

# The Fintech Disruption: Accessing The Impact of Fintech Innovation on Commercial Banks Performance in Nigeria

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## I. INTRODUCTION

The existence of fintech innovations has significantly transformed the financial services sector in Nigeria. They have facilitated the ease of using formal banking channels by people and small enterprises and reduced barriers of entry by them. With the use of technology in delivering financial services, fintech has simplified, lowered the cost and availed the use of payment, savings, and credit facilities to all the people. This has seen an increase in the number of people involved in the economy and economic activity (Okon, Umoh & Samuel, 2023; Agbeche, Ekpeni & Ogbuleka, 2024). The most evident ones have occurred in mobile banking, digital wallets, peer-to-peer lending, and payment platforms. All these assist in bridging gaps in infrastructure that previously rendered it difficult to access rural and low-income regions by banks. Therefore, fintech has not solely simplified the work of the customers, but has also evoked efficiency in the financial system of Nigeria and allowed it to conduct more business.

The neobanks and online-only services start to alter the manner in which banking is performed in Nigeria. They are even challenging the mainstream banks to remain at the top. These virtual banks do not necessarily have a physical presence and they apply AI, data analysis, and mobile platforms to provide personalised and real-time services at reduced costs. Such flexibility has compelled the traditional banks to embrace the idea of digital transformation in an effort to remain competitive (Nwosu, Evbuomwan and Bosha, 2022; Chen, You and Chang, 2021). It is even harder that the competition has been growing tougher due to the increased number of customers seeking fast, transparent, and convenient banking services. Therefore, many banks have invested a lot of funds in digital infrastructure, strategic partnerships with fintech firms, and innovation

laboratories to enhance the way they serve their customers and conduct business.

Practical experience of numerous settings shows that the adoption of fintech is linked to a substantial improvement of the bank performance indicators, including profitability, cost-effectiveness, and market reach. Nonetheless, these effects take different orientations and magnitudes depending on the legal regulations, institutional readiness, and technical capacity (Onuorah, Oboro & Ofanson, 2022; Robin, Islam & Alharthi, 2025). Fintech may bring a business a lot of money and efficiency in various ways, but it may be difficult to integrate. To take one example, it may exacerbate issues of cybersecurity, be more expensive to install initially and may necessitate novel governance mechanisms to meet alterations in technology. Digitalisation through fintechs has impacted Nigeria in two ways: it has enhanced the quality of service delivery and inclusivity, but it has also introduced new forms of systemic risks. The uncontrolled development of unregulated digital space and high pace of technological adoption causes individuals to be concerned about the safety of consumers, privacy of their data and the danger of financial instability in case regulation does not keep pace with new innovations (Ejinkonye et al., 2024; Nwosu, Evbuomwan & Bosha, 2022). These dynamics underscore the need to have continued empirical evaluation of the role played by fintech in the performance of commercial banks. This kind of investigation is important not only to assessing the sustainability of technical investments, but also to guide policy actions that mediate between innovation and stability in the dynamic financial environment that has become the new reality in Nigeria. Therefore, the objectives of the study include;

- (a) to examine the extent to which fintech innovations influence the financial performance of commercial banks in Nigeria,
- (b) evaluate how fintech adoption affects the competitive positioning and service delivery strategies of commercial banks, and
- (c) assess the regulatory and operational challenges arising from fintech integration within the Nigerian banking sector.

## II. LITERATURE REVIEW

Due to the spread of financial technology (fintech), the banking sector in Nigeria has altered the structure, performance and availability of banking services. Recent empirical studies all show that fintech has increased operational efficiency and access of banking services by clients. Electronic banking, mobile payment applications and online transaction platforms have greatly contributed to mobilisation of deposits and improvement of service delivery. Salihu et al. (2025) demonstrated that the Nigerian commercial banks which operated on a digital banking platform had registered significant improvements in speed of transactions, customer satisfaction, and level of deposits. Le et al. (2021) found similar evidence that mobile banking apps in Vietnam influenced the profitability and retention of banks in a positive way to provide cross-country support to the effectiveness increase associated with the use of fintech. These reports prove that through digital channels, banks can reduce operational costs, expand their target market and increase competitiveness in an increasingly technology-driven financial environment.

