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## EFFECT OF FINANCIAL PRODUCTS ON THE PERFORMANCE OF SELECTED DEPOSIT MONEY BANKS IN NIGERIA: 2005-2019

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**ABSTRACT:** *This research study investigated the effect of financial products on the performance of selected deposit money banks in Nigeria. The study sought to ascertain whether the various products introduced by the banks in the face of keen competition have significantly impacted on their performances. Secondary data were utilized and sourced from annual reports and Nigerian Stock Exchange fact books. Multiple regression was used as a tool of data analysis. The results from test of the three hypotheses revealed that, mobile banking has significant positive effect on return on assets (ROA), point of sale has positive significant effect on return on equity (ROE) while automated teller machine also have positive significant effect on earnings per share (EPS). The study therefore recommended that, there is need for deposit money banks to heavily invest in technology as this will highly encourage the adoption of financial products technologies and this will influence the performance of deposit money banks in Nigeria. Banks management should strive to innovate better and cheaper ways of serving customers. With shorter transaction turnaround time, transactions volumes can be significantly increased.*

**Keywords:** financial products, deposit money banks, point of sale, mobile banking, automated teller machine

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## INTRODUCTION

The dynamic effects the activities of commercial banks have on both local and national economies make it imperative to constantly study how efficiently their resources are employed. One of the most important determinants of the rate of growth and development of an economy is its financial sector (Adoms, Yua, Okaro & Ogbonna 2020). Financial institutions, especially banks all over the world, are coming up with more creative ways to design improved financial products and services, faster and more efficiently. The overall aim of financial product design and development is to enable the institutions grow their revenues over time, maximize shareholder wealth, increase market share, improve upon existing ones by modifying certain features of the products, expand frontiers into new markets, help to maintain sales, transform the institution, shape the future of the organization and ensure the institution is ahead of the competition and is well repositioned to exploit existing and future opportunities (Kotler, 2002).

Banks do greatly influence economic development especially with their roles of financial intermediation which include, trusty money creation; this is so most especially when one considers the fact that more than 50% of the total money supply in the Nigerian economy since year 2000 to date was created by commercial banks via demand deposits (CBN, 2019).

Secondly, as a keeper of assets (monetary and non-monetary) for both individuals and groups, there is an increasing proportion of commercial banks total assets to Gross National Product (GNP) i.e. from 30% in 2004 to 60 % in 2010 and increase of 100 % (CBN, 2018). The role of intermediation of funds that is, attracting deposits at low costs from the surplus segment of the economy and lending these out to the deficit segment at higher rates, this affects not only the pace but also the pattern of economic activities especially in a developing country like Nigeria (Mwangi, 2007).

Economic development, as posited by Sanusi (2011) is about enhancing the productive capacity of an economy by using available resources to reduce risks, remove impediments which otherwise could lower costs and hinder investment. The banking system, he argued, plays the important role of promoting economic growth and development through the process of financial intermediation. Many economists have acknowledged that the financial system with banks as its major component, provide linkages for the different sectors of the economy and encourage high level of specialization, expertise, economies of scale and a conducive environment for the implementation of various economic policies of government intended to achieve non-inflationary growth, exchange rate stability, balance of payment equilibrium and high level of employment (Okaro, 2018).

The primary goal of a bank is to maximize its deposit mobilization with a view to enhancing its liquidity position and optimize positive returns on shareholders' funds. Customer deposit, which is the sum total of funds put in trust with the banks, are the liabilities upon which the banks depend to transact legitimate businesses with a view to making profits. Thus, the principal objective of banks product or service is to attract customer deposit. These customer deposits which form the capital employed by banks to engage in trade transactions thus become the most important factor for their survival, a measure of strength and a pointer to good condition of health. These all-important deposits are usually attracted from customers through the instrumentality of bank products. This raise concerns on whether a significant relationship exists between bank products and bank financial performance.

Consumers have become more aware of their rights in the business environment. They have also become aware of the availability of several product alternatives. The incidence of Covid-19 pandemic has further dwindled the fortunes of financial institutions, with banks as the worst hit. In the Nigerian scenario, present realities show that the case is worse than imagined. The Nigerian Banking system has undergone remarkable changes over the years in terms of the number of institutions, ownership structure as well as depth and breadth of operations. These have been largely influenced by challenges posed by the need to conform to international standard Okafor, Ogbonna and Anaemena (2020).

The stress test of 2009 by the regulator-Central Bank of Nigeria (CBN) has further confirm the woes of the financial institution, with result showing that about 8 out of 24 banks (-33 %) in the country have negative share capitals (CBN, 2010). This was the origin and a precursor to the banking tsunami of August 14, 2009, with a most shocking pronouncement by the CBN governor that led to the sacking of eight (8) MD/Chief executives Officers and numerous directors of the banks. With further threats of revocation of operating licenses, withdrawal of inter-bank guarantees, nationalization, outright sales or acquisition of erring

banks, enormous pressure is being mounted on the banks to create more businesses and maximize retained profits towards meeting up with the demands of the regulator.

