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Article

Digital Business Innovation and Financial Inclusion: Panacea to Nigeria's Economic Growth

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Abstract: An emphasis on inclusive development via conventional financial inclusion and digital innovation is evident globally. Contemporary business innovations are driven by digitalization. This paper explores the effects of financial inclusion and digital business innovations on Nigeria's economic growth. It tracks the evolution of financial inclusion from banking sector recapitalization through the Maya Declaration's implementation and the regulation of M-payments to the licensing of Mobile Network Operators (MNOs). The article describes digital business innovation (DBI) facilitated by Information and Communication Technology (ICT) as well as Artificial Intelligence (AI) as a strategy that will raise the quality of life for those at the base of the development pyramid. The effectiveness of Digital Banking Inclusion (DBI) in Nigeria faces challenges, including the presence of individuals without traditional bank accounts, the uneven distribution of digital technology and higher incomes in cities, barriers that hinder fair competition, the use of a single regulatory approach that may not fit all situations, a shortage of affordable, high-quality digital connections, and conflicts of interest between DBI service providers and DBI users. The study suggests speeding up the development of financial infrastructure, application of digital technologies, and modifying the regulatory framework to fit various contexts.

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1. Introduction

In recent years, inclusive development has attracted both domestic and foreign interest. Financial, political, economic, social, and technological goals are unattainable without financial inclusion. Financial inclusion is a top priority for governments, international organizations, development-focused organizations, and financial institutions in contemporary societies. A realistic method for sustained economic development is financial inclusion, especially in improved welfare and quality of life via wealth creation, job creation, and poverty reduction (World Bank, 2014). Seven of the 17 Sustainable Development Goals for 2030 focused on financial inclusion because of its effectiveness in reducing extreme poverty and boosting shared prosperity. Financial exclusion has been elevated to a legitimate global policy issue since 2010. The World Bank, the Alliance for Financial Inclusion, and the G20 Pittsburgh Summit (GPFI, 2010) established strategies for increasing financial inclusion in developing countries.

Governments and international organizations have developed legal frameworks worldwide to close the gap between the wealthy and the poor. However, Nigerian financial institutions have understood that the fundamental inclusion indicators of creating bank accounts, expanding the number of branches, and installing Automated Teller Machines are just the beginning of financial inclusion (World Bank, 2014). As a result, the main policy focus of financial institutions is creating new services to satisfy the continuously shifting client expectations. Through financial inclusion, these innovations often enhance organizational performance and ultimately engender. Various financial services include online and mobile banking, credit and debit cards, e-wallets, and mobile wallets. Business organizations gain from digital business innovation through lower transaction costs, more accessible services, and improved organizational performance. It offers clients several advantages, including ease and simple financial transactions, among others. Financial inclusion and digital business innovation offer several benefits for all parties involved. The advantages include improving access to financing for low-income people and lowering the cost of financial intermediation for financial institutions, Fintech companies, and other Fintech users.

Nigeria is one of Africa's most populated and rapidly rising nations because of its population expansion and resource abundance. Despite these favourable aspects, the benefits of financial inclusion, and the advantages of digital business innovation, the economy's main issue is that the country is not sufficiently financially inclusive for many population groups. The exclusion of rural residents, seasonal labourers, and minorities from the banking system was what Dr Mahamad Yunus called "Financial Apartheid"(Lalitha,2015). Many rural and tribal territory's poor have limited access to formal financial services, contributing to the region's slow economic development and pervasive poverty. (Attah, Shittu, and Jimooh, 2019) These categories of Nigeria's population struggle to manage their erratic income. They need to satisfy a wide variety of financial needs and improve their standard of living. (Asif et al., 2023).

The fact that a significant portion of the Nigerian population is financially excluded points to a gap between the availability, accessibility, and utilization of finance. Although financial inclusion rates have steadily grown, they fell short of the goals outlined in Nigeria's financial inclusion policies from 2012 to 2018. Nigeria now has a financial inclusion rate of 64%, which is much below the target of 70% set for the year 2023. In addition, Nigeria's financial inclusion structure is unevenly distributed across gender, youth, educational attainment, income, and the urban-rural divide (IMF, 2023).

