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IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY ON THE PERFORMANCE OF QUOTED DEPOSIT MONEY BANKS ON NIGERIAN EXCHANGE GROUP

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Abstract: *The study examined the impact of information and communication technology on the performance of quoted deposit money banks on Nigerian exchange group. The study specifically examined the impact of mobile banking, internet banking, agency banking, automated teller machine and point of sale on the performance of quoted deposit money banks on Nigerian exchange group. A Survey Research design was used for the study with a population of 200 management staff of fifteen (15) quoted deposit money banks on Nigerian exchange group. Census sampling was adopted since the population was relatively small and data for the study were collected through structured questionnaire and analyzed using descriptive statistical tools such as tables and simple percentages. In addition, multiple regressions were used for further analysis and test of hypotheses. Findings of the study showed that mobile banking, internet banking, agency banking, automated teller machine and point of sales affect the performance of quoted deposit money banks on Nigerian exchange group. According to the study's findings, the Nigerian banking sector's customer service is greatly enhanced by the usage of ATMs and smart cards. Additionally, the study found that automated teller machines have improved quoted deposit money banks' performance on the Nigerian exchange group. The study's final conclusion was that the performance of quoted deposit money banks on the Nigerian exchange group is greatly impacted by internet banking. According to the study's conclusions, management of listed deposit money banks on the Nigerian Exchange Group should always make sure that more money is invested in mobile banking services in order to improve their performance.*

Key words: *ICT, performance, mobile banking, internet banking, agency banking, automated teller machine banking and point of sales.*

1.0 INTRODUCTION

1.1 Background to the Study

The business landscape of today is extremely dynamic and changes quickly due to advancements in technology, growing consumer awareness, and customer needs. These shifting conditions and the extremely unpredictable economic climate define the complicated and competitive environment in which business organizations, particularly the banking sector of the twenty-first century, operate. In the modern world, one of the challenges that organizations face in order to thrive is performance. According to Ali et al. (2023), performance is the conversion of inputs into outputs in order to achieve organizational outcomes like profit, asset expansion, customer retention, and operational efficiency. In the global economy, deposit money banks act as financial intermediaries and hubs for the mobilization of financial resources. They transfer excess spending dollars to the economy's

deficit spending units, which are needed by the household and corporate sectors. A strong, effective banking industry is a necessary precondition for making the investment and saving choices required for quick economic expansion (Addae-korankye, 2024). A healthy banking industry offers a mechanism for consistently and methodically funding a nation's most lucrative and effective enterprises. Because they implement monetary policy and offer ways to facilitate payment for goods and services in both domestic and international trade, banks play a crucial role in an economy. Banks have adopted information and communication technologies in place of more conventional banking practices in recent years (Aladwani, 2021).

The automation of procedures, controls, and information generation through the use of computers, telecommunications, software, and other devices that guarantee the seamless and effective operation of operations is known as information and communication technology, or ICT. ICT innovation has completely changed how banks operate and how they deliver benefits to clients in the account management sector on a global scale (Akpan, 2022). Globally, ICT has also given the banking sector the resources it needs to handle the difficulties presented by the new economy. It has served as the cornerstone of current measures to develop the banking industry and changes to the financial sector that aim to speed up and improve the dependability of financial operations (Jawaid, 2024). Internet, mobile, and agency banking are examples of ICT aspects in the banking industry. When a financial institution or mobile network operator contracts with a retail or postal outlet to handle bank customers' transactions, this is known as agency banking. While internet banking entails entering data into personal accounting software and incorporating information into a customized accounting software design, mobile banking uses mobile phones to conduct financial services from the comfort of one's home (Ahmad & Al-zubi, 2021).

Globally, and especially in emerging nations like Nigeria, information and communication technology (ICT) has revolutionized the performance and operations of deposit money institutions. In the banking industry, ICT tools and systems have increased overall profitability, client satisfaction, and operational efficiency (Iluno et al., 2018). Deposit Money Banks handle transactions resulting from deposits and withdrawals using mainframe computers to keep track of their client accounts. Additionally, they run an Automated Teller Machine (ATM) network. Numerous online banking platforms are adaptable and make banking easier at all Nigerian banks. This is significant since it promotes financial advancement for the banks in the industry and facilitates account collecting, which helps clients view their records in one location whether they are with their primary bank or other institutions (Devi, 2017).

ICT is becoming more widely recognized as an additional transmission network for carrying out a number of tasks, including handling account transactions. Customers are given the opportunity to manage their account transactions whenever and however it is most convenient for them. The internet has grown rapidly in popularity recently, enabling users to view their accounts and perhaps complete transactions from a distance, whether at home or at work, using laptops or other internet-enabled devices. Debit cards, ATM cards, credit cards, and smart cards have all made banking easier. By automating standard banking procedures like account opening, fund transfers, and loan processing, ICT decreases the need for manual labor. Operations are streamlined to reduce errors, increase speed, and boost productivity (Joseph & Stone, 2023). ICT has brought cutting-edge banking services and products, such digital loans, online payments, and e-wallets, to Nigerian deposit money banks. These services

meet the changing needs of clients while bringing in extra money. ICT adoption reduces the need for manual procedures and physical branches, which lowers overhead expenses. Banks are able to maintain service quality while allocating resources more efficiently. Branch-based transactions are no longer necessary because to e-channels like ATMs and mobile banking. Additionally, banks can improve consumer engagement and profitability by using customer data analysis to provide customized goods and services. This study is poised to investigate the impact of information and communication technology on the performance of Deposit Money Banks in Nigeria.

1.2 Statement of the Problem

As more banks join the market, competition in Nigeria's banking sector is getting fiercer. By offering high-quality electronic banking products like automated teller machines (ATMs), Internet banking, mobile banking, e-switch telephone banking, SMS banking, point-of-sale (POS) systems, network banking, personal computers, and electronic wallets, among others, many banks tend to enhance their performance. The use of information and communication technology in Nigerian deposit money banks' service delivery has grown rapidly. With the goal of raising the standard of client service, they have made significant financial investments in the implementation of self- and virtual banking services. It is anticipated that the growth of e-banking services will relieve crowding in banking halls and lessen the frequency of lengthy lines there.

