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Electronic Banking And Business Sustainability Of Deposit Money Banks In Anambra State, Nigeria

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ABSTRACT

This study investigated the electronic banking and business sustainability of deposit money banks in Anambra State, Nigeria. The study aimed to investigate the relationship between electronic fund transfers and economic sustainability, the relationship between point of sale service and operational performance, the extent of relationship between automated teller machine and product sustainability of deposit money banks in Anambra State, Nigeria. Relevant conceptual, theoretical and empirical literature were reviewed. The study was anchored on Diffusion of Innovation Theory and Green Business Model Innovation. Correlational research design was adopted. The study was carried out in Anambra State, Nigeria. The population of the study comprised 2090 customers of deposit money banks in Anambra State, Nigeria. The statistical formula devised by Borg and Gall was employed to determine the sample size of 408. The instrument used for the study was questionnaire. Face and content validity were adopted while, test re-test and Cronbach Alpha method were carried out to achieve reliability of the instrument. The research questions were analyzed using simple percentage while Pearson product-moment correlation analysis was used in testing the hypotheses. The result revealed that electronic fund transfers relate had a positive significant relationship with economic sustainability of deposit money; point of sale service had a positive significant relationship with operational sustainability of deposit money banks and automated teller machine services had a positive significant relationship with product sustainability of deposit money banks in Anambra State, Nigeria. The study concluded that electronic banking had a positive significant relationship with business sustainability of deposit money banks in Anambra State, Nigeria. The study recommended that banks should focus on minimizing transaction times and costs associated with fund transfers and payments. Banks should put adequate security mechanism in place to forestall fraudulent practices, invest in ATMs that are easy to use; reliable, works with speed, guarantees privacy, affordable charges, and ones that allow customers to make deposits. Banking institutions should work hand in hand with major service provider and other organizations that use point of sale systems so as to ensure service are available to customers and point of sale systems to vendors.

Keywords: Electronic Fund Transfers, POS, ATM, Economic Sustainability, Operational Performance and Product Sustainability

INTRODUCTION

Business sustainability has become a huge point of concern based on the current new relationship advanced with nature by global work practice. This relationship is expressed through development sustainability as against businesses in previous times. The achievement of just economic development characterized by industrialization has resulted in global business milieu such as global warming, acid rain

and proliferation of persistent organic substance and all these environmental challenges are associated with the activities of business organizations (Park, 2018). The increasing harm and damage perpetuated on the natural environment by the activities of these firms require that a proactive and responsive approach be implemented to mitigate these challenges (Sarkis, 2019). In this regard, firms are enjoined to be responsible in ensuring that their operation process is adequately managed to prevent further degradation and enhance business sustainability (Orji, Kusi-Sarpong & Gupta, 2019). Sharma and Gupta (2022) concur with (Bai, Kusi-Sarpong, Ahmadi, Badri & Sarkis, 2019) that the growing concern for the global business environment and the development of international standards for business environmental management has created a need for business to adopt electronic business practices. Human resource management is considered an important area of management that focuses on the most vital asset of the organization business, the human resources. Business sustainability has become the focus of almost all areas of study, including human resource management and it is contended that electronic banking is the most important component of business sustainability. Sudin (2021), opined that electronic banking is an important concept in forward-thinking businesses around the world. It is believed that understanding and increasing the scope and depth of electronic banking practices, has the potential to improve the business performance of organizations in a more sustainable manner (Sudin, 2021). Aruljah, Opatha and Nawaratne (2021) point out that green human resource management practices are powerful tools in making organizations and their operations of electronic banking.

In the light of the above, many businesses have started adopting this measure right from the point are using electronic banking in a bid to achieve the universal sustainability mandate towards creating a safe terrain (Kusi-Sarpong & Sarkis, 2019). Information and communication technology (ICT) has been considered as the most principal component of electronic banking management (Ahmad 2021). Information and Communication Technology (ICT) is significantly transforming most businesses to become technologically friendly. Currently, we have reached the fourth stage of the technology revolution, which includes the automation of most processes in the sector of business, education, economy, etc. and rising new technologies such as the internet of things, Self-driving cars, (Mohammad, & Naser 2019).

The Banking sector is no exception, as it is also undergoing profound transformation within its processes. Banking worldwide has shifted toward electronic banking which has been facilitated by advancements in technology, which varied from one country to another. Some banks moved completely from traditional banking to digital banking, others moved to digital banking while maintaining traditional banking as another option. However, in both options, the internet access is essential for executing banking transactions, whereas the availability and the quality of Internet service will differ from one country to another, and from one bank to another (Mohammad, & Naser 2019). Financial institutions in Nigeria are introducing and expanding the electronic banking products offered their customers in a bid to catch up with global developments and improve the quality of their service delivery.

Electronic banking (e-banking), which is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a physical institution, involves the use of the use of electronic and the internet-driven products such as Automated Teller Machine (ATM), Mobile Banking, Electronic Funds Transfer, and Point of Sales (P.O.S) (Jameelah & Odeleye 2017). It is expected that with the adoption of e-banking, less cash will circulate outside the banking system in the economy while fewer customers will need to physically visit their banks. However, despite the adoption of e-banking, queues in the banking halls still persist and bank customers still handle much cash. It therefore becomes imperative to ask if bank customers are satisfied with the e-banking services as provided by the Nigerian banks. The advent of Internet, electronic commerce, communication technology and users' response to this technology has opened opportunity for many businesses including the financial institution (Ismail & Alawamleh 2017). Adoption of electronic banking service delivery is fast gaining ground in Nigeria. Different e-Banking channels such as electronic cards, internet banking and mobile banking services have been introduced. Online banking is the emerging issue, which is expanding rapidly in banking industry especially in African countries. In recent times, banking activities in Nigeria have

increasingly depended on the development of Information and Communication Technology (ICT). Rising numbers of financial institutions are introducing and expanding their offerings of electronic banking products (Ismail & Alawamleh, 2017).

