



## Assessing The Impact of Financial Service Digitalization on SME Businesses In Lagos, Nigeria

Fadeyi Olatunji

Department of Business Studies, Landmark University, Omu-Aran, Nigeria

Ademola Samuel Sajuyigbe\*

Department of Business Administration, Osun State University, Okuku Campus, Nigeria

Rahman Adeniran Tella

Department of Business Administration, Atiba University, Oyo, Oyo State, Nigeria

Oluwakayode David Oke

Department of Accounting, Precious Cornerstone University, Ibadan, Nigeria

Olusola Adebola Babalola

Department of Banking and Finance, Osun State Polyethnic, Iree, Nigeria

Adebayo Wahab

Department of Management, Leadership and Marketing, Ulster University, United Kingdom

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Corresponding author:

[sajuyigbeademola@yahoo.com](mailto:sajuyigbeademola@yahoo.com)

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### Abstract

**Purpose:** This paper examines the impact of digitalization on SMEs in Lagos Nigeria, especially in digital financial services.

**Method:** The respondents for this study were 150 owners /managers of SMEs in Lagos, Nigeria and data were analyzed descriptively and inferentially using the chi-square test. The research adopts a quantitative research strategy to analyze the difference between SME performance before and after adopting the technology, analyze the degree of technology adoption by the SMEs, and Quantitative evaluation of the advantages of digital financial services.

**Result:** The study found that digitalization has improved SME operations, enhancing efficiency, competitiveness, and access to financial services. However, challenges like internet connectivity and security issues remain unaddressed, necessitating targeted interventions and support strategies. To maximize digitalization's benefits, the study recommends government-led awareness campaigns to highlight the advantages of digital financial services for SMEs. Additionally, partnerships with telecom firms and government agencies should be established to expand broadband access and improve internet reliability in underserved areas. Finally, training programs for SME owners and staff are essential to ensure effective use of these financial services.

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## INTRODUCTION

As technology transverses the world of business and digital financial services enhancing the operations of SMEs across the globe, African SME businesses are not left out in this game changer. The increase in the usage of digital financial services by SMEs in advanced economies served as the major driver of the economy, business performance, and innovation in the twenty-first century. However African businesses have not been as fortunate because the transfer of knowledge and technologies from the developed regions has been slow. Notwithstanding, the scenario has changed within the last several years as African countries adopted the new technologies, promoted by the African Union goals. One of these significant developments is the digitization of financial services which has a broader impact on business operations especially the SME sector which struggles to access conventional financial services.

Before this time Ifeoluwa et al. (2022) noted that most SMEs in Africa and Nigeria in particular use the traditional paper-based financial systems that are not only cumbersome but highly prone to mistakes, embezzlement, and theft as they take longer times to complete transactions. More so, this huge time spent on managing cash transactions and having to go to banks often to deposit cash robs the SMEs of time for core business activities and the associated security challenges. These inefficiencies within the SMEs' operations further add to the operational cost of the business with other attendant challenges that result in high failure rates among the small businesses within the first five years of their operations, as noted by Krah et al. (2024). Arguably, the development of digital financial service solutions not only changes this environment with the provision of safe and effective payment mechanisms but also eliminates many of the implementation cost factors for SMEs. Notably, mobile pulse point of sale (POS) systems to electronic money transfer solutions among others are among the technologies that have improved SMEs' efficiency in recent times and have enhanced their ability to facilitate transactions optimally. A recent report by the Statista Market Forecast (2024), noted that Africa's transaction value in digital Payment platforms is expected to go above USD 195. 50 billion by the end of the year 2024 with annual growth rate rising above 10 percent that it was between 2020 to 2024. Thus, of this amount, 65% in the following years, which was USD 314. 80 billion by 2028. This forecast clearly shows that African business organizations have now woken up to the fact that digitalization is possible. Specifically, Nigeria has embraced the usage of digital financial products as a way of financing SMEs since they play a significant role in the country's economy. Sasu (2024) indicates that the number of users of digital financial services in Nigeria in 2023 stood at 40% up from 2020. This shift is a clear indication that Nigerian businesses are opening up to digital financial services especially small businesses, as the deployment of financial services technology could deliver meaningful solutions to most of the SME's challenges in Nigeria.

SMEs are well-known contributors to every sound economy across the globe and Nigerian SMEs are no exception as they offer immense contributions towards economic growth, provision of employment opportunities, and innovations in many sectors Bayraktar and Algan (2019). Nevertheless, Nigerian SMEs are confronted with numerous problems that range from inadequate finance, floor credit, poor operational flow, and restricted access to market among others. While the current advances in technology have led to the emergence of new opportunities for SMEs in terms of finance sources and business processes, however, little is known about how much of these benefits have been enjoyed by SMEs in Lagos State which is the commercial hub of the country. Thus, Adeosun and Shittu (2021) noted that there is a need to ensure the proper running of SMEs in the country since they have greatly contributed to the nation's GDP over time. Moreover, with over 80% of SMEs in Nigeria failing within their first five years of existence, as reported by Ikpoto (2023), it is highly imperative to identify the factors that can enhance their sustainability and growth, which financial services digitalization plays an integral role. Thus, this study examines the impact of digital financial services on SMEs in Lagos, Nigeria, focusing on three key objectives: (a). assess the

workings of SMEs before and after the provision of digital financial services in Lagos Nigeria., (b). define the level of digitalized financial services among SMEs in Lagos Nigeria., (c). evaluate the advantages that have been gained by SMEs due to the digitalization of financial services.

### **Digitalization: A Modern-Day Business Domain Technological Concept**

Digitalization has appeared as an interesting technological process that has attracted much attention and become widespread today in various organizations, institutions, and industries. Hence, digitalization as a concept that has been more or less complex has been subject to various interpretations and definitions based on the context and operational approaches. Parviainen et al. (2017) defined digitalization as the fundamental change of analog work products or processes to digital form. Similarly, Brennen and Kreiss (2014) the concept is the adoption of digital technology by a country, an industry, or an organization. In the research of Gradillas and Thomas (2023), digitalization refers to the “transformation of the socioeconomic environment through the adoption, application, and utilization of digital artifacts”. Legner et al. (2017) concurred with Gradillas and Thomas' (2023) perspective, defining digitalization as the strategic use of digital technologies to achieve significant social and organizational effects. However, Chester et al. (2018) and Cappa et al. (2021) after analyzing several definitions of digitalization took a new path to explain it as the process of collecting, generating, and analyzing data to create value and enable innovation in business and organization to create a novel digital product. Similarly, El Sawy et al. (2020) defined digitalization as the process that encompasses reinventing an organization by using technologies digital boasting.

Despite the various broad definitions of digitalization in the literature, there remain several confusions and misrepresentations with digitization. Gobble (2018) asserted that both concepts have distinct meanings, while scholars like Bounfour (2016), as well as Kiron and Unruh (2017), noted that there is no clear consensus on the differences between the two concepts and that a definition for either of the terms would largely depend on their usage. In a systematic review carried out by Gradillas and Thomas (2023), they agree with Bounfour (2016), and Kiron and Unruh (2017) that there is a conceptual overlap and little consensus between the two concepts. In an attempt to clarify definitions, Maltaverne (2017) referred to digitization as the conversion of analogue data into digital form, while Legner et al. (2017) explained it as an effort to convert physical assets into digital signals. Although the two terms are interconnected in a general sense, it is crucial to recognize that they have distinct differences, which have been a subject of scholarly debate and discussion for many years, serving as a foundation for scientific inquiry and examination.