To escape from the big hammer wielded by the regulators such as Securities and Exchange Commission (SEC), Central Bank of Nigeria (CBN), Nigeria Deposit Insurance Company (NDIC), affected banks faced with the dilemma, have taken the option of mergers and acquisition (M&A). This is followed by recent signing of Transaction Implementation Agreement (TIA) being witnessed at that time. The aim of TIA to take over the erring banks from the original owners, whose capitals have been eroded and handed over to new owners, with vested interests and whose capital is used to rescue the erring institutions, to avoid total and monumental collapse, with resultant effect of loss of depositors funds, loss of trust and confidence on Nigeria financial institution by overseas counterparts, and loss of wealth by shareholders. These have led to increase in competition, with each bank struggling to have a sizeable wallet share of the available market (Okefor, 2013). The introduction of the Structural Adjustment Program (SAP) in 1986 brought in its wake, liberalization policies in which economic determinants were left to the forces of demand and supply. There was upsurge in the number of licensed banks, interest rates and foreign exchange rates were left to market forces determination. The resultant competition became so intense which led to aggressive marketing, designing and introduction of financial products, innovative attractions, also services were polished and improved upon, while customers were being treated as kings in order to ensure a fair share of the business. Attitudes and service delivery methods were improved upon turning the banking industry into a supply leading market as against its demand following market nature of old (Afolabi, 2002).

Change continues to occur, and markets, products, services, technology, the business environment, and people keep changing, frequently in an unpredictable and significant manner. Some of the old marketing strategies of the banks were no longer relevant in this new environment. Banks, as a result are forced to develop new marketing strategies to cope with challenges in the financial service sector.

Could it be that the existing financial products are tailored to suit the middle and upper income group and the low-income groups who constitute the majority of the retail activities, however, do not have access to existing products? There is therefore, the need to develop new financial products to suit the low income earning group, many of whom do not have cheque accounts, assets, etc to guarantee them financial services such as loans. The greater percentage of Nigerians who still remain unbanked are source of concern. It is a source of anxiety because of the opportunities being missed, handling payments through a bank account provides a gateway for one to enter the financial mainstream and become an owner of financial assets. More so, those who own bank accounts are more likely to own other assets including accounts related to savings, credit, and insurance. Accessing credit facilities also becomes less cumbersome. People without financial accounts or relationship with mainstream financial institutions are likely to pay high transaction fees for services such as cheque instead of taking advantage of the existing products.

It is against this backdrop that banks are now faced with the challenges of how to survive and remain afloat in the present competitive market situation. Another problem that is yet to be resolved is whether the various products introduced by banks such as have significant positive

effect on their financial performance of banks or there is need for disaggregate products that satisfy the needs of all classes of bank products consumers. The study seeks to ascertain whether the various products introduced by the banks in the face of keen competition have significantly impacted on their performances.

## **LITERATURE REVIEW**

### **Conceptual Review**

In recent times, financial institutions especially the commercial banks have opted for products innovation through the instrumentality of technology to aid in their service delivery and profit maximization. The expectation of value, primarily establishes the cause of banking by customers in the first place. This means that the most tactical way of attracting, retaining and ensuring customers' loyalty is by developing and offering need satisfying products and services that add real value to the customers. For better appreciation of this study, Key conceptual clarifications are made in this section in order to aid understanding of their practical application. These concepts include: product, financial product, market and marketing, and bank performance.

### **Product**

A product is a set of benefits offered for exchange and can be both tangible, as well as intangible (like services, experience, belief). Product is defined as something that is capable of satisfying a customer need or want. According to Kotler (2002), a product is anything that can be offered to a market for attention, acquisition, use or consumption; it includes physical objects, services, personalities, places, organizations and ideas. A product as defined by Baker (2005) "is the combination of objective, (tangible) and subjective (intangible) properties designed or intended to provide need-satisfying experiences to consumers". It is the entire set of benefits that are offered by a marketer and are sought by consumers who are willing to offer in exchange something of value. A product contains a certain amount of potential satisfaction, which comes partly from its tangible and objective features and partly from its intangible and subjective features. It also covers anything that can be offered to someone to satisfy a need or want such as goods, services, ideas, people, places and organization. Services are however unproductive of any value as they do not fix or realize themselves in any permanent subject or vendible commodity which endures after labour is passed. It is perishable in the very instant of its production. A service is something that changes the condition or status of its consumer in a fundamental way (A Jimad et al, 2011). Medical services, for instance, affect the physical well-being of a patient while financial services affect the economic fortunes of a client.

### **Financial product**

Banking products can be conveniently categorized into three viz; core products, customer offerings and customer support services. Core products are the traditional financial services which Afolabi (2002) identified as, deposit mobilization, credit and loan, funds transmission, foreign exchange and general and financial advisory services. They together form the bedrock of bank services. Customer offerings are set of products fashioned out of traditional core products in order to suit the purposes and meet peculiar needs of different customers. Thus, from deposit mobilization is fashioned out target savings such as Higher Institution Fund Account, Christmas, Hajj and Ileya savings account, while from credit and loan services is fashioned out Housing Loan, Asset Acquisition Loans etc. Customer support services are

another set of products also fashioned out of core products made possible with the level of available technology with the aim of making services more suitable and conducive to customers. Example includes ATM, e-banking, Smartcard, Internet banking, Western Union and Money transfer. Such products/services include: -liberalization of credit/loan procedures; negotiable interest sum deposits; loan syndication; equipment leasing; warehouse financing, foreign exchange financing, cash encashment services; also is the introduction of electronic devices in the mould of Automated Teller Machine (ATM); Electronic Funds Transfers; Internet banking to mention but a few. It should, however, be noted that no new products can be said to be entirely novel as the traditional banking products still form the bedrock upon which they were built, all the bank needs to do this to dust up, repackage and modernize them to suit target (existing and potential) customers alike (Aburime, 2018).

