perceived usefulness and ease of use using psychometric scales. This theory implies that technology users will adopt a technology if it is both practical and simple to use. The Technology Acceptance Model (TAM) is criticized for a number of reasons, one of which is that it ignores the cost of implementing technological infrastructure. Despite these criticisms, the TAM is a valuable theory regarding the adoption of information technology by corporations. Banks expect their clients' e-payment channels to be user-friendly and beneficial to both the bank and the client; otherwise, the reason they were implemented would be rendered ineffective.

2.2 Conceptual Framework

This discusses the concepts of digital banking and performance of deposit money banks with their respective dimensions.

2.2.1 Concept of Digital Banking

In order to serve clients through online channels, digital banking entails digitizing all conventional banking products, procedures, and activities (Malyshev, 2023). Any bank branch services are available and accessible around-the-clock on computers, smartphones, and other compatible smart devices with digital banking. According to Malyshev (2023), a digital bank is one that conducts business online and offers its clients services that were previously exclusive to bank branches. Compared to traditional systems, digital banking systems are far more flexible and enable banks to add and expand features much more quickly. High-level process automation, web-based services, and APIs are the foundations of digital banking, which offers banks and their clients exceptional cost-effectiveness, security, and flexibility. A fully digital customer journey is made possible by modern banking solutions, which also produce real-time data streams and expedite critical analytics. Mobile banking is another term that is often used interchangeably with online and digital banking. It is a service that an established bank offers to its clients so they can conduct transactions using their mobile devices instead of going to a bank branch. Therefore, of the three concepts, digital banking is the most expansive. It is reasonable to assume that it consists of a blend of mobile and internet banking (Malyshev, 2023).

2.2.2 Dimensions of Digital Banking

Internet banking, automated teller machine and point of sale are adopted in this study as used by (Thulani, Tofara & Langton, 2009); Deekor, 2021)

i. Internet Banking: According to Thulani, Tofara, and Langton (2009), internet banking refers to systems that let customers access their accounts and general information about the products and services offered by the bank via the bank's website, all without the need for human intervention or the inconvenient process of sending letters, faxes, original signatures, or phone confirmations. Internet banking is the process of conducting banking operations, such as fund transfers, payments for goods and services, account inquiries, statement printing, and more, via the use of electronic tools and instruments rather than physically visiting a banking facility. Typically, the bank's website is used for this type of electronic banking. It also provides exactly the same services that

the mobile banking application provides with few additions and it is usually more secured and legible (Deekor, 2021).

ii. Automated Teller Machine (ATM): According to Rose (1999), an automated teller machine (ATM) is a computer terminal that combines a cash vault and recordkeeping system. It allows users to access the bank's bookkeeping system 24 hours a day by punching a special code number into the computer terminal or by using a card bearing a personal identification number (PIN). An ATM card is a piece of plastic with a magnetic strip that contains all of the customer's personal information, including name, account number, card limit, and bank of concern. When a cardholder inserts an authorized credit or debit card from a bank that they are currently a customer of, this electronic device serves as a cash dispenser and provides other banking services as needed. Additionally, it helps clients of financial institutions or intermediaries carry out necessary financial transactions, like cash withdrawals, fund transfers, or account information retrievals, whenever they want and without having to deal with bank employees directly. This is accomplished by the account holder inserting an electronic card into the machine and then entering a Personal Information Number (PIN), which grants the account holder the necessary access (Deekor, 2021).

iii. Point of sale (POS): This is an electronic terminal or device that is typically used in retail settings, such as gas stations, supermarkets, restaurants, etc., to process card payments via a PIN. It records each transaction made, prints the required receipt, and moves money from customers' accounts to the vendor's account—often referred to as the merchant. It obtains the necessary data from a customer's debit or credit cards, verifies that there are enough funds in the accounts, debits the account and transfers the funds to the merchant if the account is funded, logs each transaction that is completed, prints the required receipt, or declines the transaction due to insufficient funds. The point-of-sale system has gained widespread usage, particularly in places lacking ATMs and banks. Through the process of exchanging cash for amounts debited from customer cards premium, they fill the gap left by cash payments. For those with debit or credit cards, mobile bank agents offer readily available cash. But there is a lot of risk involved, particularly given the rise in kidnapping and fraud. There is a risk that if a card is used on a terminal after being stolen or obtained under duress, the merchant will be held accountable because the transaction will be linked to that particular terminal. Along with stamp duty, CBN recently added a N50 fee to each POS transaction. Due to these, POS usage decreased and many terminals became inactive (Deekor, 2021).