### **Empirical Evidence on The Benefits of The Digitalization of Businesses**

A study that investigated the effects of digital technologies on the internationalization process of Small and Medium scale Enterprises (SMEs, as documented in publicly available studies) has described digitalization as a pervasive phenomenon globally (Hervé et al., 2021). This view was shared by a similar study by Autio, Mudambi and Yoo (2021). In Africa, particularly in regions such as Lagos, and Nigeria, digitalization has shown significant potential in transforming the landscape of Businesses (O. Lottu et al., 2023). This section therefore explores generally the empirical evidence in respect to the benefits of digitalization for business globally, with a focus partly on the African region.

In a comparative study of the business landscape of a developed economy (United States of America) and (Nigeria) a developing economy, Ewuga et al. (2023) asserted that the competitive advantage as well as organizational growth of businesses is due to digitalization. According to Ewuga et al. (2023), businesses are increasingly dependent on technology integration to drive competitiveness and growth. Ewuga et al. (2023) concluded that technology integration or digitalization is increasingly vital for businesses both in developed countries like the US as well as in developing or under-developed African economies like Nigeria. While many businesses in Africa are

yet confronted with challenges such as access to necessary talents, cost as well as most importantly security concerns, businesses that can successfully integrate technology have the potential to improve their productivity, efficiency and customer service (Ewuga et al., 2023). In consonance with the assertions of Ewuga et al. (2023), Lottu et al. (2023) also acknowledged the prevalence of significant challenges confronting African businesses in the digitalization of businesses. The study acknowledges, however, that the various benefits accruing to the successful digitalization of businesses are a result of cost efficiency, the changing expectations of customers, and regulatory changes. These benefits all culminate in improved organizational growth and competitiveness that aid the business sustenance (Ewuga et al., 2023; O. Lottu et al., 2023).

Research on the impact of digital technology on local business ventures which are traditionally affiliated to Africa pointed out that there are positive implications such as easier access and a broader market frontier as part of the way that a company can be formalized digitally. According to Onyima and Nkechi (2017), digitalization enables businesses to expand their market reach beyond geographical constraints. A similar source noted that digital platforms allow SMEs to access global markets, thereby increasing their customer base and revenue potential (Badran, 2021). A study focused on digitalization in middle-income economies (Andreoni & Roberts, 2020) noted that digitalization offers businesses access to international/global markets, facilitating accessibility to and for customers beyond the locations or immediate environment of the businesses. As stated in such studies by Onyima and Nkechi (2017), Andreoni and Roberts (2020), and Badran (2021), digital platforms help improve the convenience as well as the ease of access to the products and services of businesses for consumers.

Research has shown that small business operations and efficiencies have greatly benefitted from the evolution of modern digital technologies and digitalization with effects not simply limited to production (Costa Melo et al., 2023; Costa et al., 2023; Kulabuna, 2023; Radicic and Petković, 2023; Skare, de las Mercedes de Obesso and Ribeiro-Navarrete, 2023). The study by Kulabuna (2023) for example reveals that digital technologies streamline business processes, leading to improved productivity and reduced operational expenses. Moreover, digital tools such as cloud computing and enterprise resource planning (ERP) systems help SMEs in Africa to optimize resource utilization and minimize wastage, as noted by studies such as Costa Melo et al. (2023) and Omino (2023). Studies such as Alkhawaldah et al. (2023) and Dharmayanti et al. (2023) have appreciably linked the aforementioned factors such as enhancing operational efficiency and reducing costs to innovation and adaptability of systems. In a study that adopted an inductive qualitative study that used firm field data through semi-structured interviews with eight entrepreneurs, Khurana, Dutta, and Singh Ghura (2022), established that digitalization assists firms to be innovative and agile such that they can serve dynamic market needs. Research by North, Aramburu and Lorenzo (2019) and Sutrisno et al. (2024) insinuated that digital technologies empower businesses to innovate their products, services, and business models to meet evolving customer demands. Studies such as Canhoto et al. (2021) and Zamani, Griva and Conboy (2022) drew attention also to the fact that digital platforms help in facilitating real-time data analytics, allowing businesses to gather insights and adapt their strategies swiftly in response to market changes. Zamani, Griva and Conboy (2022) in their study, reported that some firms survived the turbulences caused by the COVID-19 pandemic only because of their proactiveness in taking advantage of real-time data analytics which was only possible through digitalization.

Another very significant benefit of digitalization is the enhancement of customer engagement and satisfaction as identified by a study (Awadhi et al., 2021) focused on examining the associations between customer perceived expectations, perceived experiences of customers, and customer satisfaction in the digital solution of the telecommunications sector of the United Arab Emirates (UAE). According to Awadhi, Obeidat and Alshurideh (2021), digitalization enables SMEs to engage with customers more effectively, leading to enhanced satisfaction and loyalty. A study by

Majeed, Jayadatta and Abubakari (2024) bore the insinuation that digital communication channels, such as social media and email marketing, enable businesses to engage with customers in personalised and interactive ways. This, in turn, fosters stronger relationships and brand loyalty among customers (Majeed et al., 2024; Sashi, 2021; Weber, 2009). The study by Steinhoff et al. (2019) established a link between digital-based interactions or relationships and customer loyalty.

A secondary study by Portion et al. (2023) showed that digitalization provides businesses in developing countries with access to various business support services, which Ewuga et al. (2023) described as fostering the growth and development of such businesses, despite the associated challenges they have to overcome. Li et al. (2018) and Costa Melo et al. (2023) were more specific in describing some of the benefits of digitalization in this respect, with a focus on SMEs, noting that digital platforms connect businesses with advisory services, training programs, and networking opportunities, which are needful for capacity building as well as skill enhancement. Costa Melo et al. (2023) further confirmed that businesses have access to logistics, marketing, and distribution services through digital marketplaces and e-commerce platforms. The findings of Jangjarat and Jewjinda (2023), a qualitative study focused on businesses in Krabi, Thailand, showed that there exist numerous opportunities for businesses to harness the adoption of digital innovations and technologies. However, Jangjarat and Jewjinda (2023) opined that such businesses that will benefit from digitalization must have incorporated digital innovation and technologies into their operations, processes and services to achieve long-term development.

According to multiple journals that have been reviewed, the exponential value of digitalization to businesses was evident with support from scientific research. From the improved operational efficiency, and market coverage ability, to the creation of new possibilities for innovation and better relationships with customers, several advantages indicate the competencies created by the act of digitalization for businesses to succeed in competitive conditions and contribute to organizational development. But it is important to appreciate the fact that these, as well as the corresponding benefits, can only be achieved with considerable actions towards the tackling of related digitalization issues within businesses.