Business innovations are increasingly driven by digitalization. Businesses now have new opportunities to innovate and provide value. Artificial intelligence, big data analytics, and other digital technologies have improved corporate operations, increased customer contact, and produced new products and services. Improved organizational performance and sustainable development directly correlate to adopting digital business innovations.

Financial technology, or fintech, emerged in the financial sector between 2007 and 2008 as new technologies amid the financial crisis and has since changed the financial industry by bringing innovations to the market. Nigerian financial inclusion is driven by the quick growth of mobile networks in previously underserved neighbourhoods and communities. Compared to conventional channels and systems, digital financial services provide high mobility and flexibility for users of financial services. Adopting digital financial services in Nigeria can significantly increase financial inclusion and economic development. Moreover, the wide availability of mobile phones enhances digital technology and facilitates financial services distribution to rural regions and underserved parts of society. (IMF, 2023). Given the extensive use of financial innovations and modern services and channels of digital financial services in Nigeria, it

is necessary to identify core digital business innovations enabling financial access, which is needed for sustained development.

1.2 Purpose and Structure of the Paper

This paper, therefore, investigated the impact of digital business innovation and financial inclusion on economic development in Nigeria. The rest of the paper is structured as follows. The conceptual framework for digital business innovation and financial inclusion is presented in the next section. Section 3 describes the development of financial inclusion in Nigeria. Section 4 discusses digital business innovation as a viable strategy for financial inclusion. Section 5 summarises the challenges to digital business innovation and financial inclusion. Section 6 concludes with recommendations.

2.Conceptual Framework

2.1 Digital Business Innovation

Due to the potential of digitalization, it has become a catchphrase for practically all enterprises. The introduction of the Internet in the early 2000s hastened the development and application of several technologies that form the basis of the digital economy. The Internet, social networks, and other digital technologies are being used increasingly because of the fourth industrial revolution. This revolution, known as Industry 4.0, often known as the Fourth Industrial Revolution (4IR), created new cyber-physical systems with radically new capabilities for humans and robots. Industry 3.0 symbolizes fundamental innovations for integrating technologies throughout communities and even our human bodies and Industry 4.0 capabilities depend on these technologies and infrastructure (Schwab 2015). 4IR is the term for blending lines separating the physical, digital, and biological worlds (Schwab 2015). Digital change, which has enormous sustainability potential, was the first sign of the 4IR. As a result, the financial industry is witnessing an increase in various innovative business models. Using digital platforms and cutting-edge technology, FinTech companies can provide financial products and services (Mavlutova, 2023).

Most definitions of digital business innovation relate to the usage of mobile or Internet technologies. Others provide a definition of e-business that is independent of technology. The transactional aspect of e-business is where the concept converges. Digital business encompasses more than transaction-based trade via digital channels (Chaffey et al., 2019). "digital business" describes how businesses use conventional and online supply and marketing channels to optimize internal business operations and increase their organizations' competitiveness. Therefore, digital business comprises a variety of processes facilitated by digital technologies that strive to link the physical and digital worlds. It extends beyond online shopping and selling (Gartner, 2021).

Digital companies use various digital technologies, including social media, cloud computing, website technology, analytics, and digital advertising. Small and medium enterprises (SMEs) now have the chance to outsource their technological infrastructure for online operations to improve reliability and scalability with the growth of cloud computing. The advent of user-friendly content management systems (CMS) that allow

mobile responsive themes has led to websites that are simple to browse on digital devices and provide users with a more seamless experience (Lin et al., 2022).

Digital finance, as seen by professionals in the field, involves providing financial services using digital tools like desktop computers, the Internet, or cards linked to a reliable digital payment system. According to a McKinsey research study, digital finance is described as "financial services delivered through mobile phones, the internet, or cards" (Manyika, Lund, Singer, White, & Berry, 2016, p. 4). This encompasses a diverse array of innovative financial products, financial institutions, financial software, and new customer segments. Table 1 illustrates the wide range of digital financial technologies offered by Fintech companies.