### **Market and marketing**

Market consists of all existing and potential customers sharing a particular need or want, which might be willing and able to engage in exchange process to satisfy their needs and wants. Marketing may, therefore, be seen as the art of creating and satisfying customers through the social and managerial process by which industries and groups obtain what they need and want through exchange of products/services of value with others at a profit (Balogun, 2007). From the banking point of view, Meiden (2008) defined bank marketing as that part of management activity that seeks to direct the flow of banking services profitably to selected customers. This is in line with the thinking of Modern (1991), who saw marketing as management task within the organization. It is a tool used in understanding the needs of customers in the market and adapting the operations of the organization to deliver the right goods and services more effectively than competitors.

### **Bank Performance**

Performance means achievement of a work given to be done. Performance evaluation is done in order to know whether the expected have been achieved and if any deviation, how it can be corrected. Bank performance is a multidimensional construct that consists of four elements (Alametal., 2011). These are Customer-focused performance, including customer satisfaction, and product or service performance; financial and market performance, including revenue, profits, market position, cash-to-cash cycle time, and earnings per share; human resource performance, including employee satisfaction; and organizational effectiveness, including time to market, level of innovation, and production and supply chain flexibility. Consistent with the theoretical foundations in the capabilities and resource-based perspectives, it is argued that organizational capabilities are rent-generating assets, and they enable firms to earn above-normal returns. For example, performance management capability influences various measures of firm performance by allowing business leaders to review and take corrective actions on any potential or actual slippages proactively and in a timely manner (Athanasoglou et al 2008). Likewise, prior studies in marketing and strategy argue that customer management capability (Alam et al. 2011) and process management capability (Ahmad et al., 2011) influence several dimensions of firm performance. Financial performance measures how well a firm is generating value for the owners. It can be measured through various financial measures such as profit after tax, return on assets (ROA), return on equity (ROE), earnings per share (EPS) and any market value. Generally, the financial performance of banks and other financial institutions has been measured using a combination of financial ratios, benchmarking, measuring performance against budget or a mix of these methodologies (Ahmad et ah, 2011).

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**Innovations in the Nigerian financial system**

Financial innovation is the unanticipated improvement in the array of financial products and instruments that are stimulated by unexpected change in customer needs and preferences, tax policy, technology and regulatory impulses (Bhattacharyya and Nanda, 2010). The developments in the financial sector have not only led to the increase in the number of financial institutions, but also the development in level of sophistication with new payment systems and asset alternatives to holding money. This has resulted mainly from technological advancement and increase in competition as the number of institutions increase. As financial markets become more liquid and complete, changes in official interest rates are more readily transmitted to the whole term structure and more generally to financial asset prices. Some of the recent innovative products designed and offered by Nigerian Banks in the 21st century include:

**Mobile banking**

Today's banking customers can do almost 90 percent of his or her routine banking transactions on his phone through the innovation of mobile banking, an e-banking solution provided by banks that allows customers to access their account information via their Global System for Mobile Communication (GSM) mobile phone. It also enables subscribers carry out basic banking services anywhere in the country. With mobile banking, customers can view their account statement, initiate inter-account funds transfer, make payments to other bank accounts and individuals, request for cheque books or stop cheques, download mini statements, make utility bill payments, buy air-time, flight tickets, among others. Mobile banking is unique in that users do not need to have internet connectivity to initiate transactions on it.

Further breakthroughs have been made in the ICT sector to the extent that several transactions can be consummated with hand held mobile phone (GSM). Banks such as GT Bank have developed mobile banking products like GT-Connect, Zenith have Z-mobile, Access Bank has Access-online, even old generation bank like Wema Bank has Wema-mobile. These newly designed products and services enables customers adopt Do-It-Yourself (DIY) approach, by carrying out a number of transactions even while on transit, eating, driving or exercising (CBN, 2019).

**Short message service (SMS) and electronic-mail alert**

Today, SMS and e-mail alert enables delivery of account related information, product and services notifications in real-time to customer's mobile phones and email accounts. Most commonly, these products notify customers when money is deposited, withdrawn or any transaction takes place on any enrolled banks customer accounts (CBN, 2019).

**U- Direct**

This is an internet banking platform that allows account holders access their account (savings and current) from the comfort of their homes or offices on their personal computers, laptops and tablet anytime, anywhere. This service only existed in science fictions 20 years ago. With U- Direct bank customers now can take charge of their banking transactions without having to visit the bank physically

**Point of sale (POS)**

POS (Point of Sale) machines were almost absent in Nigeria twenty years ago. Today, banks have more than 200,000 POS installed in the country. POS are great at facilitating cashless

transactions. Different banks have deployed POS machines in different locations to help its customers carry out cashless transactions.

### **Automated teller machine (ATM)**

Difficult as it is to believe, twenty years ago, very few banks could boast of ATMs. The first ATM in Nigeria was actually installed in 1989, and very few people had access to it. Today, for example united bank of Africa (UBA) has in place more than 3000 ATMs deployed in 19 countries of operations across Africa to ensure account holders have access to their funds 24 hours of the day, every day of the week.