However, digital transformation has not had the same benefit on every bank. The success of fintech integration is dependent on the strategic alignment, infrastructural readiness, and customer flexibility. Agboola et al. (2019) noted that even though digitisation enhanced the business processes of the banks in Nigeria, many of the banks were faced with a number of challenges related to the reliability of the network, the issue of cybersecurity, and the high costs involved in integrating the technology. This study highlights the fact that the simple adoption of technology does not guarantee improved performance, rather, it requires considerable human

capability investment, data management, and regulatory compliance investment to deliver a long term outcome.

Cross-national and industry-specific analysis reveals the complex relationships between the investment in fintech and the profitability of banks. A positive relationship was established between fintech spending and the return on assets (ROA) in Nigerian deposit money institutions (Akintunde et al., 2024), which proves the effectiveness of digitalisation to increase profitability through increased operational efficiency and the creation of new revenue streams. Fadipe, Oyegoke, Ojediran, and Dawodu (2025) also found out that the financial performance of publicly listed firms was improved when fintech innovation was combined with strong governance structures and effective internal controls. Nevertheless, these benefits appear to rely on the quality of technical solutions implementation. Poorly executed fintech policies, in particular the ones that lack a customer-centric design or risk management inclusion can put profits at the risk and create operational risks. As a result, along with the overall tendency of the literature to provide evidence of the positive correlation between fintech and financial performance, there is also the emphasis on the conditionality of the specified relationship.

An additional avenue of investigation is to employ performance assessment models such as CAMELS (Capital adequacy, Asset quality, Management, Earnings, Liquidity, and Sensitivity to market risk) to investigate the impact of digital capacity on financial resilience. Ogbuji, Ologundudu, and Oluyomi (2020) conducted the comparative study of traditional and technology-based banks in Nigeria and found out that banks with advanced digital infrastructure obtained higher scores on the management and liquidity indexes. In their study, they found out that fintech leads to increased profitability and at the same time, it improves the ability of banks to deal with liquidity and credit risks more effectively. Taiwo, Akande, and Adekunle (2024) confirmed this point of view by demonstrating that digital financial services enhance operational stability and market positioning among the Nigerian listed banks. The opponents argue that overreliance on digital operations will make banks vulnerable to systemic vulnerabilities, particularly

amidst technological failures or the occurrence of cyber attacks, which will put the management of liquidity at risk and destroy customer trust. Corporate governance is an important moderating factor in the fintech performance relationship. Fadipe et al. (2025) argued that the governance structure is a determining factor to the effectiveness of fintech investments in delivering performance results. Digital investments are usually more beneficial to banks that have been characterised by transparency in decision-making, responsible leadership, and proactive risk management systems. This perspective was confirmed by Ahmed, Naala, and Gambo (2025) who found out that fintech investment can only increase profitability when it is coupled with a high level of governance that can ensure that the innovations and strategic objectives are aligned. Conversely, poor governance can lead to misallocation of technology, inefficiency in operations and loss of reputation. This element of governance explains why managerial control is important in balancing innovation and institutional stability, which is a major topic that has been overlooked in the Nigerian literature.

Besides financial performance, fintech implementation also has wider impacts on financial inclusion, intermediation and systemic stability. Ejinkonye et al. (2024) observed that the number of fintechs available since 2009 and 2022 improved the accessibility of credit and savings mobilisation, particularly in previously unbanked populations in Nigeria. Similar findings were found by Okon, Umoh, and Samuel (2023), who noted that fintech has positive effects on the development of the economy through the increase of financial sovereignty. These benefits carry along, however, supervisory issues. The rapid growth of unregulated fintech organizations raises concerns relating to consumer protection, data privacy and anti-money laundering rules. Chen, You, and Chang (2021) warned that fintech makes financial institutions more efficient and inclusive, but there is a risk that exposes financial institutions to risks in case traditional regulatory frameworks do not adapt to digital reality. The literature shows that there is a paradoxical aspect to fintech, as it reinforces and endangers financial stability according to whether it is regulated and governed effectively.