2.2.3 Performance of Deposit Money Banks

In the business world, performance refers to how well a company performs as a result of its initiatives and operations evaluated in relation to its goals or in comparison to those of its rivals (Ateke & Akani, 2018). It serves as a gauge for how well the company meets its stated goals. For banks, profitability, deposit volume, and bank size could all be regarded as trustworthy performance indicators (Ibekwe, 2021). However, depending on how well a bank has performed over a given period of time, the performance of DMBs can be viewed from various angles. The most widely used performance metrics are profitability, total asset, customer base, and deposit volume.

2.2.4 Measures of Performance of Deposit Money Banks

For the purpose of this study, performance will be measured in terms of customer satisfaction and service delivery (Ateke & Akani, 2018; Ibekwe, 2021).

i. Customer satisfaction: A product's ability to meet or exceed a customer's expectations is included in the measurement of customer satisfaction (Fisbein, 2023). One of the key components in deposit money bank's ability to maintain customer satisfaction is the utilization of internet marketing in all of its forms (Ankit, 2023). In addition to linking the organization with the outside world, where it influences deals with, it helps the organization analyze accurately and quickly communicate with her customers and other stakeholders (Nurpus, 2021). Any business's ability to satisfy its customers depends on the tactics it uses, including marketing, to meet the essential success criteria for competing in its industry and outperforming its rivals (Ochattanon, 2022).

ii. Service quality: The ability of a service to meet the needs of its clients is referred to as service quality (Atef, 2011). Customers view quality differently than when they engage with the company. Because customer contact is one of the most important business processes, service quality becomes a critical component of success in the car care industry (Lambert, 2010). Existing research on service delivery concentrates on the conventional view of the relationship between the client and the service provider (Han et al., 2021). According to Doucet (2004), the layout of the space and the actions of the service provider determine the quality in these conventional settings. Online service centers have emerged more recently as a result of the internet's widespread use. In these situations, face-to-face and virtual communication is crucial to the caliber of the services provided. As a result, in hybrid settings, the quality of service is determined by both the customer-provider behavioral interactions and the social media communications (Doucet, 2004; Palese and Usai, 2018).

2.3 Empirical Review

Several researchers have investigated the relationship between digital banking and performance of deposit money banks in Makurdi Metropolis, Benue State. Some of these researches conducted from different part of the world including Nigeria are reviewed below;

Aigbovo and Orobator (2022), in this study, the effect of electronic banking on financial performance of deposit money banks in Nigeria was investigated and the period of study was from 2009 – 2018. The data analysis used both dynamic panel data regression and multivariate panel estimation. The GMM estimate's results show that while the total value of point-of-sale transactions has a negative impact on deposit money banks' financial performance, the total value of automated teller machine transactions has a positive and significant impact on those banks' financial performance. Additionally, there was a negative correlation that did not pass the significant test between the total amount of mobile payment transactions and financial performance. According to the study, deposit money banks should install more ATMs in order to shorten the lines that typically form at most of them and promote consistent use. In order to counteract the detrimental impact of mobile payments on deposit money banks' financial performance, deposit money banks should also work with telecom network providers and security personnel to apprehend and prosecute hackers. Furthermore, to address the issue of subpar network service that has hampered Nigeria's progress in the adoption rate of point of sale systems, deposit money banks should work with telecom network providers.

Siddik, Sun, Kabiraj, Shanmugan, Yanjuan (2019), studied the effect of E-banking on the performance of Bangladeshi banks using panel data of 13 banks over the period of 2003–2013. Return on Equity, Return on Assets, and Net Interest Margin were used to gauge performance. Pooled ordinary least square analysis results indicate that e-banking has a negative impact in the first year of adoption, but after two years it starts to positively contribute to banks' Return on

Equity. Ogutu and Fatokio (2019) conducted a study to investigate the impact of electronic banking on the financial performance of Kenyan commercial banks that are listed. Their findings indicated a robust positive correlation between the financial performance of these banks and their use of mobile, agency, ATM, and online banking services.

