

Empowering Women Through Fintech: Gender and Financial Inclusion in Nigeria

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Abstract- *The intersection of financial technology (fintech) and gender inclusion has emerged as a crucial driver of socioeconomic transformation in developing nations. This study examines how fintech innovations empower Nigerian women by improving access to financial services and promoting inclusive economic participation. Using a mixed-method approach, data were collected from 420 women across six geopolitical zones through structured questionnaires and focus group interviews. The quantitative analysis employed multiple regression and correlation tests to assess the influence of fintech adoption on women's financial inclusion, while the qualitative strand explored barriers and success narratives. Results reveal that fintech platforms significantly enhance women's financial inclusion by reducing transaction costs, improving credit access, and promoting financial literacy. However, barriers such as digital illiteracy, security concerns, and socio-cultural norms persist. The study recommends policy frameworks focusing on digital education, fintech regulation, and gender-sensitive financial innovations. These measures will not only bridge the gender gap in financial inclusion but also contribute to Nigeria's sustainable economic development.*

Keywords: *Fintech, Gender Empowerment, financial Inclusion, Digital Finance, Women, Nigeria*

I. INTRODUCTION

Financial inclusion is essential for poverty reduction, gender equality, and sustainable development. The United Nations Sustainable Development Goals (SDGs) identify financial inclusion as a cross-cutting enabler for several objectives, including SDG 1 (No Poverty), SDG 5 (Gender Equality), and SDG 8 (Decent Work and Economic Growth).

Despite this recognition, women in Nigeria face persistent challenges in accessing formal financial systems due to collateral requirements, limited credit histories, and cultural restrictions. Fintech innovations are now offering viable alternatives—ranging from mobile money platforms like Paga and OPay to peer-to-peer lending services and crowdfunding applications—that bypass the constraints of conventional banking.

The rapid expansion of fintech has reshaped the

global financial ecosystem by introducing innovative mechanisms for saving, investing, and accessing credit. Across developing nations, fintech has emerged as a transformative force in fostering financial inclusion, particularly among marginalized populations such as women. According to the World Bank (2023), over one billion adults worldwide remain unbanked, and women constitute a disproportionate percentage of this figure. In Sub-Saharan Africa, the gender gap in formal financial access remains wide, with approximately 35% of women excluded compared to 25% of men (Global Findex, 2022). Nigeria, Africa's largest economy, exemplifies this challenge, as cultural, educational, and infrastructural factors continue to hinder women's participation in formal finance.

Digital financial services—such as mobile banking, online savings platforms, digital loans, and payment applications—enable women to bypass traditional financial barriers. With the proliferation of smartphones and internet connectivity, Nigerian women are increasingly engaging in mobile transactions, accessing microloans, and participating in digital marketplaces. This shift promotes economic inclusion while supporting entrepreneurship, household stability, and intergenerational welfare improvement.

Although Nigeria has witnessed remarkable growth in its fintech sector—valued at over \$1 billion in annual transactions (CBN, 2024)—its benefits remain disproportionately skewed toward men. The Central Bank of Nigeria reports that women account for less than 35% of active mobile banking users nationwide. Despite increased digital penetration, gender-based disparities persist in financial literacy, access to technology, and participation in formal economic structures. Many fintech products also lack gender-sensitive designs or outreach programs tailored to women's unique needs.

Consequently, while fintech holds promise, its

potential for empowerment remains underexploited. The broad objective of this study is to evaluate the impact of fintech on women's financial inclusion in Nigeria. Specifically, it examines the extent to which fintech access influences women's participation in formal financial systems, identifies the major barriers affecting women's adoption of fintech services, analyses the relationship between fintech usage and women's economic empowerment, and proposes policy measures to enhance gender-responsive fintech development. Research questions include: How has fintech access affected women's financial inclusion in Nigeria? What are the primary barriers to fintech adoption among women? What relationship exists between fintech use and women's economic empowerment? What strategies can enhance women's inclusion through fintech innovation? To guide empirical analysis, the following hypotheses were formulated: H₀₁: Fintech access has no significant effect on women's financial inclusion in Nigeria; H₀₂: There is no significant relationship between fintech adoption and women's economic empowerment; H₀₃: Socio-cultural factors do not significantly influence women's fintech adoption.

This research contributes to both academic discourse and practical policymaking. Academically, it enriches the literature on gender, finance, and technology in Sub-Saharan Africa by offering context-specific empirical evidence. Practically, it informs fintech developers, regulators, and gender advocates on structuring inclusive digital finance ecosystems. The study focuses on adult women aged 18–60 across Nigeria's six geopolitical zones. Both urban and rural populations were considered to capture variations in access and digital literacy. The study primarily examines fintech products related to mobile banking, digital savings, lending, and payment platforms. Limitations include possible response bias, incomplete internet access data, and limited availability of gender-disaggregated fintech statistics.

II. LITERATURE REVIEW

Financial inclusion refers to the provision of affordable financial products and services—such as payments, savings, credit, and insurance—to all individuals and businesses regardless of income or location (World Bank, 2022). Fintech encompasses digital innovations that improve or automate

financial services, creating a pathway for women's empowerment by reducing reliance on physical bank branches and easing transaction barriers. Gender empowerment in finance is defined as women's ability to make strategic life choices in contexts where this ability was previously denied (Kabeer, 1999). Fintech promotes empowerment by enhancing access, control, and use of financial resources. Mobile money accounts, digital savings applications, and credit-scoring tools have emerged as substitutes for traditional collateral-based systems.

