# SADI International Journal of Management and Accounting

ISSN: 2837-1844| Impact Factor : 7.76 Volume. 11, Number 3; July-September, 2024; Published By: Scientific and Academic Development Institute (SADI) 8933 Willis Ave Los Angeles, California https://sadijournals.org/index.php/sijma|editorial@sadijournals.org



# EFFECT OF ONLINE BANKING ON THE FINANCIAL PERFORMANCE OF LISTED DEPOSIT MONEY BANKS (DMB) IN NIGERIA

# Ahmed Abubakar Zik-Rullahi, Ph.D. and Adeoye Yinka

Department of Accounting, Faculty of Management Sciences, University of Abuja, P.M.B 117, Gwagwalada-

Abuja, Nigeria.

DOI: https://doi.org/10.5281/zenodo.13611629

Abstract: This study examines the effect of online banking on the financial performance of listed Deposit Money Banks (DMBs) in Nigeria. The analysis focuses on three aspects of online banking: Online Web Transactions (WEB), National Electronic Funds Transfer (NEFT), and Mobile Money Operator (MMO). The study utilizes regression analysis to investigate the effect of online banking components on Profit after-tax growth (PATG) for DMBs. The findings indicate that Online Web Transactions (WEB) have a negative and statistically significant impact on PATG. This suggests that an increase in online web transactions is associated with a decrease in financial growth for DMBs in Nigeria. In contrast, National Electronic Funds Transfer (NEFT) demonstrates a positive and statistically significant influence on PATG, indicating that an increase in NEFT is associated with an increase in financial growth. On the other hand, Mobile Money Operator (MMO) shows a negative and statistically significant effect on PATG, implying that an increase in MMO usage is associated with a decrease in financial growth. These findings highlight the complex relationship between online banking and financial growth in the Nigerian banking industry. The study provides valuable insights for banks, policymakers, and stakeholders to make informed decisions and develop strategies that maximize the benefits of online banking while mitigating potential challenges. The recommendations include enhancing online web transactions, leveraging NEFT services and addressing challenges posed by MMOs. By implementing these recommendations, DMBs can navigate the digital banking landscape, optimize their online banking services, and achieve sustainable financial growth in Nigeria.

Keywords: Online banking, financial growth, DMBs, WEB, NEFT, MMO & PATG.

# Introduction

The global financial landscape has undergone a significant transformation over the past few decades, with technology playing a pivotal role in shaping the way financial services are delivered. One of the notable advancements is the advent and widespread adoption of online banking, which has revolutionized the traditional banking sector. This paradigm shift has not only altered the way customers interact with financial institutions but has also had a profound impact on the overall financial performance of banks, particularly in emerging economies like Nigeria (Okafor, 2020).

Nigeria, as a major player in the African economy, has witnessed substantial growth in its banking sector, characterized by increased competition, regulatory changes, and technological innovations. The integration of

online banking services has become a key strategy for many Nigerian banks to enhance efficiency, broaden their customer base, and stay competitive in a dynamic market (Boateng & Nagaraju, 2020).

The financial performance of banks is a critical aspect that reflects their ability to generate profits, manage risks, and adapt to the changing business environment. The introduction and expansion of online banking services have raised pertinent questions about their influence on the financial performance of Nigerian banks. Understanding the nuanced relationship between online banking and financial performance is crucial for both policymakers and banking stakeholders as they navigate an increasingly digital financial landscape (Ibrahim & Mohammed, 2020). Several factors contribute to the complexity of this relationship. The adoption of online banking involves substantial investments in technology infrastructure, security measures, and staff training. Additionally, changes in customer behaviour, preferences, and expectations must be considered. This study aims to explore the multifaceted effect of online banking on the financial performance of listed Nigerian banks, taking into account various dimensions such as profitability, operational efficiency, customer satisfaction, and risk management.

By delving into the specific challenges and opportunities presented by online banking in the Nigerian context, this research seeks to provide valuable insights for policymakers, bank executives, investors, and researchers. The findings will inform strategic decisions, regulatory frameworks, and industry practices to optimize the integration of online banking services and ensure sustainable financial performance for listed Nigerian banks in an increasingly digital era.