As the sustainability of businesses gradually becoming uncertain, diversified and sophisticated, Electronic Banking services tend to become more complex. This means that, for Banks to remain relevant in the near future, they have to consistently innovate and keep on track with the most recent technology that will put them at bay with other competitors. Conversely, fierce competition has obliged banks to look for an effective way to differentiate in the market and augment the likelihood of business sustainability. Additionally, business struggle to find or develop instruments to measure the quality of their customer service delivery. It is a well-known fact that business service delivery in banks is not always targeted when looking for mediating factors towards electronic banking services. For that reason, this challenge has become one of the toughest decisions for today's banks to deliver such services with the most recent convenient and secured technology at a lower cost (Bahia & Nantel, 2023; Bhat, 2021). Presently, banks in Nigeria are adding value to their services for business sustainability. The businesses have more choices in choosing their banks because the new age by using information technology that bringing about sweeping changes in the banking industry, forcing them to reengineer many of their basic processes and systems (Oluwaseun & Adeyemi Irefin 2023). Few of the technology-driven electronic banking services being offered are viz. Automated teller machines ATM, Electronic Clearing Service (ECS), electronic funds transfer (EFT), tele-banking, internet banking etc. New technological capabilities are now being effectively used to create value and to better manage business sustainability relationship in Nigeria banking system (Raji, 2020).

Electronic banking products are increasingly gaining ground as many business received them as panacea to problems of poor service delivery that has been bedevilling many banks for a long time (Dogarawa, 2021). However, experts posit that the rate at which Nigeria businesses accepted the electronic banking is far below expectation. Deposit money banks need rebuild on customer focused banking with new improved processes, modern technology, a competitive range of delivery channels and focusing services on the best customers (Humaira, Hamid & Asghar 2017). This of course requires the radical re-modeling of the banks delivery channels and business process engineering resulting in significantly improved: process excellence, speed of delivery, and value to customers through these, customers' perception and reaction to electronic banking products and services would have positive influence on business sustainability (Faisal & Masud 2021). Base on this facts this study investigated the relationship electronic banking and business sustainability in Anambra State.

Statement of Problem

All banks compete with each other to attract their customers in different ways through providing convenient, accessible and acceptable services or/and products to their customers. One of the most important of these services is the electronic services that have contributed significantly to increase the distance between customers and the bank (Kannabira & Narayan, 2021). The problems of electronic banking services are risk of failure, complexity, security, and lack of personalized service (Moutinho, 2020). Other are machine out of order, machine out of cash, no printing statements, cards get blocked, frequent breakdown of ATM service, unreliability of ATM service, lack of sufficient technicians in all bank who solve breakdown of ATM machine, lack of sufficient alternative system which substitute ATM service for the customer when temporary problem happen in the machine, lack of convenience of E-bank service, lack of mobile banking service, lack of reliable Tele-banking, lack of credit card service, under-development of technological infrastructure, low level of relevant knowledge creation and innovation, interruption of network, lack of suitable and regulatory frame work for e-commerce, resistance to changes in technology among customers and service providers as result of fear of risk, lack of fair distribution of E-banking service in all over Nigeria.

In this study result he found that business sustainability in e-banking has significant relationship with convenience, reasonable and fair fees (charges) during transaction, efficient service of e-banking, privacy, security, reliability and responsiveness of employees to solve e-banking service failure and these variable

