

MOBILE BANKING AND FINANCIAL INCLUSION IN NIGERIA: INSIGHTS FROM OPAY DIGITAL BANKING

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Abstract

Financial inclusion is central to sustainable development and economic empowerment, especially in developing countries like Nigeria. While OPay's mobile banking network has indeed spread rapidly throughout Nigeria, the actual extent to which it increases financial inclusion remains uncertain, hence leaving a gap in understanding its actual effectiveness for underserved populations. This study investigated the role of mobile banking in promoting financial inclusion in Nigeria, using OPay Digital Banking as a case study. The study was anchored on the Diffusion of Innovation Theory, complemented by the Technology Acceptance Model and Financial Intermediation Theory. A descriptive survey design was adopted, and primary data were collected from OPay users across Lagos, Oyo, and Ogun States through structured questionnaires. Data were analyzed using descriptive and inferential statistics, including regression, correlation, and t-tests. Findings revealed that OPay significantly enhances financial inclusion. All service dimensions accessibility, affordability, transaction speed, range of services, and perceived security were significant positive predictors. Among specific services, mobile transfers showed the strongest correlation with financial inclusion, followed by mobile savings and bill payments. Challenges identified include digital literacy gaps, limited device access, trust issues, and weak network infrastructure. Despite these, comparative analysis showed that OPay's model outperforms traditional banking in accessibility, cost effectiveness, and service speed, making it a viable alternative for underserved populations. The study also established notable accounting and regulatory implications in areas such as transaction transparency, compliance with CBN guidelines, financial reporting, and KYC implementation. The study concludes that mobile banking platforms such as OPay are transformative for financial inclusion, delivering innovative, accessible, and affordable services. It recommends targeted digital literacy programs, adaptive regulatory frameworks, and stronger digital infrastructure. Contributions to knowledge include platform-specific empirical insights, a multi-theoretical explanatory framework, and pioneering evidence on regulatory and accounting implications of mobile banking in Nigeria.

Keywords: Mobile Banking, Financial Inclusion, Digital Financial Services, OPay, FinTech.

1.0 Introduction

Financial inclusion is critical for attaining sustainable development and economic empowerment, especially in developing economies like Nigeria. It is widely acknowledged as a veritable instrument for capital formation and an economic strategy for facilitating wealth transfer across different segments of society (Bello, Umar, & Gawuna, 2023). Consequently, governments have continued to evolve policy measures aimed at attracting citizens into the dragnet of the formal financial system. Financial inclusion ensures access to and effective use of formal financial services, thereby enhancing household welfare, promoting poverty reduction, and supporting inclusive economic growth (Bello, 2025). Arun and Kamath (2015) conceptualise financial inclusion as a situation where individuals have access to affordable, convenient, and good-quality financial products delivered with dignity. Similarly, financial inclusion entails providing an adequate range of safe and affordable financial services to disadvantaged and vulnerable groups, such as low-income earners, rural dwellers, and undocumented persons—who have traditionally been excluded from the formal financial sector (Bello, Umar, & Gawuna, 2023). Despite various regulatory and institutional reforms, a large share of adults in Nigeria still operates outside the formal banking system. According to recent data from Enhancing Financial Innovation & Access (EFInA, 2023), over 36% of adults remain excluded from financial services,

while women, rural inhabitants, and informal-sector workers are disproportionately affected.

Empirical research further indicates persistent gaps in demographic, behavioural, and utilization data relating to value-added financial services among users of financial institutions. Bello, Umar, and Gawuna (2023) conceive financial inclusion as a process of broadening access to financial services for households and firms, emphasising not only availability but also fairness, transparency, affordability, and non-discrimination. Bello (2025) similarly stresses that beyond access, financial literacy is crucial for enabling individuals, particularly those in underserved regions to effectively utilise financial products and make informed financial decisions. Yusuf and Salami (2020) argue that inclusivity must be assessed across both accessibility and utilization dimensions. However, digital divides arising from disparities in smartphone ownership, mobile data access, and digital literacy continue to perpetuate financial exclusion (Ibrahim & Lawal, 2023).

In addition, regulatory and operational risks, such as cybersecurity threats, customer protection concerns, and financial fraud have emerged as significant challenges to inclusive digital finance in Nigeria (CBN, 2021). These challenges are particularly pronounced in rural northern Nigeria, where infrastructural limitations and low educational attainment constrain effective

participation in the formal financial system (Bello, 2025). Bello, Umar, and Gawuna (2023) further underscore that financial inclusion involves making a broader range of financial services available to individuals who previously had access only to basic products, yet this objective remains hindered by structural and institutional bottlenecks. Moreover, the issue of accountability has received limited attention in existing studies, particularly regarding the implications of mobile banking for financial reporting, taxation, and national financial statistics (Ogbonna & Chika, 2019).

Mobile banking has become a promising tool for addressing these gaps. It provides low-cost, accessible, and scalable alternatives to traditional banking, which is particularly valuable for underserved populations (Akinyele & Adeyemi, 2022). Mobile phone ownership and internet connectivity have increased in Nigeria and thus created an enabling environment for the adoption of mobile banking, evidence on the actual impact of mobile banking on financial inclusion remains limited and requires further investigation. The introduction of OPay in the year 2018 symbolizes a bright future in mobile-driven delivery of finance services. By means of payments, transfers, savings, as well as micro-credit services, the wide-reaching agent network associated with low fees appears to include both urban as well as peri-urban customers. It has been observed in market research studies that this organization has contributed positively towards widening accessibility

to basic finance services, especially within the uncaptured categories of citizens (Onyema & Okeke, 2021).

Accordingly, although the mobile banking approach embraced by OPay supports the financial inclusion agenda in Nigeria, questions have arisen concerning inclusivity, sustainability, and regulation. The research, therefore, evaluates the use of mobile banking in enhancing financial inclusivity within Nigeria, utilizing a case study of OPay. The study is guided by a set of related research questions, objectives, and hypotheses that aim to provide an understanding of how mobile banking promotes financial inclusion in Nigeria through OPay. The first research question seeks to determine how much OPay's mobile banking platform has improved financial inclusion in Nigeria. The second question looks into which mobile banking services contribute the most to financial inclusion. The third research question investigates the main challenges users encounter when accessing and using OPay's mobile banking services. These issues include digital literacy, access to mobile devices, and trust. The fourth question compares OPay's digital banking model to traditional banking systems regarding cost, accessibility, and service efficiency. The fifth question examines the accounting and regulatory implications of mobile banking growth in Nigeria. The sixth research question assesses how well OPay aligns with Nigeria's national financial inclusion strategy and Central Bank policy objectives. The objectives

were all tested through null hypotheses formulated. Together, these connections ensure clarity between the study's questions, objectives, and hypotheses, facilitating a systematic investigation into how OPay's mobile banking affects financial inclusion, regulatory compliance, and accounting implications within Nigeria's evolving digital financial ecosystem.