Enoruwa, Ezuem and Nwani (2019), investigated the relationship existing between electronic banking and bank performance in Nigeria, the researchers adopted data from the secondary source. Regression analysis was used by the researchers to confirm the type and degree of the relationship between the dependent and explanatory variables. However, Total Bank Deposit served as a stand-in for the performance of the Nigerian banking industry, and the transaction values from Web Pay, ATMs, mobile banking, and point of sale systems served as a stand-in for electronic banking. The study discovered a positive and significant correlation between bank performance and the correlation results of electronic channel products (ATM, POS, Web pay, and Mobile Pay). The outcome of the regression analysis also demonstrated the strong correlation between each predictor.

Ugbede, Yahaya and Edicha (2019), examined the effects of electronic payment on financial performance of deposit money bank in Nigeria. Data were collected from secondary sources through annual reports and statistical bulletin of Central Bank of Nigeria. The profitability of Nigerian deposit money banks was used to gauge financial performance, whereas automated teller machines, online banking, and point of sale systems were used to gauge electronic banking. The method of multiple regression was applied. The study found that while POS makes a positive and statistically significant contribution to bank profitability, internet banking also makes a positive and statistically significant contribution to bank profitability. ATMs, on the other hand, did not contribute to the sampled banks' profitability or their statistical significance. It is therefore advised that banks provide a wide range of goods and services through POS and IBK in an efficient, effective, and economical way if they wish to enhance their financial performance.

Njeru and Omagwa (2018), in their study of mobile banking and bank profitability in Kenya sourced primary data from 60 respondents through a structured questionnaire. They analyzed the data using descriptive analysis and multiple regression analysis. While customization and electronic funds transfer services did not demonstrate a significant impact on the profit of Kenyans' tier 1 bank, the researcher discovered statistically significant transactions effect on the profit of Kenyans. In a similar vein, Orji, Ogbuador, Okon, and Anthony-Orji (2018) investigated the relationship between advancements in electronic banking and the general performance of Nigerian banks between 2012 and 2017. To determine how each independent variable related to the dependent variable, the researchers used multiple regression analysis and descriptive data analysis techniques. Among the variables included in the study, automated teller machines, bank size, point of sale, and mobile banking are the main factors influencing a bank's performance. The impact of innovation in electronic banking on banking as a whole was discovered by the researchers.

3.0 METHODOLOGY

Since the data for this study will be gathered from the study sample at a single point in time, a cross-sectional design was used. The study is based in Nigeria's Benue state, specifically in Makurdi Metropolis. The entirety of the money deposit banks that are permitted to operate in the study area constitutes the geographical scope of the investigation. 403,684 clients of the six money deposit money banks that operate in the study area make up the study's target population. Using Taro Yamane's 1967 sample size formula, the study's sample size was 400. Using Bowley's

formula, the specific sample size for each money deposit bank under investigation in Benue State is determined.

Table 1: Banks sampled with their customers and sampled population

S/N	Money Deposit Bank studied in Makurdi metropolis of Benue state of Nigeria	No of Customers	Sampled population
1	First Bank plc	120, 153	119
2	Union Bank plc	98, 287	98
3	United Bank for Africa Plc	103, 392	102
4	Stanbic Bank, Plc	I8, 624	19
5	Zenith Bank, Plc	10428	10
6	Guaranty Trust Bank Plc	52, 800	52
	Total	**403, 684**	**400**

Source: Researcher's Computation (2023)

The primary research tool used to gather the necessary data from clients of particular deposit money banks in the study area was a survey questionnaire. According to the reliability index of 0.805 and the validity test, the sample adequacy is 86% (KMO = 0.863), which is significant (Sig = 0.000). Customer satisfaction in this study is a function of online marketing, according to the regression model, which is presented as follows:

$$PER=f(DTB) \quad (1)$$

$$PER=f(IBS, ATM, POS \quad (2)$$

Where:
PER = Performance of Deposit Money Banks
IBS = Internet Banking Service
ATM = Automated Teller Machine
POS = Point of Sales
The explicit form of the model can be stated as follows:

$$PER = \beta o + \beta_1 (IBS) + \beta_2 (ATM) + \beta_3 (POS) + e \quad (3)$$

Where:
B_o =constant of the model.
B_1-B_3= coefficients of the model.
e = disturbance terms or error term. It is assumed to be normally distributed with a mean of zero.