Table 1. Application of Innovative Financial Technologies Offered by Financial Institutions and FinTech Companies

Technologies	Applications of Digital Technologies
Electronic payments, e-wallets, electronic transactions	Solutions for trading and investing via distance. Alternative methods of managing money
Big Data and Advanced Analytics	Faster computing for wealth decision-making. Obtaining and analyzing data on public firms to make investment choices.
Blockchain and cryptocurrency	Peer-to-peer solutions for lending and investment. Payment transfer and FOREX, Digital currencies
Artificial Intelligence	Automated advice alert. Regulatory technology for automated supervision, Algorithm trading, robo-advice

Source: (Mavlutova, 2023)

The thriving Fintech industry accelerated Nigeria's digital financial system. Financial transactions such as Business-to-business (B2B) and then business-to-consumer (B2C) services were prioritized during Nigeria's early Fintech years (the early 2000s), including the use of mobile money to replace cash payments as part of the CBN's Payment System Vision 2020. Digital consumer financing is one of the fintech industry's many financial services, including from outside investors (Wezel and Ree, 2023).

Cryptocurrencies are current developments in digital finance. Almost everyone now accepts the use of cryptocurrencies. The adoption of Bitcoin and Ethereum for online transactions has increased in Africa. Cryptocurrencies, often known as crypto-currency or crypto, refer to any digital or electronic currency that relies on encryption to facilitate transactions. It is supported and maintained by a computer network, not a centralized organization like a bank or a government. By using the decentralized system to verify that the parties to a transaction have the money they claim, the buyer gives instructions to transfer ownership of a specific amount of his balances to the seller as part of any transaction, doing away with the need for conventional intermediaries, like financial institutions, when money is transferred between two entities.

Meanwhile, it is unclear what the law is in Nigeria regarding cryptocurrencies. The Nigeria Securities and Exchange Commission and the Central Bank of Nigeria have issued statements warnings against using cryptocurrencies. The trade-in of bitcoins is expressly prohibited in certain African countries, including Morocco and Algeria. The main goal of the warnings is to inform the public about the distinction between traditional currencies issued and guaranteed by the government and cryptocurrencies, which are not. (Gandolph, 2019).

2.2. Financial Inclusion

One of the essential ingredients for economic growth is credit. The development of peoples' standards of life, particularly those in the lowest strata of society, will be facilitated by the timely availability of money in an acceptable and appropriate amount and cheaply. Additionally, having access to money would enable the most vulnerable populations to better their standard of life and break the cycle of poverty. The percentage of individuals with access to banking or financial services is known as financial inclusion. It helps the underserved sector of society get formal financial services at reasonable prices.

The United Nations and the World Bank proposed giving everyone access to timely, respectful, quality financial services at reasonable costs when they have financial requirements in 2005. The groundwork for forming digital finance was created by the quick growth of new technologies like big data and mobile Internet, as well as conventional inclusive finance combined with digital technology, which laid the foundation for developing digital finance (Xie and Liu, 2022).

Dr. Muhammad Yunus, the creator of Bangladesh's Grameen Bank, popularized financial inclusion when he won the 2006 Nobel Peace Prize in appreciation of his efforts to provide micro-finance to the underprivileged. Financial inclusion is defined by the United Nations Report of 2016 as the sustainable supply of provision of cheap financial services to the disadvantaged in the formal economy. According to Ren, Wang, and Lin (2022), the goal is to provide efficient and effective financial services to all socioeconomic strata and groups in need of financial services, with an emphasis on helping small and micro firms, farmers, urban low-income groups, and other vulnerable groups,

Zou and Ling (2018) divided financial inclusion into conventional and digital forms after analyzing the evolution of the various phases of financial inclusion. The former refers to services offered by established financial institutions, such as conventional banks, insurance companies, etc., while the latter refers to services rendered by newer institutions, like Internet financial institutions. Conventional finance evaluates the accessibility and usage of the services of banking organizations. For example, Automated Teller machines (ATM), Points of Sales (POS), Numbers of Bank Accounts, and Banking Embranchments are tools used to measure the degree of conventional financial inclusion (Jimoh, Shittu, and Attah 2019). Digital financial inclusion is the process of making financial services available via technology, including the Internet, mobile networks, cards, and digital wallets. (Jain et al. 2021). Digital finance emerged when financial inclusion reached a particular point in development and performed better than conventional financial inclusion.