### **Electronic- statements**

Twenty years ago, the average customer will spend hours in a bank branch trying to get his or her bank statement. This is no longer the case at banks. E-statement give banks customers the option to have their bank statements delivered to their e-mail addresses either at the end of every business day, week or month through electronic mail. The customer specifies the frequency of the delivery and the format of the e-mail, either as a portable document file (PDF) or as an excel worksheet.

### **Pay manager**

This is a web-based payment solution, provided by banks that allow companies to automate their payment system to suppliers, customers, and staff Pay manager has the capability to move money from corporate accounts with any bank and pay into accounts with any bank. Payments can also be made from Dollar, Euro and Pound Sterling accounts to any account in the world.

### **Pay direct**

No longer are corporate compelled to make a great part of their sales in cash as they did twenty years ago. With an e-banking product like Pay Direct from banks, companies can get their customers to pay them electronically. Pay Direct is a PC-based electronic payment solution designed for secure commercial transactions between an organization and its customers.

It is designed to be a payments, collection and monitoring solution. It is an effective and price competitive way of providing 24 hours, all week e-payment solutions. It leverage son the online, real-time integration between the banks network and inter switch to provide an effective payment solution. Companies, using Pay Direct to collect payments, get instant SMS notification once a customer pays into their accounts.

### **U-pay**

Twenty years ago, paying employees required huge movement of cash by road by bullion vans. Today, this can be done conveniently through U-Pay, a Web -based Human Resource, salary administration and payroll solution provided by banks to corporate bodies. It enables automated salary processing and payment directly into employees 'accounts in any banks. Employee's details can be hosted on the U-Pay platform enabling employee benefits to be processed conveniently through the platform. With U-Pay connect, all payments are effected instantly.

### **Collection products**

Banks develop collection services to handle the challenges involved in managing cash for large organizations with huge daily cash sales. Usually, the banks allocate secured vehicles, with

security personnel to pick-up cash for daily sales of these organizations. In the case of big trading companies, such as big petroleum marketers, whose businesses are on cash and carry basis, banks often set up transient offices in such premises to handle cash collection services and evacuate cash on regularly basis, sometimes hourly evacuation, every three hours or once per day, thereby reducing the inherent risks associated with handling huge cash.

**Eduportal**

The education sector is also benefiting from innovations in financial technology. The era of students lining up for hours to pay their school fees now belongs to the past. Eduportal is the banks solution to that era providing an online educational portal that provides a comprehensive technology-based school management solution for tertiary institutions. School fees payments is not only enabled on this system but it also provides world-class learning environment for the entire school community including staff and parents as well as facilitates information upload for student-lecturer real time communication.

**Temporary overdrafts (TODS)**

This is a product designed by Nigerian Banks at the wake of the 21st century, to allow their trusted customers overdraw the funds in their account by certain amount for a very short period of time. The aim of this product is to enable reliable customers to meet immediate obligations, even when they do not have money in their account. They are meant for short term funding needs. They are granted for short tenors usually spanning few weeks too few months.

**Local purchase orders (LPO)**

By LPO, Nigerian banks create and avail funds to customers with genuine contracts to finance the supply of materials or execution of specific supplies and contractual obligations. Most banks will only finance purchase orders of reputable organizations referred to as Blue chips. Most Local purchase orders usually have payment clause of 14days, 30 days, 60 days, sometimes up to 90 days. Thus, banks provide short term finance to their customers, to execute such contracts and repay at maturity of the LPO, while security is usually an irrevocable domiciliation of payment undertaking signed by the blue chip, to domicile payment direct to the bank providing finance for that specific transaction.

**Customized value-added products**

It is common in recent time to find banks associating their products and services with extra specific value-added products such as insurance benefits designed, especially for the critically minded customers as a means of giving extra value, with the objective of getting total loyalty from the customer. The justification for offering such products is in the fact that the target audience would not only derive banking benefits, but are also availed protection against certain insurable risks.

**Consumer lending products**

These are financial products and services designed to take care of the needs of individual customers of banks. They do not usually involve large amount of money, since they are needed to meet short-term personal needs. Details are discussed below:



**Salaries backed-advances %**

Salary advances are retail products designed to enable salary earners have access to a certain percentage of their income before the due date. Usually it is advanced to individuals with verifiable monthly salaries, whose salaries are domiciled within a branch of the bank where the request is made. The bank thus allows a customer to have access to a part of his salary, and repayment is made through direct deduction as soon as the salary is paid, while the borrower is only allowed access to the balance after settlement of his indebtedness.

**Asset acquisition products**

These are products designed to make the acquisition of household and office properties more convenient for reliable customers of banks. The need for these products arises to enable customer use their fund for purposes while fulfilling their basic needs. Variants of these products exist. Quality Life Scheme (QLS) was designed by United Bank for Africa (UBA) to make asset acquisition more flexible for customers, while JVIPOWER was designed by Access Bank Plc for similar purpose.

**Shares purchases and trading**

These are margin facilities designed for companies and individuals dealing in the capital market. The product enables organizations or persons purchase shares of reputable companies, using loans from banks and selling as soon as the shares gains appreciable values. Making a success of this product requires adequate capital market techniques, including speculative and intuitive skills. This is perhaps because of the volatility of the capital market, as many organizations have burnt their fingers by wrong investment decisions in this product.