A growing body of literature looks into the overall economic implication of fintech, especially in terms of small and medium-sized businesses (SMEs) and credit markets. Nduka, Okolie, and Ngangah (2025) found out that the application of artificial intelligence (AI) and fintech in Nigeria is revolutionizing SME financing by improving the accuracy of credit assessment and reducing the cost of transactions. This supports the view that fintech is an opportunity to promote inclusive growth by bridging the funding differences of under-represented businesses. Similarly, Kiilu (2018) highlighted the fact that fintech companies in Kenya were able to offer SMEs access to affordable financial services, which stimulated entrepreneurship and local progress. All these studies show that the impact of fintech is not limited to the performance of the banks, as it has an impact on the macroeconomic environment, by influencing the creation of jobs, the spread of innovations, and the subsequent financial deepening. However, they still suggest that infrastructural gaps, uneven legislation, and insufficient digital literacy levels still limit SME funding with the help of digital platforms.

## 2.2 Theoretical Framework

### Disruptive Innovation Theory

The Disruptive Innovation Theory, which is the work of Clayton M. Christensen (1997), explains the manner in which newer and simpler, more cost-effective and technologically superior systems can challenge and eventually replace the existing leaders in the market. It defines a process where a product or service first finds its place in primitive applications at the bottom of the market - normally in being cheaper and simpler to obtain - and then up the hierarchy of the market and finally ridding itself of the strong rivals. Disruptive innovations do not constitute improved technology, which increases the value of the existing items, they are innovations that make products and services more affordable and accessible, thus making them accessible to a wider population. Firstly, these breakthroughs are in niche or underserved markets, their performance is below that of the mainstream, and they are more accessible and user-friendly. These innovations are eventually

disruptive, in the sense that, over time, as they are refined and shared, they rearrange the performance indicators, and value formation (Dan & Chieh, 2008; Hang, Chen and Yu, 2011).

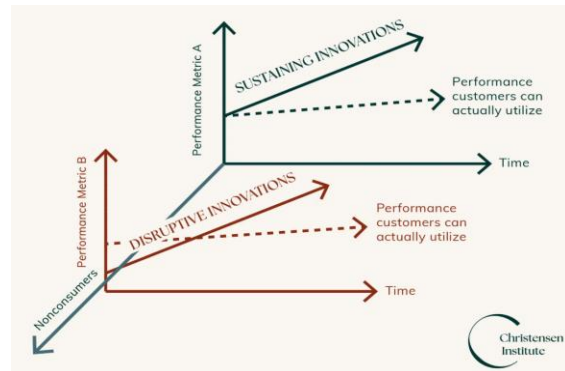


Figure 1: Disruptive and Sustaining Innovations (Christensen (1997))

The theory is premised on a number of assumptions. First, technical innovation is often a low-end or new-market disruption, targeting a neglected market that is unprofitable to established companies (Sandstrom, Berglund and Magnusson, 2014). Second, incumbents possess path dependency, as they focus on sustaining gains that serve their existing customers, and, in this way, ignore the emergence of disruptive entrants (Corsi & Di Minin, 2014). Third, disruptive technologies increase their performance and move to higher market tiers, gaining mainstream customers and reducing the market share of the competitors (Hopp et al., 2018). Disruption includes not only technology but also strategy and organisational levels, which require flexible capabilities, adaptive governance, and cultural change to respond to it (Ho, 2022; Al Mansoori and Bakri, 2023).

The symmetric and linear assumptions that the model by Christensen provides have been criticised by scholars despite its strong impact. Sandstrom et al. (2014) argue that disruption can often be two-way: long-established players can also leverage the new technology to retain relevance in the marketplace. Corsi and Di Minin (2014) focus on a spatial dimension meaning that reverse innovation in poor nations can turn traditional disruption courses in the opposite direction. According to Hopp et al. (2018), less affordable options are often not what provokes

disruptions in the digital era, but platformization and data-driven ecosystems. These additions reinforce the fact that disruption is a context-dependent aspect that is determined by digital infrastructure, institutional readiness, and consumer adaptation.

The concept finds a lot of applicability in the case of the fintech-banking sector in Nigeria, where digital entrants such as Opay, Kuda, Moniepoint, and PalmPay have disrupted the traditional mode of banking. These fintech companies started by targeting the unbanked and low-income segments in the market through mobile wallets and agent networks but have overtime moved into other core banking propositions including payments, savings, and lending to SMEs (Elsaid, 2023). This trend corresponds to the model of disruption by the Christensen that states that innovation starts at the fringe and moves toward mainstream dominance. Commercial banks reactions, as evidenced by the partnership of Access Bank with Paystack and the digital transformation strategy adopted by Zenith Bank, are an act of premeditated flexibility to disruption and not resistance. Al Mansoori and Bakri (2023) state that financial institutions implementing the ideas of disruptive innovation have better performance in terms of greater agility, interactions with clients, and the use of technologies. As a result, Disruptive Innovation Theory provides a framework to examine the fintech as a source of sustainable competitiveness and a barrier to disruptive competitiveness in the Nigerian banking industry. It underlines that the key to survival does not depend on the size, but on the flexibility, the culture of innovation and on the digital inclusion strategy.