The goals of inclusive finance, as highlighted by Thingalaya, Noodiyah, and Shelty (2015), are to:

i)Provide access to financial services at a reasonable cost to all population strata.

ii)Establish sound financial institutions guided by the internal management system.

iii)Ensure financial and institutional sustainability as a means of providing access to financial services over time.

iv)Create a variety of financial service providers.

Financial inclusion hasten economic development by reducing poverty and income inequality. The development advantages of financial inclusion are from three interconnected perspectives: enhancing societal welfare, developing small and medium-sized businesses, and empowering individuals and families. Economic constraints, corruption, and managerial challenges are vital in the high percentage of company failure, especially in small and medium-sized firms (SMEs). The most prominent element affecting organizational effectiveness among many issues confronting Nigerian businesses is access to finance. SMEs can solve this problem through financial inclusion.

3. The Development of Financial Inclusion in Nigeria

3.1. Background to Financial Inclusion in Nigeria

Nigeria, including many emerging nations, struggles with financial exclusion. In lucrative metropolitan areas, banks often provide services via branch networks. However, a significant portion of the population lives in rural regions with high poverty rates. Setting up bank offices and automated teller machines (ATMs) in rural locations is costly. As a result, many rural residents either have no access to or very little access to banking services. The consequence is that financially excluded people cannot save or obtain credit. As a result, they cannot guard themselves against unforeseen economic shocks like illness or unemployment. When poverty is exacerbated, this group of individuals continues to be susceptible. Hence, providing accessible, fundamental financial services to the underserved and excluded population has become a top development objective for developing countries.

3.2. Liberalization of the Nigerian Banking System

The Central Bank of Nigeria's 1986 removal of limitations on loans, interest rates, and the currency rate marked the beginning of the Nigerian Financial Inclusion regime. This would enable the Nigerian financial system to allocate limited resources as efficiently as possible. To strengthen investor confidence and the amount of credit available to the economy, the government started the process of recapitalizing the banking industry in 2005 by increasing its capital from N2 billion to N25 billion (Kanu & Isu, 2015). Additionally, the formation of specialized banks and government-initiated policy alternatives like the Agricultural Finance Guarantee Scheme Fund (ACGSF) and the Anchors Borrowers Programme (ABP) were implemented to support the poor's access to credit. The Peoples Bank of Nigeria was established in 1990, followed by Community banks in 1992 and micro-finance institutions in 2005.

3.3 Initial Financial Inclusion Initiatives

The aforementioned initiatives aimed to increase financial inclusion by developing various modern financial instruments, including Automated Teller Machines (ATM), Point of Sale terminals (POS), Mobile Banking applications, Internet Banking facilities, as well as the expansion of bank branches. Due to these activities, banking credit extended to the private sector rose from N 8.57 billion in 1981 to 33.55 billion and 530.37 billion in 1990 and 2000, respectively, reaching N29,051.61 billion in 2020. Additionally, there are now more rural bank branches than ever, with 240 in 1981 replaced by 722 in 2000 and 5385 in 2020, respectively. (CBN, the Central Bank of Nigeria, 2020). The use of contemporary banking tools has also evolved throughout time. ATM use rose from $548.60 billion in 2009 to $6,512.61 billion in 2019, while POS usage increased from $11.03 billion in 2009 to $3,204.75 billion in 2019. (CBN, 2020).

The frequency of poverty has increased despite the dramatic changes in the financial sector. Concerns about the potential influence of financial inclusion on poverty reduction in Nigeria were raised by the contradictory relationship between financial development indicators and poverty incidence in Nigeria. Meanwhile, there is broad

agreement in the theoretical and empirical literature that financial inclusion and development are essential strategies for combating poverty. This served as a rationale for the necessity to revisit digital finance in Nigeria, given the failure of the numerous financial sector reforms to accomplish financial development and poverty reduction.

3.4 Implementation of the Maya Declaration Policy

According to the CBN, 46.3 per cent of Nigerian adults were financially excluded as of 2010. Hence, there was the need to align with the Maya Declaration, which the Alliance for Financial Inclusion promoted at its Global Policy Forum in Mexico. The Declaration was the first worldwide commitment made by officials from emerging and developing nations to raise the quality of life for the underprivileged by promoting greater financial inclusion. The CBN created the National Financial Inclusion Strategy (NFIS) in 2012 to improve access to payment services from 21.6 per cent in 2010 to 70 per cent in 2020, thus implementing the Maya Declaration's objectives. Due to their high mobile penetration rates, CBN highlighted m-payments as one of the essential factors in achieving this goal. The CBN's regulatory approach to financial inclusion has two phases (Ezechukwu 2021).