determined 84% business sustainability in e-banking and he also recommended for future researcher to investigate the relationship between e-banking and business sustainability. E-banking was adopted by banks to improve their service delivery, decongest queues in the banking hall, enable customers withdraw cash 24/7, aid international payment and remittance, track personal banking transaction, request for online statement, or even transfer deposit to a third party account for business sustainability. The adoption of electronic banking (e-banking) has brought major challenges to the banking industry in terms of risk exposure. The volume of deposits has increased as well as the fraudulent practices experienced by Nigerian banks since its adoption in the economy. Another challenge is the ability to adopt global technology to local requirements the ability to strengthen business support for e-finance, the ability to keep the confidentiality, integrity and authentication of the institution for business sustainability. E-banking has created many new challenges for bank management and regulatory and supervisory authorities in order to support business sustainability. They originate not just from increased potential for cross border transactions but also for domestic transactions based on technology applications which raise many security related issues. Inordinate tolerance for corruption among Nigerian public and government agencies; weakness of the existing legislative/judicial institutions to make and enforce relevant laws on cyber-crimes; quality of graduates in terms of professional values and ethics; chronic unemployment among graduates, and the widening gap between the few rich and the many poor caused mainly by bad governance. In the main, erosion of good value principles and corruption constitute the greatest cause of rising cyber-crimes among Nigerians (Domestic electronic payment in Nigeria). The business on the other hand, stand to enjoy the benefit of quick service delivery, reduced frequency of going to banks physically and reduced cash handling, which will give rise to higher volume of turnover. However, these developments in the Nigerian banking industry seem not to have achieved their aims. Despite the effort of banks to ensure that business reap the benefits of e-banking, the bank is met with complaints from customers as regards, online theft and fraud, non-availability of financial service, payment of hidden cost of electronic banking like short message services (SMS), for sending alert, mandatory acquisition of ATM cards, non-acceptability of Nigerian cards for international transaction, malfunctioning Automated Teller Machines (ATMs) and network downtime. Many scholars investigated the relationship between electronic banking and business sustainability. The result of the study indicate that automated teller machine, point of sale, internet banking and mobile banking has a significant effect on business sustainability. Similarly other examined the effect of e-banking on customers' satisfaction. The result showed no significant and positive relationship between E-banking factors and business sustainability. These empirical findings show that there is a conflicting result on effect electronic banking services and customer satisfaction. These conflicting results show that the issue of the relationship between electronic banking and business sustainability is yet to be resolved, hence the need for this research work. Also, while various study have been done in reference to the effects of effect electronic banking services on customer satisfaction, and on SMEs performance depicting the existence of a knowledge gap. Despite the existence of some studies on electronic banking services and customer satisfaction and SMEs performance in Anambra State, Nigeria, It is a grace period where banks can reexamine their model of operation to come up with better services and solutions that will restore the public's trust and business sustainability in the banking sector. Having no access to the physical banks has been a huge imposition for bank clients, so it can provide an introduction for electronic banking which, in turn, will help the banks maximize the efficacy of their procedures. These shortcomings have somehow contributed to the knowledge gap in literature, thus warranting a more systematic and comprehensive study of electronic banking and business sustainability. Based on the foregoing, the study evaluated the relationship between electronic banking and business sustainability in Anambra State.

Objectives of the Study

The main objective of the study is to evaluate the relationship between electronic banking and business sustainability of deposit money banks in Anambra State, Nigeria. The specific objective includes to:

- i Evaluate the level of relationship between electronic bill payment and social sustainability of deposit money banks in Anambra State, Nigeria

- ii Determine magnitude of relationship between point of sale service and operational of deposit money banks businesses in Anambra State, Nigeria
- iii Assess extent of relationship between automated teller machine and product sustainability of deposit money banks in Anambra State, Nigeria

Research Questions

The following research questions guided this study.

- i. What is magnitude of relationship between point of sale service and operational sustainability of deposit money banks in Anambra State, Nigeria
- ii. How does automated teller machine correlate with product sustainability of deposit money banks in Anambra State, Nigeria
- iii. How does mobile banking services correlate with cultural sustainability of deposit money banks in Anambra State, Nigeria

Hypotheses

The following hypotheses stated in null form guided this study.

Ho₁: Electronic bill payment had no significant relationship with social sustainability of deposit money banks in Anambra State, Nigeria

Ho₂: Point of sale service services had no significant relationship with operational sustainability of deposit money banks in Anambra State, Nigeria

Ho₃: Automated teller machine services had no significant relationship with product sustainability of deposit money banks in Anambra State, Nigeria

REVIEW OF RELATED LITERATURE

Conceptual Framework

Electronic Banking

The concept of electronic banking has been defined in many ways. It is a service that allows customers to access their bank information, conduct financial transactions, make deposits, withdrawals and pay bills through the internet without having physical visit to their banks. Daniel (2019) defines electronic banking as the delivery of banks' information and services by banks to customers via different delivery platforms that can be used with different terminal devices such as personal computers and mobile phone with browser or desktop software, telephone or digital television. According to Abid and Noreen, (2023) electronic banking defined as any use of information and communication technology and electronic means by a bank to conduct transactions and have interaction with stakeholders. Electronic banking, often referred to as e-banking or online banking, has undergone a remarkable evolution since its inception, encompassing several pivotal phases and innovations. It all began with the introduction of Automated Teller Machines (ATMs) in the 1960s, which marked the earliest steps in the journey of electronic banking (Konheim, 2016). ATMs allowed customers to perform basic banking transactions such as cash withdrawals and balance inquiries outside traditional banking hours. This innovation not only increased accessibility but also significantly reduced the need for physical branches, altering the way individuals interacted with their banks (Sakoe, 2015).

The 1980s witnessed the advent of telephone banking, a service that allowed customers to access their accounts and perform basic transactions by calling a dedicated phone line (Acha, 2008; Agar, 2013). This was a significant milestone in the development of remote banking, providing customers with an alternative to visiting a physical branch. However, the real revolution came in the 1990s with the rapid rise of online banking (Chaimaa, Najib, & Rachid, 2021). As the internet became more widely accessible, banks began offering online platforms that allowed customers to access their accounts, check balances, pay bills, and transfer funds electronically. This era brought about various security measures, including Secure Sockets Layer (SSL) encryption, to protect online transactions, thus enhancing the safety and reliability of electronic banking (Crede, 1995; Pazarbasioglu, et al. 2020).