Two principal theories underpin this research: Diffusion of Innovation Theory (Rogers, 2003) and Empowerment Theory (Zimmerman, 1995). Diffusion of Innovation Theory explains how technological innovations are communicated through social systems over time. Adoption depends on perceived usefulness, ease of use, social influence, and compatibility. Nigerian women's acceptance of fintech hinges on smartphone literacy, network quality, and trust in digital institutions. Empowerment Theory posits that empowerment occurs when individuals gain control over decisions and resources.

Fintech serves as a catalyst for financial and psychological empowerment by granting women agency in spending, saving, and investing. Together, these frameworks explain how fintech diffuses through social networks and enhances women's financial agency.

Empirical studies consistently affirm fintech's role in bridging gender gaps. In Kenya, M-Pesa usage lifted 2% of households out of extreme poverty, disproportionately benefiting female-headed families (Suri & Jack, 2016). Similar evidence in Ghana and Tanzania shows that mobile banking improves women's credit access and business income (Akinola, 2021; Mnyanyi, 2020). Within Nigeria, research remains limited but encouraging. Women using digital wallets reported a 27% increase in savings and a 19% improvement in business revenue compared to non-users (Okoye et al., 2021).

Conversely, barriers such as digital illiteracy, poor network coverage, and patriarchal restrictions on phone ownership persist (Adeyemo & Bello, 2022). Collectively, these findings underscore fintech's dual nature: a tool for empowerment constrained by infrastructure, culture, and education.

III. METHODOLOGY

A mixed-method design was adopted, combining quantitative survey data with qualitative interviews. The target population comprised Nigerian women aged 18–60 with access to digital financial services. Using stratified sampling across six geopolitical zones, 420 respondents were selected, and 20 in-depth interviews were conducted with women entrepreneurs and fintech practitioners. Structured questionnaires measured demographic profiles, fintech access, financial inclusion, and empowerment on a five-point Likert scale. Qualitative data were collected via semi-structured interviews exploring perceptions of fintech usefulness and barriers.

The dependent variable, Financial Inclusion Index, was measured as a composite of savings, credit, and insurance access. The independent variable, Fintech Access Score, captured frequency of use, transaction volume, and perceived ease. Control variables included age, education, income, marital status, urban/rural residence, and digital literacy. Quantitative data were analyzed using SPSS 26, including descriptive statistics, Pearson correlation, and multiple regression. The regression model showed that a one-unit increase in fintech access raises the financial inclusion index by 0.37 points ($p < 0.001$). Qualitative transcripts were thematically coded to identify recurring themes of opportunity, constraint, and trust.

IV. RESULT AND INTERPRETATION

Descriptive statistics indicated that respondents averaged 33.45 years of age with a monthly income of ₦85,600. The mean fintech access score was 3.89 out of 5, while the financial inclusion index averaged 0.72. Correlation analysis showed significant positive relationships between fintech access, education, digital literacy, and financial inclusion. Regression analysis revealed that fintech access exerted the strongest influence on women's financial inclusion, controlling for socio-economic factors.

Qualitative findings reinforced the quantitative results. Interviewees highlighted that mobile money and digital banking simplified transactions, reduced travel time, and improved personal savings

discipline. Women reported enhanced autonomy in household financial decision-making, the ability to save discreetly, and greater confidence in managing business activities. However, older and rural women cited challenges in navigating apps and limited smartphone ownership. Trust and security concerns were also highlighted, with rural users preferring hybrid agents providing face-to-face assistance.

V. DISCUSSION

Findings align with the Diffusion of Innovation theory, confirming that fintech adoption depends on perceived usefulness and social acceptance. Digital literacy strongly correlates with financial inclusion, indicating that technology is a primary enabler of empowerment. Nevertheless, structural inequalities persist, with gender norms restricting smartphone access and financial decision-making. Empowerment extends beyond account ownership to include confidence, privacy, and agency.

VI. CONCLUSION AND POLICY RECOMMENDATION

In conclusion, fintech significantly enhances women's financial inclusion in Nigeria. Affordable, accessible, and user-friendly digital platforms narrow gender disparities, although rural, low-income, and less-educated women remain at the periphery. Policy recommendations include community-based digital literacy campaigns, gender-sensitive product design, regulatory frameworks ensuring consumer protection, public-private partnerships to expand digital coverage, and fintech education integrated into school curricula. Implementing these measures will advance the SDGs and position fintech as a sustainable instrument for women's empowerment in Nigeria.

REFERENCES

- [1] Eke, C. I. (2016). An Economic Assessment of Nigeria's Smartphone Data Bundle Consumption, Subscriber Resource Constraints and Dynamics: The Case of Abuja and Lagos States. *Journal of Telecommunication System Management*.
- [2] Eke, C. I. (2019). Teledensity and Economic Growth in Nigeria: An Impact Assessment. *Bingham Journal of Economics and Allied Studies*, 2(2), 120–131.

- [3] Eke, C. I., Magaji, S., & Ezeigwe, G. C. (2020). An Economic Assessment Model of Employment/Dynamics Capacity Development and Household Telecommunication Expenditure in Nigeria. *Journal of Economics and Sustainable Development*, 11(2), 107–115.
- [4] Adeyemo, M., & Bello, R. (2022). Gender, digital literacy, and financial inclusion in rural Nigeria. *Journal of Development Economics*, 18(4), 45–62.
- [5] Akinola, O. (2021). Mobile money and women's economic participation in Ghana. *African Economic Review*, 33(2), 77–94.
- [6] Central Bank of Nigeria. (2024). Annual Report on Fintech and Digital Finance. Abuja: CBN Press.
- [7] Global Findex. (2022). The Global Findex Database 2022: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19. World Bank.
- [8] Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change*, 30(3), 435–464.