It has been noted that the cost of providing financial services has been significantly reduced by digitally based financial services. ICT has many advantages, but in order to maintain development and compete in the changing financial market, deposit money institutions need to handle issues including cybersecurity threats and a lack of digital literacy. The efficacy of ICT investments is decreased and digital transformation initiatives are slowed down by resistance to ICT adoption. Cybercriminals are increasingly targeting banks to take advantage of weaknesses in ICT systems, which can result in data breaches, monetary losses, and harm to the banks' reputation. ICT-dependent financial services are disrupted by frequent power outages and erratic internet connectivity, which leads to delays and unhappy customers.

Any deposit money bank that wants to thrive in this volatile economic climate, like Nigeria, must embrace information and communication technology capabilities in order to keep up with the modern world's dynamic business cycle brought about by globalization. Even while deposit money institutions have embraced ICT, which eliminates the need for in-person interactions with bank employees, there are still a lot of clients crammed into banking halls waiting in line to make transactions. Does this imply that the introduction of ICT to facilitate customer transactions has had no positive effect on the customers of these stated deposit money banks that are mentioned on the Nigerian Exchange Group, given that customers still wait in line to be attended to with various complaints? It is therefore important to investigate the impact of information and communication technology on the performance of quoted deposit money banks on Nigerian Exchange Group.

1.3 Objectives of the Study

The broad objective of the study is to examine the impact of information and communication technology on the performance of quoted deposit money banks on Nigerian Exchange Group. The specific objectives of the study include to:

i. establish the impact of mobile banking on the performance of quoted deposit money banks on Nigerian Exchange Group.
ii. determine the impact of internet banking on the performance of quoted deposit money banks on Nigerian Exchange Group.
iii. ascertain the impact of agency banking on the performance of quoted deposit money banks on Nigerian Exchange Group.
iv. ascertain the impact of point of sale banking on the performance of quoted deposit money banks on Nigerian Exchange Group.
v. ascertain the impact of automated teller machine banking on the performance of quoted deposit money banks on Nigerian Exchange Group.

1.4 Research Hypotheses

The study formulated the following hypotheses in a null format:

$H0_1$: establish the impact of mobile banking on the performance of quoted deposit money banks on Nigerian Exchange Group.
$H0_2$: determine the impact of internet banking on the performance of quoted deposit money banks on Nigerian Exchange Group.
$H0_3$: ascertain the impact of agency banking on the performance of quoted deposit money banks on Nigerian Exchange Group.
$H0_4$: ascertain the impact of point of sale banking on the performance of quoted deposit money banks on Nigerian Exchange Group.
$H0_5$: ascertain the impact of automated teller machine banking on the performance of quoted deposit money banks on Nigerian Exchange Group.

1.5 Significance of the Study

The study's conclusions are crucial for a number of stakeholders, including deposit money institutions, investors, clients, policymakers, and researchers. Policymakers and the government can benefit from the findings. Policymakers can use the study's results to identify which regions of internet banking should receive assistance by waiving fees or providing other non-monetary incentives. In order to enhance performance, the results also help deposit money institutions assess how advanced information and communication technology affects their implementation. The investigation's findings might make it easier for these deposit money banks to adopt new technology. Banking organizations may require direction on how to implement ICT applications most effectively. Knowing the benefits that are obtained by agents and other people to perceive the benefits and become agents is made easier by the exploration. By serving as a management reference point for the adoption of technological advancements that must be implemented, both now and in the future, this study is equally significant to the management of these quoted deposit money institutions in Nigeria. The study's findings shed light on the efficacy of information technology investments in these deposit money banks. They are also better able to learn how to enhance their service delivery skills as a result. Lastly, because the study contributed to the expanding body of knowledge in information and communication technology, scholars might find it useful. This could serve as a reference for future information and communication technology research.

This essay is divided into five sections, starting with the introduction, which is covered in section one. The literature review is covered in component two, the study's methodology is

covered in component three, and the findings and discussion are covered in component four. The study's conclusion and recommendations are finally accepted in phase five.

2.0 REVIEW OF RELATED LITERATURE

Theoretical Framework

The study considered the innovation diffusion theory as most relevant to the work.

2.3.1 Innovation Diffusion Theory

Rogers introduced the Innovation Diffusion Theory in 1962. The theory describes how new concepts, innovations, or technologies gradually permeate social systems or cultures. According to Rogers (1962), the following crucial elements influence an innovation's general adoption: relative benefit, compatibility, complexity, trialability, and observability. The degree to which an innovation is thought to offer more advantages than its predecessor is known as relative advantage. It leads to improved prestige, economic gains, and increased efficiency. According to earlier studies, an innovation's relative advantage and adoption rate are positively correlated. Users are more likely to embrace new technologies when they believe they are more beneficial or advantageous than older ones. Customers have highlighted advantages like price, convenience, and immediacy when it comes to ICT adoption. Customers are therefore thought to be more inclined to use ICT when they perceive clear benefits from it (Roberts & Amit, 2003).

The degree to which an innovation is thought to offer more advantages than its predecessor is known as relative advantage. It leads to improved prestige, economic gains, and increased efficiency. According to earlier studies, an innovation's relative advantage and adoption rate are positively correlated. Users are more likely to embrace new technologies when they believe they are more beneficial or advantageous than older ones. Customers have highlighted advantages like price, convenience, and immediacy when it comes to ICT adoption. Customers are therefore thought to be more inclined to use ICT when they perceive clear benefits from it (Roberts and Amit, 2003). Although there are five established adopter classes, it is still crucial to understand the characteristics of the target population because the majority of the inclusive community will typically fall into the middle categories. Different strategies are employed to engage the different adopter classes when advancing a development. The innovators, early adopters, early majority, late majority, and laggards are the five recognized adopter classifications.

Learning, influence, decision-making, execution (bringing it to completion), and affirmation (fortification in light of favorable outcomes) are the steps that diffusion theory goes through. In a similar vein, extortion and digital threats have enhanced information and technology advancement. Customers interact with change specialists more frequently and are more likely to use relational and general communication channels. Although relational channels are helpful at the influence stage, broad communications channels are arguably more important during the learning stage (Arnaboldi & Claeys, 2010). Information technology advancement decisions made by the banking industry can be classified as discretionary, aggregate (when a decision is made by consensus from a framework), or specialist-based (where a decision is supported by another individual with specialized knowledge).According to Barnes and Corbett (2013), supervisors should be fully aware of an innovation's potential and the benefits that result from implementing it, as well as the associated expenses and limitations. Customers who use internet banking can view their records from anywhere. Because it is conducted

online, propelled internet banking is heavily reliant on ICT. Clients can take advantage of the bank's services without physically visiting the location.