#### **Statement of the Problem**

The ideal scenario envisions a seamless integration of online banking services within the operations of listed Nigerian banks. In an optimal situation, online banking should enhance efficiency, reduce operational costs, and contribute positively to the financial performance of these banks. The ideal model involves a secure, user-friendly, and technologically advanced online banking infrastructure that not only attracts a larger customer base but also fosters customer loyalty through enhanced services.

Despite the potential benefits of online banking, some notable challenges and issues hinder its optimal integration and impact on the financial performance of listed Nigerian banks. These challenges include the prevalence of cyber threats and the risk of unauthorized access to sensitive financial information that may undermine the trust of customers in online banking platforms; inadequate technological infrastructure and outdated systems may result in system downtimes, slow processing times, and a suboptimal user experience. Inherent risks associated with online transactions, such as system failures, transaction errors, and network outages, may negatively impact the overall efficiency and reliability of online banking.

Failure to address the aforementioned challenges and issues associated with online banking in listed Nigerian banks may lead to several adverse consequences. Persistent security concerns and operational issues may erode customer trust, resulting in a decline in the number of customers using online banking services. The inability to offer efficient and reliable online banking services may hinder the banks' ability to compete with global counterparts and may lead to a loss of market share. More so, failure to optimize online banking may lead to increased operational costs, negating the potential cost-saving benefits that effective digital services could bring. Hence, resolving the challenges associated with online banking is crucial for ensuring the sustained financial performance and competitiveness of listed Nigerian banks in an increasingly digital financial landscape.

# **Objectives of the Study**

The broad objective of the study is to examine the effect of online banking on the financial performance of listed Deposit Money Banks (DMB) in Nigeria. The specific objectives of the study are to:

Evaluate the effect of Internet (WEB) banking transactions on the financial performance of listed Deposit Money Banks (DMBs) in Nigeria

Investigate the effect of NEFT Transfers on the financial performance of listed Deposit Money Banks (DMBs) in Nigeria

Assess the effect of Mobile Money Operator transactions on the financial performance of listed Deposit Money Banks (DMBs) in Nigeria

# **Research Questions**

The study provided answers to the following research questions:

✤ To what extent have Internet (WEB) banking transactions affected the financial performance of listed Deposit Money Banks (DMBs) in Nigeria?

• To what extent have NEFT Transfers affected the financial performance of listed Deposit Money Banks (DMBs) in Nigeria?

To what extent have Mobile Money Operator transactions affected the financial performance of listed Deposit Money Banks (DMBs) in Nigeria?

# **Statement of Hypotheses**

- The following hypotheses stated in null form (H<sub>0</sub>) were formulated for this research:
- $H_{01}$ : Internet (WEB) banking transactions have no positive and significant effect on the financial performance of listed Deposit Money Banks (DMBs) in Nigeria.

•  $H_{02}$ : NEFT Transfers have no positive and significant effect on the financial performance of listed Deposit Money Banks (DMBs) in Nigeria.

•  $H_{03}$ : Mobile Money Operator transactions have no positive and significant effect on the financial performance of listed Deposit Money Banks (DMBs) in Nigeria.

# **Conceptual Review**

# Concept of Internet (WEB) Banking

Internet (Web) Banking, also known as online banking or e-banking, refers to the electronic platform provided by financial institutions that allows customers to access and manage their banking services over the internet. Dong et al. (2020) revealed that the notion of e-banking encompasses various banking activities conducted via electronic networks. They assert that e-banking involves several service types that allow bank customers to request information and perform most retail banking transactions using a computer or mobile phone. Shanmugam and Nigam (2020) argue that e-banking refers to systems that enable bank customers to access their accounts and obtain general information about banking products and services through the bank's website, eliminating the need for sending letters, faxes, original signatures, or telephone confirmations.

Through Internet Banking, customers can conduct various financial transactions and banking activities without the need to physically visit a brick-and-mortar bank branch. Common features of Internet Banking include:

Account Information: Customers can view details of their accounts, including balances, transaction history, and account statements.