### **Financial Services in The 21st Century: How Has Digitalization Contributed To Progress**

In the early twenty-first century, the financial services field saw a particularly significant transformation, the exponential growth of digitization drove this change. Technological advancements have completely changed the manner in which these transactions are done, recorded, and made available, thus signaling the exit of physical banking (Hakizimana et al., 2023). This shift of paradigm has caused significant transformation across developing countries particularly the African continent and the formal financial systems. Furthermore, in Nigeria, which is considered as the biggest economy country in Africa, digital transformation has affected the field of finance, particularly in large cities like Lagos (Siano et al., 2020). Digital transformation simply refers to the integration of digital technologies into all aspects of a business thereby resulting in massive changes in the operation of the organizations, customer experiences, and substantial value delivery (Chen et al., 2021). As mobile phones and the internet have become sources of communication and financial tools, fintech startups as well as incumbent banks see a perfect chance of delivering digital banking solutions that correspond to the needs of SMEs. These firms or businesses on many occasions find it very difficult to access funding from traditional banks due to policy restrictions and high collateral demands, these are seeking solace in digital platforms such as: Paga, Monie Point, Opay, Kuda, etc; for credits, payment solutions, and other essential financial services.

### **Mobile Money in Africa**

There has been a swift growth of the mobile revolution across the African continent where people's use of technologies and management of their financial transactions cannot be compared

with what it used to be in the past (Amankwah-Amoah, 2019). Inarguably one of the more imposing trends in this regard has been the creation and rapid growth of mobile money services. Mobile money is a digital payment system that allows users of the service to store, send, and receive money with their mobile devices, without going to the bank (Lottu et al., 2023). In the last ten years, mobile money has revolutionized Africa's economy by offering millions a secure, easy and efficient way of managing their resources (Lashitew, van Tulder and Liasse, 2019). A review of the literature: mobile money as a tool for affecting change in financial access and utilization has remarkably altered the financial network especially in African nations together with enhancing the standards of the populations who otherwise would not have a chance of accessing financial services. Mobile money as a tool of monetization is deemed to boost economic development and reduce the poverty rate in African countries according to Evans (2018). This paper mainly explores the way that mobile money services which was promoted by successful innovations like the M-Pesa in Kenya have enabled millions of people who could not have been embraced by the conventional banking sector to access essential financial services. In addition, Ky et al. (2018) and Nan et al. (2021)', have shown from empirical analysis, that mobile money has a positive impact on socioeconomic factors including; higher savings, more credit access and better standards of living among households. Therefore, these research findings reveal the transformative impact of mm in enhancing financial vulnerability as well as promoting economic opportunities among low-income households in Africa. In particular, the literature review (Ahmad, Green, and Jiang, 2020; Siano et al., 2020; Danladi et al., 2023) proves that the opportunities provided by mobile money positively impact financial inclusion and sustainable development in the entire African territory.

Nigeria's success story of mobile money acceptance is evident by an entity referred to as Paga. Paga was started by Tayo Oviolu in 2009, and it has grown to become one of the biggest mobile money solutions firms, offering all sorts of money-related services to individuals and businesses (Ehret and Olaniyan, 2023). Paga broke new ground in the country as Nigerians embraced it convenient means of digital payments that are safe and secure from the banking system. As an Opera Limited company, Opay has been on the cutting edge of Nigeria's digital banking innovation with the mobile money service. Opay was started in the year, 2018, and in the least space of time, Opay has spread its networks across the nation and is now offering consumers millions of financial services (Kumar et al., 2024). Opay's strategy of transforming Nigerian digital banking can be attributed to its feature of providing its complete suite of services available through its mobile application (Lottu et al., 2023). Mobile money can be utilized effectively for money transfers, bill payment, air time and data bundle purchases, and even in-store as well as online purchases and mobile loans and insurance (Mhlanga, 2023). It provides a highly integrated system for people with the simplicity of using such companies' services as well as those who don't have access to the banking industry at all.

### **Fintech Disruption and The Impact on SMEs in Lagos**

Igbinenikaro and Adewusi (2024) posit that fintech disruption is the innovative digital technologies challenge to traditional established financial institutions leading to increased efficiency and accessibility of financial services. The disruption brought about by fintech in Nigeria has been groundbreaking, particularly to firms mostly SMEs in urban environments like Lagos. To get a better understanding of the disruptive effects of fintech innovation on SMEs, Effiom and Edet (2022) provide valuable guidance regarding such development as well as the opportunities and challenges that will ensue from it. On the topic of how fintech could assist Nigeria's SMEs in obtaining funding, research by Gatsi (2020) answers the following question. consumer-Fintech services like digital lending and crowdfunding are emerging to be potential substitutes for conventional banking for SMEs in their quest for finance. These internet-based platforms use technology to streamline the lending process, reduce the regulatory burdens and offer easy repayment terms in an aim of

expanding access to credit for SMEs especially those with poor credit back or collateral. Also, fintech disruption has accelerated the digitization of payment processes, allowing SMEs in Lagos to transact more efficiently and securely (Lottu et al., 2023). The Lagos Business School's research underlines the relevance of digital payment solutions in boosting SMEs' liquidity and cash flow management, resulting in enhanced productivity and market competitiveness (Effiom and Edet, 2022).

However, the fin-tech disruption in Nigeria poses challenges for SMEs particularly in cyberspace and more particularly, regulation (Iheanacho and Oluwasemilore, 2021). The effect of fintech innovation for market regulation analysis by Igbinenikaro and Adewusi (2024) discusses the directions of Nigerian financial innovations for regulators to balance the opportunities with the safety and stability of the customers as well as the financial sector. Moreover, with the rapid advancement of fintech solutions available in Lagos, there begins concern about the safety of SMEs' information as well as the exposure to cyber threats. Scholars in Nigerian institutions have also carried out research which urges the deployment of robust cybersecurity measures to enable SMEs manage the risks associated with the use of fintech technologies and keep off cyber threats (Hassan et al., 2024).

### **Challenges of Digitalization Specific to Financial Services**

Ewuga et al. (2023) and Lottu et al. (2023) noted that the digitalization of businesses, including in the financial sector, comes with a lot of benefits. The findings of these studies indicated that there are various challenges in achieving significance. Lottu et al. (2023), a study that weighed the driving forces of digitalization against both the benefits as well as the challenges accruing from the digitalization transformation of businesses in the financial sector (with emphasis on banking), was extremely explicit in its analysis of the challenges accruing. According to Lottu et al. (2023), such challenges include cybersecurity challenges, legacy systems, regulations and compliance challenges, data privacy concerns as well as, most importantly, resistance to changes within the systems/organizations themselves.