Because it offers a framework for examining how these ideas spread among stakeholders and customers as well as tactics to boost adoption, the diffusion innovation theory is pertinent to the study. An essential tool for comprehending and enhancing the uptake of new services and technologies in the Nigerian banking sector is the Innovation Diffusion Theory. Banks may use ICT-driven innovations to boost customer satisfaction, increase operational efficiency, and achieve financial inclusion by removing adoption hurdles and customizing strategies for various client segments. Maintaining development and competitiveness in Nigeria's dynamic and changing banking industry depends on the use of IDT.

2.2 Conceptual Framework

2.2.1 Information and Communication Technology

ICT, which includes hardware, software, databases, networks, and other related components used to build information systems, is the term used to describe the use of computers or any other process that aids in the production, manipulation, storage, communication, and/or dissemination of information (Isibor et al., 2018). IT equipment, communications equipment, and software (pre-packaged, customized, and in-house developed) have historically been included in ICT investments (OECD Fact book, 2011-2012). Intellectual capital structure and complementary assets including human, organizational, process, innovation, consumer, and financial capital are all included in today's ICT investments (Yanf & Fanf, 2024). According to Azojiri and Nzube (2020), information and communications technology is drastically changing practically every aspect of human endeavor, with the banking industry being the most affected, as we can all attest.

The purchase of machinery and computer software that is utilized in production for more than a year is included in ICT adoption. Software, communications equipment, and information technology equipment (computers and related gear) make up ICT. Software involves purchasing pre-packaged software, custom software, and in-house software. Depending on how they distinguish between intermediate use and adoption in reality, the disparity in data availability and measurement of ICT adoption across nations may have an impact on the comparability of ICT adoption across nations (Nwakoby et al., 2018). Increased efficiency and information accessibility made possible by ICT adoption in the financial sector enhance activity coordination within organizational boundaries.

2.2.2 Dimensions of Information and Communication Technology

As aspects of information and communication technology, technological applications like internet banking, mobile banking, automated teller machines, agency banking, and point of sale are rapidly causing significant changes in the banking industry while displacing conventional techniques.

i. Mobile Banking

Using mobile telecommunication devices to provide banking and financial services is another term for mobile banking. Customers of financial institutions can use a mobile device, like a mobile phone, to perform a variety of financial activities thanks to this technology. Account inquiries, money transfers, phone vending, password changes, and bill payments are among the services that this product offers (Wise & Ali, 2019). Using a mobile device, such as a smartphone or PDA, to conduct balance checks, account transactions, payments, credit

applications, and other banking operations is known as mobile banking. Customers can access the mobile banking system from anywhere at any time thanks to its internet routing (Raji et al., 2021). SMS banking was the first mobile banking service to be made available by SMS (Timothy, 2022). Many regions of the world, particularly rural and distant ones, lack adequate infrastructure and employ mobile banking. This feature of mobile commerce is also well-liked in nations where the majority of people lack access to banking. Customers must travel hundreds of miles to the closest bank in the majority of these locations, which are primarily located in large cities. The range of services provided could include tools for managing accounts, conducting stock market and bank transactions, and gaining access to personalized data (Wisdom, 2022).

ii. Internet Banking

According to Ayuba and Aliyu (2015), the term "internet" refers to the use of the internet to carry out banking operations, including money transfers, bill payment, checking the balance of current and savings accounts, paying mortgages, and buying financial instruments and certificates of deposit. Customers of a financial institution, such as a retail or virtual bank, credit union, or society, can use internet banking to make financial transactions via a secure website run by the organization (Mickinney, 2015). Any transactions pertaining to online usage may be included. More and more banks have websites where clients can do a variety of activities in addition to asking questions about account balances, interest rates, and currency rates. Unfortunately, there is a lack of statistics on Internet banking, and cross-country comparisons are challenging due to definitional discrepancies (Timothy, 2022). Online banking is another name for internet banking. It entails using electronic devices, including computers, to make banking transactions online (www) without going to a banking hall. The electronic card infrastructure is used in online banking to carry out payment instructions and finalize the settlement of goods and services between clients and merchants via the internet (Timothy, 2022).

iii. Agency Banking

A system known as "agency banking" allows banks and other financial organizations to provide their services to clients via retail locations or independent agents rather than through conventional bank branches. According to Chimaobi et al. (2020), these agents serve as middlemen and offer standard banking services such cash deposits, withdrawals, account opening, bill payment, and money transfers. By providing formal financial services to underbanked and unbanked individuals, particularly in rural and isolated locations, agency banking fosters financial inclusion. Consumers no longer have to travel great distances to visit bank locations in order to obtain banking services nearby. Without having to pay for the expensive opening and upkeep of physical branches, banks can increase the scope of their services. Banks handle more transactions and draw in new clients through agency banking, which increases revenue (Haadi & Ajibola, 2018). Agents who receive compensation for delivering financial services can find work through agency banking. Agents may lack the necessary skills to manage intricate financial transactions and usually only offer basic banking services. Given that many rural communities in Nigeria lack access to formal banking facilities, agency banking has emerged as a crucial instrument for advancing financial inclusion. The Agent Banking Guidelines were established by the Central Bank of Nigeria (CBN) in order to control activities and guarantee openness. Prominent financial institutions and fintech firms including Paga, Access Bank, and First Bank have used agency banking to broaden their customer base. The Point of Sale system is used by agents to conduct agency banking (Joseph & Stone, 2023).

iv. Automated Teller Machine

An automated teller machine (ATM) is a computer terminal that combines a cash vault and recordkeeping system, according to Rose (1999), as referenced in Adukanya et al. (2023). By entering a unique code number into the computer terminal or by using a card with a personal identification number (PIN), users can access the bank's bookkeeping system around-the-clock. All of a customer's personal information, including name, account number, card limit, and bank of concern, is contained on an ATM card, which is a piece of plastic with a magnetic strip. Upon inserting a valid credit or debit card issued by a bank with which they currently have an account, In addition to being a cash dispenser, this electronic gadget offers additional banking services as required. Furthermore, it enables customers of financial institutions or intermediaries to conduct essential financial operations whenever they choose and without having to speak with bank staff directly, such as cash withdrawals, fund transfers, or account information retrievals. A Personal Information Number (PIN), which provides the account holder with the required access, is entered once the account holder inserts an electronic card into the machine (Deekor, 2021).

v. Point of Sale

An electronic device called a point of sale system (PoS) lets consumers pay for goods or services whenever it's convenient for them. The point of sale (POS), sometimes known as the point of purchase (POP) or checkout, is where a transaction takes place. A salesperson-friendly interface on a point-of-sale terminal controls the selling process. The receipt can be created and printed using the same system. POS systems keep track of sales for tax and business purposes. They are increasingly using illegal software known as "zappers" to fake these records in order to avoid paying taxes (Olorunsegun, 2020). It is an electronic terminal or gadget that is commonly used in retail settings, such gas stations, supermarkets, restaurants, etc., to process card payments via a PIN (Adukaya et al., 2023). It transfers funds from customers' accounts to the vendor's account, often known as the merchant, keeps track of every transaction, and prints the necessary receipt. The system gathers the required information from a customer's credit or debit cards, confirms that the accounts have sufficient funds, debits the account and sends the money to the merchant if the account is funded, records every completed transaction, prints the required receipt, or rejects the transaction because of insufficient funds.