*Fund Transfers:* Users can transfer money between their own accounts or to other accounts within the same bank. Some systems also support interbank transfers.

*Bill Payments:* Internet Banking facilitates the payment of bills and utilities directly from a customer's bank account.

**Online Statements:** Customers can access and download electronic statements, reducing the need for paper statements.

*Mobile Recharge:* Many Internet Banking platforms allow users to recharge mobile phone credit directly from their bank accounts.

*Investment Management:* Some Internet Banking services provide tools for managing investments, such as buying and selling stocks or accessing mutual funds.

*Loan Applications:* Customers may have the ability to apply for loans or credit facilities through the online banking platform.

*Alerts and Notifications:* Banks often offer alert services to notify customers of account activity, low balances, or other relevant information.

# **Concept of NEFT Transfers**

NEFT, which stands for National Electronic Funds Transfer, is a popular electronic funds transfer system used in various emerging and advanced nation of the world. It is a nationwide electronic payment system that allows individuals, businesses, and financial institutions to transfer funds from one bank account to another securely and efficiently. Frank and Binaebi (2019) proposed that electronic funds transfer is a banking method through which individuals execute fund transfers, inquire about account balances, settle bills, and manage assets such as stocks online. This involves the utilization of banking products and services directly by customers over electronic and communication networks. Electronic banking, in essence, refers to leveraging the internet as a delivery mode for services, encompassing activities like opening deposit accounts, electronic bill payments, online transfers, withdrawals, and any other transactions conducted through online banking. According to Muotolu and Nwadialor (2019), electronic finance (e-finance) can be defined as the provision of financial services and market activities using electronic communication and computation. It is a medium that involves the use of electronic devices such as the Internet, wireless connections, networks, ATMs, phones, and cell phones in the delivery of banking services.

# Key features of NEFT transfers include:

*Nationwide Coverage:* NEFT is available across various countries and facilitates fund transfers between different banks and branches.

*Electronic Process:* NEFT transactions are conducted electronically, eliminating the need for the physical movement of funds or paper instruments.

*Scheduled Transfers:* NEFT operates on a deferred settlement basis, and transactions are settled in batches. The system works in hourly batches during the regular working hours of banks.

*Individual and Bulk Transfers:* NEFT supports both individual and bulk transactions. Individuals can use NEFT for various purposes, including money transfers, bill payments, and more.

*Transaction Limits:* There are predefined transaction limits for NEFT transfers. However, these limits may vary depending on the bank and the type of account.

# **Concept of Mobile Money Operator**

Mobile Money Operator (MMO) transactions refer to financial transactions and services facilitated through mobile devices by authorized financial entities known as Mobile Money Operators. Some common Mobile Money Operator transactions include Mobile Wallet Services, Money Transfers, Bill Payments, Airtime Purchase, Merchant Payments, Cash Withdrawals, Savings and Investments, and International Remittances.

Electronic banking services can be grouped into four major classes, namely:

First, mobile banking is one form of electronic banking; it is used for performing balance check, account transactions, payments, credit applications and other banking transactions via a mobile device such as a mobile phone or personal digital assistant (PDA) (Ndunga, Njati & Rukangu, 2016). Monyoncho (2015) noted that mobile banking allows customers with convenience of accessing bank products and services via their phones. Thus, mobile banking is about getting banking services and products to the unbanked (those who do not have physical access to the bank. Second, the automated teller machine allows bank customers to conduct banking transactions from almost every other ATM in the world. The basic form of non-branch banking is ATM, where bank customer's access bank services and products with their card and pin and check their balances, withdraw monies, and make payments. Ogbuji (2012) observed the ATM is one of the existing replacements of the cascading labour intensive transaction system done through what is popularly known as paper-based payment instruments. Jegede (2014) showed that the use of ATM terminals have averagely improved the performance of Nigerian DMBs.