Regression analysis was utilized for testing hypotheses at the 5% (0.05) significance level in the data analysis process, along with the mean standard deviation. Version 21 of the Statistical Package for Social Sciences (SPSS) was utilized to facilitate analysis. If the P-value (sig) is greater than 0.05 (P >0.05) or the alternative hypothesis (Ha), the null hypothesis (Ho) should be accepted. The alternative hypothesis (Ha) will be accepted and the null hypothesis (Ho) will be rejected if the P-value (sig) is less than 0.05, or P <f_0 or 0.05.

4.0 RESULTS AND DISCUSSION

Even though 400 copies of the research questionnaires were given to the 400 sampled customers of particular deposit money banks in the study area, every one of the questionnaires was successfully completed and filled out, making up the final sample for the study because great care was taken to make sure the sampled respondents understood and could complete the questionnaires. This demonstrates a respectable 100% response rate.

4.1. Diagnostic Tests

To make sure that the results of a regression test are reliable, a few presumptions must be satisfied. This section includes the multicollinearity and normality tests.

4.1.1 Normality Tests

The descriptive measures used in this study included the minimum, maximum, mean and standard deviation. To test for the normality of data, skewness, and kurtosis were used.

Table 2: Skewness and Kurtosis Result

Variable	N	Min.	Max.	Mean	Std. Dev.	Skewness	Kurtosis
Internet banking	400	1	5	4.07	.914	-1.129	3.901
ATM	400	1	5	4.05	.920	-1.884	2.286
POS	400	1	5	4.13	.893	-1.855	2.028
Performance	400	1	5	4.04	.938	-1.052	3.900

Source: Researcher's Computation from SPSS Output, 2023.

The descriptive statistics are shown in Table 2, with emphasis on the data's means, minimum, maximum, and standard deviation. Regarding online banking, it reveals a mean response of 4.07 (representing 91.4% of the respondents). This suggests that performance in Deposit Money Banks is greatly impacted by online banking. The table also shows that, among the deposit money banks surveyed, the average score for automated teller machines is 4.05, meaning that 92.0% of respondents agreed that these machines have improved. Furthermore, the average score for point of sales is 4.13, with 89.3% of respondents falling within this range. This indicates that a majority of respondents agreed that deposit money banks' use of point of sale has a positive impact on performance. Performance has a mean score of 4.04, which represents 93.8% of the respondents. This suggests that Benue State's deposit money banks are performing better when it comes to their services. In the meantime, for every variable taken into consideration in this study, the minimum and maximum values are consistently 1 and 5. The extremely low standard deviations of all the variables under consideration further demonstrate the extremely low dispersion among the responses. This demonstrates that the respondents were in agreement to answer every question posed in the research project. Since the skewness and kurtosis values in Table 2 are almost within ±2 and ±5, respectively, it is assumed that the data values are almost normal. Within these ranges, values for skewness and kurtosis are regarded as showing uniformity of the data. This implies that the study has no issue of normality.

4.1.2 Test for Multicollinearity

A correlation matrix and the Variance Inflation Factor (VIF) were used to test for multicollinearity among the independent variables used in the study. The outcomes are shown below:

Table 3: Correlation Matrix

Variable	1	2	3	4
Internet banking (1)	1			
ATM (2)	.513**	1		
POS (3)	.247**	.522**	1	
Performance (4)	.585**	.522**	.475**	1
N	400	400	400	400

** Correlation is significant at the 0.01 level (2-tailed)

Source: Researcher's Computation from SPSS Output, 2023.

A positive correlation was observed between the variables, as Table 3 illustrates the correlation between all the dimensions of digital banking and performance. Additionally, a positive correlation ($r=.585$; $p<.01$) has been observed between online banking and performance. A correlation between performance and automated teller machines was discovered ($r=.522$; $p<.01$). Additionally, a positive correlation ($r=.475$; $p<.01$) was discovered between performance and point of sale. This demonstrates that there is no problem with collinearity among the independent variables.

Table 4: Test for Multicollinearity

Model	Collinearity Statistics	
	Tolerance	VIF
Internet banking	.591	1.693
ATM	.569	1.759
Point of Sales	.640	1.562

Source: Researcher's Computation from SPSS output, 2023

Because the values of the Variance Inflation Factor are less than 5, this result further supports the correlation matrix's finding that there are no issues with multicollinearity among the independent variables (online banking, automated teller machines, and point of sale) used in the models.