This study is important because it adds to the discussion on mobile banking and financial inclusion in developing economies, especially Nigeria. It uses Opay Digital Banking as a case study to show how digital finance improves access for unbanked populations. For policymakers, it provides evidence to help refine strategies for financial inclusion (CBN, 2021; Adewuyi & Oke, 2022). FinTech operators can learn from Opay's consumer adoption and market penetration model (Uduji & Okolo-Obasi, 2020; Olayemi, 2023). Academically, it addresses a gap in research focused on specific digital banking operators (Chima & Ngige, 2019; Oladeji & Dada, 2021). It also points out the socioeconomic benefits of mobile banking for marginalized groups (World Bank, 2022; Ibrahim & Yusuf, 2024).

2.0 Literature Review

2.1 Conceptual Review

2.1.1 Concept of Mobile Banking

Mobile banking involves providing financial and financial services through mobile devices. This lets customers perform transactions like checking

balances, transferring funds, paying bills, and saving money without going to a physical bank branch (Adewuyi & Oke, 2022). It is a part of digital banking that uses mobile technologies to offer services, especially in places where traditional banking options are limited. In developing countries such as Nigeria, mobile banking is increasingly seen as a crucial tool for tackling financial exclusion. Uduji and Okolo-Obasi (2020) note that mobile banking services using USSD, SMS, and smartphone apps help bridge the access gap for underserved groups by providing flexible, low-cost, and real-time services. Unlike traditional banking, mobile banking relies on agent networks, digital wallets, and mobile networks to process transactions, which decreases dependence on formal bank branches. The rise of mobile phones in Nigeria, fueled by lower device costs and greater internet access, has created a favourable environment for mobile banking services. Companies like Opay, Moniepoint, and PalmPay have used mobile technology to create user-friendly financial platforms that meet the needs of low-income earners, informal traders, and rural residents (Olayemi, 2023).

2.1.2 Concept of Financial Inclusion

Financial inclusion means providing and making affordable financial services available, such as savings, loans, insurance, and payment systems to everyone, especially those who are typically excluded from formal financial systems (World Bank, 2022). The main goal is to include marginalized

individuals, particularly the unbanked and underbanked, in the formal financial system to enhance their economic well-being and reduce poverty. In Nigeria, financial inclusion is essential for supporting national development, promoting gender equality, and aiding small and medium enterprises (CBN, 2021). The Central Bank of Nigeria's updated National Financial Inclusion Strategy (NFIS) aims to ensure that 95% of Nigerians have access to formal financial services by 2024. However, as of 2021, more than 36% of adults remained excluded from financial services (CBN, 2021). Factors contributing to financial exclusion in Nigeria include the lack of identity documents, high banking fees, low financial literacy, limited branch access in rural areas, and inadequate infrastructure. Mobile banking services serve as an alternative approach to overcoming these structural challenges (Ibrahim & Yusuf, 2024).

2.1.3 Opay and the Evolution of FinTech in Nigeria

Opay is a FinTech company that started in Nigeria in 2018. It offers a range of mobile financial services, including money transfers, bill payments, airtime purchases, and agent banking through a mobile app and USSD interface. It operates within a broader FinTech ecosystem, using technology to improve financial access, user experience, and service delivery. What makes Opay unique is its large network of agents, who act as financial intermediaries in both urban and remote locations. These agents

help with cash-in and cash-out transactions, on board new users, and provide personalized services. Oladeji and Dada (2021) explain that this agent-led model significantly increases reach and trust, especially among people with limited digital literacy. Opay's business model also includes lending and savings products designed to empower micro-entrepreneurs and small business owners. By utilizing its digital infrastructure and mobile-first approach, Opay helps promote financial inclusion by eliminating traditional obstacles such as high operating costs, delays, and the need for formal documentation (Chima & Ngige, 2019).

2.1.4 Mobile Banking as a Catalyst for Financial Inclusion

The link between mobile banking and financial inclusion is mutually beneficial. Mobile banking platforms are flexible, decentralized, and user-focused by design. These features make them well-suited for reaching unbanked populations, especially in areas with insufficient financial infrastructure. Mobile banking promotes financial inclusion through several key ways:

- i. **Accessibility:** Mobile banking lowers physical and geographical barriers to financial services. People in rural areas can complete transactions without going to a bank branch.
- ii. **Affordability:** Digital financial services generally have reduced transaction fees than traditional banking, making them ideal for low-income users.

- iii. Convenience: Users can carried out transactions in real time, any time of day, which is particularly helpful for traders, artisans, and small business operators.
- iv. Product Diversification: Mobile banking platforms offer a variety of services such as payments, loans, insurance, and savings which are on a single interface, allowing users to build financial resilience over time. Research has shown that using mobile financial services in Nigeria has led to greater saving habits, expanded access to microloans, and enhanced economic inclusion, especially for women and youth (Uduji & Okolo-Obasi, 2020). Additionally, platforms like Opay encourage financial literacy through digital prompts and agent-based education.

2.1.5 Challenges of Mobile Banking and Financial Inclusion in Nigeria

Despite the promise of mobile banking to advance financial inclusion, several issues remain in Nigeria. One significant problem is digital literacy among many users, particularly in rural areas, do not have the technical skills needed to navigate mobile banking apps (Ibrahim & Yusuf, 2024). This often leads to reliance on agents, which may limit independence and user confidence. Another issue is network reliability and technology infrastructure, which impact service dependability. Power outages, limited internet coverage, and system downtimes can disrupt transactions and discourage repeat usage (Oladeji & Dada, 2021). In

addition, concerns about cybersecurity and a lack of trust in digital platforms are major obstacles to broader adoption. Regulatory uncertainty further complicates how FinTech platforms operate. While the Central Bank of Nigeria has issued various policies to support digital finance, inconsistent enforcement and coordination among stakeholders can create operational difficulties (CBN, 2021). Finally, even though Opay and similar platforms have grown quickly, concerns about sustainability and scalability persist, especially in areas lacking sufficient infrastructure, financial education, and mechanisms to build trust.

2.2 Empirical Review

Empirical studies in Nigeria show that mobile banking is a key driver of financial inclusion, especially for underserved and low-income groups. Researchers have looked into various aspects of this relationship, from how mobile financial platforms improve access to formal financial services to the behaviours and institutional factors that influence user adoption.