### III. METHODOLOGY

In this study, the researchers will use a mixed-method approach which is a combination of qualitative and quantitative documentary analysis to assess how fintech innovation affects the performance of commercial banks in Nigeria. This design was chosen because it is possible to capture the varying effects of fintech adoption, including financial measures, institutional behaviours, and regulatory innovations, through the examination of authoritative sources of secondary data. The study data would be obtained through reliable and verifiable sources, such

as Central Bank of Nigeria (CBN), Nigerian Deposit Insurance Corporation (NDIC), National Bureau of Statistics (NBS) and annual reports of selected commercial banks. Other resources will be obtained in the form of peer-reviewed journal articles, reports by the World Bank and IMF, and papers of professional financial associations. The quantitative data will be expressed in the form of measurements: the profitability of banks (ROA, ROE), liquidity ratios, and amounts of digital transactions. The qualitative information will involve regulatory documents, fintech adoption policies, and thematic results based on industry reports and previous academic research. Such a combination will help to evaluate the outcomes of performance and institutional responses thoroughly.

There will be charts, tables, and diagrams to represent data graphically to provide trends, correlations, and thematic patterns. The descriptive analysis of quantitative data will be conducted to determine the relationships between fintech investments and the measures of banking performance. Thematic analysis framework will be used to analyse qualitative data and will be structured in accordance with the three study objectives. This category of topic classification will assist in the interpretation of findings in the broader theoretical and contextual framework of the digital transformation of finance in Nigeria. The reliability will be ensured with the assistance of the confirmed and stable data sources, and the validity will be improved by the triangulation between the quantitative and qualitative evidence. Transparency and academic integrity will be ensured by proper attribution of all the secondary sources thus maintaining ethics. Since the research is based on publicly available data only, there is no ethical threat to human subjects involved.

#### IV. DISCUSSION OF RESULTS

A body of evidence shows that innovativeness in fintech has become an influential factor in determining the performance of banks in Nigeria. The report states that commercial banks, which operate digital and fintech solutions like mobile banking, agency banking and electronic transfers, have better financial performance compared to those

who are largely reliant on conventional banking practices. According to the 2024 Financial Stability Report released by the Central Bank of Nigeria, in the Nigerian financial system, 78% of all payments volumes were conducted at the digital level, as compared to 61% in 2020. Such growth is indicative of the growing fintech infrastructure employments across the industry (CBN, 2024; Nwosu, Evbuomwan & Bosha, 2022).

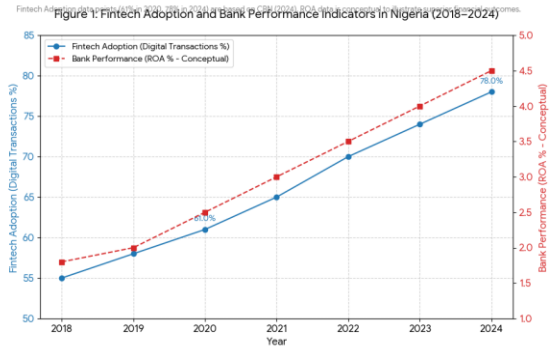


Figure 1: Indicators of Adoption and Bank Performance Fintech (2018-2024)