Third, internet banking offers bank customers with home banking services and products. Internet banking refers to banking services provided by banks over the internet. Some of the vital internet banking services includes paying of bills, funds transfers, viewing account statements, among others. Internet banking is performed via a computer system or similar devices that can connect to the banking site via the internet (Oruro & Ndungu, 2013). Fourth, point of sales (POS) is another aspect of electronic banking. Ngumi (2013) sees POS as a retail payment system which reads a customer's bank's name and account number when a bank card or credit card is swiped (passed through a magnetic stripe reader). The use of POS has made bank services more accessible by customers', cost efficient and income generating streams for DMBs (Iftekhar, Schmiedel & Song, 2019; and Ngumi, 2013).

# **Theoretical Framework**

This study is theoretically underpinned on Technology Acceptance Theory.

# **Technology Acceptance Theory**

Davis, Bagozzi and Warshaw (1989) propose the Technology Acceptance Theory (TAT) to explain the conceptual model that users' intention or acceptance degree towards information system or new technology. TAT is constructed on the foundations of perceived usefulness and perceived ease of use. Perceived usefulness refers to individual belief to improve the degree of job performance through using a particular new technology and information system. Perceived ease of use indicates how easy an individual learns how to operate or use new technology or information system (Davis et al., 1989, Gefen et al., 2003). The model places more emphasis on how perceived ease of use would positively affect perceived usefulness. Exogenous variables such as environment are also the antecedent that induces perceived usefulness and perceived ease of use. TAT is based on both important perceptive factors as perceived usefulness and perceived ease of use. TAT is widely applied on the research of information technology. Liu and Arnett (2000) examined the significance based on the TAT theory. Gefen et al. (2003) combined TAT and rust to propose an integrated model for explaining online consumer

behavior. Pavlou (2003), proposes an e-commerce acceptance model of online consumers by separating and applying experiment designs and survey. The study integrates TAT factors, the experiences of the public, perceived risk and faith. The empirical results show that the principle of e-government is that people fully trust the governmental organization and that they highly identify with information technology and that TAT does not only apply to examine the empirical study, scholars' new information technology accept intention or behavior, but also ensures that TAT is suitable for the explanation of online user behavior issues (Liu and Arnett, 2000; Gefen et al., 2003; Pavlou, 2003; Horst et al., 2007).

#### **Empirical Review**

Mohammed (2018) Using correlation and regression approaches they examine online banking effect on the banks financial performance in Ethiopia. Their research reveals capital sufficiency and cost efficiency have a positive correlation with performance of banks and other variables like liquidity deposits ratio including inflation have a negative correlation with performance of banks and online banking and bank size have no relationships with banks performance in Ethiopia.

Lasmini, Budiarti, Tasman and Fifka (2020), research on E-Banking application and bank performance in Indonesia's. Internet Banking and Mobile Banking were employed as surrogates for E-Banking, with risk, liquidity, bank size, and business cycles serving as control variables. The results shows online banking has a strong correlation with bank performance in Indonesia, but mobile banking has a positive but negligible correlation with bank performance in Indonesia.

Olindo and Maniagi (2018) evaluated the Influence of Electronic Banking on Performance of Commercial Banks in Kakamega County. The research design adopted was explanatory design which predicted the likelihood of a phenomena occurring given the presence of an event. The sampling technique used was stratified purposive random sampling. Data was collected from primary sources. Primary data was collected using questionnaires. The instruments were administered by the researcher on the selected respondents. Data was edited, coded and then analyzed using SPSS version 20. Electronic banking significant accounted for 58.2% variation in the performance of commercial banks. The study recommended that commercial bank management need to decrease electronic banking bill payment services in commercial bank so as to enable customers to undertake transaction through electronic banking. The banks should also enhance electronic banking customer security and privacy to reduce fraud and cyber-crime associated with electronic banking.