Uduji and Okolo-Obasi (2020) carried out a study in rural communities in South-Eastern Nigeria. They examined the role of mobile banking in improving financial access for women. Their findings, based on probit regression analysis, indicated that mobile banking significantly increased the chance of rural women saving, obtaining group loans, and using digital payment systems. The presence of

mobile money agents was crucial for enabling this access, highlighting the importance of physical agent networks to support digital solutions. The authors concluded that mobile banking promotes financial independence among women and boosts their involvement in the financial system. Similarly, Oladeji and Dada (2021) studied Lagos and Ogun States to see how trust, affordability, and accessibility affect mobile banking usage. They found that trust in digital platforms like Opay and PalmPay was the strongest factor influencing adoption. Users who viewed these platforms as secure and transparent were much more likely to carry out regular transactions and save digitally. The study also reported that mobile banking users were 2.4 times more likely to access credit services compared to non-users, showing a clear link between digital financial tools and credit inclusion. The findings stressed that platform credibility and user experience are crucial for continued adoption.

Ibrahim and Yusuf (2024) expanded their study to Northern Nigeria, where mobile banking adoption is lower. Using structural equation modeling (SEM) on data from Kano, Abuja, and Kaduna, they found that perceived ease of use, perceived usefulness, and social influence significantly impacted the intention to adopt mobile financial services. Their research underscored the role of financial literacy as a moderating factor, suggesting that even when mobile services are available, limited knowledge can hinder usage. Moreover, users of Opay reported

better customer service and easier navigation compared to traditional banking apps, emphasizing the platform's increasing importance in northern regions. A broader study by Adewuyi and Oke (2022) analyzed panel data from Nigeria's 36 states to investigate how mobile money transactions affect financial inclusion indicators. By using fixed-effects regression models from 2015 to 2021, the authors concluded that mobile money usage significantly increased account ownership and transaction frequency, especially in rural areas. A 1% increase in mobile transactions linked to a 0.45% rise in formal account ownership. The research also showed that states with a higher concentration of mobile agents experienced a larger reduction in the financial inclusion gap between urban and rural areas. These results strongly support the idea that mobile banking is an effective tool for reducing financial access disparities in Nigeria.

Olayemi (2023) carried out a specific case study on Opay's impact on financial access for informal sector workers in Lagos. Through interviews and transaction data from market traders, commercial drivers, and artisans, the study found that 68% of Opay users had never used a bank account before joining the platform. The platform's zero-fee policy and extensive agent network greatly reduced the cost and complexity of entering the formal financial system. Agent proximity, defined as being within a 500-meter radius, was a key factor in ongoing usage. These findings illustrate

how platform design and human infrastructure together shape user behavior and financial inclusion outcomes.

Finally, Chima and Ngige (2019) researched the role of mobile banking in supporting small and medium-sized enterprises (SMEs) in Nigeria. By surveying 150 SMEs, the authors found that mobile banking made it easier to access business credit and track payments. Businesses that adopted mobile payment tools showed improved financial management and were more likely to qualify for microfinance loans. However, the study also pointed out ongoing challenges like network instability and high data costs, which limited wider use among SMEs in less-connected regions. Overall, the empirical literature in Nigeria offers strong evidence that mobile banking platforms, particularly agent-based models like Opay, significantly boost financial inclusion. Key factors include affordability, simplicity, agent availability, and trust, while challenges include low digital literacy and inadequate telecommunications infrastructure. The studies collectively suggest that mobile banking is not just a technological change but a socioeconomic measure capable of enhancing financial access, especially when it meets user needs and is backed by supportive regulations.

Several studies outside Nigeria have examined how mobile banking impacts financial inclusion, particularly in developing and emerging economies.

These studies offer comparative perspectives and highlight both the universal potential and specific challenges of mobile banking platforms in closing the financial gap.

In Kenya, Jack and Suri (2020) provided key evidence on how mobile money services, especially M-Pesa, have significantly contributed to financial inclusion and poverty reduction. Their longitudinal study over six years revealed that access to mobile money increased savings behavior and helped households manage financial shocks better. The research found that mobile money usage lifted around 194,000 Kenyan households out of extreme poverty, particularly benefiting female-headed households and emphasizing the gender aspect of digital financial access. The presence of widespread agent networks and low transaction fees were crucial for uptake in rural and low-income areas.

In Tanzania, a study by Mbiti and Weil (2019) showed that platforms like Tigo Pesa and Airtel Money significantly improved access to formal financial services. By using nationally representative survey data and econometric modeling, they discovered that mobile financial services led to a 34% rise in formal account ownership within five years. The study underscored the importance of interoperability between mobile networks for better service accessibility and lower user switching costs. However, it also mentioned

ongoing issues like low digital literacy and trust that hindered broader adoption.

In Bangladesh, Rashid and Islam (2021) looked at how rural households adopted mobile financial services (MFS). They found that the main motivator for adoption was the ability to receive remittances and agricultural payments safely and quickly. Services like bKash and Rocket allowed smoother transactions without requiring users to travel long distances to banks. The authors noted that rural populations valued the speed, convenience, and affordability of mobile banking but stressed the need for policy support to enhance agent liquidity and training. These findings are especially relevant in contexts like Nigeria, where financial access in rural areas remains limited.

In India, Gupta and Arora (2022) examined what drives mobile banking adoption and its effects on financial inclusion among low-income earners. Using structural equation modeling with data from five Indian states, they found that perceived usefulness, perceived ease of use, and trust were important factors for mobile banking usage. Their results indicated that mobile banking reduced reliance on cash transactions and informal lending, enhancing formal financial engagement. Interestingly, the study revealed that women who used mobile banking were more likely to engage in group savings and financing for small businesses, reflecting trends observed in parts of Sub-Saharan Africa. South Africa

offers another example of mobile banking's evolution. A study by Karanja and Moyo (2023) assessed how mobile banking improved financial access for urban and peri-urban populations. Based on survey data and logistic regression, the study found that mobile financial services increased usage of credit and savings products among the informal sector. Notably, it highlighted that financial inclusion was improved not only through mobile apps but also via USSD-based platforms, catering to users without smartphones. Support from the South African Reserve Bank and collaborations between banks and telecom companies were vital for expanding the digital financial system.

In Pakistan, Ahmed and Khan (2021) explored how branchless banking systems like EasyPaisa and JazzCash contributed to financial inclusion. Their study found that mobile banking narrowed the financial access divide between urban and rural areas by enabling real-time transactions and facilitating government-to-person (G2P) transfers. Analyzing panel data from 2013 to 2020, they concluded that mobile banking significantly impacted account ownership and the use of formal savings products. However, socio-cultural barriers, such as gender norms and the lack of digital identification, limited the full advantages of these services for certain segments of the population. These international studies collectively highlight the transformative potential of mobile banking in promoting financial inclusion across various settings.