**Equipment lease facilities (ELF)**

This is a product designed for lease facilities where the customer who is in need of equipment for its business is giving the facility to purchase the equipment. The ELF as is fondly called is designed to take care of more capital-intensive equipment like specialized construction, manufacturing and media equipment's unlike the conventional asset acquisition products designed to meet the acquisition of less expensive household properties. Usually, the agreement is made under seal where the title to the equipment is purchased for the use of the customer is vested in the bank, while the equipment is leased to the customer with rental payments prescribed.

**Development of mortgage products**

Mortgage products are financial products designed for the acquisition of landed properties and buildings. By their nature, mortgages involve long term financing. There are different reasons for the need for mortgage loans which include: Land acquisition, building construction, purchase of a house, home renovation and refinance of existing mortgage. Recently financial institutions have started setting up mortgage arms and departments to develop better improved products to cater for these property needs of their clients. Similarly, mortgage banks are also being licensed for this purpose.

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## THEORETICAL FRAMEWORK

Several theories have been used by different scholars to explain financial product. This study is guided by two major theories. These include task technology fit theory and technology acceptance theory.

### **Task technology fit (TTF) theory**

This theory was propounded by Goodhue and Thompson (1995) and contends that it is more likely to have a positive impact on individual performance and be used if the capabilities of Information Communication and Technology (ICT) match the tasks that the user must perform (Goodhue and Thompson, 1995). Goodhue and Thompson (1995) mention the factors that measure task-technology fit as; quality, authorization, and compatibility, ease of use/training, production timeliness, systems reliability and relationship with users. The model is useful in the analysis of various context of a diverse range of information systems including electronic commerce systems and combined with or used as an extension of other models related to information systems outcomes. According to the theory of task-technology fit, the success of an information system should be related to the fit between task and technology, whereby success has been related to individual performance (Goodhue and Thompson, 1995) and to group performance (Zigurs and Buckland, 1998). For group support systems, a specific theory of task-technology fit was developed (Zigurs and Buckland, 1998) and later tested by (Zigurs et al, 1999) and detailed the requirements of group support systems to fit group tasks. For mobile information systems, task-technology fit has been shown to be generally relevant, but more specific questions regarding the applicability of task- technology fit to mobile information systems remain unanswered (Gebauer and Shaw, 2004). The theory of task-technology fit maintains that a match between business tasks and information technology is important to explain and predict the success of information system.

### **Technology acceptance theory**

Technology acceptance Theory (Propounded by Davis 1989) Theories and models used in studies related to the innovations, acceptance and use of new technology are many. For instance, focusing on the technological issues (Davis 1989) advances the Technology Acceptance Theory (TAM). This model relates the individuals' behavioral intentions and his/her ICT use. It is suggested that, the actual behavior of a person is determined by his behavioral intention to use, which is in turn influenced by user's attitude toward and perceived usefulness of the technology. However, attitude and perceived usefulness are both determined by ease of use. Adopting the TAM model requires the understanding of end-user's requirements regarding usefulness and user friendliness (Pedersen et al, 2002). From this model, usefulness and user friendliness affect users' attitudes towards any service (ibid.).

Davis (1989), thus suggest that it is important to value user requirements based on perceived usefulness and the user friendliness of the technology rather than other objective measure. Critiques of this model are directed to its inclination to the technological/technical aspects of the technology in question ignoring other factors such as social aspect of the users. In practice, constraints such as limited ability, time, environmental or organizational limits and unconscious habits will limit the freedom to act.

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## EMPIRICAL REVIEW

Akani, W.H and Obiosa R.L.S (2020). This study examined the effects of financial innovation on the profitability of deposit money banks in Nigeria. the general purpose of the study was to examine the effect of financial innovation on the profitability while the specific objectives was to examine the effect of automated teller machine, electronic fund transfer, internet banking, mobile banking and investment on information communication technology on return on equity of deposit money banks. The study formulated four hypotheses and used panel data regression to analyze the secondary data extracted from the annual reports and accounts of the fourteen firms for the period 2009 to 2017. Return on equity was the dependent variables while automated teller machine, electronic fund transfer, internet banking, mobile banking and investment on information communication technology on return were the independent variables. Findings of the study revealed that automated teller machine and electronic fund transfer have negative relationship with return on equity while internet banking, mobile banking and investment on information communication technology have positive relationship with return on equity. The study recommends that deposit money banks should adopt financial innovations, deposit money banks invest in technological innovations and banks should transform banking service by adapting to mobile banking and agency banking so that not only to providing jobs but also increase market share.

Usman M. (2020). The upswing of competition in banking business environment today has necessitated Banks to be preoccupied by the quest for intensive research to discover a potential Technical breakthrough capable of contributing to the muscle of beating and outperforming their competitors, to survive and remain afloat .The only tool today, to be used to champion in such a situation is to find a strategic tool that can improve on the banks service delivery and efficiency in conduction of daily operations. This is what led to the introduction of mobile banking. Mobile banking is a service provided by banks that allows their customers to conduct financial transactions remotely using mobile device. The study examines the effect of mobile banking on financial performance of deposit money banks in Maiduguri Borno State with a particular reference to U. B. A Maiduguri main branch. Pearson product moment correlation coefficient (PPMCC) was used to determine the strength and direction of linear relationship between the variables. The researcher used survey research method in obtaining his findings. Fifty (50) questionnaires were administered but only twenty five (25) were retrieved and the responses were subjected to tabular analysis in line with statistical package of social science. The major finding of the study was that mobile banking does not have any positive effect on financial performance of deposit money banks in Maiduguri. The researcher in his conclusion stated that as the rate of adoption if mobile increases, the financial performance of deposit money banks can decrease. The researcher's major recommendation to deposit money banks in Maiduguri is that they should attach importance to investing in R&D so as to discover another potential technological banking breakthrough that would Supercede mobile Banking".

