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Effect Of Sustainable Banking System On Profitability Of Listed Deposit Money Banks In Nigeria

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This study examines the effect of the Sustainable Banking System on the Profitability of Listed Deposit Money Banks (DMB) in Nigeria, over 10 years, from 2014 to 2023. The study used an ex-post facto research design and a sample of listed deposit money banks in Nigeria were selected based on the availability and accessibility of annual reports and financial data. Data were collected from financial statements and analyzed through inferential and descriptive statistical methods. The primary analytical method employed was regression analysis using the Ordinary Least Square method (OLS) and interpreted with the help of descriptive statistics; including standard deviation, mean, minimum, and maximum. The statistical analysis of the study was conducted using a statistical package of Social Science (SPSS). The study found a significant effect between electronic payment cards, electronic payment terminals, and mobile transactions in listed deposit money banks in Nigeria. The study concluded that a sustainable banking system has a significant positive effect on the profitability of listed deposit money banks in Nigeria, and it recommends that listed deposit money banks in Nigeria should focus on developing specialized E-banking techniques tailored to the specific needs of the banking industry. This will involve collaborating with forensic accounting, data analytics, and cyber security experts to create advanced algorithms.

Keywords: Banking, Deposit, Profitability, Sustainable, System.

1.1 Introduction

Sustainable banking has emerged as a transformative approach within the global financial system, emphasizing the integration of environmental, social, and governance (ESG) principles into banking operations (Ugbede et al.., 2019). This paradigm shift recognizes the critical role financial institutions play in promoting economic development while addressing pressing global challenges such as climate change, social inequality, and environmental degradation. A sustainable banking system encourages banks to adopt practices that balance profitability with social responsibility, environmental stewardship, and long-term value

creation (Ugwueze & Nwezeaku 2018). The shift toward sustainability is not merely a moral obligation but a strategic necessity. Sustainable banking enables institutions to mitigate risks associated with environmental and social issues, attract ESG-conscious investors, and enhance their reputation in a competitive market. At the same time, it requires banks to reconfigure traditional models by embedding sustainability into their core operations, products, and services (Mendez and Houghton 2020).

In Nigeria, the adoption of a sustainable banking system is becoming a pivotal strategy for promoting long-term economic growth, reducing environmental risks, and addressing societal concerns. Sustainable banking emphasizes the integration of ethical practices, risk management, and resource efficiency into the financial sector's decision-making processes (Abor et al. 2019).

The profitability of listed deposit money banks is a vital indicator of financial performance and resilience, directly influencing shareholder confidence, market valuation, and economic stability. However, the transition to sustainable banking practices introduces new dynamics into the profitability equation. On the one hand, sustainable banking can enhance operational efficiencies, improve risk management, and attract environmentally conscious investors (Saheed 2018). On the other hand, it necessitates significant investments in technology, training, compliance mechanisms, and ESG-aligned projects, which could affect short-term financial outcomes. For listed deposit money banks in Nigeria, profitability remains a primary objective, serving as a key measure of financial health and shareholder value. However, the shift towards sustainable practices presents both opportunities and challenges. While compliance with sustainability principles can lead to enhanced corporate reputation, operational efficiencies, and access to green financing opportunities, it also requires significant investment in new frameworks, technologies, and training (Nwagwu 2020).

1.2 Statement of the Problem

The adoption of a sustainable banking system is gaining momentum globally as financial institutions align their operations with environmental, social, and governance (ESG) principles. In Nigeria, the implementation of sustainable banking is particularly significant given the nation's pressing economic, environmental, and social challenges. However, while sustainable banking holds potential for long-term value creation, its impact on the profitability of listed deposit money banks remains unclear. Profitability is a critical metric for banks, influencing their ability to attract investors, expand operations, and contribute to economic development. However, transitioning to sustainable banking often requires substantial investments in ESG compliance, green financing initiatives, and capacity building, which could increase operational costs and pressure short-term profitability. On the other hand, sustainability practices may improve banks' reputations, mitigate risks, and attract environmentally conscious investors, potentially enhancing financial performance in the long run.