While digitalization comes with its benefits to the financial sector, the rise of digital technologies in banking operations has led to a surge in cybersecurity threats, including cyberattacks, data breaches, and malicious activities, as highlighted by a study focused on FinTechs (Despotović et al., 2023). According to Despotović, Parmaković and Miljković (2023), as financial services become more digital, sensitive customer data, transactions, and critical infrastructure are becoming targets for cybercriminals. This, as highlighted in the study by Lottu et al. (2023), has forced many banks to invest heavily in robust cybersecurity measures, including security audits, threat monitoring, and staff training. Despotović, Parmaković and Miljković (2023) also identified data privacy concerns as one of the major challenges in the digitalization of financial services/processes. In the analysis by Lottu et al. (2023), despite the significant benefits of the gathering and application of customer data as crucial for digital banking and tailored services e.g. improved customer experience/satisfaction, this raises notable data privacy concerns. Aside from external interferences, i.e. cybersecurity threats, internal issues such as the mishandling of customer data can lead to legal repercussions, loss of customer trust, as well as harm to the reputation of financial institutions, as highlighted in the outcomes of studies by Dove (2018) and Almeida, Shmarko and Lomas (2022).

Notably, the dynamic nature of i.e. Fintech innovations and digital banking often surpass existing regulatory frameworks, creating serious compliance challenges, especially in areas such as consumer protection and data privacy as revealed by Lottu et al. (2023). This, as highlighted in a study by George, George and Baskar (2023), necessitates that banks swiftly adapt to varying regulations across countries and regions to avoid consequences such as reputational damages, hefty fines, as well as operational disruptions (George et al., 2023). While studies such as Mantyi (2020) focused on challenges hindering the digitalization of financial services such as the legacy systems

adopted by some banks, which do not support digitalization, a more important challenge of digitalization specific to the financial sector is resistance to changes. In a study that examined the role of organizational justice in coping with or managing change resistance, (Rehman et al., 2021), noted that organizational culture and human behaviour may resist change, especially in traditionally structured financial institutions such as banks. According to Rehman et al. (2021), such resistance may readily hinder the successful implementation of initiatives for digital transformation. proffering a way out, studies by Rehman et al. (2021) and Lottu et al. (2023) asserted that getting through this challenge requires effective leadership commitment, change management strategies and the development/promotion of a culture of innovation within financial institutions. Building on these theoretical insights, the next section outlines the research methodology used to examine SME digitalization in Lagos.

## **RESEARCH METHODS**

### **Research Design**

The study followed a cross-sectional research design and thus used a survey approach to analyze the effects of digitization on small and medium-sized enterprises (SMEs) in Lagos, Nigeria (Barr, 2024). The study sought to answer certain research questions concerning changes between SME operations pre- and post-digitalization, the level of digitalization among SMEs in Lagos and benefits of digital financial services adoption. This has been because the use of this quantitative approach was considered to be highly reliable since it provided results that can be quantified, were generalizable and because it was easier to gather information from a large number of respondents. The survey tool was designed in the context of the research questions; closed-ended and Likert-scale questions were used to capture the general understanding of the state of the adoption, perceived benefits and the impact of the AFES services on the business among the SMEs.

### **Research Approach**

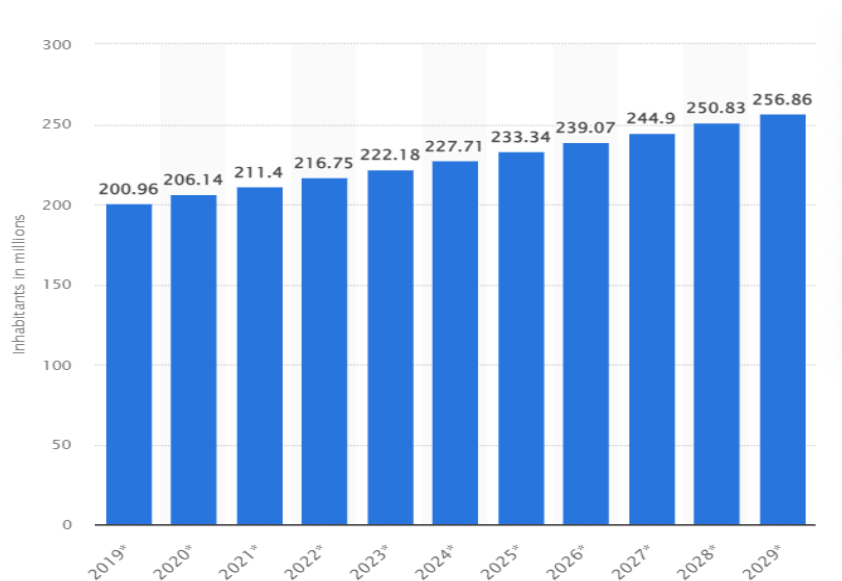
Based on the research questions that were outlined at the beginning of the study, an inductive methodology was used (Varporto et al., 2020), in a bid to understand the context of the digitization on financials among the SMEs in Lagos State, Nigeria, and derive more theories and findings from the data collected. Regardless, the three fundamental research methodologies that form the basis of strategies applied include the deductive, inductive, and abductive approaches and since the inductive approach is able to develop new hypotheses and generalize from data thereby providing a more profound understanding of the research problem under consideration (Thomas, 2003; Soiferman, 2010; Amadi, 2021), it was adopted in the current study.

In the context of Azungah (2018), inductive research is a method of data collection, analysis, and the formation of hypotheses or conclusions. Following therefore an inductive research approach this study sought to establish new insights and especially from the users' end that would potentially help in designing relevant policies and practices regarding digital financial services for SMEs. Selecting and collecting appropriate data and then analyzing the data are crucial for the right inference (Azungah, 2018; Bradfer-Lawrence et al., 2023).

### **Research Population**

This research targeted the population in Nigeria with specific reference to Small and Medium Enterprises (SMEs), which play an important role in the development of the economy, creation of employment opportunities and innovation. Currently, the population of Nigeria was over 227.71 million in the year 2024. (Figure 3). Nigeria's diverse economy, with over 200 million people, is characterized by various industries, regions, and demographic profiles, which makes it suitable for such a study as in Africa (Edewor et al., 2023; Gilad, 2024).





**Figure 1.**  
**The population trajectory of the study area**  
 Source: O’Neill, 2024

SMEs in Nigeria include businesses across sectors like agriculture, manufacturing, retail, and services, typically having fewer than 250 employees and operating independently or as partnerships or corporations (Edewor et al., 2023; Gilad, 2024). The study specifically targets SMEs in Lagos state, Nigeria's commercial hub, which has a population of over 20 million (Adegbi, 2022; Tiabasi, 2023). This subset of the population was believed to provide insights into the effects of digitalization on SMEs in a crowded urban environment and thereby add to the understanding of the phenomenon at a regional level as a microcosm of the Nigerian environment.