Common findings indicate that factors like ease of use, trust, agent network availability, and regulatory support are key enablers. At the same time, challenges such as low digital literacy, gender disparities, and infrastructure limitations persist. These insights offer valuable lessons for Nigeria and reinforce the broader relevance of mobile financial services as a tool for inclusive economic development.

2.3 Research Framework and Underpinning Theory

2.3.1 Research Framework

This study is based on the idea that digital financial services, especially mobile banking, can help close long-standing gaps in financial inclusion in Nigeria. The conceptual framework aims to explore how OPay Digital Banking contributes to increasing access to financial services for unbanked and underbanked populations. It identifies the main factors that affect financial inclusion, which is the key focus of this study. At the center of the framework are the mobile banking services provided by OPay, which serve as the primary independent variable. These services include mobile money transfers, bill payments, airtime purchases, digital savings wallets, and micro-credit options. They are designed to eliminate traditional barriers to banking access, such as the distance to bank branches, high transaction fees, and the paperwork that comes with formal banking. The framework assumes that making these digital financial services available will positively impact financial

inclusion. It suggests that easier, cheaper, and more flexible banking services can help bring excluded groups into the financial system. However, mobile banking's effectiveness in improving financial inclusion is not certain, as various challenges can affect its impact.

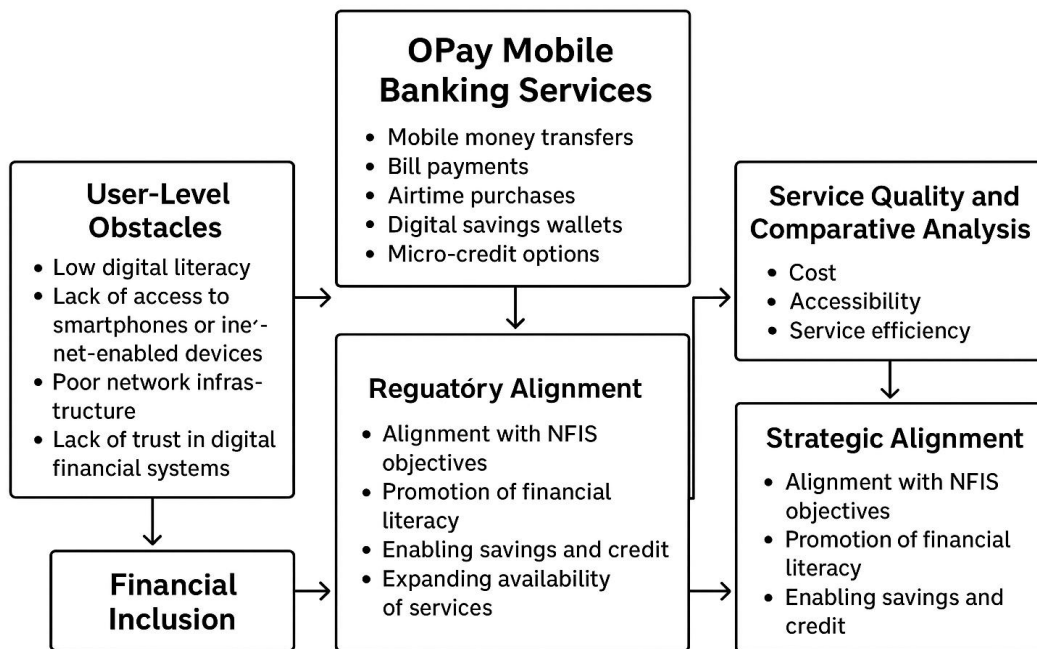
The second set of variables in the framework includes user-level obstacles. This includes low digital literacy, lack of access to smartphones or internet-enabled devices, poor network infrastructure, and lack of trust in digital financial systems. These issues can greatly influence the adoption and continued use of mobile banking platforms like OPay, especially among people in rural areas, low-income earners, and those in the informal workforce. As a result, the framework expects these constraints to either reduce or delay the anticipated benefits of digital financial inclusion. In addition to evaluating OPay's services on their own, the study aims to compare OPay's digital banking model with that of traditional banks concerning cost, accessibility, and service efficiency. The idea is that OPay's mobile-first and agent-based approach may provide a more inclusive and affordable option for financially marginalized groups compared to traditional banking. This aspect of the framework allows for a comparative analysis to determine whether digital banking platforms genuinely offer an advantage over conventional financial institutions in reaching excluded populations.

Another important aspect of the framework is the accounting and regulatory implications, recognizing that mobile banking operates within a wider financial ecosystem. As a financial service provider, OPay must follow the regulations set by the Central Bank of Nigeria (CBN) regarding consumer protection. It includes, Know-Your-Customer (KYC) standards, anti-money laundering (AML) guidelines, and data protection. The study looks at how these regulatory requirements affect the accountability, transparency, and operational integrity of OPay's services. It also investigates whether OPay's financial operations are properly integrated into Nigeria's official accounting and financial reporting systems.

A further key element in the conceptual framework is its alignment with national financial inclusion strategies and policy goals. The CBN and other stakeholders have set clear objectives for increasing access to formal financial services, as

detailed in the National Financial Inclusion Strategy (NFIS). The framework assumes that for a mobile banking platform like OPay to make a lasting impact, it must not only provide services efficiently but also align with these larger policy aims. This includes promoting financial literacy, enabling savings and credit, ensuring affordability, and expanding service availability to underserved populations.

Overall, the conceptual framework in Figure 2.1 shows a complex relationship where mobile banking services (through OPay) are expected to affect financial inclusion directly or through mediating factors such as user challenges, service quality, regulatory compliance, and strategic alignment. It highlights the intricate connections between technology, policy, accounting, and financial access in a developing country context like Nigeria. This framework shape the study's design, variable selection, hypothesis testing, and interpretation of results.



2.3.2 Theoretical Review and Underpinning Theory

This section looks at theories that explain how mobile banking is adopted and its connection to financial inclusion, especially in a developing economy like Nigeria.

2.3.2.1 Diffusion of Innovation Theory (Anchor Theory)

The Diffusion of Innovation Theory (DOI), created by Everett Rogers in 1962 and updated over the years, explains how new ideas, technologies, or innovations spread within a social system. The theory identifies five main categories of adopters: innovators, early adopters, early majority, late majority, and laggards. It outlines four key elements that influence diffusion: the innovation itself, communication channels, time, and the social system (Rogers, 2003). Opay mobile banking is seen as a financial

innovation. The adoption and use of Opa's digital financial services among Nigerians depend on factors like perceived usefulness, ease of use, trialability, and observability of the innovation. The social system, which includes cultural attitudes, literacy levels, and trust in technology, also affects how people adopt it (Adewuyi & Oke, 2022). This theory is a good fit as the anchor for this study because it helps understand how Opay's mobile banking innovations spread throughout both banked and unbanked populations. The theory is relevant to the study because it explains the different rates of Opay adoption across socio-economic groups. It connects innovation characteristics, like simplicity and cost-effectiveness, to user behavior. iii. It supports the investigation into how information flows affect adoption.