3.5 Phase I: 2009–2014 Regulating M-payments

The first initiatives mainly focused on regulating mobile payments by enacting a licensing framework. The CBN published necessary regulatory documentation for mobile payments. "The Regulatory Framework for Mobile Payments in Nigeria" is the paper's title. Guidelines for Mobile Money Services in Nigeria, a second paper released by CBN in 2014, modified the framework. The three goals of the CBN's involvement were listed in the Guidelines. First, to ensure a systematic and orderly growth of mobile payment services in Nigeria, stating the anticipated responsibilities of stakeholders. Second, to list the fundamental technological and commercial criteria for each recognized player in the m-payments market. Third, to increase user trust by promoting the security and efficiency of m-payment services. The Guidelines exclusively identified licensed organizations as "mobile money operators" (MMOs) to provide m-payment services. The bank-led model and the non-bank-led model are the two business models that MMOs may use to provide the services. The bank-led model is one in which a bank serves as the service provider, alone or as part of a group with other banks. Banks may decide to work with other authorized organizations in this paradigm, but they are still primarily in charge of providing financial services. A non-banking business entity that is authorized to offer mobile payments is used in the non-bank model. However, the Guidelines exclude Mobile network operators (MNOs) to preserve the financial system's integrity. The MNO's only responsibility was to provide infrastructure for the communications networks.

3.6 Phase II: 2015–2020 Licensing of Mobile Network Operators (MNOs)

MMO licenses were issued during the initial stage of financial inclusion; however, the m-payment industry did not achieve much success. The CBN acknowledged that agent networks allowed individuals to be served in places without bank branches or other physical financial access points like ATMs. Therefore, a functioning agent network is necessary for the unbanked to become financially included. A problem has been the lack of permanent location agents. The Regulatory Framework for Licensing Super Agents in Nigeria was made public by the CBN because of MNOs' extensive network of existing locations across Nigeria. Super-agents are businesses hired by financial institutions to operate as their agents. Affected parties, like MNOs, will be encouraged by this agreement to share their agent networks with financial services companies like MMOs. MNOs licensed following this framework are given "super-agent" status, allowing them to hire more agents on their behalf. The CBN's Guidelines for the

Regulation of Agent Banking and Agent Banking Relationships in Nigeria describe the range of banking-related activities that super-agents or agents may engage in.

The NFIS was updated by the CBN in 2018. The new NFIS offered broad policy concepts that would improve its execution in response to the 2012 NFIS's challenges—first, adopting a risk-based regulatory framework that provides an even playing field for all businesses. Second, to create a significant effect, encourage pertinent performers to play to their areas of strength.

The Guidelines for the Licensing and Regulation of Payment Service Banks (PSB) in Nigeria were established based on these principles in the revised NFIS. To improve financial inclusion in rural areas by increasing access to deposit products and payment/remittance services via high-volume, low-value transactions in a safe, technology-driven environment, the guidelines provide the framework for licensing specialized banking organizations known as Payment Service Banks (PSBs). PSBs keep and accept deposits in savings accounts. Additionally, they could run an electronic wallet and provide payment and remittance services. However, loans, advances, or guarantees cannot be made by PSBs. Additionally, the PSB Guidelines allow MNOs to register as PSBs via subsidiaries when they have satisfied the license criteria. Three organizations, including two under the authority of MNOs, received authorization in principle from the CBN in September 2019.

4. Digital Business Innovation as a Major Strategic Option

Traditional inclusive finance has joined with digital technology for quality service delivery and efficiency. Digital business innovation is an emerging technology integrating big data and mobile Internet. Pursuing quality and efficiency, a novel development philosophy is the core of high-quality development. Banks and non-bank entities use digital finance to increase financial access for the underserved and financially excluded.