Babatunde and Sunday (2017) studied E- Banking in Nigeria, Issues and Challenges. The study assesses issues and challenges of e-banking in Nigeria. The specific objectives ascertain the effect of e-banking on workers, job security in Nigeria banking industry, examine the relationship between e- banking and quality of service delivery of commercial banks in Nigeria, evaluate the relationship between e-banking and security of financial transactions and to find out if e-banking influences customers satisfaction in the Nigerian banking industry. The survey and descriptive research design were adopted in the methodology of the study. The population consists of all the customers and staff of three selected banks branches in the Benin metropolis. A sample of three hundred respondents was selected using the convenience random sampling techniques. The study employs primary data using questionnaires as the research instrument. The data analysis was carried out using summary statistics and ordinary least square regression analysis. The study findings indicate that employees' job security has a positive relationship with E-banking and significantly influence E-banking in Nigeria; customers' satisfaction was ascertained to have a positive relationship with e-banking and also influence e-banking penetration in Nigeria;

security of financial transactions was found to have a positive relationship with e-banking, it however had inverse significant impact on e-banking; services delivery has a positive relationship with e-banking. It is therefore recommended that for effective e-banking penetration, investors education and marketing of e-banking products should be the key strategy banks should use to attract more customers towards embracing e-banking and increasing security for e-banking products, reduction of charges on e-banking products and increasing more ATM outlets in Nigeria as part of measures towards enhancing quality services delivery and promotion of e-banking as this will further enhance the recent need for financial inclusion as part of the monetary policy of the Central Bank of Nigeria.

Nwakoby, Okoye, Ezejiofor, Anukwu and Ihediwa (2020) looked at the relationship between electronic banking and deposit money bank profitability in Nigeria from 2009 to 2018. *Ex post facto* research design was used in this study. The study used regression analysis to examine the hypotheses. According to the findings, the Automated Teller Machine (ATM) payment method has a negative effect on deposit money bank return on equity in Nigeria, but this effect is not statistically significant; the Point of Sales (POS) payment method has a positive effect on deposit money bank return on equity in Nigeria, but this effect is not statistically significant; and the Mobile Banking Payment (MPAY) has a positive effect on return on equity in Nigeria, but this effect is not statistically significant.

Enoruwa, Ezuem and Nwani (2019) used data from the Central Bank of Nigeria (CBN) bulletin to investigate the association between electronic banking and bank performance in Nigeria from 2009 to 2017. The degree and type of the link between the dependent and independent variables were investigated using regression analysis. Electronic channel products (ATM, Mobile Pay) are positively and strongly associated to bank performance, according to the correlation data.

Bingilar and Bariweni (2019) investigated the effect of electronic payment systems on the performance of commercial banks in Nigeria. For the purpose of the study, data was collected from secondary sources specifically from the CBN statistical bulletin and comprised of data on the assets base of commercial banks and internet banking for the period of 2009 to 2019. Findings of the research showed that internet (online) banking transactions had a positive relationship with the asset base of commercial banks.

Agu and Nwankwo (2019) looked at the impact of the electronic banking system on the financial performance of a few Nigerian deposit money banks. The research design was an ex post facto research design that utilized secondary data from 2008 to 2017. The amount of the effects exerted on chosen deposit money banks by ATM, MMT, and PUS was determined using the ordinary least square (OLS) multiple regression technique of analysis. The analysis found that ATM and MMT have a positive and non-significant effect on ROE, whereas POS has a negative and non-significant effect on ROE of selected Nigerian deposit money institutions.

Madugba et al. (2020) examined the impact of electronic banking on the financial performance of Nigerian deposit money banks. The data for the study was obtained from the Central Bank of Nigeria's Statistical Bulletin and the National Bureau of Statistics' Statistical Bulletin for various years, as well as from published financial statements of the banks under study. An ex-post facto research design was used and a normality test was carried out to establish the goodness of the data; descriptive statistics and a multicollinearity test were conducted in which the independent variables were found good. Regression was adopted to test two hypotheses. It was found that ATM has a positive and significant association with Earning EPS and ROA; POS and NEFT significantly affect ROA

only, while WEB has an insignificant impact on both EPS and ROA. It is concluded that electronic banking significantly affects financial performance of deposit money banks in Nigeria.