### Sampling Method

Purposive sampling was applied in the choice of the respondents and SMEs that meet certain criteria as defined by the research objectives (Hidayat, Azizah, and Ahmad, 2024). The reasons for choosing purposive sampling over other approaches were its relevancies and beneficial outcomes: guaranteeing the probability of representing a specific population of interest, identifying the efficiency of participant selection, ensuring the experts and experiences’ inclusion in the study, and staying true to the study’s local orientation and major stakeholders of digitalization (Lapuz, 2023; Naserrudin et al., 2023; Hidayat et al. Since purposive sampling targeted the SMEs in Lagos state criteria and selected the representatives with certain roles and qualifications this allowed to increase the validity and relevance of the study therefore increasing the overall validity/relevance of findings. As recommended in Fasiha, Erwin, and Musdalifah (2024) and Hidayat et al (2024), relevant characteristics selection criteria were applied in the selection of the respondents in the study. For the SMEs, some of the criteria include: the business must be operational, the business must belong to a specific sector, a business with ten or less than 250 employees, the business must be in Lagos state, and it must have been in operation for at least two years. These were important to eliminate bias that might lead to the rise of some individuals to certain studies that may harm the validity of the study results (Effiom & Edet, 2018). The participants included SME representatives who owned, managed, or performed financial decisions for the SMEs or played a key decision-maker role, and who had considerable knowledge regarding the SMEs’ operations, their financial administration, and their experiences with digital financial services. Applicants were also expected to have a working

experience of not less than two years in the SME. Data collection involved only the respondents with specific traits, and one respondent was selected from each featured company. From the described criteria, 150 participants were chosen first. However, to give relevant information regarding the digitalization of financial services, SMEs and their representatives who participated in the survey, needed to have prior experience in the usage of digital financial services. With the implementation of this extra filter, the total number of subjects was lowered to 125 from the initial pool of 150 persons.

### **Data Collection Process**

In the same way as other similar studies conducted in other parts of the world such as Siwec et al., (2023) Wijekoon, Sharma & Samkin (2023) Roffia & Dabić (2024); data was collected through questionnaires. An online survey was constructed to collect details about the specifics of SME operations and digital transformation, as well as a self-reported appreciation of digital financial services (DFS), and participant traits. The survey was conducted via Google Forms which is an effective tool of data collection through the internet. Specific attempts were made to recruit SMEs into the study, using e-mail, tweets, and posts on business bulletin boards. Other Aids to participation in the survey included partnerships with local business associations and chambers of commerce. In addition, other strategies such as the use of follow-up messages or prompts were used to elicit participation and also ensure optimal response rates. This was more convenient due to the fact that the survey was conducted via the Internet to enable the representatives of SMEs to complete the survey and submit their responses online. More so, the study employed the use of face validity for the research instrument.

### **Measurement of Variables**

To address the research questions, the study compared the operations of SMEs before and after the digitalization of their financial services. This was done based on two dependent variables: (1) perception as a competitive advantage and (2) Record Keeping. These variables were measured on a Likert scale whereby the efficiency, accuracy and timeliness of record-keeping practices in SMEs before and after digitalization was measured against a scale of 1 to 3, i. e. No change to Highly efficient). Another variable addressed on the scale of 1 to 3 (Unsure to Most definitely) included Perception as a competitive advantage (i. e. establishing how SMEs perceived their competitive stance in the market before and after accessing digital financial services). These dependent variables were analyzed with regards to the legal structure of the SMEs which was the independent variable. The legal formation of the SMEs was classified into Corporation, LLC, Partnership and Sole Proprietorship; this was used as the proxy to SMEs complexity, size and legal compliance. The research also examined the digitalization of SMEs, with particular emphasis on the length of mobile Money usage in using financial services (dependent variable) affecting cash flow management (independent variable). Likewise, the measurement of these variables embraced the use of a Likert scale as well. The Impact on cash flow management (i. e. how digital financial services helped or hindered cash flow forecasting, monitoring and liquidity management within the SMEs) was measured on a Likert scale ranging from 1 (Unsure) to 3 (Most definitely). The extent of using digital financial services was measured by how long SMEs had been using digital financial services which included 0-2years, 11 years and above, 3-5 years and 6-10years. In addressing the research question concerning the impact on cash flow management, the studies identified whether digital financial services enhanced cash flow monitoring, forecasting and liquidity management within SMEs. The study also looked at the effect of digitalization on SME businesses concerning the perceived impact of digitalization and perception as a competitive advantage. The perceived impact was assessed from the SMEs' standpoint concerning the benefits realized from the use of digital financial services; namely, access to finance, efficiency, and competitiveness shifts was expressed on

a neutral to very positive scale. Perception of competitive advantage was defined along a Likert scale ranging from 1 to 3, representing the different levels of certainty in the SMEs' perception of their competitive position in the market relative to other firms within the industry, from Unsure to Most Definitely.

Quantitative data were used in this study, and it therefore meant that measures of central tendency and percentage as well as inferential statistics were used. Percentage and frequency analysis were used to analyze and report quantitative demographic data gathered from the survey respondents (Zayed et al., 2022). These statistics gave an overall picture of the demographic distribution of the sample population and included aspects like age, gender, experience level, level of education achieved, the legal structure of the SMEs, the industry sectors and others. Descriptive statistics were used for identification of possible correlations between the variables and construction of test hypotheses. In particular, the Chi-Square statistics (Formula 1) was used to compare frequency distributions in the dataset, that is, to determine whether there is a relationship between, for example, the legal structure of SMEs and their perceptions of the benefits of digitalization or the duration of using digital financial services and its influence on cash flow (Lugo-Armenta and Pino-Fan, 2024). Chi-square analysis enabled the evaluation of patterns of association or variability between one or two groups in the non-sampling population (Lugo-Armenta & Pino-Fan, 2024).

The Chi-Square statistic is calculated using the following formula:

$$\chi^2 = \sum \left[ \frac{(O-E)^2}{E} \right] \dots\dots\dots \text{Formula 1}$$

In formula 1:

$\chi^2$  = the Chi-Square statistic measures discrepancies between expected and observed frequencies.

O = the observed frequency in each cell of the contingency table.

E = the expected frequency in each cell of the contingency table within the null hypothesis.

$\Sigma$  = the sum of the values calculated for each cell in the contingency table.

To test the hypothesis the contingency tables were used and compared the observed and expected frequencies. The sum of squared differences between observed and expected frequencies was done for each cell and the result was divided by the expected frequencies to obtain  $\chi^2$ . The obtained  $\chi^2$  value was then compared to the Chi-Square distribution in order to determine the relevance of the calculated number. If the calculated  $\chi^2$  value was greater than the critical value at  $\alpha = 0.05$ , it was also getting that the variables in the contingency table had a relationship. Thus, the data gathered with this method was analyzed and discussed in the next section.

## RESULTS & DISCUSSION

### Descriptive Statistics

Of the 150 participants of the survey, 25 of them (16.7%) stated that they have never used Fintech stating that they are unaware of Fintech services, inadequate internet connection, low confidence in Fintech platforms and rather prefer physical financial services. Therefore, the study continued with the intact 125 respondents by asking about various demographic and business-related factors. Of the 125 participants, most of them were female 64(51%) while 60(48%) were male. Regarding the age distribution the largest portion of the respondents was in the 25-44 age range and the largest share within them was 35-44 years old meaning that there are many middle-aged SME owners. Educationally, 30.4% of participants had completed secondary school, while 21.6% had no formal education, reflecting a diverse educational background among SME owners.

Regarding business structure, 51.2% of participants operated under a sole proprietorship model, emphasizing the prevalence of individual ownership within Lagos's SME sector. The study

also revealed that most participants (50.4%) had 3-5 years of experience with digitalization, indicating a growing trend towards digital adoption among SMEs. Participants' businesses were spread across various sectors, with 40% in the service sector, 26.4% in manufacturing, 19.2% in retail, and 13.6% in restaurants. Monthly expenditure on digital platforms was minimal for most respondents (91.2%), indicating cost-effective digital solutions. Lastly, the study found that 51.2% of SMEs had 6-15 employees, suggesting that the sector is predominantly composed of small to medium-sized operations.