4.2 Regression Analysis

The study's model's regression analysis results are shown in this subsection. The degree to which the predictor variables—point of sale, automated teller machines, and internet banking—have an impact on the dependent variable—performance—is explained by the regression model. The outcome can be found in the coefficients tables, analysis of variance, and model summary. The degree to which the independent variables influence the dependent variable was ascertained using the model summary. An ANOVA test was used in the study to determine the model's significance

and determine if it could be used for additional statistical analysis. The process involved calculating the F statistics and the associated P-values. The criteria for comparing F statistics P-values with a significance level of 0.05 were applied in the study. The study determined that the model is significant and suitable for use in additional statistical analyses if the P-value of the F statistics was less than 0.05, and vice versa. The calculation of predictor variable coefficients came next. The analysis of multiple regression was carried out with a 95 percent confidence level (α = 0.05).

Table 5: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin Watson
1	.905	.819	.810	.749	1.737

a. Predictors: (Constant), internet banking, automated teller machine and point of sales
Dependent Variable: Performance

Source: Researcher's Computation from SPSS Output, 2023.

The summary of the regression model is displayed in Table 5. According to the model summary, the three digital banking dimensions—online banking, automated teller machines, and point of sale—accounted for 78.5% of the performance variance. The R Square value is 0.785. Other than the variables in the model, other factors accounted for the remaining 21.5%. The outcome suggests that aspects of digital banking are important performance predictors. Additionally, a strong positive correlation between the study's variables is indicated by the value of R= 0.905.

Table 6: Analysis of Variance (ANOVA)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	256.763	4	64.191	114.422	.000
Residual	445.792	395	.561		
Total	702.555	399			

a. Dependent Variable: Performance

b. Predictors: (Constant), internet banking, automated teller machine and point of sales

Source: Researcher's Computation from SPSS Output, 2023.

The results of the Analysis of Variance (ANOVA) are displayed in Table 6 and show that p-value = 0.000 (less than 0.05) and F (114, 422) = 64.191 (greater than the critical F value of 2.42). Thus, the analysis demonstrates that the model had a good fit. The outcome also suggests that the model was statistically significant and sufficient in forecasting changes in performance, and that the three digital banking dimensions—online banking, automated teller machines, and point of sale—significantly explained changes in performance.

Table 7: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.806	.158		5.106	.000
Internet banking	.201	.035	.213	5.781	.000
ATM	.278	.039	.270	7.199	.000
POS	.100	.034	.102	2.893	.004

a. Dependent Variable: Performance

Source: Researcher's Computation from SPSS Output, 2023

The regression coefficient, which explains how online marketing affects customer satisfaction, is displayed in Table 7's result. All of the independent variables had a significant impact on the dependent variable (performance), as indicated by the beta coefficients. The findings indicate that the automated teller machine had $\beta = 0.270$, $t = 7.199$, $P = 0.000$, the point of sale had $\beta = 0.102$, $t = 2.893$, $P = 0.004$, and internet banking had $\beta = 0.213$, $t = 5.781$, $P = 0.000$. The outcome indicates that performance would be 0.806 if all the variables (online banking, automated teller machines, and point of sale) were held constant. The outcome also shows that a unit change in internet banking would result in a 20.1% increase in performance, assuming that all other factors remain constant. For an automated teller machine, a unit increase would result in a performance increase of 27.8% while a unit change in the point of sales would result in a performance change of 10%. All other factors being held constant. Thus, the outcome demonstrates that in Makurdi Metropolis, Benue State, the point of sale has the greatest impact on deposit money banks' performance.

4.3 Test of Hypotheses and Discussion of Findings

The findings of the study were discussed based on the study's objectives and hypotheses tested.

The findings of the study from objective one also discovered that internet banking has significant effect on performance of Deposit money banks in Benue State-Nigeria. Regression was used to test the hypothesis at 5% level of significance and the p-value (0.000) was lower than the significant level. This is statistically given as $p= 0.000< .05$. Results in Table 7 show that the p-value was 0.000. This was supported by a calculated t-statistic of 5.781 which is larger than the critical t-statistic of 1.96. This result is consistent with that of Obiekwe and Anyanwaokoro's (2017) study, which found that internet banking significantly affects the profitability of Nigerian commercial banks. In a similar vein, Hussein and Elyjoy's (2018) research found that internet banking significantly improved the operational performance of commercial banks. Ighoroje and Okoroyibo (2020) concluded that the cashless policy has improved the performance of money deposit banks in Nigeria and that internet banking has a positive and significant effect on return on equity (ROE). The study found that Nigerian banks' returns on assets (ROA) have increased favorably and noticeably as a result of the use of electronic banking. The fact that internet banking enables users to conduct transactions independently at their convenience and at very little cost to the banks means that these findings are consistent with a priori expectations.