Over 80 nations have introduced digital financial services to help people transition from cash-based transactions to formal financial services. These digital financial services provide a range of services to formerly underserved and excluded poor people, including payments, transfers, credit, insurance, securities, and savings (The World Bank 2020). The availability of Information Communication Technology (ICT) and Artificial Intelligence (AI), which will raise the quality of life for those at the bottom of the pyramid, has aided the adoption of digital finance. Lower transaction costs for this group of customers in rural locations and the application of novel business models like AI and ICT without physical outlets are some novel developments of digital finance. Although greater initial costs are associated with creating new technologies, such expenses decrease as the volume of business grows (Mhlanga, 2020).

Digital financial instruments like ICT and AI increase information asymmetry. The inability to provide a range of information properly and efficiently is a significant issue with conventional financial inclusion. Customers who use digital services can access a wealth of information via online services and products. The accessibility of this data lessens the informational disparity between financial institutions and stakeholders. Customers may use digital platforms to send and save information electronically, as well as to make payments. Additionally, the hiring of retail agents who have digital devices linked to communication infrastructure that enables electronic cash management is encouraged by digital financial inclusion. Using digital technologies like AI and ICT will make it possible to provide new financial services like credit, insurance, and savings to the underserved and financially excluded (Mhlanga, 2020).

Digital finance also assures that financially excluded people can access formal financial services. Customers may purchase these services for less money. Customers

can trade in irregularly small sums, which helps them manage their inconsistent revenues. Digital financial services also help to lower the costs and dangers associated with utilizing informal providers and cash-based transactions, including the risks of loss, theft, and other financial crimes. Additionally, it encourages women's engagement and economic empowerment (Mhlanga, 2020).

Small and medium-sized businesses are the foundation of both industrialized and emerging economies. Xie and Lie (2022) divide research results on digital finance and SMEs into three sections. First, SMEs' ingenuity benefits from digital financing. Financial institutions may use digital technology and other developing technologies to assist SMEs with value creation and fund monitoring, which support SMEs' innovation process. Second, digital finance can free SMEs from funding restrictions like cost and accessibility. Finally, via effective and efficient information management, digital finance may increase the operational efficiency of SMEs.

Initiatives are being made in both developed and developing nations to speed up the adoption of digital financial services, and these countries' financial system regulators are using ultimatums to do so. The strategies include capping the amount of cash that may be withdrawn daily, enforcing high penalties for withdrawals exceeding a specific threshold, and promoting "digital" adoption among people, companies, and bank account holders. These tactics may lead to "forced inclusion," as Ezechukwu (2021) put it, which would only improve the welfare of those with bank accounts rather than the welfare of the unbanked population. The implication is that financial data inclusion is different from financial inclusion. Hence, digital finance may lead to more financial data inclusion instead of higher financial inclusion. The public may register on a digital finance platform but avoid using digital FinTech platforms.

Moreover, while financial inclusion should be voluntary, regulations can raise questions about hidden goals underlying "forced inclusion." The success of compelled inclusion is still up in the air. Forced financial inclusion may work well for the "banked" population. Still, it may not work well for the unbanked population, which maintains official bank accounts and does business outside the established banking system.

5.Challenges of Digital Finance in Nigeria

The difficulties of achieving digital financial inclusion may be underestimated due to the tremendous benefits of digital money. First, individuals without a formal bank account do not profit from digital financial inclusion. People who are not part of the official financial services industry are included in this. Second, the urban population benefits more from digital financial inclusion than rural residents due to the concentration of digital infrastructure and more significant income in metropolitan regions. Third, non-market barriers to competition constitute a risk that needs to be addressed (Ketterer, 2017).

Suppose for-profit providers can provide digital financing to the poor at a profit. In that case, there is a chance that incumbent participants in the industry would adopt anti-competitive measures to fend off any threats from new entrants looking to join the market. Fintech start-ups often depend on venture capital financing rather than bank loans at the early stage of their operations since banks and investment firms connected to established Fintech organizations might withhold funding to new entrants to force new entrants to merge with existing players or acquire.

Fourth, a significant issue is the regulatory barrier. To regulate the online digital finance arena, the regulatory authorities find it challenging to provide a universal regulatory framework for digital finance. A new set of difficulties and dangers for

financial services regulators have arisen due to the recent emergence of new and sophisticated Fintech businesses that have encouraged the use of unconventional business models to help the Fintech providers avoid all forms of banking and financial regulations.