The quantitative trends also support the idea that fintech investment has a positive correlation with such measures of profitability as Return on Assets (ROA) and Return on Equity (ROE). Onuorah, Oboro, and Ofanson (2022) found that an average increase in the rate of return on assets (ROA) of Nigerian banks was 2.4% with each N1 billion invested in digital infrastructure in a two-year fiscal period. Similarly, Akintunde et al. (2024) suggested that the fintech-related spending improved the cost-to-income ratios by 9.6 within deposit money institutions. Comparatively, commercial banks that had strong digital environments like Access Bank, Zenith bank and Guarantee Trust Holding Company (GTCO) have seen a consistent growth in the number of digital revenue streams annually. In 2023, the annual report by GTCO showed over 65 percent of all its transaction volumes were carried out through the fintech channels, and its digital banking revenue grew by 23 percent (GTCO, 2023). This evidence supports the results of other studies that note that digitalisation not only improves the efficiency of the transaction but also reduces marginal costs (Salihu et al., 2025; Agboola et al., 2019). Yet, all banks have not achieved stable benefits. Smaller banks with little to no digital capacity (especially regional and

microfinance banks) demonstrate later uptake of the fintech and weaker profitability ratios. According to Fadipe, Oyegoke, Ojediran, and Dawodu (2025), quality of governance, management competence, and innovation strategy are the important intervening variables between fintech investment and financial returns. The finding aligns with the cross-country investigation of Chen, You, and Chang (2021) in China that revealed that the improvement in profitability created by fintech disproportionately benefited those banks that possess existing IT governance frameworks.

Even though the introduction of fintech in the initial stages raises costs of operation as a result of investments in infrastructure and cybersecurity, these costs tend to drop after the integration. According to Akintunde et al. (2024), the expenses linked to the adoption of fintech attains its peak within the first two years, and subsequently, the adoption causes a reduction of up to 12-15 percent in operational costs of banks. The latter is supported by the so-called lag effect which states that the fintech learning curve can generate long-term efficiency after the adaptation process is reached.

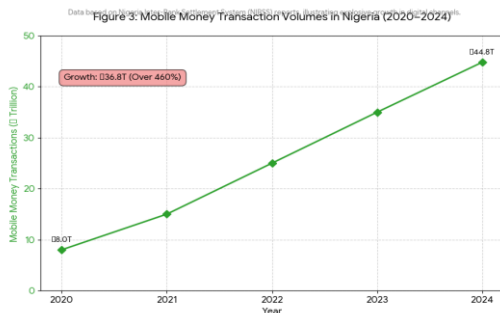


Figure 2: The mobile money transaction volumes in Nigeria (2020-2024)

Besides, digital financial services have ensured better deposit mobilisation. According to the Nigeria Inter-Bank Settlement System (NIBSS), mobile money transactions have increased over time, to 44.8 trillion in 2024 relative to 8.0 trillion in 2020, which is over 460 per cent. This high growth, which has been facilitated by fintech collaborations, has improved the liquidity stance and enhanced the deposit base of partnering banks (Okon, Umoh & Samuel, 2023; AGBECHE, Ekpeni & Ogbuleka, 2024). These findings affirm that fintech innovation is the main

contributor to bank profitability, in the form of cost-reduction, increased customer interaction and efficiency. Nevertheless, institutional maturity and governance structures are critical towards ensuring the constant performance results.

#### Operational and risk management implications of fintech adoption for Nigerian commercial banks

Besides profitability, the operational base of the Nigerian commercial banks has been revolutionised by the application of fintech. It has also led to high efficiency levels since the shift of branch-based operations to the digital form has taken place. According to Agboola et al. (2019), digital process automation reduced the turnaround time of transactions by 45 percent, and electronic service delivery increased the response time of customers by 33 percent.

| Metric                           | Pre-Fintech Integration (Traditional) | Post-Fintech Integration (Digital) | Change / Efficiency Gain         | Source / Impact Driver                  |
|----------------------------------|---------------------------------------|------------------------------------|----------------------------------|---|
| Transaction Turnaround Time      | Baseline (100%)                       | Reduced to 55%                     | 45% Reduction                    | Digital Process Automation              |
| Customer Response Time           | Baseline (100%)                       | Reduced to 67%                     | 33% Improvement                  | Electronic Service Delivery             |
| Operational Fraud Losses         | Baseline (100%)                       | Reduced to 73%                     | 27% Decline                      | AI Monitoring Tools                     |
| Suspicious Transaction Detection | Low / Manual                          | ~90% Success Rate                  | Real-Time Detection              | Fintech Tools / Real-time Monitoring    |
| Operational Costs                | High / Peak                           | Declining                          | 12-15% Reduction (After 2 Years) | Stabilization of Fintech Learning Curve |

Table 1: Operational Efficiency Metrics Before and After Fintech Integration, (Author's Compilation, 2025).