Electronic Bill Payment

The concept of electronic bill payment represents a transformative shift in how individuals and businesses manage their financial obligations, offering a streamlined and efficient alternative to traditional paper-based billing methods. This concept involves using digital platforms to initiate, authorize, and execute payments for various bills, including utilities, loans, and services. Electronic bill payment systems, often integrated into online banking platforms, enable users to pay their bills electronically. These systems facilitate the transfer of funds from the payer's account to the biller, eliminating the need for physical checks or in-person transactions. According to a report by McKinsey & Company, the adoption of electronic bill payment systems has been growing globally, driven by the desire for convenience and the efficiency gains associated with digital transactions (Global Payments Report 2021). One of the primary advantages of electronic bill payment is the convenience it offers to consumers. Users can set up recurring payments, schedule payments in advance, and receive electronic reminders, reducing the likelihood of missed payments. A study published in the *Journal of Business and Technical Communication* emphasizes the user-centric benefits of electronic bill payment, including time savings and enhanced convenience (Electronic Bill Presentment and Payment 2020). Electronic bill payment contributes to cost savings for both consumers and billers. According to a research paper by the Federal Reserve Bank of St. Louis, the adoption of electronic payments, including bill payments, is associated with reduced processing costs and environmental benefits, as it minimizes the reliance on paper and physical infrastructure (Federal Reserve Payments Study 2019). Electronic bill payment is a cornerstone of modern financial transactions, offering a convenient, cost-effective, and environmentally friendly alternative to traditional billing methods. As digitalization continues to reshape the financial landscape, understanding the benefits, challenges, and regulatory considerations associated with electronic bill payment is crucial for both consumers and businesses.

Automated Teller Machines (ATM)

Automated Teller Machine (ATM) is a machine where cash withdrawal can be made over the machine without going in to the banking hall. It also sells recharge cards and transfer funds; it can be accessed 24 hours/7 days with account balance enquiry (Salehi & Zhila 2021). Automated Teller Machine (ATM) is a computerized telecommunications device that provides the customers of a financial institution with access to financial transactions in a public space without the need for a human clerk or bank teller (Salehi & Zhila 2021). Ali and Emenike (2023) see automated teller machine (ATM) as a computerized telecommunications device that provides the clients of a financial institution with access to financial transactions in a public space without the need for a cashier, human clerk or bank teller. On most modern ATMs, the customer is identified by inserting a plastic ATM card with a magnetic stripe or a plastic smart card with a chip that contains a unique card number and some security information such as an expiration date or CVV. Authentication is provided by the customer entering a personal identification number (PIN). Using an ATM, customers can access their bank accounts in order to make cash withdrawals, credit card cash advances, and check their account balances as well as purchase prepaid cell phone credit.

POS (Point of Sale)

Point of Sale terminals are deployed to merchant locations where users slot their electronic cards through POS in order to make payments for purchases or services instead of using raw cash. A 'checkout' refers to a POS terminal or more generally to the hardware and software used for checkouts, the equivalent of an electronic cash register (Hazlina 2017). As the POS terminals are online real-time, the customer's bank account is debited immediately for value of purchases made or services enjoyed. There are indeed alternatives to handling or transacting cash for transfers and for payments of goods and services purchased. A POS terminal manages the selling process by a salesperson accessible interface. The same system allows the creation and printing of the receipt. POS systems record sales for business and tax purposes. Illegal software dubbed 'zappers' is increasingly used on them to falsify these records with a view to evading the payment of taxes (Olorunsegun, 2017).

Business Sustainability

Business sustainability as a concept gained prominence from the report submitted by the Brundtland Commission in 1987; and since then, it has become widely accepted especially in the assembling sectors as it was viewed as an essential administrative and leadership tool. Business sustainability as described by Wales, (2023) is a process through which management of an organization keeps its business activities running. In the same vein, Bourdreau and Ramstad (2021) averred that business sustainability is the achievement recorded by an organization's in meeting its current needs without compromising its future needs. Genty, (2021) asserted that Business sustainability implies having in place the right leadership style, talents, global awareness/intuition and the action plan required in combatting threats being faced by modern organizations. The above position is in agreement with Gehman and Lefsrud, (2018) where they opined that one of the major ways by which firms contribute towards sustainability is through their mode of operation and practices.

Consumers, the media, and policymakers believe that the environment negatively impacts businesses. As a result of this perception, organizations have been under intense pressure for the last few decades to incorporate sustainability into their management principles (Discua 2020). With regard to business sustainability, by ensuring competitiveness and safeguarding both immediate and long-term social and natural resources, performance is the concept of accommodating and managing business present and future wants and needs on behalf of the business (Zaman & Kusi-Sarpong 2023). Three pillars, "social, economic, and environmental, make up the triple bottom line philosophy, business sustainability component, economic sustainability encompasses the analysis and reduction of company costs, the expansion of market share, returns on investments, and the improvement of revenue and earnings compared to economic performance targets. It frequently ranks as an organization's top priority (Pan, Sinha, & Chen, 2021). The conservation of natural resources is crucial to achieving Business sustainability, including businesses' impact on the environment for sustainable economic development and intergenerational equality. According to Yong et al. (2020) social sustainability is a corporate strategy that supports equality in opportunity, distribution, and finding solutions to problems with poverty, income inequality, and health and education. These ideas have significantly altered how firms conduct their operations and have substantially impacted firms' performances (He & Harris 2020).

Business sustainability encompasses a business framework that prioritizes value creation through the sustained upkeep and enhancement of economic, ecological, and social capital (Zhang, Pan, Jiang, Feng, 2020). Organizations that exhibit higher levels of business sustainability experience more excellent stability and achieve superior rates of return, unlike firms with lower sustainability levels. The rationales behind this phenomenon are the allure of superior human capital, additional perks extended to employees, and the impetus to foster innovation in production and processes to maintain competitiveness (Haar, O'Kane, & Daellenbach 2022) Implementing business sustainability initiatives has the potential to enhance the standing of an organization businesses.