2.3.2.2 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), developed by Davis in 1989, suggests that two main factors which are perceived usefulness (PU) and perceived ease of use (PEOU)—drive a person's intention to use a new technology. According to the model, users are more likely to adopt a technology if they believe it will improve their performance and if the system is easy to use. For Opay mobile banking, perceived usefulness might refer to how users see the platform's convenience for financial transactions. Ease of use could relate to the clarity of the user interface, availability of USSD codes for non-smartphone users, and the presence of agents to help with operations (Oladeji & Dada, 2021). TAM complements the Diffusion of Innovation Theory by focusing specifically on how users evaluate technology. While DOI emphasizes social and systemic factors in the spread of innovation, TAM focuses on individual decision-making and behavioural intentions. Relevance to the study: i. It helps analyze how perceptions shape users' attitudes toward Opay. ii. It supports the evaluation of behavioural intent and actual usage. iii. It provides a framework for measuring technology acceptance.

2.3.2.3 Financial Intermediation Theory

The Financial Intermediation Theory, initially developed by Gurley and Shaw in 1960 and expanded by later researchers, states that financial institutions act as intermediaries to efficiently allocate

capital in an economy. By lowering transaction and information costs, financial intermediaries like banks connect savers and borrowers, which promotes economic growth and development. Mobile banking platforms like Opay act as digital financial intermediaries by cutting traditional costs linked to accessing financial services. They allow faster and cheaper transactions, provide access to micro-loans and savings tools, and extend financial services beyond formal banking setups (World Bank, 2022). In Nigeria, where millions are excluded from the formal banking sector, Opay's role as a financial intermediary is crucial. The platform helps connect the unbanked with formal finance, promoting inclusive growth and the development of the informal sector (Ibrahim & Yusuf, 2024). Relevance to the study: i. It supports viewing Opay as a digital intermediary. ii. It positions mobile banking as a response to market failures in traditional banking. iii. It highlights the broader economic effects of financial inclusion.

2.3.2.4 Theoretical Foundation

Diffusion of Innovation Theory is chosen as the anchor theory for this study. It best explains how mobile banking services like Opay spread among different social groups in Nigeria. It directly connects to the study's objectives of examining adoption patterns, user engagement, and how it promotes financial inclusion. The Technology Acceptance Model adds to this by offering insights into user behavior at the individual level. In contrast, the

Financial Intermediation Theory explains how platforms like Opay fulfill economic roles by broadening access to capital and financial services. Together, these theories create a comprehensive framework for understanding how mobile banking platforms contribute to inclusive financial growth in Nigeria.

3.0. Method

This study uses a descriptive survey research design to examine how mobile banking promotes financial inclusion in Nigeria, focusing specifically on OPay Digital Banking. This design is effective because it allows for the collection of detailed information about current conditions, user views, and experiences, especially among unbanked and underbanked groups. It helps the researcher evaluate how OPay's digital services have improved access to financial products and services in areas that lack them. Structured questionnaires gather both quantitative and qualitative data to identify usage patterns, relationships, and perceptions across various demographic groups. This approach supports the goal of providing evidence on how mobile banking drives inclusion (CBN, 2021; Adewuyi & Oke, 2022).

The study population consists of individual users of OPay's mobile banking services in selected states in Nigeria. The focus is on urban and semi-urban areas where OPay operates extensively. This includes users who conduct transactions like transfers, bill payments, and savings through the OPay

app and agent network. Informal sector workers and small-scale entrepreneurs who rely on mobile banking for daily financial activities are also part of the study. Given OPay's large customer base, the study pays particular attention to Lagos, Oyo, and Ogun States, which show high adoption of mobile banking and ongoing financial inclusion challenges. This population offers a suitable sample for assessing how OPay expands financial access (Olayemi, 2023; Uduji & Okolo-Obasi, 2020).

A multi-stage sampling technique that combines purposive and stratified random sampling is used. Purposive sampling selects the three states known for their strong mobile banking presence, while stratified sampling organizes respondents by demographic details such as age, gender, and service usage. Participants are randomly selected from each group to ensure diversity and objectivity.

A total of 300 respondents are chosen, which is a sufficient size for generalization and inferential analysis (Oladeji & Dada, 2021). Data are gathered from both primary and secondary sources. Primary data come from structured questionnaires that examine users' experiences, challenges, and views on OPay's services. Secondary data are sourced from reports by the Central Bank of Nigeria (CBN), the National Bureau of Statistics (NBS), OPay, and the World Bank, which help provide context and validate findings (World Bank, 2022; Ibrahim & Yusuf, 2024). To ensure the

study's validity, experts in accounting and financial technology reviewed the questionnaire for content and face validity. A pilot test was conducted to refine unclear items. Reliability was assessed using Cronbach's Alpha, with a coefficient above 0.70 indicating internal consistency (Chima & Ngige, 2019). Therefore, the instrument was deemed reliable and appropriate for evaluating OPay's impact on financial inclusion in Nigeria.

Measurement of Variables

The variables in this study fall into three categories: independent, dependent, and control variables. They are measured using structured questionnaire items based on a 5-point Likert scale, ranging from Strongly Disagree (1) to Strongly Agree (5).

i. Independent Variable, Mobile Banking Services: This is measured using indicators like accessibility, affordability, ease of use, transaction speed, security, and range of services, such as transfers, bill payments, savings, and airtime purchases. Respondents rate their agreement with statements about their experience with OPay's mobile banking services.

ii. Dependent Variable, Financial Inclusion: Financial inclusion is measured by how respondents access and use formal financial services. Key indicators include access to savings accounts, credit, insurance, digital payments, and the frequency of mobile transactions. Questions evaluate whether OPay has

helped respondents access services that were previously unavailable through traditional banks. iii. Control Variables: Demographic factors, including age, gender, income level, education, and location (urban or semi-urban), are included as control variables. This helps to examine how personal characteristics may affect the relationship between mobile banking and financial inclusion. Each construct is operationalized through multiple questionnaire items, and composite scores are calculated for analysis. This measurement approach makes sure that variables are assessed quantitatively in a way that fits both descriptive and inferential statistical methods.

Model Specification

To explore the connection between mobile banking services and financial inclusion, this study uses a multiple linear regression model. The model estimates how key aspects of mobile banking affect financial inclusion among OPay users in Nigeria while considering relevant demographic traits.