Despite the growing advocacy for sustainable banking in Nigeria, there is limited empirical evidence on how this paradigm shift affects the profitability of listed deposit money banks. This knowledge gap creates uncertainty for financial institutions seeking to balance

sustainability objectives with profit maximization. Additionally, it raises concerns about the readiness of Nigerian banks to adopt global sustainable banking practices amidst economic instability, regulatory challenges, and stakeholder expectations. This study seeks to address these issues by examining the effect of the sustainable banking system on the profitability of listed deposit money banks in Nigeria. Understanding this relationship is crucial for policymakers, investors, and bank executives to develop strategies that foster sustainable growth while maintaining financial viability.

1.3 Objectives of the Study

The primary objective of the study is to examine the effect of a sustainable banking system on the profitability of deposit money banks in Nigeria. The specific objectives include, to:

i. Assess the effect of electronic payment cards on the profitability of listed deposit money banks in Nigeria
ii. Evaluate the effect of electronic payment terminals on the profitability of listed deposit money banks in Nigeria
iii. Examine the effect of mobile transactions on the profitability of listed deposit money banks in Nigeria

1.4 Hypotheses of the study

i. Electronic payment cards have no significant effect on the profitability of listed deposit money banks in Nigeria.
ii. Electronic payment terminal has no significant effect on the profitability of listed deposit money banks in Nigeria.
iii. Mobile transactions have no significant effect on the profitability of listed deposit banks in Nigeria.

Review of Related Literature

2.1 Conceptual Review

Sustainable Banking System

A sustainable banking system refers to a financial system that integrates environmental, social, and governance (ESG) considerations into its operations, products, and services to promote long-term economic growth, social well-being, and environmental protection further stating that the key to sustainable banking is to decide a common set of principles and apply them (Abor et al. 2019). Unlike conventional banking, which primarily focuses on maximizing short-term profits, sustainable banking emphasizes the need for responsible practices that balance profitability with broader societal goals. Sustainable Banking creates long-term resilient and sustainable economic, social, and environmental values having a green, responsible, and inclusive strategy through transparent and efficient utilization of resources (Mendez and Houghton 2020). This approach is based on certain principles that not only consider profit but also economic and social benefits. The main objective of sustainable

banking is to maintain financial and social stability. Nwagwu (2020) pointed out that though the concept of sustainable banking has gained much popularity lately, however, banks still face diverse challenges about its adoption and implementation. Such a prominent challenge includes poor knowledge about what sustainable banking is and how it can be incorporated into business operations and activities to promote sustainable development.

Electronic Payment Cards

Banking transactions are performed by using electronic cards like Value Card, ATM Card, Debit Card, Credit Card, etc. An electronic card is a type of online banking that is a tangible plastic card used to verify the cardholder's identity. It is utilized for online financial transactions that involve point-of-sale (POS) and Automated Teller Machine (ATM) to approve payments to vendors (Chimaobi, 2018). Different types of cards available are debit cards and prepaid cards that require reloading. An Automated Teller Machine (ATM) integrates a computer terminal, record-keeping system, and cash vault into a single unit, allowing customers to access a financial institution's accounting system using a plastic card with a PIN or inputting a code on a connected terminal anytime.

Electronic Payment Terminals

Electronic payment terminals process cheque verifications, credit approvals, cash withdrawals, and deposits, as well as cash transactions. This enhances electronic fund transfers when purchasing at the point of sale. Automated Teller Machine (ATMs) is a vital form of electronic payment terminal enabling customers to perform transactions without the need for human interaction. The POS terminals act similarly to ATMs. Electronic Payment Terminals refer broadly to any device or platform used to process electronic transactions, POS systems are the specialized devices used by retailers and businesses to accept payments from customers. In this situation, after a transaction is finished and the value is determined, the sum is inserted into a POS terminal with the electronic card. The spender's account automatically transfers the cash equivalent amount to the beneficiary's account (Ugbede et al, 2019).