Theoretical Framework

The study was anchored on Diffusion of Innovation Theory (IDT). Diffusion of innovations is a theory that seeks to explain how, why, and at what rate new ideas and technology spread. Rogers, popularized the theory in his book *Diffusion of Innovations*; the book was first published in 1962, and is now in its fifth edition. Rogers argues that diffusion is the process by which an innovation is communicated over time among the participants in a social system. The origins of the diffusion of innovations theory are varied and span multiple disciplines. Rogers proposes that four main elements influence the spread of a new idea: the innovation itself, communication channels, time, and a social system. This process relies heavily on human capital. The innovation must be widely adopted in order to self-sustain. Within the rate of adoption, there is a point at which an innovation reaches critical mass. The categories of adopters are innovators, early adopters, early majority, late majority, and laggards. Diffusion manifests itself in different ways and is highly subject to the type of adopters and innovation-decision process. The criterion for the adopter categorization is innovativeness, defined as the degree to which an individual adopts a

new idea. Diffusion of Innovation (DOI) Theory, developed by Rogers (2003), is one of the oldest social science theories. It originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system.

The process of adopting new innovations has been studied for over 30 years and one of the most adaptation models is described by Rogers in his book diffusion of innovation (2003). He offered the following description of an innovation. An innovation is an idea, practice or project that is perceived as new by an individual or other unit of adaptation (Roger, 2003). An innovation may have been invented longtime ago, but if individual perceive it as new, then it may still be an innovation for them. The newness characteristics of an adoption are more related to the three steps (knowledge, persuasion and decision) of the innovation-decision process. In addition, roger claimed there is a lack of diffusion research on technological clusters. For Roger (2003), “a technology cluster consists of one or more distinguishable elements of technology that are perceived as being closely interrelated. In general IDT explains individuals’ attention to adopt a technology as a modality to perform a traditional activity. The critical factors that determine the adoption of an innovation at the general level are the following: relative advantage, compatibility, complexity, trialability and observability (Moga, 2020). Many banks have found it advantageous to adopt ICT in their operation in order to improve their efficiency. This is achieved through development of websites and mobile applications that suit the customer needs. Customers are therefore able to access their accounts anywhere as long as they are connected to the internet. This theory is concerned with the manner in which a new technological idea, artifact or technique, or a new use of an old one, migrates from creation to use. According to IDT, technological innovation is communicated through particular channels, over time, among the members of a social system.

The stages through which a technological innovation passes are: knowledge (exposure to its existence, and understanding of its functions); persuasion (the forming of a favourable attitude to it); decision (commitment to its adoption); implementation (putting it to use); and confirmation (reinforcement based on positive outcomes from it) (Arnaboldi & Claeys, 2008). In the same way internet banking has been enhanced due to cyber threats and fraud. Early users generally are more highly educated, have higher social status, are more open to both mass media and interpersonal channels of communication, and have more contact with change agents. Mass media channels are relatively more important at the knowledge stage, whereas interpersonal channels are relatively more important at the persuasion stage.

Innovation decisions may be optional (where the person or organization has a real opportunity to adopt or reject the idea), collective (where a decision is reached by consensus among the members of a system), or authority-based (where a decision is imposed by another person or organization which possesses requisite power, status or technical expertise). Barnes and Corbitt (2023) advises that managers need to understand the capabilities of any particular technology and the benefits that ensue from its use in considering what technology to use with their operations, as well as understand associated costs and limitations of operating that technology. He advises the general issues to consider as the volume and variety of output that the technology can achieve, the fit with existing technology used with the organisation and the level of maturity of the technology.

The relevant of the theory to this study. The IDT theory explain the necessity of adopting technology in an organization to replace the traditional system of management and administration as well as model of service provision if is service orientated company a theory is normative in nature as it aims to establishes structures. Electronic banking heavily relies on the ICT since it is carried out on the internet. Customers are able to access their accounts remotely without having to physically visit the bank.

Empirical Review

The effect of electronic banking on service delivery and customer satisfaction has attracted much attention in academic literature. For instance, Okeke (2017) investigated the effect of Electronic banking services on development of small and medium scale enterprises in Anambra state. Automated teller machine (ATM) point of sales (POS, mobile banking (MB) and internet banking were regressed on small

and medium scale enterprises. The population of the study was 1300 staff of 15 selected small and medium scale enterprises in Anambra state. Judgmental sampling technique was used to get the desired target sample size of 350. The tools used in analyzing the data collected were simple percentages, descriptive statistics and correlation analysis. The study also employed multiple regression analysis (MRA) method to determine the effect of Electronic banking services on small and medium scale enterprises. The result of the study indicate that Automated teller machine has a significant effect on the development of small and medium scale enterprises in Anambra state Point of sale has no influence on the development of Small and medium scale enterprises in Anambra state. Internet banking has a significant effect on the development small and medium scale enterprises in Anambra state, and Mobile banking has significant effect on the development small and medium scale enterprises in Anambra state. The above study is related to the present study as it appears to support the main issue already raised in the study of electronic banking on customer satisfaction. But differ in their dependent variable.