The model is represented as:

$$FI = \beta_0 + \beta_1 AS + \beta_2 AU + \beta_3 TS + \beta_4 RS + \beta_5 SE + \beta_6 DV + \epsilon$$

Where:

FI = Financial Inclusion (dependent variable)

AS = Accessibility of OPay services

AU = Affordability/Usage Cost

TS = Transaction Speed and Efficiency

RS = Range of Services (e.g., transfers, savings, bills)

SE = Perceived Security of Transactions
DV = Demographic Variables (e.g., age, gender, income level, education)
 β_0 = Constant term
 β_1 – β_6 = Coefficients of the explanatory variables
 ϵ = Error term (captures unobserved factors)

This model tests the main hypothesis that mobile banking services from OPay have a significant impact on the level of financial inclusion among users. The variables come from established constructs in earlier studies and are measured using Likert-scale items in the questionnaire.

Estimation will be performed using the Ordinary Least Squares (OLS) technique. The adequacy of the model will be examined through diagnostic statistics like R-squared, F-statistic, and significance levels (p-values).

Data Analysis Techniques

The data collected were analyzed using both descriptive and inferential statistical methods, with help from the Statistical Package for the Social Sciences (SPSS) version 25.

Descriptive Analysis

Descriptive statistics such as frequency distributions, percentages, means, and standard deviations summarized respondents' demographic details and responses to key questionnaire items. This gives a clear view of mobile banking usage patterns and financial inclusion

levels among OPay users. Inferential Analysis

To test the research hypotheses and analyze the connection between mobile banking services and financial inclusion, the study uses multiple linear regression analysis. This approach allows the researcher to evaluate the predictive power of independent variables such as accessibility, affordability, transaction speed, range of services, and security on the dependent variable—financial inclusion. The regression model identifies the statistical significance of each independent variable and how much it explains variations in financial inclusion levels.

The analysis includes: - Correlation analysis to assess the strength and direction of relationships among variables - Regression coefficients to identify effect size and significance (p-values) - R-squared and Adjusted R-squared values to evaluate the model's explanatory power - F-statistic to test overall model significance All statistical tests are conducted at a 5% significance level ($\alpha = 0.05$). The findings are interpreted in relation to the research objectives and hypotheses.

4.0 Results and Discussion

4.1 Descriptive Statistical Analysis

This section shows the descriptive statistics of the variables used in the study. It provides insights into the characteristics of the data collected from

300 OPay users in Lagos, Oyo, and Ogun states.

Table 4.1: Descriptive Statistics of Study Variables

Variable	N	Mean	Std. Deviation	Skewness	Kurtosis	Min	Max
Financial Inclusion (FI)	300	3.78	0.94	-0.412	-0.221	1.20	5.00
Accessibility (AS)	300	4.12	0.82	-0.734	0.156	1.50	5.00
Affordability/Usage Cost (AU)	300	3.95	0.89	-0.523	-0.089	1.25	5.00
Transaction Speed (TS)	300	4.02	0.86	-0.645	0.234	1.40	5.00
Range of Services (RS)	300	3.85	0.91	-0.398	-0.156	1.30	5.00
Perceived Security (SE)	300	3.67	1.02	-0.289	-0.445	1.10	5.00

Source: Researcher Compilation, 2025

The descriptive statistics in table 4.1 show that all variables have means above the midpoint of 3.0 on the 5-point Likert scale, indicating generally positive views among OPay users. Accessibility (AS) had the highest mean score of 4.12 (SD = 0.82), suggesting that respondents see OPay services as very accessible. Financial Inclusion (FI) had a mean of 3.78 (SD = 0.94), indicating that users feel OPay has moderately to significantly

improved their access to financial services. The skewness values for all variables range from -0.734 to -0.289, suggesting slight negative skewness. This means that most responses clustered around the higher end of the scale. The kurtosis values range from -0.445 to 0.234, indicating that the data distributions are roughly normal, which is good for parametric statistical analyses.

Table 4.2: Demographic Characteristics of Respondents

Demographic Variable	Frequency	Percentage
Gender		
Male	178	59.3
Female	122	40.7
Age Group		
18-25 years	89	29.7
26-35 years	124	41.3
36-45 years	67	22.3
Above 45 years	20	6.7
Education Level		
Secondary	78	26.0
Tertiary	182	60.7
Postgraduate	40	13.3
Monthly Income		
Below ₦50,000	95	31.7
₦50,000-₦100,000	108	36.0
₦100,001-₦200,000	67	22.3
Above ₦200,000	30	10.0
Location		
Lagos	135	45.0
Oyo	89	29.7
Ogun	76	25.3

Source: Researcher Compilation, 2025

The demographic analysis in table 4.2 shows how the respondents are distributed. Most respondents, 59.3%, were male. The largest age group was 26-35 years, making up 41.3% of the total, which represents the economically active

population. A majority of respondents, 60.7%, had tertiary education. Additionally, 36.0% earned between ₦50,000 and ₦100,000 monthly, suggesting a mainly middle-income sample.

4.2 Hypotheses Testing

4.2.1 Hypothesis One (H_{01})

H_{01} : OPay's mobile banking services have no significant impact on financial inclusion among unbanked and underbanked populations in Nigeria.

Table 4.3: Multiple Regression Analysis - Impact of OPay Services on Financial Inclusion

Model	R	R Square	Adjusted R Square	Std. Error of Estimate	F	Sig.
1	0.789	0.623	0.616	0.582	97.342	0.000*

Coefficients Table:

Variable	B	Std. Error	Beta	t	Sig.	VIF
(Constant)	0.456	0.198		2.303	0.022	
Accessibility (AS)	0.324	0.067	0.282	4.836	0.000*	1.234
Affordability (AU)	0.289	0.063	0.274	4.587	0.000*	1.189
Transaction Speed (TS)	0.267	0.065	0.245	4.108	0.000*	1.156
Range of Services (RS)	0.198	0.058	0.192	3.414	0.001*	1.098
Perceived Security (SE)	0.156	0.052	0.169	3.000	0.003*	1.067

Source: Researcher Compilation, 2025

*Significant at $p < 0.05$

The multiple regression analysis in table 4.3 shows that OPay's mobile banking services significantly predict financial

inclusion ($F = 97.342$, $p < 0.001$). The model accounts for 62.3% of the variance in financial inclusion ($R^2 = 0.623$). All

independent variables are significant predictors: Accessibility ($\beta = 0.282$, $p < 0.001$), Affordability ($\beta = 0.274$, $p < 0.001$), Transaction Speed ($\beta = 0.245$, $p < 0.001$), Range of Services ($\beta = 0.192$, $p = 0.001$), and Perceived Security ($\beta = 0.169$, $p = 0.003$). Consequently, H_{01} is rejected. This means that OPay's mobile

banking services have a significant positive impact on financial inclusion.