Agu, B.O and Nwankwo, S.N.P (2019)The study examined the effect of Electronic Banking System on financial Performance of selected Deposit Money Banks in Nigeria. The Automated Teller Machine (ATM), Point of Sale (POS), Mobile Money Transfer (MMT) was proxies for Electronic Banking used to examine their effects on the aggregate Return on Equity (ROE) of deposit money banks in Nigeria. The research design was an ex post facto research design which made use of secondary data covering the period of2008-20] 7. The main models that

underpinned the study are; Bank-focused Model, bank-led model and non-bank-led model. The study adopted the ordinary least square (OLS) multiple regression method of analysis in determining the extent of the effects exerted on selected deposit money banks by ATM, MMT and PUS. The result of the analysis shows that ATM and MMT have positive and no significant effect on ROE while POS has negative and no significant effect on ROE of selected deposit money banks in Nigeria. The study concluded among others that the introduction of electronic' banking in Nigeria has a positive and no significant influence on financial performance of selected deposit money banks in Nigeria. MMT has positive and no relationship with ROE. The study recommended among others that management of deposit money banks should provide more A TM stands outside the banking hall to reduce long queues, exposure of customers to hash weather and unknown enemies especially during the pick periods like Mondays, Fridays and during festive periods (Christmas and New Year). 1.0 Introduction: The guidelines on Electronic Banking (e-banking practices in Nigeria which is in line with global trend were introduced by Central Bank of Nigeria (CBN) in 2004. Banks in Nigeria were directed to install Automated Teller Machine (ATM) for cash withdrawals. Specific guidelines were also put in place on standards and use of electronic (e-banking) products such as credit cards, digital cash by CBN in line with international best practices. CBN promoted automated payment instruments, replaced cash transaction mechanism, real time gross and enhanced monetary policy's transmission mechanism. Real lime Gross Settlement (RIGS) system was implemented in order to eliminate risk in large value payments and increased efficiency of the payment system (CBN, 2004). Electronic banking which serves both as a medium of delivery of banking services and as a strategic tool for business development have gained wide acceptance internationally and has become a marvel to Nigerians. It has abridged the gap by offering speed, efficient, convenience and increased comfort and time savings transactions which are made 24 hours a day without requiring the physical interaction with the bank teller (Agu, 2014) With the Automated Teller Machine (ATM), Point of Sale (POS), and Mobile Phones, one do not need to physically carry large sum of cash around. All that is needed is to locate an ATM and slot your card or position yourself where you can get service and withdraw or transfer your money from your account to another account within seconds.

Amu C.U. and Nathaniel. C.N. (2016).This work studied the relationship between electronic banking and the performance of Nigerian commercial banks. The study became necessary due to the increased adoption of the electronic banking which has redefined the banking service both in Nigeria and internationally. Electronic banking was proxied by value of Point-of-Sale transactions while commercial banking performance was proxied by customers' deposits. Engle-Granger cointegration model was used to analyse data for the sample period January 2009 to December 2013. The results show that POS is not cointegrated with both the savings and time deposits but are cointegrated with demand deposits. It is recommended that the monetary authorities and commercial banks should embark on an all-inclusive enlightenment campaign for the banking public on the benefits, convenience and importance of adopting e-banking channels in completing their transactions

## RESEARCH METHODOLOGY

This section explains the methodology used in this study. It discusses the research design, population of study, sample size, sources of data, variables measurement, model specification and data analysis technique. Since this study examines the effect of financial product on

performance of the deposit money banks in Nigeria, the dependent variable is banks' performance which being measured as Return on Equity (ROE), Return on Asset (ROA) and Earnings per share (EPS). These variables are explained below:

**Return on equity (ROE):** measures the rate of return for ownership interest (shareholders 'equity) of common stock owners. It measures the efficiency of a firm at generating profits from each unit of shareholder equity. ROE shows how well a company uses investments to generate earnings growth. It reflects how effectively a bank management is using shareholders' funds. A bank's return on equity is affected by its return on assets as well as by the bank's degree of financial leverage

**Return on assets (ROA):** is a profitability ratio that measures the efficiency of-a business in utilizing its assets to generate income. It shows the percentage of how profitable a company's assets are in generating revenue. This ratio tells us what the company can do with what it has, that is, how many naira's of earnings they derive from each naira's of assets they control. It's a useful number for comparing competing companies in the same industry. The number will vary widely across different industries. Return on assets gives an indication of the capital intensity of the company, which will depend on the industry; companies that require large initial investments will generally have lower return on assets. **Earnings per share ratio (EPS):** measures shareholder profitability by revealing how much profit a share generates with money shareholders have invested. Earnings per share ratio measure the amount of a company's net income that is theoretically available for payment to the holders of its common stock. A company with high earnings per share ratio is capable of generating a significant dividend for investors, or it may reinvest the funds back into its business for more growth; in either case, a high ratio indicates a potentially worthwhile investment, depending on the market price of the stock.