POS is an abbreviation for "Point of sale". A point-of-sale system is utilized for conducting transactions at physical retail locations and online stores (Osakwe & Ezeaku 2022). Put simply, a POS is a tool that can be utilized at a specific moment and location to complete a minor transaction. Businesses from various industries are increasingly implementing POS systems, with the main reason being that a POS system eliminates the need for price tags (Oyedokun, et al 2021). The price of an item is linked to its code in the stock system, so the cashier just has to scan the code to complete a sale. In instances of price modifications, adjustments can be easily made using the inventory window. Other advantages of POS include the capacity to offer various discounts, a customer loyalty program, and improved inventory management. Because DMBs are responsible for issuing POS in Nigeria, it is considered important to statistically evaluate the impact of POS usage on DMBs' performance (Obiekwe and Anyanwaokoro 2017). Electronic Payment Terminals (EPTs) are essential components of the sustainable banking ecosystem. These terminals help reduce reliance on cash, paper-based receipts, and the traditional banking infrastructure.

Mobile Transactions

Phone banking and mobile banking are components of traditional and modern advancements in phone technology. Phone banking involves customers using their phones to contact the bank to inquire about their balance, answer security questions to verify their identity, make payments, and transfer funds (Amu & Nathaniel. 2022).it is a voice-based mode of banking through phone calls without the use of the Internet. Currently, it appears that the mobile phone is the most efficient way of conducting e-banking as customers can perform transactions on their phones. Today, it is widely used and can be applied in various situations; customers also seem to trust and feel safe using it. It is similar to PC banking but it is a smaller machine available 24/7 for paying, transferring, and checking balances with no time or location restrictions (Aigbovo & Benedicta 2022). Therefore, Taiwo & Agwu (2017) specified mobile banking as a type of transaction involving the transfer of ownership rights to access goods and services using a mobile device to computer networks with the help of an electronic device. It is the access to comprehensive banking service using a mobile app or website.

Moreover, mobile banking refers to the provision of financial services related to banking using mobile communication devices. AlJabri and Sohail (2012) stated that mobile banking is predominantly done via SMS or mobile internet, but can also involve specific applications called “clients” that are downloaded onto the mobile device. Mobile banking allows customers of a bank to conduct different financial transactions using a mobile device such as a phone or tablet. Mobile transactions, including mobile banking and phone banking, play a critical role in ensuring sustainable banking systems by promoting financial inclusion, reducing operational costs, and minimizing environmental impacts. It allows individuals in remote areas to access banking services, reducing the need for a physical branch, and thereby eliminating the carbon footprint of traditional banking operations.

Profitability

Bank profitability refers to a bank’s ability to generate profits from its operations over a specified period. It reflects a bank’s financial health, and how effectively it can manage its resources and control costs. It measures the performance of a bank in terms of how the bank can generate profit relative to its revenue, assets, liabilities, and equity over a specific period The document that reportedly clarifies this is the organization's officially published financial reports. Without a doubt, various banks have their individual goals (Njeru & Omagwa 2018). Certain banks aim for long-term growth goals while others prioritize a quiet and stable existence, reducing risk and maintaining a conservative image to their investors despite achieving modest success. Typically, the behavior of a firm's share prices is seen as an indicator of its success. It is a market indicator that may not always be reliable. Still, the bank’s size, deposits, and profitability are considered reliable indicators of performance (Mangniri, & kigbu 2023). Bank performance is the utilization of a bank's assets to achieve its objectives. In this research, the ROA profitability indicator was used over other metrics to assess bank performance because it considers net profit after interest and tax.