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 technique of multiple regression was applied. The study found that ATMs do not contribute to bank profitability and are not statistically significant to bank profitability. However, POS has a positive contribution to bank profitability and is statistically significant to bank profitability. Internet banking also has a positive contribution to bank profitability and is statistically significant to bank profitability.

Okon and Amaegberi (2018) used data from the Electronic Payment System Office, Central Bank of Nigeria statistical bulletin from 2007 to 2016 to estimate the impact of mobile banking transactions on bank profitability in Nigeria. To undertake quantitative analysis for four selected old and new generation banks, the study uses Panel unit root and SURE model estimate techniques. Economic a priori criteria, statistical criteria, and econometric criteria were used to examine the findings of this study. The positive and statistically significant association between automated teller machines and the performance of old and new generation banks in Nigeria reveals that automated teller machines are a substantial contributor to the success of old and new banks in Nigeria.

# Methodology

# **Research Design**

This study employed an *ex-post facto* research design, which is implemented subsequent to the occurrence of events and the availability of data. This design is selected when the researcher lacks control or the capacity to manipulate the variables under investigation due to the events having already transpired.

*Ex-post facto* research is utilized to establish cause-and-effect relationships between variables by examining preceding events or data. It is a method employed to discern elements associated with a specific occurrence, situation, event, or behavior by scrutinizing earlier events or data for potential causal factors.

# Area of Study

The study was conducted in Nigeria concentrating mainly on deposit money banks in Nigeria

# Sources of Data

This study utilized secondary source of data collection drawn from the audited financial statements of various firms spanning the years 2018 to 2022. The reason for opting for this timeframe is the prevalence of numerous fraudulent incidents within the Nigerian banking sector during this period.

# Population and Sample Size of the Study

The study's population consists of 14 banks listed on the Nigerian Exchange Group as of December 31, 2022, selected based on their classification as Deposit Money Banks by the Central Bank of Nigeria. All 14 banks constitute the sample size for this study.

# **Model Specification**

The Multiple Regression Model (MRM) was used in this study to determine the effect of the explanatory variables on the focal variable and make predictions as they relate to the variables. The Multiple Regression Model was represented as:

 $PATG = \beta 0 + \beta_1 WEB_{it} + \beta_2 NEFT_{it} + \beta_3 MMO_{it} + \epsilon_{it} \dots \dots i$ *Where:* 

WEB = Online (Web) Transactions

NEFT = National Electronic Funds Transfer

MMO = Mobile Money Operator

PATG= Profit after Tax Growth

 $\beta = Coefficient$ 

 $\mathcal{E} = \text{Error term}$ 

#### Results

#### Summary of Multiple Regression Result

Table 1: Regression Analysis Result of the Industry Level Panel Data

Dependent Variable: PATG Method: Panel Least Squares Date: 11/25/23 Time: 12:06 Sample: 2018 2022 Periods Included: 5 Cross-sections Included: 14 Total Panel (balanced) observations: 70

Variable	Coefficient	Std. Error	t-Statistic	Prob.
WEB	-0.007448	0.024233	-0.307351	0.0495
NEFT	0.042464	0.015614	2.719694	0.0082
MMO	-0.005187	0.024775	-0.209353	0.0348
С	0.021678	0.026412	0.820774	0.4145
R-squared	0.609605	Mean dependent var		0.015372
Adjusted R-squared	0.047772	S.D. dependent var		0.017897
S.E. of regression	0.017464	Akaike info criterion		-5.183559
Sum squared resid	0.021959	Schwarz criterion		-5.002273
Log likelihood	208.1588	Hannan-Quinn criter.		-5.110987
F-statistic	17.72601	Durbin-Watson stat		1.308017
Prob(F-statistic)	0.029364			

# Source: E-view 10.0 Statistical Output, 2023

Table 1 revealed that the coefficient of Online Web Transactions (WEB) is negative and significant in achieving Profit after Tax Growth (PATG) of listed deposit money banks in Nigeria. The PATG= 0.02-0.007WEB which indicates that PATG of listed deposit money banks in Nigeria will decrease by 0.7% for every 1% increase in Online Web Transactions. The p-value of 0.04 is more than the t-statistic value of -0.30 and the standard error value of 0.02 is more than the t-statistic value. This implies that there is negative and significant effect of Online Web Transactions on Profit after Tax Growth of listed deposit money banks in Nigeria.