Fifth, most people and businesses lack access to an internet connection that is both high-quality and reasonably priced. The regulatory framework is inadequate, and there is not enough infrastructure, which limits the ability of the poor and low-income people to obtain excellent and inexpensive digital connections. In reality, there is a digital gap between urban and rural SMEs regarding the adoption of digital technology since rural regions often lag behind metropolitan areas in terms of connection. Additionally, the availability of necessary skills is a need for the successful implementation of digital banking. Higher education institutions, which are often found in metropolitan locations, tend to attract competent personnel. Because of this, it is challenging for rural SMEs to recruit skilled workers, which eventually affects the adoption of digital financing for sustainable development.

Sixth, there is an objective conflict in digital money between Digital finance service (DFS) consumers and suppliers. The goal of DFS consumers is welfare maximization, whereas the former concentrates on profit maximization goals. The private and public cooperation approach may be critical in resolving these tensions in providing digital banking.

Seventh, obtaining the necessary cash is a huge issue for Nigerian businesses, especially SMEs. SMEs may have trouble getting financing, and venture capitalists often target high-growth SMEs and start-ups situated in cities. Small businesses with slow or mediocre growth rates make up the great bulk of businesses in rural regions.

Meanwhile, accessibility to finance is different from availability. Access to finance and greater digital financial inclusion are two distinct problems. The well-being of people with formal bank accounts performing basic financial transactions through personal digital devices will be improved by digital finance that makes money available and accessible to everybody without prejudice. However, in certain developing nations, the availability of digital banking services is seen as having access to such services. Banks' availability of Internet banking services in developing nations does not imply that poor and rural residents can afford to utilize them.

6.Conclusion and Recommendations

Nigeria has made great strides in financial inclusion; there are still many obstacles to overcome. There has been steady progress in onboarding Nigerians into the banking industry; the total inclusion rate is far below stated expectations. The unusually high exclusion rate is partly caused by long travel distances to financial access locations, a lack of financial literacy, and the relatively low adoption of mobile money and payments. This is particularly true regarding gender, education, income, and geography. In addition to advancing onboarding and reorienting the approach to financial education, policies should continue to focus on expanding networks and financial access points. Several initiatives are being undertaken to reduce financial exclusion using traditional and digital banking.

Theoretically and empirically, digitization has made financial services accessible to a considerable portion of those not financially engaged. This is because digital technologies make financial services inexpensive to many. The unbanked population, especially those living in poverty, now has access to banking services, including savings, insurance, and other financial services.

SMEs are the foundations of developed and developing economies built on the backs of small and medium-sized enterprises (SMEs). Digital financing encourages SMEs to grow to a high level of quality service delivery. The financial industry reforms

and innovations are accelerated by promoting digital technologies and the established financial sector.

Diverse policy efforts have been launched in Nigeria to encourage digital money and financial inclusion. To keep these activities going, regulating organizations should concentrate on enhancing digital financial literacy, modernizing digital infrastructure, encouraging fintech incubation, and promoting ethical practices in fintech operations, especially in digital lending. (Wezel and others, 2023)

M-payments may help expand financial services to the unbanked population in developing countries with solid mobile penetration. Regulators have thus been interested in the service. This may be accomplished by hastening financial infrastructure development and extensive use of digital technology to increase the accuracy of financial asset pricing and lower friction.

To reduce risk and provide a supportive institutional environment for increasing the effectiveness of financial resource allocation, the financial regulatory bodies should develop an efficient and effective framework for financial supervision. Due to the varied nature of digital money, the regulatory framework has to be flexible.

Nigeria's experience with digital banking has shown that the regulatory framework is essential for technology. Strong indications indicate the possibility of m payments thriving in metropolitan areas in this nation with high penetration rates. More precisely, the CBN's original choice to exclude MNO from directly offering m payment services was why m payments in Nigeria failed. The direct involvement of MNOs in m payments is essential for attaining successful financial inclusion due to their sizeable agent network. Recent regulatory reforms support this perspective.

To reduce information asymmetry and provide the groundwork for the healthy and sustainable expansion of SMEs, the government would need to develop strong partnerships with SMEs non-state-owned SMEs in non-polluting industries to employ technologies like big data and blockchain.

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