2.2 Theoretical Review

Bank-Focused Theory

This theory was disseminated by Kapoor (2010) and is based on the premise that banks use non-traditional but conventional delivery channels to offer services to their customers. Such channels include automated teller machines (ATMs), mobile phone banking, and Point of Sale (POS) among others. In using these means, the bank offers a wide range of services to its customers regardless of location and branch attachments. All that is needed is to enter the needed information into the system and the transaction is completed.

The Technology Acceptance Theory

This theory elucidates the extent to which organizations and customers accept information systems in their work. Fred Davis and Richard Bagozzi are theorists who developed this theory and employed it in assessing the extent to which customers perceive ease-of-use and helpfulness of technologies (Davis and Bagozzi 1989). Perceived usefulness is the ability of individuals or organizations to improve their performance through the acceptance of new technology. In comparison, apprehended ease of use measures how easily individuals or organizations make use of technology systems. This theory applies in the banking industry because e-banking techniques constitute information technology systems that banks employ in delivering services to their customers. Banks have adopted agency banking, mobile banking, ATM banking, and Internet banking in the delivery of their services, but the extent of their implementations differs from one bank to another (Janson, 2009). Moreover, customers access banking services from these e-banking strategies at various levels of usage.

Innovation Diffusion Theory

The Adoption process (also known as the Diffusion of Innovation) describes the behavior of consumers as they patronize new products and services. The individual groups of innovators, early adaptors, early majority, late majority, and laggards (Rogers, 2003). Ahmad and Ali Al-Zu'bi (2011) revealed that the determinants of the adoption of e-banking are accessibility, convenience, security, privacy, content, design, speed, and fees. In organizational settings, the most commonly used definition of innovation is a " new idea, which may be a recombination of old ideas, a scheme that challenges the present order, a formula, or unique approach which is perceived as new by the individuals involved" (Christensen, and Larsen, 1993). According to this definition, any idea, whether it pertains to products, production processes, administrative procedures, or information technology may be regarded as an innovation as long as people, on an individual basis, think that it is something new to them. Rogers (2003) defines innovation as an idea, practice, or object that is perceived as new by an individual or other unit of adoption. It should be noted here that Rogers (2003) often uses the terms innovation and technology as synonyms. Technology, according to him, is a design for instrumental action that reduces the uncertainty in the cause-effect relationships involved in achieving a desired outcome.

2.3 Empirical Review

Asha (2018) investigated the impact of online banking on the financial performance of commercial banks in Kenya. The study specifically focused on Barclays Bank of Kenya. The study adopted a descriptive research design to examine the financial performance of Barclays Bank of Kenya over the six years from 2012 to 2017. Furthermore, primary data was sourced

from two branches of the Barclays Bank of Kenya that is, the Moi Avenue Branch and the Queensway Branch. Echeloned random sampling was used to choose 50 respondents comprising bank managers, departmental heads, and employees for the study. Essential data was collected with the aid of questionnaires which were analyzed using the Statistical Package for Social Sciences (SPSS) and Excel to find descriptive statistics: frequencies, percentages, mean, standard deviation, kurtosis, and skewness. Regression analysis was conducted between independent variables and dependent variable in order explore the forms of relationships between the two variables performance of commercial banks in Kenya, highlighting the role of online banking as a critical component of sustainability in banking operations.
Moazenzadeh and Hamidi (2018) discussed restrictions in terms of accessibility of the use of Internet banking which caused a shift toward the innovation of mobile banking. They did a study on 732 banking customers given their age, gender, and educational level. The findings displayed that the client's age has a less significant impact on the use of any more advanced technology communication channel, so they are willing to adopt any new technology introduced. The results also reflected that the bank's clients are opportune to pay for improved services while benefiting from its advantages. The launch of new technology does not affect their trust in using such technology.