**Inferential Statistics**

Inferential statistics used in this study help to provide an answer to the research question as shown below:

*RQ 1: To examine the SME operations before and after the digitalization of financial services in Lagos, Nigeria*

*H<sub>0</sub> (Null Hypothesis):* The legal structure of businesses does not have a significant influence on the perceived effects of digital financial services on record-keeping practice

*H<sub>1</sub> (Alternative Hypothesis):* The legal structure of businesses has significant influence on the perceived effects of digital financial services on record-keeping practice.

**Table 1.**  
**Impact of digital financial services on record-keeping**

		Impact of Digital Financial Services on Record-Keeping			
		Highly Efficient	More Efficient	No change	Total
Legal Structure of Business	Corporation	14	5	0	19
	Limited Liability Company (LLC)	18	4	0	22
	Partnership	15	4	1	20
	Sole Proprietorship	42	20	2	64
<b>Total</b>		<b>89</b>	<b>33</b>	<b>3</b>	<b>125</b>

**Table 2.**  
**Chi-square tests**

	Value
Chi-Square statistic	3.816
Degrees of Freedom	6
p-value	0.702

To determine the correlation between a business's legal structure and the impact of digital financial services on record keeping, a chi-square test was conducted. The research results established that Pearson's chi-square statistic depicted a value of 3. 816 with 6 degrees of freedom, p = 0. The p-value obtained in the current study is greater than the typical level of statistical significance of 0. 05, this means that we cannot reject the null hypothesis that the two variables are independent. This means that there is not enough substantiation to support the notion that a business's legal formation influences how digital financial services affect record keeping.

*Null Hypothesis (H<sub>0</sub>):* Laws regarding the structure of businesses do not affect their attitudes towards digital money solutions as a way to gain a competitive edge.

*Alternative Hypothesis (H<sub>1</sub>):* Businesses' legal structure is positively related to their perception of digital financial services as something that can give them a competitive edge.

**Table 3.**  
**Perception of digital service as a competitive advantage**

		Perception of digital service as a competitive advantage			
		Most definitely	Possibly	Unsure	Total
Legal Structure of Business	Corporation	15	3	1	19
	Limited Liability Company (LLC)	14	8	0	22
	Partnership	17	3	0	20
	Sole Proprietorship	47	17	0	64
Total		93	31	1	125

**Table 4.**  
**Chi-square tests**

	Value
Chi-Square statistic	8.947
Degrees of Freedom	6
p-value	0.176

In light of the above findings, the chi-square test was conducted at a 0.05 significance level. We did not have enough evidence to reject the null hypothesis. This means that there is no evidence that one can use to support the fact that business legal structures have a bearing on their views on digitally offered financial services as a competitive edge. In other words, the findings indicate that business form and its attitude towards digital financial services as a value-added factor are two different things. This means that even if the legal formation of the business is a corporation, limited liability company, partnership, or sole trader the position of Lagos, Nigeria businesses does not differ appreciably in terms of the use of digital financial services as a competitive weapon. However, it should also be remembered that the p-value is greater than 0.05 at 0.176. This is an indication that the result is not statistically significant, there may still be some underlying trends or patterns that require further investigation or consideration.

*RQ 2: To determine the extent of digitalization of financial services across Lagos, Nigeria*

*H<sub>0</sub> (Null Hypothesis):* There is no association between the duration of using digital financial services for a business and how digital financial services impact cash flow management.

*H<sub>1</sub> (Alternative Hypothesis):* There is an association between the duration of using digital financial services for a business and how digital financial services impact cash flow management.

**Table 5.**  
**Impact on cashflow management**

		Impact on Cashflow Management			
		Most definitely	Possibly	Unsure	Total
Duration of Using Digital Financial Services	0-2 years	42	6	3	51
	11 years or more	3	1	0	4
	3-5 years	54	7	2	63
	6-10 years	5	1	0	6
Total		104	15	5	125

**Table 6.**  
**Chi-square tests**

	Value
Chi-Square statistic	1.737
Degrees of Freedom	6
p-value	0.942

Therefore, following the results of the chi-square test done, a chi-squared statistic of 1.737, while the residual degrees of freedom of 6, a p-value of 0.942, we couldn't reject the null hypothesis. It also indicates that there is no relationship between how long a business has been using digital financial services and the manner in which the digital financial services affect the cash flow. In other words, the number of years the business has been implementing digital financial services seems not to have any impact on the management of cash flow in the business.

*RQ 3: To determine the benefits accrued by SMEs in Lagos, Nigeria due to the digitalization of financial services*

*H<sub>0</sub> (Null Hypothesis):* There is no association between the perceived impact of digitalization of financial services on SMEs' businesses and their perception of digitalization as a competitive advantage

*H<sub>1</sub> (Alternative Hypothesis):* There is an association between the perceived impact of digitalization of financial services on SMEs' businesses and their perception of digitalization as a competitive advantage.

**Table 7.**  
**Perception of digitalization as a competitive advantage**

		Perception of digitalization as a competitive advantage			
		Most definitely	Possibly	Unsure	Total
Impact of	Neutral Impact	1	1	0	2
Digitalization of	Positive impact	30	20	0	50
Financial Services on	Very Positive	62	10	1	73
Business					
Total		93	31	1	125

**Table 8.**  
**Chi-square tests**

	Value
Chi-Square statistic	12.152
Degrees of Freedom	4
p-value	0.016

Based on the chi-square test results, we reject the null hypothesis (H<sub>0</sub>) and accept the alternative hypothesis (H<sub>1</sub>), indicating that there is a significant association between the perceived impact of digitalization of financial services on SMEs' businesses and their perception of digitalization as a competitive advantage.

## Discussion

This section provides an overview of the major recommendation of the study based on theoretical reference and assessment of the consequences, as far as they relate to the research objectives. Employing existing knowledge as available in the public domain, causal components and implications of the presented discussion are then highlighted.

## **Impact of The Digitalization of Financial Services on SME Operations Before and After Digitalization**

Scholarly studies on small and medium enterprises' digitalization have emerged as an active stream of research over the last few years (Hasan et al., 2022; Bagale et al., 2023; Costa et al., 2023; Raihan, 2024). This research work aims to examine the impact of digitalization on the Nigerian SMEs' operations with main attention to the efficiency, performance and competitiveness. Extending prior research on SMEs' attitudes to and interactions with digitalization before and after availing digitalized financial services. According to the studies, the majority of the SMEs (71.4%) say they have a moderate improvement in efficiency in their company's financial process after they adopt the electronic system. These findings are in line with prior studies carried out by Awinja et al., (2021), and Skare et al., (2023) which have revealed the performance of SMEs following the digitalization process in terms of productivity. For example, the research by Awinja and Fatoki (2021) showed that digital financial services were germane factors in guaranteeing SME growth and productivity. Studies such as Moeuf et al. (2018) and Soni et al. (2022) believe that digital technologies facilitate the streamlining of processes, the reduction of costs, as well as the improvement of decision-making in SMEs, which results in improved operational efficiency. On a similar note, studies by Scott, Van Reenen and Zachariadis (2017) and Chen et al. (2021) found that SMEs that adopt digital financial services experience improvements in customer service, general operational efficiency, as well as in revenue generation.