The table shows that the efficiency of the banks in Nigeria has significantly improved after the integration of the fintech. Digital automation and electronic service delivery increased the turnaround and customer response time by 45% and 33, respectively (Agboola et al., 2019). The losses on fraud were reduced by 27 percent, and the detection of suspicious transactions became nearly 90 percent effective, which is supported by AI-based monitoring systems (Access Bank, 2024; Fidelity Bank). Two years later, the operation costs reduced by 12-15 percent as banks adjusted to fintech practices (Akintunde et al., 2024). The use of AI-driven solutions and blockchain reconciliation processes by banks resulted in vast reductions in the number of fraud cases and time spent on reconciling processes. According to the internal audit report by Access Bank (2024), the transactional fraud losses that were reported by the bank were decreased by 27 percent after fully applying their AI monitoring technology. According to the report on the digital operations of Fidelity Bank, fintech solutions helped in preventing or detecting fraud on a real-time basis in 90 percent of suspicious transactions.

These findings are consistent with the CAMELS-based study by Ogbuji, Ologundudu, and Oluyomi (2020) that determined that banks with a strong digital standing have higher ratings concerning liquidity and managerial efficiency. Taiwo, Akande, and Adekunle (2024) reported that digitised banks possessed deeper liquidity buffers, which enabled more timely changes in asset-liability and more sustained the banks during crises.

However, with the advent of fintech, there has been more disposition to new operational risks. According to the theme data, on the one hand, the automation reduces the number of manual mistakes, but at the same time, it increases the risk of cybersecurity. According to Nwosu, Evbuomwan, and Bosha (2022), Nigeria has reported over 12,000 cybers with fintech in 2021-2023 with an estimated loss of N14.3 billion to the banking industry. This tendency shows that Ejinkonye et al. (2024) are worried that accelerated digitalisation, which lacks any coordinated regulation, increases the vulnerability of the system. Governance quality is again seen as a moderating variable in terms of risk management.

According to Fadipe et al. (2025), banks that had robust internal auditing policies experienced thirty-five percent less operational breakages during the changes in fintech. Poorly regulated organisations, in turn, experienced frequent downtimes, loss of data and breach of security.

Besides, fintech adoption in credit management systems has produced mixed results. Model-based credit scoring based on AI can make the process of processing loans 50 times faster, yet the algorithms might also include algorithmic biases due to the inaccuracy of the data sources (Ahmed et al., 2025). This brings out the moral side of the fintech regulation- finding a balance between effectiveness and fairness and consumer protection. Financial institutions that invested in cybersecurity and employee retraining were more resolute to their operations. According to a 2024 poll by the Financial Institutions Training Centre (FITC), 82% of the Nigerian bank employees had had an experience within the upskilling fintech programs by 2023. The improvement of the human capital expertise is strongly related to the reduction in the number of system downtimes and the rise in digital adoption rates. All these facts emphasize the idea that fintech not only enhances the efficiency of operations but also, at the same time, raises the level of risks associated with technology. There should be strong risk governance, cybersecurity measures and regulatory oversees to ensure benefits of transition to digital banking remain.

Bank non-bank fintechs and financial inclusion  
Financial inclusion and competition between banks and non-bank fintechs

In Nigeria, fintech innovation has been very useful in the promotion of financial inclusion program in the country. Between 2014 and 2024, the rate of access to formal financial services among Nigerian adults grew by 48.6 to 74.5%, which is mainly due to the growth of fintech (EFInA, 2024). Fintech partnerships have helped to bring mobile money and agency banking, which has served over 17 million adults hitherto unbanked (Okon et al., 2023; Agbeche et al., 2024).

Table 2: Financial Inclusion Indicators Before and After Fintech Expansion (2015–2024)

| Financial Inclusion Indicator            | Pre-Fintech Expansion (~2015) | Post-Fintech Expansion (2024)       | Change                  | Impact Driver                 |
|--|-------------------------------|-------------------------------------|-------------------------|-------------------------------|
| Adults with Formal Financial Access      | 48.6% (Based on text)         | 74% (EFInA, 2024)                   | +25.4 Percentage Points | Fintech Expansion             |
| Previously Unbanked Adults Reached       | Baseline (~0 million)         | Over 17 million (Okon et al., 2023) | Significant Growth      | Mobile Money & Agency Banking |
| Mobile Money Transaction Volume (Annual) | Low / Negligible              | ~N44.8 Trillion (NIBSS, 2024)       | Exponential Growth      | Fintech / NIBSS Collaboration |
| Rural Access to Banking Services         | Low / Branch-Dependent        | Greatly Increased                   | Improved Access         | Agency Banking Network        |