Njeru and Omagwa (2018) studied the impact of mobile banking and bank profitability in Kenya sourced primary data from 60 respondents through a structured questionnaire and analyzed the data using descriptive analysis and multiple regression analysis. The research found that transactions had a quantitative significant effect on profitability while electronic funds transfer services and customization did not have a significant effect on the profitability of tier 1 commercial banks in Kenya.
Ugwueze and Nwezeaku (2018) studied the relationship between electronic banks and the performance of Nigerian commercial banks. This study was necessary as the adoption of electronic banking increased and bank services were redefined in Nigeria and abroad. E-banking is a signal of the value of sales transactions, while commercial banking is a signal of the performance of customers' deposits. The outcome shows that POS systems are primarily designed for processing transactions, and are easily integrated with demand deposits rather than with savings and time deposits. It is recommended that financial authorities and commercial banks initiate an all-encompassing enlightenment campaign to enable the banking public to learn about the advantages, conveniences, and importance of using electronic banking channels to complete transactions. Secondary data retrieved from the listed Deposit Money Banks' financial statements were scrutinized. The Engle-Granger co-integration model was used to analyze the data of the sample period from January 2009 to December 2013.

Rosemary and Jane (2019) examined the impact of agency banking, mobile banking, ATMs, and Internet banking on Kenya's commercial banks' financial performance. The theory of agency, the theory of emergencies, the theory of the dissemination of innovations, and the theory of the acceptance of technology form the theoretical basis of this study. In the design of the study, the descriptive approach was used. The target group consisted of 40 commercial banks and 100 respondents were selected, including 40 senior management and 60 operational managers. Data are examined using descriptive statistics, correlations, and regression analysis. Although online banking involves the use of the Internet, individuals must sometimes visit the

banks to help with various problems arising from the use of online banking. Online banking is introducing new ways for banks to operate, offering customers new technologies such as e-banking and mobile banking efficiently and conveniently.

Ugwueze and Nwezeaku (2022) examined the relationship between electronic banking and the performance of Nigerian commercial banks. The study was necessary because the increasingly widespread adoption of electronic banking redefined banking services in Nigeria. A descriptive research design was adopted to conduct the research work. The questionnaires were distributed to First Bank plc. The data were analyzed using correlation and multiple regression analysis. The result of this investigation shows positive relationships, which means that electronic banking has a significant impact on the profitability of Nigeria's commercial banks.

3. Methodology

Ex-post facto research design was used for this research because of the historical nature of the data used. The collected data was regressed using the Ordinary Least Square method and interpreted with the help of descriptive statistics. The population of the study consists of all the 16 deposit money banks quoted by the NGXGROUP as of the year 2024. However, one of the banks was merged and acquired by Access Bank, and Skye Bank was delisted in 2019. Hence, we have 14 listed deposit money banks on the Nigeria exchange group. The data were sourced from the bank's financial statement for the period of 10 years 2014 to 2023 using the bank's annual reports and account. The data were analyzed using the statistical package of social science (SPSS). This is because it is an ideal tool for data manipulation and statistics.

Model Specification

Hence the model is expressed as:

ROE=f{PPBV, EPT, MT)

$ROA=\beta_0+\beta_1+PPV+\beta_2EPR+\beta_3MT+e$

Where:

ROE= Return on Equity

ROA=Return on Asset

PPV=Prepaid Cards

EPT=Electronic Payment Terminals

MT=Mobile Transaction

B_0=Constant (I.e. the intercept)

B_1-B_3=Co efficient of independent variables (i.e. the slope)

e=Error Term

4.1 Data Presentation and Analysis

This section presents the results of the analysis conducted on the data collected from the annual reports and accounts of the listed banks in Nigeria for the period of the study. It presents the descriptive statistics, correlation, and regression results of the study.

4.1.1 Descriptive Statistics

Descriptive statistics shows the mean and standard deviation of the independent variables from the mean and standard deviation of the dependent variable.

Table 1: Descriptive Statistics of the Variables

	Observation	Minimum	Maximum	Mean	Std. Deviation
ROA	50	0	1	.72	.454
EPV	50	0	1	.56	.501
EPT	50	0	1	.66	.479
MT	50	0	1	.64	.485

Source: Computed using SPSS version 25.