The focus of this study is to examine the effect of financial products on performance of the deposit money banks in Nigeria. The independent variables are financial products which are measured by mobile banking, point of sale (POS) and automated teller machine.

### Measurement of variables

The below table show variables measurement

Table1; Measurment of variables	
Variable	Measurement
Return on assets (ROA)	$\frac{\text{Net income after taxes}}{\text{Total Assets}}$
Return on equity (ROE)	$\frac{\text{Net Income After taxes}}{\text{Total Equity capital}}$
Earnings per share (EPS)	$\frac{\text{Net Earning}}{\text{Number of shares}}$
Mobile banking (MB)	Measured in value
Point of sale(POS)	Measured in value
Automated teller machine	Measures in value

**Source:** Research finding

## Data Analysis Technique

The nature of the data collected determines the type of tool to be adopted for analysis. For the purpose of this study, multiple regression techniques were used as a tool of data analysis. This is for the reason that the study was undertaken to predict the relationship between financial products and bank performance using the return on assets, return on equity and earnings per share as proxies for bank performance while mobile banking, point of sales automated teller machine were used as proxies for financial products.

## Models Specification

The model used in testing the hypotheses of this study is presented below:

$$ROA = a + \beta_1 MB + \beta_2 POS + \beta_3 ATM + e \quad \text{equation 1}$$

$$ROE = a + \beta_1 MB + \beta_2 POS + \beta_3 ATM + e \quad \text{equation 2}$$

$$EPS = a + \beta_1 MB + \beta_2 POS + \beta_3 ATM + e \quad \text{equation 3}$$

Where:

MB= Mobile Banking

POS= Point of Sale

ATM= Automated Teller Machine

ROA=Return on Assets

ROE= Return on Equity

EPS= Earnings per Share

a = Constant

$\beta_1$ -  $\beta_4$  = Coefficient of the independent variable

e= Error Term

## RESULTS AND DISCUSSIONS

The study uses three independent variables to determine the effect of financial products on the performance of selected deposit money banks in Nigeria. These three explanatory variables are mobile banking (MB), point of sale (POS) and automated teller machine (ATM). The regression results are presented below:

### TEST OF SIGNIFICANT OF INDEPENDENT VARIABLE FOR RETURN ON ASSETS (ROA)

Table 1: coefficients for return on assets (ROA)					
Model	Unstandardized Coefficients		standardized coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	0.246	0.441		0.557	0.08
MB	0.243	0.057	0.604	0.369	0.003
POS	0.130	0.126	0.272	0.157	0.000
ATM	0.008	0.010	0.413	0.778	0.006

Source: Summary from SPSS output

### TEST OF SIGNIFICANT OF INDEPENDENT VARIABLES FOR RETURN ON EQUITY (ROE)

<b>Table 2: Coefficients for Return on Equity (ROE)</b>					
Model	Unstandardized Coefficients		standardized coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	0.851	0.257		3.318	0.016
MB	0.755	0.382	1.141	1.978	0.002
POS	0.037	0.018	0.047	0.76	0.004
ATM	0.009	0.006	0.276	0.778	0.001

**Source:** summary from SPSS output

### TEST OF SIGNIFICANT OF INDEPENDENT VARIABLES FOR EARNING PER SHARE (EPS)

<b>Table 3: coefficients for earning per share (EPS)</b>					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	1.407	0.193		7.301	0.000
MB	0.525	0.287	1.347	1.830	0.017
POS	0.345	0.361	0.744	0.957	0.015
ATM	0.007	0.004	0.374	1.566	0.028

**Source:** summary from SPSS output

From the above regression models, holding mobile banking, point of sales and automated teller machine to a constant zero, performance of deposit money banks would be 0.246, 0.851 and 1.407, its established that a unit increase in mobile banking would lead to an increase in performance of the bank by a factor of 0.604, 1.141 and 1.347, respectively, a unit increase in point of sale would cause an increase in performance of the bank by a factor of 0.272, 0.047 and 0.744, a unit increase in automatic teller machine would lead to an increase in performance of the bank by a factor of 0.413, 0.276, and 0.374. This clearly shows that there is a positive relationship between performance of deposit money banks and mobile banking, point of sale and automatic teller machine. The study further revealed that the P-value were less than 0.05 in all the variables, which shows that all the independent variable were statistically significant and thus in position to make conclusion for the study.

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## TEST OF HYPOTHESES

### **Hypothesis One: Mobile banking has no significant effect on return on assets (ROA)**

The hypothesis is tested and the regression result in table 1, shows that standardized coefficients of mobile banking is 0.604, this indicates a positive relationship between MB, and ROA a measure of financial performance of deposit money banks. The p- value for MB is (0.003) is less than (0.05) significant level which indicates that is statistically significant. This means we reject the Null hypothesis by accept the alternative hypothesis and conclude that, mobile banking has significant effect on return on assets.

### **Hypothesis Two: Point of sale has no significant effect on return on equity (ROE)**

The hypothesis is tested and the regression results in table 2, shows that standardized coefficients of point of sale is 0.047, this indicate a positive relationship between POS and ROE a measure of financial performance of deposit money banks. The p- value for POS is 0.004 and is less than (0.05) significant level which indicates that is statistically significant. This means we reject the Null hypothesis by accept the alternative hypothesis and conclude that, point of sale has significant effect on return on equity.