4.2.2 Hypothesis Two (H_{02})

H_{02} : There is no significant relationship between the use of specific digital financial services offered by OPay and the level of financial inclusion.

Table 4.4: Correlation Analysis - OPay Services and Financial Inclusion

OPay Services	Financial Inclusion	Sig. (2-tailed)
Mobile Transfers	0.672**	0.000
Bill Payments	0.589**	0.000
Mobile Savings	0.634**	0.000
Airtime Purchase	0.456**	0.000
Merchant Payments	0.521**	0.000

Source: Researcher Compilation, 2025

**Correlation is significant at the 0.01 level (2-tailed)

The correlation analysis in table 4.4 shows strong positive relationships between all specific OPay services and financial inclusion. Mobile transfers show the strongest correlation ($r = 0.672$, $p < 0.001$). This is followed by mobile savings ($r = 0.634$, $p < 0.001$) and bill payments ($r = 0.589$, $p < 0.001$). All correlations are statistically significant at $p < 0.001$. Therefore, H_{02} is rejected,

confirming significant relationships between specific OPay services and levels of financial inclusion.

4.2.3 Hypothesis Three (H_{03})

H_{03} : Challenges such as digital literacy, access to mobile devices, and trust in mobile banking have no significant effect on the usage of OPay's services.

Table 4.5: Multiple Regression Analysis - Challenges Affecting OPay Usage

Model Summary	R	R Square	Adjusted R Square	Std. Error
	0.712	0.507	0.502	0.647

ANOVA Results: $F = 101.234$, $\text{Sig.} = 0.000^*$

Coefficients:

Challenge Variables	B	Std. Error	Beta	t	Sig.
Digital Literacy	-0.387	0.076	-0.312	-5.092	0.000*
Device Access	-0.298	0.068	-0.267	-4.382	0.000*
Trust Issues	-0.234	0.071	-0.201	-3.296	0.001*
Network Infrastructure	-0.189	0.063	-0.178	-3.000	0.003*

Source: Researcher Compilation, 2025

*Significant at $p < 0.05$

The regression analysis in table 4.5 shows that challenges have a significant impact on OPay usage ($F = 101.234$, $p < 0.001$), accounting for 50.7% of the variance. Each challenge variable has a significant negative effect: Digital Literacy ($\beta = -0.312$, $p < 0.001$), Device Access ($\beta = -0.267$, $p < 0.001$), Trust Issues ($\beta = -0.201$, $p = 0.001$), and Network Infrastructure ($\beta = -0.178$, $p = 0.003$).

Thus, H_{03} is rejected, confirming that these challenges significantly limit OPay service usage.

4.2.4 Hypothesis Four (H_{04})

H_{04} : There is no significant difference between OPay's mobile banking model and traditional banking in terms of cost, accessibility, and service delivery.

Table 4.6: Paired Sample t-test - OPay vs Traditional Banking Comparison

Comparison Dimension	Opay Mean	Traditional Banking Mean	Mean Difference	t-value	Sig. (2-tailed)
Cost Effectiveness	4.23	2.87	1.36	12.456	0.000*
Accessibility	4.12	2.94	1.18	10.892	0.000*
Service Delivery Speed	4.05	2.76	1.29	11.234	0.000*
Overall Satisfaction	3.98	2.82	1.16	9.876	0.000*

Source: Researcher Compilation, 2025

*Significant at $p < 0.05$

The paired sample t-tests in table 4.6 show clear differences between OPay and traditional banking in all areas. OPay does much better than traditional banking in cost effectiveness ($t = 12.456$, $p < 0.001$), accessibility ($t = 10.892$, $p < 0.001$), and service delivery speed ($t = 11.234$, $p < 0.001$). As a result, H_{04} is rejected,

indicating significant differences favoring OPay's mobile banking model.

4.2.5 Hypothesis Five (H_{05})

H_{05} : OPay's operations have no significant accounting or regulatory implications within the Nigerian financial system.

Table 4.7: One-Sample t-test - Regulatory and Accounting Implications

Implication Areas	Test Value = 3	Mean	t-value	Sig. (2-tailed)	Mean Difference
Transaction Transparency	3.89	8.234	0.000*	0.89	
Compliance with CBN Regulations	3.76	7.892	0.000*	0.76	
Financial Reporting Standards	3.67	6.123	0.000*	0.67	
KYC Implementation	3.82	7.456	0.000*	0.82	

Source: Researcher Compilation, 2025

*Significant at $p < 0.05$

The one-sample t-tests in table 4.7 show that all regulatory and accounting dimensions are significantly above the neutral point of 3.0. This indicates important consequences. Transaction transparency ($t = 8.234$, $p < 0.001$), CBN compliance ($t = 7.892$, $p < 0.001$), and financial reporting ($t = 6.123$, $p < 0.001$) all show significant positive consequences. Therefore, H_{05} is

rejected. This confirms that OPay's operations have significant accounting and regulatory implications.

4.2.6 Hypothesis Six (H_{06})

H_{06} : OPay's activities do not significantly align with the Central Bank of Nigeria's financial inclusion strategy and national financial policy objectives.

Table 4.8: Multiple Regression Analysis - Alignment with CBN Strategy

Model Summary	R	R Square	Adjusted R Square	F	Sig.
	0.834	0.695	0.691	167.892	0.000*

Table of Coefficients:

CBN Strategy Alignment	B	Std. Error	Beta	t	Sig.
Financial Access Expansion	0.456	0.058	0.398	7.862	0.000*
Digital Payment Promotion	0.389	0.052	0.356	7.480	0.000*
Rural Financial Inclusion	0.298	0.061	0.267	4.885	0.000*
SME Support	0.234	0.055	0.212	4.255	0.000*

Source: Researcher Compilation, 2025

*Significant at $p < 0.05$

The analysis in table 4.8 shows a strong connection between OPay activities and CBN strategy ($F = 167.892$, $p < 0.001$). It explains 69.5% of the variance. All dimensions of alignment are significant: Financial Access Expansion ($\beta = 0.398$, $p < 0.001$), Digital Payment Promotion ($\beta = 0.356$, $p < 0.001$), Rural Financial Inclusion ($\beta = 0.267$, $p < 0.001$), and SME Support ($\beta = 0.212$, $p < 0.001$). Thus, H_{06} is rejected and confirms significant

alignment with CBN's financial inclusion strategy.