2.2.3 Performance

According to Hurduzeu (2015), performance is an organization's ability to effectively and efficiently convert its internal resources in order to accomplish its objectives. The purpose for which an organization is created determines its goals. The primary objectives of business organizations are survival, expansion, and profit. Organizations are created to achieve certain goals. An organization needs to be able to run its operations effectively and efficiently in order to meet its goals. In order to achieve their goals and maintain their performance, organizations must implement efficient business procedures (Habamenshi & Nibeza, 2024). Organizational performance is evaluated based on how well they are able to accomplish their particular goals. According to Mawanza (2024), performance is the capacity to function effectively, generate profits, endure, expand, and respond to environmental opportunities and dangers. One of the key metrics used to explain a society's degree of development is performance. One of the most significant factors that scholars have focused on in the literature on management and finance is firm performance (Souto, 2021). The idea of firm performance describes how well a company accomplishes its goals. According to Komwut and Nopadol (2024), it shows how organizations have been gazing over time. According to Moga (2020), firm performance is a

metric that helps evaluate and quantify how successfully a business accomplishes its objectives for all of its stakeholders. The ability of a corporation to accomplish its objective by applying its resources effectively and efficiently is referred to as firm performance (Ankit, 2021).

2.2.4 Measures of Performance

The work currently in publication uses both accounting and market metrics to assess performance (Seelanatha, 2017). Expectations of a firm's future and its capacity for change adaptation are reflected in its market performance (Kabir et al. 2021). The present worth of anticipated future profits as determined by the financial market is one of its components. The market measure, however, is appropriate if the market is efficient and only applies to listed enterprises. A variety of performance metrics, including as operational efficiency, market share, growth, and profitability, have been employed in certain studies to gauge the performance of businesses. Growth and operational efficiency serve as the performance metrics in this study.

i. Firm Growth

The work currently in publication uses both accounting and market metrics to assess performance (Seelanatha, 2017). Expectations of a firm's future and its capacity for change adaptation are reflected in its market performance (Kabir et al. 2021). The present worth of anticipated future profits as determined by the financial market is one of its components. The market measure, however, is appropriate if the market is efficient and only applies to listed enterprises. A variety of performance metrics, including as operational efficiency, market share, growth, and profitability, have been employed in certain studies to gauge the performance of businesses. Growth and operational efficiency serve as the performance metrics in this study. It denotes the growth of a business's operations, market share, earnings, or power. By increasing market share, launching new goods or services, or improving efficiency, growth frequently results in larger sales and profits. A company's brand reputation, trustworthiness, and bargaining power with suppliers, consumers, and partners are all improved by growth, opening up new opportunities and fostering stronger bonds. As companies invest in R&D to produce new goods, enhance existing procedures, and keep ahead of market trends, growth encourages innovation. By diversifying revenue sources, growing activities, and reducing risks, growth guarantees an organization's long-term viability. Musmuliana (2022).

ii. Operational Efficiency

The ability of an organization to minimize waste in time, effort, and materials while maintaining a high level of service quality is known as operational efficiency (Onotai, 2017). Operational efficiency includes a number of tactics and methods used to achieve the fundamental objective of providing clients with high-quality products in the most economical and timely way possible (Oluwale et al., 2018). In order to support the business, operating efficiently entails making the best use of time, people, equipment, inventory, and financial resources (Ibeneme et al., 2020). The ability to provide clients or patients with reasonably priced goods or services is referred to as operational efficiency (Balogun & Ogunnike, 2017). The sort of services must be identified in order to gauge a company's operational efficiency. The ability to design procedures based on core competencies within the organizations that push them to go above the expectations of their clients is a prerequisite for operational efficiency (Werema, 2018). According to this definition, operational efficiency is the process by which businesses accomplish their objectives while making use of the resources available

to them. In addition to forecasting and working on the cycles, it entails driving and regulating the cycles inside the company in order to develop interaction execution (Werema, 2018).

2.3 Review of Related Empirical Studies

Azorjiri and Nzube (2020), examines the effect of ICT on Banks Performance in Nigeria, from 2000-2015. By examining the effects of a few chosen ICT indicators, such as direct line usage (DLine), mobile line usage (MBLine), and internet network usage (INTERNET), on banks' performance, the study aimed to precisely ascertain the extent and level of ICT's influence on banking performance. The dependent variable was the total assets of the banks. The study demonstrates that combined ICT factors have a significant and beneficial impact on bank total assets using the ordinary least square regression model as an estimation technique. The results also demonstrated that higher bank-based ICT investment eventually resulted in higher bank assets. Based on the results, this study suggests that banks focus more on ICT use in their operations as they maintain and properly monitor ICT devices and equipment (hardware and software) to ensure maximum contribution to the organization's efficiency and customer retention.

Wiredu et al. (2020), assessed the strategic Impact of Information, Communication and Technology (ICT) in the rural banking sector and the benefits of introducing ICT in Ghana. SPSS and Microsoft Excel were used to analyze the responses. According to the study, Atiwa Rural Bank does not have the technologies it needs to support its operations, but it does have the advantages of reducing customer wait times, facilitating quick transactions with customers, lowering operating costs, offering convenient banking services to its clients, and drawing in a sizable customer base, all of which increase revenue volume and profit margins since information, communication, and technology were implemented into the bank's systems. Once more, it was discovered that the use of ICT was being hindered by a lack of funding as well as restrictive ICT rules implemented by supervisory organizations like as the Bank of Ghana and the ARB Apex Bank. According to the study, the management of Atiwa rural banks should endeavor to implement more cutting-edge technologies in order to enable the bank withstand the current banking industry wave of competition and fulfill its responsibilities for the country's economic development.