The coefficient of National Electronic Funds Transfer (NEFT) is positive and significant in achieving Profit after Tax Growth (PATG) of listed deposit money banks in Nigeria. The PATG = 0.02 + 0.04NEFT which indicates that PATG of listed deposit money banks in Nigeria will increase by 4% for every 1% increase in National Electronic Funds Transfer. The p-value of 0.001 is less than the t-statistic value of 2.71 and the standard error

value of 0.01 is less than the t-statistic value. This implies that there is positive and significant effect of National Electronic Funds Transfer on Profit after Tax Growth of listed deposit money banks in Nigeria.

The coefficient of Mobile Money Operator (MMO) is negative and significant in achieving Profit after Tax Growth (PATG) of listed deposit money banks in Nigeria. The PATG = 0.02-0.05MMO which indicates that PATG of listed deposit money banks in Nigeria will decrease by 5% for every 1% increase in Mobile Money Operator. The p-value of 0.03 is more than the t-statistic value of (0.20) and the standard error value of 0.02 is more than the t-statistic value. This implies that there is negative and significant effect of Mobile Money Operator on Profit after Tax Growth of listed deposit money banks in Nigeria.

The coefficient of determination  $(r^2)$  of 0.60 indicates that 60% of variation in performance in terms of Profit after Tax Growth of listed deposit money banks in Nigeria can explained by online banking. The remaining 40% can be explained by other related factors not noted in the regression model.

# **Summary of Findings**

Findings arising from this research were summarized as follows:

i. Online Web Transactions (WEB) have a statistically significant negative impact on Profit after Tax Growth (PATG) for listed deposit money banks in Nigeria.

ii. National Electronic Funds Transfer (NEFT) has a statistically significant positive influence on Profit after Tax Growth (PATG) for listed deposit money banks in Nigeria.

iii. Mobile Money Operator (MMO) has a statistically significant negative effect on Profit after Tax Growth (PATG) for listed deposit money banks in Nigeria.

# Conclusion

In conclusion, this study examined the impact of online banking on the financial growth of listed Deposit Money Banks (DMBs) in Nigeria. The findings revealed significant relationships between different aspects of online banking and Profit after Tax Growth (PATG).

Firstly, Online Web Transactions (WEB) were found to have a negative and statistically significant impact on PATG. This suggests that an increase in Online Web Transactions is associated with a decrease in PATG. The negative coefficient indicates that the growth in online web transactions may not necessarily translate into financial growth for DMBs in Nigeria.

On the other hand, National Electronic Funds Transfer (NEFT) showed a positive and statistically significant influence on PATG. The positive coefficient indicates that an increase in National Electronic Funds Transfer is associated with an increase in PATG. This suggests that the use of NEFT contributes to the financial growth of DMBs in Nigeria.

Lastly, Mobile Money Operator (MMO) was found to have a negative and statistically significant effect on PATG. An increase in Mobile Money Operator usage was associated with a decrease in PATG. This indicates that the presence of mobile money operators may pose challenges to the financial growth of DMBs in Nigeria.

These findings highlight the complex effect online banking exert on financial growth of the Nigerian banking industry. While certain aspects of online banking, such as NEFT, can contribute positively to financial growth, others, like Mobile Money Operator, may have a negative impact. It is crucial for DMBs to carefully assess and manage the different components of online banking to maximize their financial growth. This requires strategic decision-making, adaptation to technological advancements, and effective risk management to mitigate potential negative effects.

Overall, this study provides valuable insights which enables banks, policymakers, and stakeholders to make informed decisions and develop strategies to ensure sustainable growth in the evolving landscape of digital banking.