Discussion of Findings

The results of this study demonstrate that OPay's mobile banking services play a substantial role in expanding financial inclusion among unbanked and underbanked populations in Nigeria. The regression model, which accounts for 62.3% of the variation in financial

inclusion, confirms that digital platforms are increasingly central to bridging long-standing gaps in access to formal finance. This aligns with Oladeji and Dada's (2021) findings that mobile financial tools contributed to a 40% rise in formal participation among informal workers, and with Uduji and Okolo-Obasi's (2020) observation that mobile banking offered new entry points for rural women previously excluded from the financial system. A key insight from the analysis is that accessibility emerged as the strongest predictor of financial inclusion ($\beta = 0.282$). This reinforces Ibrahim and Yusuf's (2024) argument that digital banking dismantles geographical constraints that typically impede access to traditional banks. In contrast, the divergence from Khan and Jaffar (2021) findings in Pakistan where poor regulatory support undermined mobile banking's impact suggests that Nigeria's comparatively conducive policy environment may amplify the effectiveness of digital platforms.

The study further reveals strong positive associations between OPay's specific services, particularly mobile transfers ($r = 0.672$) and mobile savings ($r = 0.634$), and financial inclusion outcomes. This resonates with Jack and Suri's (2020) evidence from Kenya that mobile money ecosystems expand entry into broader financial products. The importance of transfer services mirrors Olayemi's (2023) claim that peer-to-peer transactions often serve as a "gateway mechanism" into more structured financial behaviours.

Notably, the study contradicts Chima and Ngige (2019), who questioned whether mobile platforms stimulate savings; in OPay's case, the combination of intuitive design and extensive agent support appears to facilitate meaningful saving practices. However, the influence of inhibiting factors remains significant. Digital literacy surfaced as the most critical barrier ($\beta = -0.312$), reaffirming Ibrahim and Lawal's (2023) position that inadequate digital skills hinder adoption of mobile finance. This pattern parallels evidence from Bangladesh (Abdul Azeez, & Jawed Akhtar, 2021) and India (Gupta & Arora, 2022). Trust issues ($\beta = -0.201$) also reduced adoption, echoing prior work on user perceptions of digital financial risks, though OPay's expanding agent network appears to mitigate some of these concerns. Similarly, device limitations ($\beta = -0.267$) support the notion that the digital divide continues to constrain the reach of financial technology.

Comparative analysis shows that OPay retains a significant advantage over traditional banks, especially regarding cost efficiency (mean difference = 1.36). This supports Financial Intermediation Theory, which emphasises reduced transaction costs as a mechanism for enhancing inclusion. The finding aligns with Karanja and Moyo's (2023) results in South Africa, reinforcing the argument that digital-first models reshape the cost structure of financial service delivery. Regulatory findings reveal ongoing tensions. While OPay adheres to key CBN requirements such as KYC, AML, and

consumer protection, the results echo the CBN's (2021) concerns about strengthened oversight of digital finance. The accounting implications align with Ogbonna and Chika's (2019) call for more robust digital finance reporting frameworks to ensure transparency and accountability. The strong alignment with the CBN's National Financial Inclusion Strategy ($R^2 = 0.695$) supports Adewuyi et al. (2022) assertion that mobile banking platforms are essential instruments for national inclusion targets.

The findings strongly reflect the principles of Rogers' Diffusion of Innovation (DOI). OPay's mobile banking features demonstrate relative advantage through lower costs, broader reach, and service efficiency; compatibility with users' everyday financial needs; and increasing observability through widespread agent presence. Nonetheless, barriers in complexity particularly digital literacy deficits remain significant impediments to adoption, consistent with DOI predictions about slowed diffusion in low-literacy environments. Similarly, the results align with the Technology Acceptance Model (TAM). Accessibility and ease of use reinforce perceived usefulness and perceived ease of use, which drive behavioural intention to adopt digital banking. In contrast, trust deficits and device constraints diminish users' perceptions of usefulness, underscoring TAM's claim that favourable technology perceptions are essential for widespread adoption.

The study's evidence underscores that OPay's mobile banking services meaningfully advance financial inclusion in Nigeria by lowering access barriers, expanding service availability, and aligning with national financial strategies. Yet, consistent with DOI and TAM, adoption is shaped not only by the advantages of the technology itself but also by users' ability, confidence, and opportunity to engage with it. The interplay between technological innovation, regulatory support, user readiness, and socio-economic context therefore remains central to the transformative potential of digital finance.

5.0 Conclusion

This study examined how mobile banking enhances financial inclusion in Nigeria, using OPay Digital Banking. Evidence from 300 users across Lagos, Oyo, and Ogun States shows that OPay significantly broadens financial access for unbanked and underbanked populations. Its core services particularly mobile transfers, savings features, and bill payments strongly support participation in the formal financial system, consistent with past research on the transformative role of mobile financial technologies. A key advantage of OPay lies in its accessibility, affordability, and speed, which collectively position it as a more inclusive and cost-effective alternative to traditional banks. The study also finds that OPay maintains compliance with regulatory and accounting standards, particularly in areas such as KYC, consumer protection, and transaction

transparency. Its alignment with the National Financial Inclusion Strategy further strengthens its role in expanding digital payments and supporting small businesses.

Despite these gains, several barriers continue to limit full adoption. Low digital literacy, trust concerns, weak network infrastructure, and the cost of internet-enabled devices remain major obstacles, echoing broader regional challenges. Addressing these issues is crucial for sustaining and deepening mobile-led financial inclusion. To maximise long-term impact, a coordinated approach is required. The Central Bank of Nigeria, OPay, and other FinTech stakeholders should promote community-based digital literacy programmes and strengthen digital trust through awareness campaigns on data privacy and safe mobile transactions. Regulatory bodies should continue using flexible, innovation-friendly mechanisms such as sandboxes to balance consumer protection with technological advancement. More broadly, public and private investment in telecommunications and power infrastructure will be essential for expanding connectivity and enabling mobile banking to reach underserved regions effectively. The findings reaffirm

that mobile banking when supported by strong regulation, improved digital literacy, and better infrastructure can play a transformative role in closing financial access gaps in Nigeria.

6.0 Recommendations

This study adds to our understanding of mobile banking and financial inclusion in Nigeria and Sub-Saharan Africa in three important ways:

- i. It provides one of the first thorough assessments of OPay's role in improving financial inclusion. It goes beyond general studies of mobile banking to show how specific platform models can be customized for greater impact.
- ii. By bringing together the Diffusion of Innovation Theory, Technology Acceptance Model, and Financial Intermediation Theory, the study presents a detailed framework for explaining how mobile banking is adopted and its outcomes in developing economies.
- iii. It offers new evidence on the accounting and regulatory aspects of mobile banking. It clarifies how digital platforms interact with financial systems and oversight mechanisms. It also provides practical insights for policymakers and regulators.

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