Gómez-Fernández and Mauro, (2021), explored the relationship between different types of ICT use at school and at home, students' attitudes towards ICT, and academic performance, as well as to see if these associations differ according to the level of performance of the students. To achieve this, we use data from the 2015 Programme for International Student Assessment Survey (PISA) to use multilevel and quantile regression models. The findings indicate variations in the association's sign based on the ICT variable under analysis. Students' interest in ICT, their use of it for amusement at home, and their earlier ICT usage initiation age all contribute to the favorable correlation between ICT use and academic achievement. The findings also indicate a correlation between improved academic achievement and the number of computers available to each student in schools. However, factors that are negatively related with academic performance include students' use of ICT for schoolwork at home, their use of ICT in class, and the significance of ICT as a topic in social interaction. Lastly, it appears that some forms of ICT use are especially linked to the academic achievement of pupils in the lowest percentiles of performance, according to our quantile regressions by ability levels. These findings emphasize how important it is to take ICT into account and include it into the

educational production function. Furthermore, the relationship between ICT and the academic achievement of underachieving kids should be taken into account in public policies.

Uzor et al. (2022), examined the effect of information and communications technology (ICT) on the efficiency of deposit money banks in Nigeria during the period 2006–2020. In particular, the impact of transaction volume on point-of-sale terminals, internet banking, mobile banking, and automated teller machines on deposit money banks' efficiency was assessed. The Granger Causality test result showed that the efficiency of Nigerian deposit money banks is not significantly impacted by information and communications technology channels such as point of sale (POS) terminals, internet banking, mobile banking, or automated teller machines (ATMs). The efficiency of deposit money banks is negatively and negligibly correlated with the volume of transactions on ATMs, mobile banking, and point-of-sale terminals. However, there was a negative and non-significant correlation between the number of transactions on internet banking and the effectiveness of Nigerian deposit money institutions. The negligible impact of ATM transactions suggests that Nigerian deposit money banks are necessary to guarantee that there is money in the machines.

Okeke (2024), reviewed the effect of ICT on the financial performance of firms in the consumer goods sector as measured by their Return on Capital Employed (ROCE) with firm size added as a control variable. The study examined thirteen (13) Nigerian consumer products businesses that were listed across a ten-year period, from 2013 to 2022. Secondary data was collected from the companies' annual reports for the reviewed period using an ex-post facto research approach. Regression and correlation analysis were performed using EViews version 12. The results indicate that the financial performance of Nigerian consumer goods companies that are listed is negatively and negligibly impacted by funding for ICT hardware (FICTH) and funding for ICT software (FICTS). The report advises stakeholders, particularly managers in the consumer products industry, to thoroughly consider all of their alternatives before making any purchases of new computer hardware or software, keeping in mind the detrimental effects on their ROCE.

3.0 RESEARCH METHODOLOGY

In order to get data directly from the population at a certain moment, the study used a survey research approach. 200 management personnel from 15 quoted deposit money banks on the Nigerian Exchange Group in their various headquarters made up the study's population because they are better qualified to respond to questions about the subject being studied. A census sampling strategy was used in the investigation. Because the study's population is small and manageable, this method was employed. The complete study population was taken into account as the sample size using this method. Both primary and secondary sources of data were gathered for the investigation. Information gathered especially for research purposes is referred to as primary data. Primary data has the benefit of being especially suited to the requirements of the study. Information obtained directly from respondents is known as primary data, and the researchers employed a questionnaire for this investigation. Conversely, secondary data entails gathering and examining information and published materials from other sources, including published data and yearly reports. Secondary data is information that has been gathered by a party other than the user. Further research is made easier by the fact that this kind of data is typically accessible from other sources and may have

previously been used in earlier studies. The fact that someone other than the researcher gathered the data saves time and money.

A standardized questionnaire served as the main source of information. The questionnaire was thoughtfully created by taking into account the different important factors and/or items required for analysis, as well as the demographic traits of the respondents. A questionnaire was used to gather the data for this investigation. Strongly Disagree, Disagree, Agree, and Strongly Disagree were the four alternatives available on the Likert Scale-based questionnaire. For the purpose of data analysis, each option was given a coded value. There were two parts to the questionnaire: research variables and responder demographics. Two research assistants assisted in administering the questionnaire to the respondents in order to facilitate the data gathering process. The researcher used factor analysis to assess the variables' constituent parts on a scale. After the supervisors completed face validity, the results generated by the collection instruments were backed up by empirical data to guarantee the validity of the instruments. The null hypothesis that the original correlation matrix is an identity matrix was tested using Bartlett's test of sphericity. The results of the Bartlett's Test of Sphericity were significant (App. chi-square = 308.229, sig. is.000), indicating sufficient inter-correlations of the factor analysis with an average reliability index of.867, while the Kaiser-Meyer-Olkin (KMO), which measures sample adequacy, was.834. The data for the study were collected, coded and analyzed with the aid of the computer-based Statistical Package for Social Sciences (SPSS). The study employed multiple regression to test hypotheses at the 0.05 level of significance, while descriptive statistical techniques like frequency tables, simple percentages, mean, and standard deviation were utilized to ascertain the demographic features of the respondents and research questions.

Performance, the dependent variable, and information and communication technology, the independent variable, constitute the foundation of this study. Additionally, agency banking, internet banking, and mobile banking are used to measure the independent variable. In this study, performance is considered to be a function of information and communication technology. The regression model is stated thus:

$Perf=f(ICT)$ (1)

$Perf=f(MOB, ITB, AGB, ATM, POS)$ (2)

Where:

P= Performance

ICT = Information and Communication Technology

Where;

MOB=Mobile Banking

ITB = Internet Banking

AGB = Agency Banking

ATM = Automated Teller Machine

POS= Point of Sales

The explicit form of the model for this study is;

$Perf= b_0 + b_1 (MOB) + b_2 (ITB) + b_3 (AGB) + b_4 (ATM) + b_5 (POS) + \varepsilon$ (3)

b_0 = intercept of the mode (Constant)

α = Constant

b_1, b_2, b_3, b_4, b_5 = parameter estimates

ε = error term

4.0 RESULTS AND DISCUSSIONS

4.2 Data Presentation and Analysis Based on Demographic Attributes

The mean, standard deviation, frequency tables, and basic percentages were used to display the data gathered from the respondents.