However, the study findings also reveal a small percentage (2.4%) of SMEs that reported no change in their operational efficiency after digitalization. Such discrepancy might have been due to various factors, as averred by studies such as Shettima and Sharma (2020), OECD (2021) and Ifeoluwa, Aime Privat and Rusu (2022), such as inadequate infrastructure, insufficient training, or ineffective implementation of digital financial services. These findings might be in contrast to some previous studies that suggest universal benefits of digitalization for SMEs. For instance, studies by (Awinja and Fatoki (2021) and Appio et al. (2024) suggest that SMEs that embrace digital technologies must experience significant improvements in innovation, efficiency and competitiveness. These differences in results indicate the importance of considering context variables and practices while examining the impact of digitalization on the business of SMEs.

The results of the study also suggest that there are insufficient grounds to claim that there is a connection between legal forms of businesses and how digital financial services affect SMEs' activities. This result runs counter to some earlier findings or assertions of other studies that found variations in SMEs' adoption of digitalization and its consequences depending on their legal framework (Frimpong et al., 2022; Kurniasari et al., 2023). For instance, SMEs with various legal structures show varying degrees of capability and readiness to adopt digital technologies (Low et al., 2022; Omrani et al., 2024). Such inconsistencies in findings, according to Huu (2023), could be the result of variations in sample characteristics, research methodology, or study context, underscoring the need for more investigation into the connection between legal structure and digitalization outcomes in SMEs.

The research presented here opens up quite compelling issues regarding what legal environment of a company makes it consider digital financial services a valuable asset. This piece of finding is relatively unique as only scant studies have been published and made available for public consumption that focus on this aspect of the research question. However, when comparing the legal structures of SMEs with their perceived competitive advantages, the results seem to deviate from the literature review done with the help of Radicic and Petković, (2023), Skare, de las Mercedes de Obesso and Ribeiro-Navarrete, (2023), and Raihan, (2024), where it was found that based on the legal structures of different SMEs, they have. These differences may indicate how dense the connection between SMEs' legal environment and their digitalization (or the perceived digitalization) is, and consequently, how necessary it is to further investigate the mechanisms and

contexts of SMEs' perceptions of such relationships. However, the conclusion that can be made from this study is that digitalization benefits outweigh the challenges in Nigerian SMEs. That being said, this is the area that most SMEs report competitive advantage such as operational efficiency, productivity, and competitiveness, but with difference in terms of businesses.

### **Extent/Duration of Digitalization of Financial Services Across SMEs in Nigeria and Impact on SMEs**

From the results of the study, it can be inferred that the majority (77%) of the SMEs that have adopted digital solutions in their financial services did this in the past 2–6 years. The remaining SMEs (23%) have had digitalized financial services for a shorter time of 6 – 11 years or more. This implies that the general uptake or adoption of digitalization in the African market or economy is new and that a vast majority of SMEs only migrated to digital financial services in the recent past. This is partly in compliance with the findings of other research works such as Majeed, Jayadatta, and Abubakari (2024) and Okoye et al. (2024). This assertion can be evident in the Nigerian scene as many of the existing SMEs have only embarked on the digitization of their financial services for not more than 2- less than 6 years. This can be interpreted as meaning that the digitalization process remains rather new for many of the SMEs in Nigeria, thus signifying a slow but steady transition towards the use of digital tools across the businesses' financial practices. This affirmation is further enhanced by the finding that only 23% of the SMEs have adopted digitalization for more than 6-11 years or more.

Digitalization in Africa is growing due to various factors such as economic, technological, demographic, and socio-political factors as insinuated by Němečková (2021) and Qobo (2022). Reiterating the notion, Luo et al. (2023) noted that rapid economic growth and urbanization create opportunities for digital innovation and entrepreneurship. Africa's mobile phone penetration has made mobile technology more accessible, enabling innovative services like mobile banking and e-commerce (Zanden, 2023), while the tech-savvy youth population is eager to embrace digital technologies for communication, entertainment, education, and entrepreneurship. Investments in broadband and infrastructure are bolstering digitalization initiatives (Khabo-Mmekoa, 2023; Khanna, 2022), accelerated by global events such as COVID-19 (Abidi et al., 2023). The fintech sector is revolutionizing the financial landscape, with mobile money platforms, digital payment solutions, and peer-to-peer lending platforms delivering financial services, making more fluid cash flows (Rajendran et al., 2023).

As revealed in this study, the majority of the SMEs sampled (83%) perceive digitalization to have a significant impact on their cash flow management practices, aligning with existing literature (e.g. Khan, Ali and Dhamija, 2023; Susanti, Mulyanti and Wati, 2023) highlighting the positive effects of digital financial services on SME operations. Largely, digitalization enables SMEs to streamline financial processes, improve access to real-time data, and enhance transparency and accuracy in financial reporting, leading to more effective cash flow management. Paradoxically, only a few of the SMEs stated that they experienced very little impact of digitalization on their cash flow followed by less than 5 percent who stated that they had no impact at all, as supported by Khan, Ali, and Dhamija (2023) and Susanti, Mulyanti, and Wati (2023).

Interestingly, the length of time in adopting the digital financial service was not found to affect the change in cash flow; those who adopted early as well as those who started adopting in recent times were observed to be equivalent (Parviainen et al., 2017b; Tiberius and Hirth, 2019). While digitalization is considered nascent for many SMEs, its importance as a source for enhancing cash flow management and operational efficiency continues to grow; (Tiberius and Hirth, 2019; Bagale et al., 2023), as has also been supported in earlier works (Meiryani et al., 2022; Chauhan et al., 2023).



### **Benefits Accrued by SMEs Due to Financial Services Digitalization**

From this research, it can be established that the level of digitalization of financial services has boosted the Operational efficiency and Business Performance among SMEs in Nigeria. A slightly lower percentage of small and medium enterprises (73. 6%) stated that, in their opinion, the effects of the digitalization process in their companies are positive or very positive in terms of competitiveness, which is in line with the literature on the advantages of access to digital financial services for companies. Overall, digitalization offers SMEs several opportunities, including access to new markets and customers, better customer outreach, as well as the optimization of business, resulting in better positioning and increased competitiveness (Costa et al., 2023, Kallmuenzer et al., 2024). The study also shows that there is a correlation between the perceived value of digitalization to the SMEs' businesses and their perceived competitive advantage meaning that digitalization is a critical factor in defining SMEs' competitive strategy and the business value of adopting digital finance services. This has been endorsed by research conducted by Del-Giudice et al. (2021) and Matarazzo et al. (2021) that reveals that SMEs reap competitive advantage through the efficient and effective utilization of digital technologies in aspects such as operational efficiency, customer engagement, and innovation.