Ali and Emenike (2023) examined the impact of automated teller machine on banking services delivery in Nigeria, using descriptive and regression analyses on the value of ATM transactions and customer deposit series for the sample period ranging from January 2009 to December 2023. The results of descriptive statistics showed that private sector saving deposits and private sector demand deposit series are normally distributed, but the private sector time deposits and the value of ATM transaction are not normally distributed. The results of the ADF unit root tests shows that the levels of the variables contain unit roots, whereas their first differences do not contain unit roots. The regression results indicate that ATM transactions positively and significantly impacts private sector demand deposits in Nigeria, but not private sector savings deposits and private sector time deposits. The study is related to the present study as both are concerned with one of the variable of electronic banking (ATM transactions) as determinants of customers' satisfaction. But differ in terms of area of population and method of data analysis.

Ugwueze and Nwezeaku (2023) studied the relationship between electronic banking and the performance of Nigerian commercial SMEs. The study became necessary due to the increased adoption of the electronic banking which has redefined the banking service both at the national and international level. Electronic banking was proxies by value of Point-of-Sale transactions while commercial banking performance was proxies by customers' deposits. Engle-Granger cointegration model was used to analyze data for the sample period January 2009 to December 2023. 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 SMEs 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. The present study investigated the effect of electronic banking service on customers' satisfaction, while the formal study exploited relationship between electronic banking and the performance of Nigerian commercial SMEs. Both studies were consign with electronic banking.

Kirigano, Muturi and Atandi (2023) analyzed the effect of mobile phone transfer applications on performance trends of micro and small enterprises. The sampling frame constituted all micro and small enterprises found in the hair-dressing, carpentry and cloth making industries in Kitale town. Descriptive and statistical analysis were carried out from which the researcher was able to compute the Pearson product moment correlation (r) to establish relationship. The study revealed that there is indeed an effect of the mobile phone transfer services innovations on enterprise performance of the enterprises surveyed, did indicate that when innovations are used they help bring more customers leading to more business income, innovations save time and money and contribute to their profits and that the more they invested in them the more the profits. Based on the findings, the study recommends a tax waiver on all mobile phones and related paraphernalia to enable majority apply them even in enterprises. Entrepreneurship policies on the other hand should be well researched before implementation to guarantee sustainability. Both studies differ in the sense that the former was mobile phone transfer applications on performance trends of micro and small enterprises, while the present study was on electronic banking service on customers' satisfaction. Both studies deals with mobile phone transfer applications.

Choochinprakarn (2023) investigated factors affecting electronic banking transaction on technological, organizational, and environmental (TOE) framework and the extended model of internet commerce adoption (e-MICA). An online survey was employed to collect data from Thai travel small and medium enterprises (SMEs) that have company websites are registered with the Thai department of business development and are a member of the tourism authority of Thailand. Data from 125 usable cases was analyzed using multiple regression. Results revealed that only competition intensity positively affected the first (promotion) stage of EC adoption, relative advantage and organizational readiness were found to be the determinants of EC adoption in the second stage of the provision of information and services, and only organizational readiness was found to influence EC adoption in the third (processing) stage. Implications for practice and research were discussed. The above study is related to the present study in the sense that both are concerned with electronic banking transaction. The two studies also differ in terms of variables, population and geographical location. While the formal study was carried out in Thailand, the present study was in Anambra State.

Ugwueze and Nwezeaku (2023) studied the relationship between electronic banking and the performance of Nigerian commercial SMEs. The study became necessary due to the increased adoption of the electronic banking which has redefined the banking service both in Nigeria and outside her shores. 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 2023. 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 SMEs 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. The above study is related to the present study in the sense that both are concerned with electronic banking. The two studies also differ in geographical location, population and method of data analysis. The formal was carried out in Teran while the present study was carried out in Anambra which invariably established a gap to be filled by present study

Ndugbu and Ochiabuto (2023) carried out a study on the relationship between predictors of a electronic banking services and a country's move toward a electronic banking services policy. Data for this research were sourced from the Central Bank of Nigeria Statistical Bulletin and Bureau of Statistics. The study covered the periods between 1981 and 2023. The analysis employed ordinary least square to evaluate a set of factors which affect such move. The results as analyzed by EVIEW statistical software confirmed positive fundamental relationships among market discipline two years ago, financial inclusion in the past year, and previous move toward a cashless society and the move toward a electronic banking services policy. Standard of living had a negative impact on the move toward a electronic banking services policy. The market discipline elasticity of move toward a Electronic banking services was inelastic as SMEs response has been below expectation towards reforms for electronic banking services and finding alternatives. The lesser the time then the more inelastic SMEs are to market discipline. Financial inclusion was found never a threat on the move toward a cashless Nigeria. The above study is related to the present study in the sense that both are concerned with electronic banking. The two studies also differ in terms of, population and method of data analysis. The formal used SMEs while the present used customers satisfaction which invariably established a gap to be filled by present study

Eze and Egoro (2023) examined the impact of electronic banking on the profitability of commercial SMEs in Nigeria. Four e-banking channels (automatic teller machines, electronic mobile banking, internet banking transactions, and point of sales services) were identified and regressed against the profit before tax of commercial SMEs operating in Nigeria between 2006 and 2014. The study used the confirmed ECM model (via residual diagnosis) to test the formulated hypotheses. The results revealed that the over impact of electronic banking on the profitability of commercial SMEs was significant; whereas, the impact of the individual channels was varied. The study recommends, amongst others that, commercial SMEs should intensify effort to deploy more ATM delivery points and also make them more effective and efficient, and that the regulatory authorities should also collaborate with the SMEs to put in

place an enabling operating environment and regulatory framework to bring out optimal deployment of these services to customers. The above study is related to the present study in the sense that both are concerned with electronic banking. The two studies also differ in terms of, population and method of data analysis. The formal used SMEs while the present used customers' satisfaction which invariably established a gap to be filled by present study