Table 1: Demographic Attributes of Respondents

Attributes	Frequency	Percentage (%)
Age		
18-27 years	40	20
28-37 years	80	40
38-47 years	50	25
48 years and above	30	15
Total	**200**	**100**
Gender		
Male	125	63
Female	75	37
Total	**200**	**100**
Educational Qualification		
SSCE	65	32
OND/NCE	35	18
HND/Degree	40	20
Masters/Ph.D	60	30
Total	**200**	**100**
Experience		
1-5 years	50	25
6-10 years	30	15
11-15 years	80	40
16 years and above	40	20
Total	**200**	**100**

Source: Field Survey, 2025.

The distribution of respondents as presented in Table 1 showed that (20%) of the respondents were from the age of 18 - 27 years, (40%) 28-37 years, (25%) of the respondents were from 38-47 years while (15%) were above 48 years. This implies that most of the respondents were old enough to provide answers to the topic under investigation. The distribution of respondents by gender indicated that (63%) of the respondents were males while (27%) were females. The result showed that quoted deposit money banks on Nigerian exchange group is male dominated. The distribution of the respondents by educational qualification shows that (32%) of the employees have SSCE qualification, (18%) have OND and NCE qualifications, majority of the employees (20%) have HND/Degree qualification while (30%) of the respondents have higher qualifications. This implies that the respondents were educated enough to understand the impactof ICT on performance of quoted deposit money banks on

Nigerian exchange group. The result distribution of respondents based on working experience revealed that (25%) of the employees had worked from 1-5 years, (15%) 6-10 years, (40%) 11-15 years while (20%) of the employees had worked for over 16 years. This implies that most of the respondents have worked for many years in the organization hence have a good knowledge about ICT and performance of quoted deposit money banks on Nigerian exchange group.

Table 2: Respondents Views on Telephone Banking

Item	N	Minimum	Maximum	Mean	STD
Mobile banking significantly Influence banking credit to real sector	200	1	5	3.31	0.748
Mobile banking facilitate speedy operations of banking services	200	1	5	3.46	0.771
Mobile banking ensures cashless economy and reduces excessive waiting queue which impairs satisfaction	200	1	5	3.02	0.603
Mobile banking ensures fund transfer, account balance and list of latest transaction where banking activities are not available	200	1	5	3.11	0.723
Mobile banking provides 24 hours call services and hotlines	200	1	5	3.53	0.771

Source: Field Survey, 2025.

These mean scores range from 3.02 to 3.53 and were all above the 2.50 cut-off point, indicating that mobile banking has a significant impact on the performance of quoted deposit money banks on the Nigerian exchange group. The responses obtained from the respondents on items 1, 2, 3, 4, and 5 were presented using mean scores and standard deviation. The results in Table 2 show that the respondents agreed with all statements that showed that mobile banking influences the performance of quoted deposit money banks on the Nigerian exchange group.

Table 3: Respondents Views on Internet Banking

Item	N	Minimum	Maximum	Mean	STD
Internet banking offers quicker rate of inter-branch as barriers are eliminated 0.772	200	1	5	3.36	
Internet banking makes enquiries on account faster, thereby improving customer satisfaction 0.831	200	1	5	3.34	
Internet banking enables customers to complete their transaction online without complaints	200	1	5	3.03	1.105
Internet banking simplifies the task of getting customers data which improve customer satisfaction 0.763	200	1	5	3.38	
Internet banking reduces frustration experience in banking operations 0.772	200	1	5	3.52	

Source: Field Survey, 2025.

Mean scores and standard deviation were used to display the respondents' answers to items 1, 2, 3, 4, and 5. The result in Table 3 indicates that the respondents agreed with all statements which showed that internet banking influence performance of quoted deposit money banks on Nigerian exchange group. The mean scores range from 3.03 to 3.52 and they were all above 2.50 cut-off point. This implies that internet banking significantly affects the performance of quoted deposit money banks on Nigerian exchange group.

Table 4: Respondents Views on Agency Banking

Item	N	Minimum	Maximum	Mean	STD
Agency banking offers competitive pricing compared to traditional banking	200	1	5	3.27	0.737
Transactions conducted through agency banking are reliable	200	1	5	3.34	0.755
The introduction of agency banking has reduced financial exclusion	200	1	5	3.23	0.723
Agency banking has significantly reduced the distance in accessing financial services	200	1	5	3.44	0.770
Agency banking has improved access to financial services	200	1	5	3.64	0.482

Source: Field Survey, 2025.

Mean scores and standard deviation were used to display the respondents' answers to items 1, 2, 3, 4, and 5. According to the results in Table 4, all of the statements demonstrating that agency banking influences the performance of quoted deposit money banks on the Nigerian exchange group were accepted by the respondents. The mean scores were all above the 2.50 cut-off point and ranged from 3.23 to 3.64. This suggests that the performance of quoted deposit money banks on the Nigerian exchange group is greatly impacted by agency banking.

Table 5: Respondents Views on Automated Teller Machine

Item	N	Minimum	Maximum	Mean	STD
ATMs provide self-service options for banking, making it easier and faster for users to access their bank accounts.	200	1	5	3.32	0.942
ATMs allows customers to perform financial transactions without needing a human teller.	200	1	5	3.54	0.521
ATMs dispenses cash, prints receipts, or provides other requested information.	200	1	5	3.76	4.053
ATMs are widely used because they provide 24/7 access to banking services without needing to visit a bank branch.	200	1	5	3.53	0.771
ATMs allow a user to choose the type of transaction (e.g., cash withdrawal or balance inquiry).	200	1	5	3.55	0.770

Source: Field Survey, 2025.

Mean scores and standard deviation were used to display the respondents' answers to items 1, 2, 3, 4, and 5. According to the results in Table 5, all of the statements demonstrating that automated teller machines have an impact on the performance of quoted deposit money banks on the Nigerian exchange group were accepted by the respondents. The mean scores were all above the 2.50 cut-off point and ranged from 3.32 to 3.76.

Table 6: Respondents Views on Point of Sale

Item	N	Minimum	Maximum	Mean	STD
POS is used for cashless transactions through debit cards, credit cards, or mobile payments.	200	1	5	3.36	0.772
POS is used to process payments for goods and services at retail stores, businesses, or service points.	200	1	5	3.34	0.831
POS verifies the card details and requests the customer's PIN or biometric authentication.	200	1	5	3.03	1.105
POS generates a receipt which is printed or sent digitally after a successful transaction.	200	1	5	3.38	0.763
POS systems are widely used in businesses like supermarkets, restaurants, fuel stations, and small retail shops.	200	1	5	3.52	0.772

Source: Field Survey, 2025.