However, there are potential contradictions in the findings and broader literature regarding the impact of digitalization on SME competitiveness. Some studies suggest that while digital technologies can lead to productivity enhancements and cost reductions, they may also exacerbate inequalities and create winner-takes-all dynamics in certain industries (Ashford, 2010; Yoo & Yi, 2022). The outcomes of studies such as Kergroach (2021), Hasan et al. (2022), and Omrani et al. (2024) suggest the need for complementary investments in skills, infrastructure, and organizational capabilities to fully realize the potential benefits of digitalization for SMEs.

### **CONCLUSION**

The findings of the study have various important implications for SME's and the Nigerian economy in this broad. The study thereby reveals the level of digitalization by SMEs in Lagos, Nigeria; qualitative changes in operations; and perceived advantages arising from digitization. Understanding this is important for SMEs that are desirous of using digital financial services to improve their operations, global positioning, productivity, and vulnerability to disruption amidst rising globalization and a global shift towards the use of digital platforms in business operations. In light of these findings, the study recommends that SMEs should integrate digital financial services as a way of adopting better record-keeping as well as streamlining their operations while at the same time improving their cash flow management. With the help of digital technologies and means of communication and cooperation, the SMEs expand the list of financial services they have access to, increase the level of financial openness, and tend to make better financial decisions. Moreover, a range of implications for practice is revealed by the research evidencing the necessity to develop targeted interventions to reduce the remaining digital divide influencing consumers' decisions, owing to internet connection, platform relevance, and reliability perils. In a more general terms, the conclusions derived from this study have given insights into the entire Nigerian economy. SMEs are a very important sector in any economy since they contribute immensely to the overall Gross Domestic Product and Employment opportunities in Nigeria inclusive. That is why the successful digitalization of SMEs can lead to positive impacts for several sectors of the economy, which means a diversified economy, improved productivity in the overall economy, and increased competitiveness in the international markets.

Through the proper encouragement of digital adoption among SMEs, policymakers and stakeholders can enhance the economy's coherent and robust character and arrange it for increased resilience to external shifts and optimum leverage of digital openings. Thus, these findings highlight

the critical need for the existence of a propitious environment for the exchange and development of digital technologies and their entrepreneurial application through investments into digital technologies, reforms of the legal framework, and the proportion of skills development programs. In general, it can be noted that the results of the study focus on the opportunities that SMEs and the Nigerian economy can receive from digitalization, highlighting the need for concerted efforts to support and accelerate digital adoption among SMEs.

### **Recommendations**

Based on the foregoing research findings, the following is recommended to enhance the SMEs' digitalization initiatives in Lagos Nigeria, and other regions. Government and policymakers should undertake focused sensitization to create awareness among SMEs regarding the advantages and opportunities in digital financial services. Several scholars (Kuteesa et al., 2024; Senyo et al., 2024) affirm that government-led awareness campaigns are essential for promoting digital financial services adoption among SMEs. While misconceptions about platforms security and stability persist, Chabalala et al., (2024) and Xie & Hu, (2024) argue that targeted sensitization programs can effectively demonstrate the benefits of digitalization, including operational efficiency, revenue transparency, and enhanced market competitiveness.

As emphasized by Jin & Liu, (2024) reliable digital infrastructure remains a fundamental prerequisite for digital financial inclusion among SMEs. The government should prioritize capital investments in digital infrastructure development through private-public partnerships with telecommunication providers. This aligns with findings from Raihan et al., (2024), who posit that poor internet connectivity and limited access to affordable devices significantly impede digital adoption in underserved regions. Furthermore, Akcali Gur & Kulesza, (2024) propose that strategic partnerships between government agencies and telecom operators are crucial for expanding broadband coverage and enhancing internet reliability in digitally marginalized areas.

Efficiency in the use of financial services requires capacity building for staff involved in fintech adoption process (Kaur et al., 2024). Therefore, training and capacity-building programmes should be developed. As documented by (Alkhwaldi, 2024; Islam & Khan, 2024), digital literacy training is fundamental for successful fintech adoption, encompassing cybersecurity awareness, online business operations, and digital tool optimization.

There is a need to establish programs that would ensure that more SMEs especially those from the rural and remote areas can access quality financial services. This could entail involving fintech organizations, microfinance organizations, and community-based organizations in making credit and other financial services targeted to SMEs in each of the aforementioned broad circumstances. Scholars affirm that collaborative partnerships between fintech providers, microfinance institutions, and local community organizations significantly enhance the delivery of tailored financial services to SMEs in remote areas (Mamtaz, 2024; Stephen et al., 2024).

The call for policy framework and regulatory changes to support digital innovation and young entrepreneurship for SMEs should be made. Scholars assert that open banking policies and standardized digital interfaces are crucial for ecosystem development (Xie & Hu, 2024). It also has measures to facilitate the licensing and registration of obscure fintech firms and to support the openness of digital interfaces, consumer protection, and data privacy.

### **Study Implications**

The findings of this study have significant implications for SMEs and the broader Nigerian economy. The research highlights the extent of digitalization among SMEs in Lagos, Nigeria, examining qualitative shifts in business operations and the perceived benefits of digital financial services. These insights are essential for SMEs seeking to leverage digital financial solutions to enhance operational efficiency, expand their global reach, boost productivity, and mitigate risks

associated with economic disruptions in an increasingly digitalized world. Based on these findings, the study recommends that SMEs integrate digital financial services to improve record-keeping, streamline operations, and enhance cash flow management. Digital technologies enable SMEs to access a broader range of financial services, promote financial transparency, and support more informed financial decision-making. Additionally, the research underscores the need for targeted interventions to bridge the digital divide that still affects SME adoption of digital financial services. Issues such as internet connectivity, platform reliability, and relevance must be addressed to facilitate seamless digital adoption. At a macroeconomic level, the study emphasizes the vital role of SMEs in economic growth, job creation, and GDP contribution. The successful digitalization of SMEs can lead to a more diversified economy, increased productivity, and greater global competitiveness. By fostering digital adoption among SMEs, policymakers and stakeholders can strengthen the resilience of the Nigerian economy, ensuring its adaptability to external changes and optimizing digital opportunities. To support this transition, the study highlights the need for a conducive environment that promotes digital technology adoption. This includes investments in digital infrastructure, legal and regulatory reforms, and skill development programs tailored to SME digitalization. Overall, the study underscores the transformative potential of digital financial services for SMEs and the Nigerian economy. It calls for concerted efforts from government bodies, financial institutions, and private sector players to accelerate digital adoption and maximize its economic benefits.

### **Limitations of The Study**

This study has several limitations that could be addressed in future research to enhance its scope and depth. First, the study is geographically limited, as it focuses exclusively on Lagos, Nigeria. This narrow focus may not adequately represent the broader context of the entire country, and future studies could benefit from including other states to provide a more comprehensive understanding. Second, the sample size of 125 participants may limit the generalizability of the findings, and expanding the sample size in future research could strengthen the validity of the results. Lastly, the study only examined the correlation between variables using the Chi-square test, without exploring causal relationships. Future research could incorporate additional analyses, such as causal inference methods, to better understand the underlying dynamics between the variables.

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