The findings of the study from objective three established that automated teller machine has significant effect on performance of Deposit money banks in Benue State-Nigeria. Regression was used to test the hypothesis at 5% level of significance and the p-value (0.000) was lower than the significant level. This is statistically given as p-value= 0.000 < .05. Results in Table 7 show that the p-value was 0.000. This was supported by a calculated t-statistic of 7.199 which is larger than the critical t-statistic of 1.96. This result is consistent with that of Ogutu and Fatoki (2019), who investigated the impact of electronic banking on the financial performance of Kenyan listed commercial banks and found a substantial positive correlation between ATM usage and those banks' financial results. Additionally, Obiekwe and Anyanwaokoro (2017) found that the Automated Teller Machine (ATM) has a major impact on the profitability of Nigerian commercial banks. In a similar vein, Pam's (2018) research found that ATM usage significantly and favorably affects Nigerian banks' return on assets (ROA). According to Joseph et al. (2021), ATM and RO and Earning EPS have a positive and significant relationship. In conclusion, Ighoroje and Okoroyibo (2020) found that the performance of money deposit banks in Nigeria has been positively impacted by cashless policies and that internet banking and automated teller machines (ATMs) have a positive and significant impact on return on equity (ROE).

The findings of the study from objective three revealed that point of sales has significant effect on performance of Deposit money banks in Metropolis, Benue State-Nigeria. Regression was used to test the hypothesis at 5% level of significance and the p-value (0.004) was lower than the significant level. This is statistically given as p= .004 < .05. Results in Table 7 show that the p-value was 0.004. This was supported by a calculated t-statistic of 2.893 which is larger than the critical t-statistic of 1.96. The results of the study contradict the findings of Obiekwe and Anyanwaokoro (2017), who found that the profitability of commercial banks in Nigeria is not significantly impacted by Point of Sales (POS). Oladejo (2016) found that when banks adopt e-payment systems, their performance level, including gross margin, profits after tax, return on assets, and return on equity, changes. Oladejo's research focused on the impact of ATM, POS, web/Internet, and mobile e-payments adoption on banks' profitability. Alao and Sorinola (2015) contend that the cashless policy has a detrimental impact on the performance of Nigeria's commercial banks, which runs counter to the results of this investigation. Oladejo (2016) found that when banks adopt e-payment systems, their performance level, including gross margin, profits after tax, return on assets, and return on equity, changes. Oladejo's research focused on the impact of ATM, POS, web/Internet, and mobile e-payments adoption on banks' profitability. According to Ugbede, Yahaya, and Edicha (2019), point-of-sale (POS) contributes positively and statistically significantly to bank profitability.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The impact of digital banking on deposit money bank performance in Makurdi Metropolis, Benue state, Nigeria, was empirically investigated in this study. The use of internet banking, automated teller machines, and point of sale has a positive and significant impact on the performance of deposit money banks in Metropolis, Benue state, Nigeria, according to the results of data analysis and study findings.

5.2 Recommendations

i. Deposit money banks should carry out more research to find new internet banking products and services in order to market and educate the public about these services and products. This will improve performance and draw in more customers.

ii. ii. Calling for the installation of more automated teller machines; banks should manage deposit money; these machines should be positioned strategically to make them easily accessible to both current and new customers.

iii. iii. Deposit money bank management should always be spreading the word about the advantages of point of sale as a way to improve digital banking. The Nigerian government ought to work diligently to create a framework for internet security in order to combat online fraud and other security risks related to online banking. The government should also enact laws regarding cybercrimes and specify the penalties for violators.

The study was limited to selected banks in Makurdi Metropolis, Benue State hence findings cannot be generalized. The study therefore suggests that further studies should be carried out on the effect of digital banking on Nigerian economy. Further studies should consider the effect of digital banking on performance quoted Nigerian banking industry using other deposit money banks respectively.

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