# Recommendations

Based on the findings of this study, the following recommendations are proposed:

i. Enhance Online Web Transactions: Although Online Web Transactions (WEB) were found to have a negative impact on Profit after Tax Growth (PATG), it is essential for DMBs to continue investing in and improving their online banking platforms. However, they should focus on optimizing the efficiency, security, and user experience of their web-based banking services to mitigate the potential negative effects on financial growth.

ii. Leverage National Electronic Funds Transfer (NEFT): Given the positive impact of NEFT on PATG, DMBs should actively promote and encourage the use of NEFT services among their customers. They can offer incentives, educational campaigns, and user-friendly interfaces to increase the adoption of NEFT and leverage its potential to drive financial growth.

**iii.** Address Challenges of Mobile Money Operators (MMOs): Considering the negative impact of MMOs on PATG, DMBs should carefully evaluate their relationships with mobile money operators and develop strategies to mitigate the challenges they pose. This could involve exploring partnerships or collaborations that align the interests of DMBs and MMOs, or developing alternative mobile banking solutions that directly integrate with existing banking infrastructure.

# References

- Boateng, K., & Nagaraju, Y. (2020). The Impact of Digital Banking on the Profitability of Deposit Money Banks: Evidence from Ghana. International Journal of Research in Finance and Management, 3, 144-150.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. Management Science, 35(8), 982.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319-340.
- Dong, J., Yin, L., Liu, X., Hu, M., Li, X., & Liu, L. (2020). Impact of Internet Finance on the Performance of Commercial Banks in China. International Review of Financial Analysis, 72, Article ID: 101579. https://doi.org/10.1016/j.irfa.2020.101579
- Frank, B. P., & Binaebi, B. (2019). Electronic Payment Systems Implementation and the Performance of Commercial Banks in Nigeria. European Journal of Business and Management Research, 4, Article No. 5. https://doi.org/10.24018/ejbmr.2019.4.5.112
- Iftekhar, H., Schmiedel, H., & Song, L. (2019). Return to retail banking and payments. Working Paper Series 1135, European Central Bank.
- Jegede, C. A. (2014). Effects of automated teller machine on the performance of Nigerian banks. American Journal of Applied Mathematics and Statistics, 2(1), 40-46.

- Monyoncho, L. N. (2015). Relationship between banking technologies and financial performance of commercial banks in Kenya. International Journal of Economics, Commerce and Management, United Kingdom, 1-23.
- Muotolu, P. C., & Nwadialor, E. O. (2019). Cashless Policy and Financial Performance of Deposit Money Banks in Nigeria. International Journal of Trend in Scientific Research and Development, 3, 465-476. https://doi.org/10.31142/ijtsrd23835
- Ndunga, R. M., Njati, I. C., & Rukangu, S. (2016). Influence of technological innovation on bank performance in Meru town, Kenya. International Journal of Economics, Commerce and Management, United Kingdom, 4(11), 1-15.
- Ngumi, P. M. (2013). Effect of bank innovations on financial performance of commercial banks in Kenya. A thesis submitted in partial fulfillment for the degree of Doctor of Philosophy in Business Administration in the Jomo Kenyatta University of Agriculture and Technology, 1-142.
- Ogbuji, C. N., Onuoha, C. B., & Izogo, E. E. (2012). Analysis of the negative effects of the automated teller machine as a channel for delivering banking services in Nigeria: International Journal of Business Management, 7(1), 23-41.
- Okafor, C. A. (2020). Cashless Policy for Business Purpose and the Performance of Deposit Money Banks in Nigeria. International Journal of Innovative Finance and Economics Research, 8, 1-13.
- Shanmugam, K. R., & Nigam, R. (2020). Impact of Technology on the Financial Performance of Indian Commercial Banks: A Clustering Based Approach. Innovation and Development, 10, 433-449. https://doi.org/10.1080/2157930X.2019.1685792
- Siddik, M. N. A., Sun, G., Kabiraj, S., Shanmugan, J., & Yanjuan, C. (2019). Impacts of e-banking on performance of banks in a developing economy: empirical evidence from Bangladesh. Journal of Business Economics and Management, 17(6), 1066–1080.