Table 2: Financial Inclusion Indicators Before and After Fintech Expansion (2015–2024)

The growth driven by the fintech has enhanced the financial inclusion situation in Nigeria a great deal. The proportion of adults having formal financial access went up to 74% in 2024 as compared with 48.6% in 2015, chiefly because of mobile payment systems and agent banking structures (EFInA, 2024). Over 17 million adults who used to be unbanked were absorbed into the formal financial system. The volume of mobile money payment also increased rapidly to N44.8 trillion in 2024 (NIBSS, 2024). The growth of the agency banking has offered its services to the rural and peri-urban areas bridging geographical divides. Fintech inventions have significantly reduced the level of financial exclusion and have improved the digital financial ecosystem in Nigeria. According to Nwosu, Evbuomwan, and Bosha (2022), neobanks, such as Kuda, Opay, and Palmpay, aggregated processed more than N15 trillion in transactions in 2023, which is 300% more than the 2021 statistics. Such fintech firms have

made banking more accessible and more democratic through zero fee accounts, instant credit decisions and simplified online platforms. Consequently, the conventional banks have been forced to adopt competitive digital approaches to be left with younger, digitally savvy consumers.

This discontinuity brought about by competition has reduced some of the traditional sources of revenues. Onuorah, Oboro, and Ofanson (2022) note that the net interest margins of the leading banks declined to 6.8 in 2018, and by 2023, the margin had reduced to 4.9 as a result of disintermediation due to fintechs and the decline of transaction fees. Similarly, according to Chen, You, and Chang (2021), price and service delivery structures in China were forced to change by the new entrants in the fintech sector- a phenomenon that can be observed in Nigeria as the banking sector develops.

However, the cooperation instead of competition becomes the defining feature of the relations between banks and fintechs. According to Nduka, Okolie, and Ngangah (2025), the Nigerian banking sector is forming strategic partnerships with fintech companies to create jointly such products as digital loans, buy-now-pay-later initiatives, and international payment systems. Access Bank added 35 percent to its number of merchant customers in 2024 through its alliance with Paystack and Zenith Bank with Flutterwave allowed the bank to increase its SME digital onboarding by 18 percent. These partnerships help to improve penetration and diversification of the products in the market. Fadipe et al. (2025) claim that the fintech and traditional bank partnership result in a mutual value through innovation dissemination and infrastructure sharing. Conversely, non-cooperative banks have the threat of being marginalised in a more digital-first world.

Fintech has triggered SMEs growth and entrepreneurial finance at the macroeconomic level. According to Nduka et al. (2025), in 2024 more than N2.6 trillion in SME lending was made possible by fintech-enabling credit platforms, compared to N1.1 trillion in 2019, which is an increase of 136%. Similarly, Kiilu (2018) found that in Kenya, up to 15% of total SME lending is fintechs, which are now being approached in Nigeria.

Despite these developments, there are still some infrastructural and geographical inequities. The 2024 study by the EFINA revealed that financial inclusion in rural northern Nigeria was still lower than the rest of the country with 61 percent compared to the 81 percent in the south. The given disparity shows that it is essential to invest in the digital infrastructure and literacy programs continuously (Okon et al., 2023). Also, the rapid growth of fintech raises regulatory issues. Ejinkonye et al. (2024) caution that the lack of control in the digital development can threaten monetary stability in case non-bank fintechs outpaced the rate of regulatory changes. Therefore, the open banking and regulatory sandbox strategies developed by the Central Bank of Nigeria in 2023 are essential to match the innovation with prudential regulation (Nwosu et al., 2022).

Thematic synthesis of the above objectives shows that fintech innovation is a ground breaking but complex force within the financial landscape of Nigeria. The quantitative and qualitative trends all lead to one or another important revelation:

**Profitability Impact:** Fintech implementation enhances bank profitability through cost-efficiency and enhanced efficiency in transactions, as well as the digital interaction with customers. The returns depend on the level of governance, readiness of the organisation and compliance to the standards of regulation.