METHODOLOGY

This study adopted survey design. Survey research design was used as it had merits such a researcher having no control over the variables and only reported what was happening. Survey research design was found appropriate because it involved collecting data in order to answer pertinent questions concerning the current status of subjects under study. This study was carried out in Anambra State. Anambra is a state in southeastern part of Nigeria. Anambra is a state with a rich culture. Primary and secondary sources of data were used in the study. The primary data was sourced from the field work using questionnaires. However, the primary data would be complemented with secondary data sourced from Journals, textbooks and other academic publications. The population of the study comprises of 2090 customers of deposit money in Anambra State, Nigeria. The statistical formula devised by Borg and Gall (1973) was employed to determine the sample size of 408. Structured questionnaire was developed to reflect the modified five (5) point Likert scale of strongly agree, agree, disagree, strongly disagree and undecided will be used to elicit information from the respondents on all issues. The instrument was both face and content validated. The reliability was determined through a method of test re-test. and Cronbach Alpha coefficient. The collected data was analyzed using quantitative data analysis methods. Data from questionnaire will be coded and entered into the computer using Statistical Package for Social Science (SPSS Version 23) for analysis. The data to be generated through questionnaires were analyzed through Pearson product-moment correlation analysis was use in testing the hypotheses. All tests would be conducted at 0.05 level of significance.

DATA PRESENTATION AND ANALYSIS

In this section, the data generated from the sampled deposit money banks were presented, analyzed and interpreted. A total of four hundred and eight 408 (100%) questionnaires were distributed to the respondents, out of which three hundred and fifty four (354 = 87%) were properly filled and found relevant to the study 40 (10%) of the questionnaires were not properly filled. While 14(3%) copies of questionnaires got missing. Therefore, the analysis in this section was based on the three hundred and fifty four relevant copies..

Research question one: *What is the level of relationship between electronic bill payment and social sustainability of businesses in Anambra State, Nigeria?*

Table 1: Respondents' view on whether your business frequently utilize electronic bill payment methods for your business operations

	Frequency	Percent	Valid Percent
Strongly Disagree	26	7.3	7.3
Disagree	28	7.9	7.9
Neutral	18	5.2	5.2
Agree	140	39.5	39.5
Strongly agree	142	40.1	40.1
Total	354	100.0	100.0

Source: Field Survey, 2025/SPSS

Greater percentages 40.1 % of respondents strongly agree that their business frequently utilize electronic bill payment methods for your business operations, 39.5% agree, 5.2% are neutral, 7.9% disagree while 7.3% of respondents strongly disagree.

Research Question Two: *What is magnitude of relationship between point of sale service and operational sustainability of businesses in Anambra State, Nigeria?*

Table 2: Respondents opinion on whether ATM reduces the queues in the bank

	Frequency	Percent	Valid Percent
Strongly Agree	51	14.4	13.4
Agree	255	72.0	72.9
Undecided	13	3.7	3.7
Disagree	18	5.1	5.1
Strongly Disagree	17	4.8	4.9
Total	354	100.0	100.0

Source: Field Survey, 2025/SPSS

Table 4.20 revealed that 14.4% of the respondents strongly agree that ATM reduces the queues in the bank. 72.0% agree, 3.7% are neutral, 5.1% disagree while 4.8% of the respondents strongly disagree.

Research Question Three: *How does Point of Sales (POS) correlate with product sustainability of businesses in Anambra State, Nigeria?*

Table 3: Respondents view on whether point of sales provides convenient location of service facility

	Frequency	Percent	Valid Percent
Strongly Agree	51	14.4	14.4
Agree	239	67.5	67.5
Natural	23	6.5	6.5
Disagree	28	7.9	7.9
Strongly Disagree	13	3.7	3.7
Total	354	100.0	100.0

Source: Field Survey, 2025/SPSS

Greater percentage 67.5% of respondents agree that point of sales provides convenient location of service facility, 14.4% strongly agree, 6.5% are neutral, 7.9% disagree, while 3.7% of the respondents strongly disagree.

Test of Hypotheses

Test of Hypothesis One

H₀: Electronic fund transfers relate had no positive significant relationship with economic sustainability of deposit money banks in Anambra State, Nigeria

H₁: Electronic fund transfers relate had a positive significant relationship with economic sustainability of deposit money banks in Anambra State, Nigeria

Table 4: Result of Pearson product-moment correlation analysis between electronic fund transfers and economic sustainability

		Economic Sustainability	Electronic Fund Transfers
Economic Sustainability	Pearson Correlation	1	.890**
	Sig. (2-tailed)		.000
	N	354	354
Electronic Fund Transfers	Pearson Correlation	.890**	1
	Sig. (2-tailed)	.000	
	N	354	354

** . Correlation is significant at the 0.05 level (2-tailed).

Source: Field Survey, 2025

Interpretations

The correlation in Table 4 shows that electronic fund transfers relate had a positive significant relationship with economic sustainability of deposit money banks in Anambra State, Nigeria. The Pearson's product moment correlation coefficient values reveal a positive and significant correlation between electronic fund transfers and economic sustainability ($r = .890$, at $p=0.000 < 0.05$). This implies

that an increase in accept the alternative hypothesis two (H_1) which states that electronic fund transfers relate had no positive significant relationship with economic sustainability of deposit money banks in Anambra State, Nigeria. Therefore we can state that electronic fund transfers relate had a positive significant relationship with economic sustainability of deposit money banks in Anambra State, Nigeria. ($r = .890$, at $p=0.000<0.05$).