Table 1 reflects the descriptive data result of the dependent and independent variables. A total of 50 findings were recorded. The table shows the mean and standard deviation with the minimum and maximum range of the dependent and independent variables. Return on asset (ROA) has an average of 0.72 with a minimum of 0 and a maximum of 1 with a standard deviation of 0.454. An electronic payment card (EPV) has an average of 0.56 with a minimum of 0 and a maximum of 1 with a standard deviation of 0.501. Electronic payment terminals (EPT) have an average of 0.66 with a minimum of 0 and a maximum of 1 with a standard deviation of 0.479. Mobile transaction (MT) has an average of 0.64 with a minimum of 0 and a maximum of 1 with a standard deviation of 0.485.

4.1.2 Correlation Matrix

The correlation result shows the relationship between each independent variable and the dependent variable. The values of the connecting coefficient range from -1 to 1. The sign of the correlation coefficient indicates the directives of the relationship (positive or negative) the magnitude of the correlation coefficient reflects the strength, with larger values indicating stronger relationships and lower values indicating weak relationships. The connecting coefficients on the main diagonal are 1.0 because each variable has a perfect positive linear relationship with itself.

Table 2: Correlation Matrix

	ROA	PPV	EPT	MT
ROA	1			
EPV	.614	1		
EPT	.775	.470	1	

MT	.646	.426	.605	1

Source: Computed using SPSS version 25.

Table 2 shows the correlation result of the dependent variable ROA and the independent variables EPV, EPT, and MT. The relationship between ROA and independent variable PPV is positive and strong with a coefficient value of 0.614 representing 61.4 percent, this means that, all things being equal the higher the EPV the higher the ROA. The relationship between ROA and independent variable EPT Is positive and strong with a coefficient value of 0.775 representing 77.5 percent, this means that, all things being equal the higher the EPT the higher the ROA. The relationship between ROA and independent variable MT Is positive and strong with a coefficient value of 0.646 representing 64.6 percent, this means that, all things being equal the higher the MT the higher the ROA.

4.1.3 Regression Result

The regression result shows the impact of each independent variable on the dependent variable. The regression coefficient values indicate the extent of the impact which ranges from 0% to 100%. This section also presents the F statistics, R^2, and adjusted R^2 of the model.

Table 3: Regression Results

Dependent Variable: ROA				
Variable	**Coefficient**	**Std. error**	**t-statistic**	**prob.t**
(Constant)	.128	.067	1.914	.062
EPV	.254	.083	3.057	.004
EPT	.485	.099	4.898	.000
MT	.202	.095	2.118	.040
R-Squared	0.709			
Adj. R-squared	0.690			
F-statistic	37.343			
Prob. (F-statistic)	0.000			

Source: Computed using SPSS version 25.

Table 3 shows the regression results of the model. The model consists of dependent variables ROA and independent variables (EPV, EPT, and MT). The f-statistic from the table is 37.343 which means that a model with a higher f statistic indicates that the model does account for the variation in the dependent variable and is statistically significant with a p-value is 0.000

which is less than 0.05. In the model, the multiple coefficient of determination R^2 is 0.709. This means that 70.9 percent of the change in ROA was caused by changes in independent variables EPV, EPT, and MT while the 29.1 percent change in ROA was caused by other factors not included in the model. The impact of the independent variable EPV on the dependent variable ROA is positive with a coefficient value of 0.254, meaning that an increase in the EPV while other variables remain constant leading to an increase of 25.4%.

The impact of the independent variable EPT on the dependent variable ROA is positive with a coefficient value of 0.485, meaning that an increase in EPT while the other variable remains constant leading to an increase of 48.5%. The impact of the independent variable MT on the dependent variable ROA is positive with a coefficient value of 0.202, meaning that an increase in MT while other variables remain constant leads to an increase of 20.2%.