**Operational Transformation:** Fintech causes operations to be quicker and services to be more stable, yet businesses are also vulnerable to cyber attack. It implies the businesses require more powerful IT governance and cybersecurity systems.

**Financial Inclusion and Competition:** Fintech can make loans more accessible to more individuals, assist in the prosperity of small and medium-sized enterprises, and expand the market size. It, however, also increases the competition and reduces the profitability of conventional banks.

## V. POLICY RECOMMENDATIONS

This paper provides specific recommendations to government bodies, financial institutions, and regulators to improve governance structures, improve

innovation, consumer protection, and equal access to financial services.

### 1. Strengthen Governance and Regulatory Oversight for Sustainable Fintech Integration

Well-developed governance and regulation systems are imperative to ensure stability of fintech-based financial activity. To create responsible innovation, the Central Bank of Nigeria should increase the level of supervision, such as Open Banking and Regulatory Sandbox models. Effective IT governance, risk management, and compliance systems that enable banks to manage cybersecurity and resilience must be in place. Such measures as a risk-based supervision process and creating cyber insurance policies will help to increase protection against cyber vulnerabilities and systemic risks.

### 2. Deepen Fintech Collaboration and Infrastructure Sharing

The cooperation of the banks and fintech companies has proved more effective than the competition-based approaches. Banks should engage in the development of partnerships that will see them jointly design digital financial products, such as mobile lending apps, blockchain payment systems, and AI-based credit rating software. The operation redundancy and expenses will be lowered due to the use of shared infrastructure in payment gateways and KYC databases. Regulators and associations in the financial sector in nations should encourage clusters of innovations and interoperability models to improve the digital financial ecosystems.

### 3. Invest in Digital Literacy, Human Capital, and Cybersecurity Capacity Building

Digital transformation implies that human capital should also keep up with it. The financial institutions are to focus on continuous training of their employees on data analytics, cybersecurity, and digital risk management. It would be beneficial to allocate a part of the fintech investment budget to employee development and ethical AI training, which would help the institutions become more competent and resilient. Creating cooperative training programs with technology suppliers and professional bodies can assist in keeping the staff updated on emerging

technology and threats within the digital banking industry.

#### 4. Promote Inclusive Fintech Expansion and Reduce Regional Disparities

Regardless of the fact that fintech has greatly increased financial inclusion in Nigeria, regional variations have still been recorded, particularly in rural and underdeveloped areas. The policymakers should provide incentives to fintech and banking institutions to expand their services to reach out to the remote populations through agent banking networks and local language mobile platforms. Success measures put in place through inclusion have to be integrated into the fintech implementation strategies to ensure that women, micro-entrepreneurs, and people in the informal sector are engaged. The partnerships between banks, development organisations, and the government will ease fair national digital financial inclusion.

#### VI. CONCLUSION

The development of banking in Nigeria through the integration of fintech has become an indication of a significant structural revolution that has re-invented the efficiency in operations, client interaction, and inclusion in finances. The findings suggest that banks that adopt digital technologies (i.e. mobile applications, AI-driven fraud detection, and automated transaction processing) show a major improvement of service delivery and profitability. Indicators like transaction turnaround time, cost of operations reduction and fraud avoidance show how technology has streamlined the conventional banking services, reduced the inefficiencies, and increased accessibility of the services. Financial accessibility has increased with 48.6% of adults having formal financial access in 2015 rising to 74 percent in 2024, which means that fintech has helped bridge the Nigeria financial accessibility divide. There are complications in the shift, however. The evidence shows that despite the performance improvement with regard to the fintech adoption, the benefits are uneven across different institutions, often determined by the governance structures, compliance with regulations, and managerial skills. Smaller banks and financial institutions in the rural areas such as them continue to suffer because of limited infrastructural

and digital capacity. Moreover, the cost of first-time implementation, cybersecurity threats, and regulatory differences are enormous challenges to the feasibility of financial improvements.

Fintech has also proven to be a growth driver and disruptor of traditional banking systems in Nigeria. This will depend on how effectively the financial institutions will combine innovation and strong governance and risk management systems in the long-term. There is evidence that all banks, regulators, and fintech companies need to work together strategically to build a supportive, safe, and robust financial space. Thus, to continue the fintech-driven development, legislative support, and digital literacy investment and a robust cybersecurity architecture are necessary.

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