The results in Table 6 show that the respondents agreed with all statements that point of sale influences the performance of quoted deposit money banks on Nigerian exchange group. The mean scores ranged from 3.03 to 3.52 and were all above the 2.50 cut-off point, indicating that point of sale has a significant impact on the performance of quoted deposit money banks on Nigerian exchange group. Standard deviation and mean scores were used to present the responses that were gathered from the respondents on items 1, 2, 3, 4, and 5.

Table 7: Respondents Views on Performance

Item	N	Minimum	Maximum	Mean	ST.D
The organization effectively controls costs while maximizing output.	200	1	5	3.32	0.942
The organization has expanded its market share in recent years	200	1	5	3.54	0.521
The organization remains competitive in its industry by embracing innovation	200	1	5	3.76	4.053
The organization frequently introduces new products or services to meet market needs	200	1	5	3.53	0.771
The organization effectively attracts and retains new customers	200	1	5	3.55	0.770

Source: Field Survey, 2025.

The responses collected from the respondents on items 1, 2, 3, 4 and 5 were presented using mean scores and standard deviation. The result in Table 7 indicates that the respondents agreed with all statements which showed that there is an improvement in performance of quoted deposit money banks on Nigerian exchange group. The mean scores range from 3.32 to 3.76 and were all above 2.50 cut-off point.

Table 8: Model Summary

R	R-Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.819[a]	.575	.549	4.466	1.595

a. Predictors (Constant), Agency banking, Internet banking, Mobile banking, ATM, POS

b. Dependent Variable: Performance

Source: Field Survey, 2025.

With a coefficient of determination (R square) of.575 (indicating a 95% confidence interval variation of 57.5% in performance due to changes in internet banking, mobile banking, agency banking, automated teller machines, and point of sale), Table 8's results demonstrate that R

square explains the variation in the dependent variable caused by changes in the independent variable. Additionally, Table 8's R 0.819 value indicates a strong correlation between the study variables.

Table 9: Analysis of Variance (ANOVA)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.424	3	1.475	6.800	.000[b]
Residual	20.816	103	.217		
Total	25.240	106			

a. Dependent Variable: Performance

b. Predictors (Constant), Agency banking, Internet banking, Mobile banking, ATM, POS

Source: Field Survey, 2025.

The ANOVA statistics in Table 9 show that the processed data, or population parameters, had a significance level of.000, indicating that the data is suitable for drawing conclusions about the population's parameter because the p-value is less than 5%. This suggests that the quoted deposit money banks on the Nigerian exchange group are significantly impacted by mobile banking, internet banking, agency banking, automated teller machines, and point of sale. The significance value was less than 0.05, indicating that the model was statistically significant (F =6.800, P =.000<0.05).

Table 10: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.2.491	.531		4.688	.000
Mobile banking	.181	.067	.255	2.700	.008
Internet banking	.173	.077	.170	1.785	.003
Agency banking	.135	.063	.201	2.122	.006
Auto. Teller Machine	.245	.098	.306	3.721	.002
Point of sale	.167	.069	.283	2.422	.000

a. Dependent Variable: Performance

Source: Field Survey, 2025.

According to the regression equation above, a unit increase in mobile banking would improve the performance of quoted deposit money banks on the Nigerian Exchange Group by 18.1%; a unit increase in internet banking would improve such banks' performance by 17.3%; a unit increase in agency banking would improve such banks' performance by 13.5%; a unit increase in automated teller machines would improve such banks' performance by 24.5%; and a unit increase in point of sale would improve such banks' performance by 16.7%. Additionally, the study discovered that the p-values for point of sale, automated teller machine, internet banking, agency banking, and mobile banking (.008, .003, .006, .002, .00000) were all less than 0.05, indicating that each variable affects the performance of quoted deposit money banks on the Nigerian exchange group in a positive way. The findings suggest that automated teller machines have a more significant effect on the performance of quoted deposit money banks on the Nigerian exchange group.

4.2 Test of Hypotheses

The formulated hypotheses are tested as follow:

4.2.1 Test of hypothesis one

$H0_1$: Mobile banking have no significant impact on the performance of quoted deposit money banks on Nigerian exchange group.

To test this hypothesis, the strength of the impact of mobile banking on performance of quoted deposit money banks on Nigerian exchange group was measured by the calculated p-value = .008 at a significance level (α) of 0.05. Since the computed p-value is less than the significance level (α) of 0.05 (*p-value* .008 < α 0.05), the null hypothesis was rejected. It is therefore concluded that mobile banking has significant impact on the performance of quoted deposit money banks on Nigerian exchange group.

4.2.2 Test of hypothesis two

$H0_2$: Internet banking has no significant impact on the performance on performance of quoted deposit money banks on Nigerian exchange group.

The effect of internet banking on the performance of quoted deposit money banks on the Nigerian exchange group was tested using the calculated p-value =.003 at a significance level (α) of 0.05. The null hypothesis was rejected because the computed p-value is less than the significance level (α) of 0.05 (p-value.003 < α 0.05), indicating that internet banking significantly affects the performance of quoted deposit money banks on the Nigerian exchange group.

4.2.3 Test of hypothesis three

$H0_3$: Agency banking has no significant impact on the performance of quoted deposit money banks on Nigerian exchange group.

To test this hypothesis, the calculated p-value =.006 at a significance level (α) of 0.05 was used to measure the strength of the impact of agency banking on performance. The null hypothesis was rejected because the computed p-value is less than the significance level (α) of 0.05 (p-value.006 < α 0.05), indicating that agency banking significantly affects the performance of quoted deposit money banks on the Nigerian exchange group.

4.2.4 Test of hypothesis four

$H0_4$: Automated Teller Machine has no significant impact on the performance of quoted deposit money banks on Nigerian exchange group.

To test this hypothesis, the strength of the impact of automated teller machine on performance of quoted deposit money banks on Nigerian exchange group was measured by the calculated p-value = .002 at a significance level (α) of 0.05. Since the computed p-value is less than the significance level (α) of 0.05 (*p-value* .002 < α 0.05), the null hypothesis was

rejected. It is therefore concluded that automated teller machine has a significant impact on the performance of quoted deposit money banks on Nigerian exchange group.

4.2.5 Test of hypothesis five

$H0_5$: Point of sales has no significant impact on the performance of quoted deposit money banks on Nigerian exchange group.