Hypothesis Two

Ho: Point of sale services had no positive significant relationship with operational sustainability of deposit money Banks in Anambra State, Nigeria

H₁: Point of sale services had a positive significant relationship with operational sustainability of deposit money Banks in Anambra State, Nigeria

Table5: Result of Pearson product-moment correlation analysis between Point of sale service services and operational sustainability

		Operational Sustainability	Point of Sale
Operational Sustainability	Pearson Correlation	1	.879**
	Sig. (2-tailed)		.000
	N	354	354
Economic sustainability	Pearson Correlation	.873 **	1
	Sig. (2-tailed)	.000	
	N	354	354

****. Correlation is significant at the 0.05 level (2-tailed).**

Source: Field Survey, 2025

Interpretations

The correlation in Table 5 shows that Point of sale service had a positive significant relationship with operational sustainability of deposit money Banks in Anambra State, Nigeria. ($r = 0.879$, at $p=0.000<0.05$). The Pearson’s product moment correlation coefficient values reveal a strong positive and significant correlation between Point of sale and operational sustainability of deposit money Banks in Anambra State, Nigeria ($r = 0.879$, at $p=0.000<0.05$). This implies that an increase in Point of sale service will increase operational sustainability of deposit money Banks in Anambra State, Nigeria. Based on the findings, the study therefore rejects the null hypothesis four (H_{04}) which states that Point of sale service had no positive significant relationship with operational sustainability of businesses in Anambra State, Nigeria. Therefore we can state that Point of sale services had a positive significant relationship with operational sustainability of deposit money Banks in Anambra State, Nigeria

Hypothesis Five

Ho: Automated teller machine services had no positive significant relationship with product sustainability of deposit money banks in Anambra State, Nigeria

H₁: Automated teller machine services had a positive significant relationship with product sustainability of deposit money banks in Anambra State, Nigeria

Table 6: Result of Pearson product-moment correlation analysis between Automated teller machine and product sustainability

		Product Sustainability	Automated Teller Machine
Product Sustainability	Pearson Correlation	1	.873**
	Sig. (2-tailed)		.000
	N	354	354
Automated Teller Machine	Pearson Correlation	.873 **	1
	Sig. (2-tailed)	.000	
	N	354	354

****. Correlation is significant at the 0.05 level (2-tailed).**

Source: Field Survey, 2025

Interpretations

The correlation in Table 6 shows that Automated teller machine services had a positive significant relationship with product sustainability of deposit money banks in Anambra State, Nigeria. ($r = 0.873$, at $p=0.000<0.05$). The Pearson's product moment correlation coefficient values reveal a strong positive and significant correlation between green Automated teller machine and product sustainability of deposit money banks. This implies that an increase in Automated teller machine will increase product sustainability of deposit money banks in Anambra State, Nigeria. Based on the findings, the study therefore rejects the null hypothesis four (H_{04}) which states that Automated teller machine services had no positive significant relationship with product sustainability of deposit money banks in Anambra State, Nigeria. Therefore we can state that Automated teller machine services had a positive significant relationship with product sustainability of deposit money banks in Anambra State, Nigeria.

Summary of Findings

This work evaluated electronic banking and business sustainability of deposit money banks in Anambra State, Nigeria. The data generated were analyzed and the following were evident.

1. Electronic fund transfers relate had a positive significant relationship with economic sustainability of deposit money banks in Anambra State, Nigeria. ($r = .890$, at $p=0.000<0.05$).
2. Point of sale service had a positive significant relationship with operational sustainability of deposit money banks in Anambra State, Nigeria. ($r = 0.879$, at $p=0.000<0.05$).
3. Automated teller machine services had a positive significant relationship with product sustainability of deposit money banks in Anambra State, Nigeria. ($r = 0.873$, at $p=0.000<0.05$).

CONCLUSION

This work evaluated the relationship between electronic banking and business sustainability in deposit money banks in Anambra. The electronic banking channels used in this study such as electronic fund transfers relate had a positive significant relationship with economic sustainability; point of sale service had a positive significant relationship with operational sustainability; and automated teller machine services had a positive significant relationship with product sustainability. The study concludes that electronic banking had a positive significant relationship with business sustainability of deposit money banks in Anambra State, Nigeria.

RECOMMENDATIONS

Based on the findings of this study, the study recommends that:

1. Banks should focus on minimizing transaction times and costs associated with fund transfers and payments. Implementing advanced technologies and ensuring seamless integration with various payment systems can facilitate quicker and more reliable transactions.
2. Banks should put adequate security mechanism in place to forestall fraudulent practices, invest in ATMs that are easy to use; reliable, works with speed, guarantees privacy, affordable charges, and ones that allow customers to make deposits
3. Banking institutions should work hand in hand with major service provider and other organizations that use point of sale systems so as to ensure service are available to customers and point of sale systems to vendors.

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