4.2 Test of Hypotheses

To decide whether to reject or accept the null hypotheses at a 0.05 (5%) level of significance, the rejection point is used, which states that (1) If the p-value is equal to or less than 5%, the null hypothesis is rejected, and the alternate hypotheses are accepted; (2) If the p-value is more than 5%, the null hypotheses is accepted and the alternate hypotheses is rejected.

4.2.1 Electronic Payment Cards

The t-cal of EPV is 3.057 and the p-value of 0.004 which is less than 0.05 therefore; the null hypothesis which states that there is no significant relationship between the Electronic payment cards and profitability in the financial statement of listed deposit money banks in Nigeria is rejected.

4.2.2 Electronic Payment Terminals

The t-cal of EPT is 4.898 and the p-value is 0.000 which is less than 0.05 therefore; the null hypothesis which states that there is no significant relationship between electronic payment terminals and profitability in listed deposit money banks in Nigeria is rejected.

4.2.3 Mobile Transactions

The t-cal of MT is 2.118 and the p-value of 0.040 which is less than 0.05 therefore; the null hypothesis which states that there is no significant relationship between mobile transactions and profitability in listed deposit money banks in Nigeria is rejected.

4.4 Summary of Findings

This chapter presents the data analysis and interpretation of results concerning the dependent variable and independent variables; it also presents the results obtained from the test of the research hypotheses. The major summary of the hypotheses is as follows:

i. There is a positive relationship between the adoption of electronic payment cards and profitability and there is a significant impact of electronic payment cards on the efficiency of customer transactions and generating revenue in listed deposit money banks in Nigeria.

ii. There is a positive relationship between sustainable banking and electronic payment terminals and there is a significant impact of technological advancement on electronic payment terminals in listed deposit money banks in Nigeria.
iii. There is a positive relationship between sustainable banking practices and profitability, and a significant impact is observed between the adoption of environmentally friendly policies and the profitability of listed deposit money banks in Nigeria.

5. Conclusion

The adoption of a sustainable banking system has a profound and measurable impact on the profitability of deposit money banks in Nigeria. This system leverages technological advancements to drive efficiency, enhance customer experience, and increase financial inclusion. Specifically, electronic payment cards have shown a significant positive effect by facilitating cashless transactions, reducing operational costs, and encouraging wider customer engagement. Similarly, electronic payment terminals have played a crucial role in streamlining payment processes, improving transaction speed, and expanding banking services to diverse economic sectors, thereby boosting revenue. Mobile transactions, another cornerstone of sustainable banking, have significantly impacted profitability by offering convenient and accessible banking solutions to a growing number of customers. These transactions reduce the need for physical branch operations while expanding service reach, resulting in lower costs and higher income streams. In conclusion, electronic payment cards, electronic payment terminals, and mobile transactions collectively enhance the profitability of listed deposit money banks in Nigeria by fostering innovation, improving service delivery, and increasing operational efficiency. The study concluded that a sustainable banking system has a significant positive effect on the profitability of listed deposit money banks in Nigeria,

Recommendations

To maintain and amplify these benefits, banks should continue to invest in sustainable banking technologies and adapt to evolving customer preferences and market demands. Based on the above findings and conclusions, the study recommends the following:

i. Banks should invest in promoting and expanding their electronic payment card services to customers. This could include offering incentives, improving user experience, and increasing awareness about the benefits of prepaid cards. By doing so, banks can capitalize on the significant impact of prepaid cards on profitability.
ii. Banks should increase the deployment of electronic payment terminals, such as ATMs and point-of-sale (POS) machines, to facilitate easy and convenient transactions. This will not only enhance customer experience but also contribute to increased profitability
iii. Banks should prioritize the development and improvement of mobile transaction platforms to accommodate the growing demand for mobile banking. This includes investing in user-friendly mobile apps, secure payment systems, and reliable infrastructure to support mobile transactions, ultimately driving profitability.

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