To test this hypothesis, the strength of the impact of point of sale on performance of quoted deposit money banks on Nigerian exchange group was measured by the calculated p-value = .000 at a significance level (α) of 0.05. Since the computed p-value is less than the significance level (α) of 0.05 (*p-value* .000 < α 0.05), the null hypothesis was rejected. It is therefore concluded that point of sale has a significant impact on the performance of quoted deposit money banks on Nigerian exchange group.

4.3 Discussion of Findings

The result from the analysis indicated that there is a significant impact of mobile banking on the performance of quoted deposit money banks on Nigerian exchange group. Regression was used to test the hypothesis at 5 % level of significance and the p-value (0.008) was lower than the significance level. This can be statistically given as P-value 0.008< α = 0.05. This is in line with Chimaobi et al. (2020) whose study found a positive impact of mobile banking on the performance of commercial banks. Kabir et al. (2024) in a study on the impact of electronic banking on the financial performance of Deposits Money Banks in the Nigerian banking industry reported a significant impact of mobile banking on financial performance of banks.

The result from data analysis indicated that internet banking has a significant impact on the performance of quoted deposit money banks on Nigerian exchange group. Regression was used to test the hypothesis at 5 % level of significance and the p-value (0.003) was lower than the significance level. This can be statistically given as P-value 0.003< α = 0.05. The result is in line with Obikeze et al. (2017) whose study established a significant impact of internet banking on customer satisfaction in the Nigerian banking industry. Adedokun (2017) also agreed that the use of ATM by banks enable customers to make transactions at home and this helps to increase banks' performance.

Additionally, the study's conclusions showed that agency banking significantly improved the performance of quoted deposit money banks on the Nigerian exchange group. At the 5% level of significance, regression was employed to test the hypothesis, and the p-value (0.006) was less than the significance level. The statistical expression for this is P-value 0.006 < α = 0.05. Okoye et al. (2018) showed a strong influence of agency banking on customer satisfaction in the Nigerian banking market, which supports this finding. The results are consistent with a research by Isibor et al. (2018) on the effects of electronic banking technology, which found that agency banking has greatly increased bank operations in Nigeria.

The result from data analysis indicated that automated teller machine has a significant impacton the performance of quoted deposit money banks on Nigerian exchange group. Regression was used to test the hypothesis at 5 % level of significance and the p-value (0.002) was lower than the significance level. This can be statistically given as P-value 0.002< α = 0.05. The outcome is consistent with Adedokun (2017), who also stated that banks' usage of ATMs allows consumers to conduct business from the comfort of their own homes, which improves bank performance. This outcome is in line with that of Ogutu and Fatoki (2019), who looked

into how electronic banking affected the financial performance of commercial banks that were listed in Kenya. They discovered a strong positive relationship between the financial performance of those institutions and the use of ATMs. Furthermore, Obiekwe and Anyanwaokoro (2017) discovered that the Automated Teller Machine (ATM) significantly affects Nigerian commercial banks' profitability. Similarly, Pam's (2018) study discovered that the return on assets (ROA) of Nigerian banks is positively and considerably impacted by ATM usage. The association between ATM and RO and Earning EPS is positive and significant, according to Joseph et al. (2021). To sum up, Ighoroje and Okoroyibo (2020) discovered that cashless policies have improved the performance of money deposit banks in Nigeria and that internet banking and automated teller machines (ATMs) significantly and favorably affect return on equity (ROE).

The result from data analysis indicated that point of sale has a significant impact on the performance of quoted deposit money banks on Nigerian exchange group. Regression was used to test the hypothesis at 5 % level of significance and the p-value (0.000) was lower than the significance level. This can be statistically given as P-value 0.000< α = 0.05. The study's findings run counter to those of Obiekwe and Anyanwaokoro (2017), who discovered that Point of Sale (POS) had no discernible effect on the profitability of Nigerian commercial banks. According to Oladejo (2016), banks' performance level, including gross margin, earnings after taxes, return on assets, and return on equity, varies when they use e-payment systems. The effect of ATM, POS, web/Internet, and mobile e-payments usage on banks' profitability was the main emphasis of Oladejo's study. Contrary to the findings of this study, Alao and Sorinola (2015) argue that the cashless policy has a negative effect on the performance of Nigeria's commercial banks. According to Oladejo (2016), banks' performance level, including gross margin, earnings after taxes, return on assets, and return on equity, varies when they use e-payment systems. The effect of ATM, POS, web/Internet, and mobile e-payments usage on banks' profitability was the main emphasis of Oladejo's study. Point-of-sale (POS) systems have a favorable and statistically significant impact on bank profitability, according to Ugbede et al. (2019).

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This study was carried out to examine the impact of information and communication technology on performance of quoted deposit money banks on Nigerian exchange group. The study's conclusions demonstrated that the performance of quoted deposit money banks on the Nigerian exchange group is impacted by mobile banking, online banking, agency banking, automated teller machine banking, and point of sale. According to the study's findings, the Nigerian banking sector's customer service is greatly enhanced by the usage of ATMs and smart cards. Additionally, the study found that telephone banking has improved quoted deposit money institutions' performance on the Nigerian Exchange Group. The study's final conclusion was that the performance of quoted deposit money banks on the Nigerian exchange group is greatly impacted by internet banking.

5.2 Recommendations

Based on findings of the study, the following recommendations were made:

- To improve its performance, management of quoted deposit money banks on the Nigerian Exchange Group should always make sure that more money is invested in mobile banking services.
- The management of quoted deposit money banks on the Nigerian Exchange Group should constantly guarantee a sufficient and effective network to allow for the unrestricted flow of internet services for efficient operation.
- In order to increase transaction revenues and deposit growth, management of quoted deposit money banks on the Nigerian Exchange Group should broaden their agency networks.
- Management of quoted deposit money banks on the Nigerian Exchange Group should enhance its online banking offerings, including the use of automated teller machines, to reduce line wait times and boost bank efficiency.
- Management of quoted deposit money on In order to enhance digital banking, the Nigerian Exchange Group should constantly promote the benefits of point of sale. To prevent online fraud and other security threats associated with online banking, the Nigerian government should put a lot of effort into developing an internet security framework. Additionally, the government ought to pass legislation pertaining to cybercrimes and outline the sanctions for offenders.

5.3 Suggestion for Further Studies

Using other deposit money banks in Nigeria, the study recommends that more research be done on the effects of information and communication technologies on the country's banking sector. Customer satisfaction in the Nigerian banking sector and electronic banking should be the subjects of future research. Lastly, more research on the difficulties of electronic banking in Nigerian financial institutions should be done.

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