### **Hypothesis Three: Automated teller machine has no significant effect on Earnings per Share**

The hypothesis is tested and the regression results in table 3, shows that standardized coefficients of automated teller machine are 0.374, this medicate a positive relationship between ATM a measure of financial performance of deposit money banks. The p-value for ATM is (0.028) is less than (0.05) significant level which indicates that is statistically significant. This means we reject the Null hypothesis by accept the alternative hypothesis and conclude that, automated teller machine has significant effect on earnings per share.

## DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATION

The introduction of financial product has revolutionized and redefined the ways banks were operating. As technology is now considered as the main contribution for the organizations' success and as their core competencies, the banks, be it domestic or foreign are investing more on providing customers with the new technologies through financial products. For a nation to witness growth there is need for a direct relationship between the financial and the real sector of its economy .Also financial intermediation, as postulated by Gurley and Shaw (1998), is a means of mobilizing deposits, creating credit and transmission of loanable funds which enables the borrowing and investing units to increase and diversity portfolios.

From the findings on the coefficients of determination, the study finds that there was great variation in the performance of deposit money banks, could be accounted to changes in mobile banking, point of sale, automated teller machine and size of the bank at 95 %confidence interval. From the findings on the R correlation the study find that there was a strong relationship between performance of deposit money banks and mobile banking, point of sale, automatic teller machine and size of the bank. From the coefficients result, the study revealed that there is a positive relationship between financial products induces and performance indices of the deposit money banks in Nigeria. The three hypotheses revealed that that there is a strong



significant relationship between financial products and performance of deposit money banks in Nigeria.

This finding of the three hypotheses is consistent with the result obtained from previous studies such as Ngigi (2012), Agboola (2006), Kagan et al, (2005), Mabrouk and Mamoghli (2010), Oginni (2013), Josiah and Kingoo (2012) and Onay et al., (2008).

The main objective of this research is to examine the effect of financial product on performance of deposit money banks in Nigeria. Multiple regression techniques were used as a tool of data analysis to predict the relationship between financial products and bank performance. The result of the study reveals that;

The standardized coefficients of mobile banking is 0.604, this indicate a positive relationship between MB, and ROA a measure of financial performance of deposit money banks. The p-value for MB is (0.003) is less than (0.05) significant level which indicates that is statistically significant. This means we reject the Null hypothesis by accept the alternative hypothesis and conclude that, mobile banking has significant effect on return on assets.

The standardized coefficients of point of sale is 0.047, this indicate a positive relationship between POS and ROE a measure of financial performance of deposit money banks. The p-value for POS is 0.004 and is less than (0.05) significant level which indicates that is statistically significant. This means we reject the Null hypothesis by accept the alternative hypothesis and conclude that, point of sale has significant effect on return on equity. The standardized coefficients of automated teller machine is 0.374, this indicate a positive relationship between ATM and EPS a measure of financial performance of deposit money banks. The p- value for ATM is (0.028) is less than (0.05) significant level which indicates that is statistically significant. This means we reject the Null hypothesis by accept the alternative hypothesis and conclude that, automated teller machine has significant effect on earnings per share.

In line with the findings of this study, the following recommendations are made:

- i. There is need for deposit money banks to heavily invest in technology as this will highly encourage the adoption of financial products technologies and this will influence the performance of deposit money banks in Nigeria.
- ii. Banks as well as the regulatory bodies should strive to innovate for better and cheaper ways of serving customers. With shorter transaction turnaround times, transactions volumes can be significantly increased.
- iii. Financial products are the engine of sustainable economic growth. Faster and more secure payment systems spur development of businesses and economic growth in all other sectors in addition to facilitating financial deepening. Government should work toward these because this is one of the keys to attainment economic independence objectives in Nigeria.

### **Implication of the Study**

The implication of this study is relating not just to the research process, but also to more strategic issues. We posit that the low costs involved in offering financial products will see an encouraging growth in the performance of banks in Nigeria. The result of the study would

enable senior management of financial institutions develop relevant product design and customer focused strategies for their banks. Since the various policy measures churned out via the credit and monetary policies/guidelines have jolted the banks from their cozy armchairs to the field to scout for deposits and for business using the instruments of their bank's products. They will now compete fiercely and scramble actively for deposits. Intense competitions, innovation, development of new products and provision of excellent service have, therefore, been the order of the day. In the process, banks should constantly be repositioning for the fierce competitive environment through information technology (computerization), new products, better packaging of old products. In all these, the financial institutions generally would move away from armchair to dynamic postures to woo customers and clients and the result is bound to be the much-desired improved services for the customers. In such a highly competitive environment therefore, only the competent and efficient banks can survive and remain in business.

The study will also add value to the existing knowledge on research that has already been done in relation to financial product and bank performance in Nigeria, this will serve as a reference material and a platform for other researchers on related subject matter.

### **Suggestion for Further Study**

This study examined the effect of financial products on the performance of deposit money banks in Nigeria. There are various factors that influence financial Institutions to adopt technology in the banking sector; there is need for a study to be done to determine factors influencing adoption of electronic banking by deposit money banks in Nigeria. There is need for a study to be conducted to determine the relationship between internet banking and financial performance of deposit money banks in Nigeria using other performance indicators to measure their relationship.

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