

The Influence of Financial Technology on Fostering Financial Inclusion and Business Growth in Tanzania: A Systematic Review

Lwidiko Badi^{1*}, Willy Maliganya² & Haruni Jeremia Mapesa³

¹Department of Mathematics and Statistics, Mwalimu Nyerere Memorial Academy, P.O. Box 9193, Dar es Salaam, Tanzania

²Department of Leadership, Ethics and Governance, Mwalimu Nyerere Memorial Academy, P.O. Box 9193, Dar es Salaam, Tanzania

³Department of Economics, The Mwalimu Nyerere Memorial Academy, P.O. Box 9193, Dar es Salaam, Tanzania

*Corresponding author: Lwidiko Badi, Department of Mathematics and Statistics, Mwalimu Nyerere Memorial Academy, P.O. Box 9193, Dar es Salaam, Tanzania.

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Abstract

This study systematically reviews existing literature to assess the influence of financial technology (FinTech) in fostering financial inclusion and enhancing business growth in Tanzania. Using a comprehensive search strategy across multiple academic databases, 5,534 articles were initially retrieved, and relevant studies were screened and analyzed to address the key objectives of accessibility, usage, business impact, and adoption challenges in FinTech. The findings indicate that FinTech has significantly improved access to financial services, particularly through mobile money, agency banking, and digital lending platforms, enabling both individuals and businesses in rural and urban areas to engage with formal financial systems. Moreover, FinTech has facilitated greater use of financial products and services, including savings, credit, and insurance, although adoption depth is constrained by digital literacy, trust, and awareness. In terms of business growth, FinTech has enhanced efficiency, improved cash flow management, and formalized micro, small, and medium enterprises (MSMEs), though challenges such as interoperability issues, infrastructure gaps, and regulatory uncertainties remain. The review further identifies major barriers to FinTech adoption, including weak network coverage, high data costs, low trust, and limited digital literacy, which require coordinated efforts from policymakers, regulators, and service providers. The study concludes that while FinTech holds substantial potential to advance financial inclusion and support economic growth, targeted interventions, digital literacy programs, and supportive policy frameworks are critical to maximizing its impact in Tanzania. These findings offer valuable insights for researchers, policymakers, and practitioners aiming to strengthen inclusive digital finance ecosystems.

Keywords: Financial Technology, Financial Inclusion, Business Growth, Digital Finance, Tanzania, Adoption Barriers.

Introduction

Financial technology (FinTech) has been a key driver of financial inclusion and plays an important role in improving the delivery of financial services and economic growth. According to financial technology refers to the utilization of computer programs and electronic platforms to provide financial services to consumers and businesses [1]. has the view that fintech is ap-

plying technology to deliver financial services and products to end-consumers, while call it a smart and modern way for providing financial services through mobiles. Fintech is a high-tech approach to providing financial services, with cashless transactions and a more user-friendly experience. On this point, financial technology has emerged as a valuable solution for modern economies seeking to increase access and efficiency in finance [2, 3].

Globally, the application of fintech has transformed financial operations, significantly increasing financial inclusion rates in countries [4]. Report that 76% of adults worldwide today have a bank account or a mobile money account, reflecting the widespread implications of technological change on financial access. Singapore is the world leader with the highest financial inclusion, and Argentina is among the lowest [5, 6]. According to countries with institutional support of government and financial systems tend to have comparatively higher inclusion scores, highlighting the importance of policy and regulatory environments [7].

The trend indicates that the development of fintech is directly correlated with national efforts to build digital financial ecosystems and consumer trust. Financial technology has revolutionized access to formal financial services, particularly among the unbanked and underbanked in Africa. Further contribute that bank account holding in Sub-Saharan Africa reached 55% in 2021, up from 42.6% in 2017, mainly due to digital innovation and well-designed financial initiatives. This has made financial services more accessible to rural and underserved populations, although cash transactions remain common. The rise of mobile money platforms such as M-Pesa, Airtel Money, and Tigo Pesa has shown how digital finance can empower individuals and businesses by providing affordable, reliable access to savings, credit, and insurance. Despite this progress, the continent still faces infrastructural and regulatory challenges that constrain full financial inclusion. Nonetheless, cash payments remain prevalent, as most adults continue to use traditional payment methods [8].

The Tanzania Financial Inclusion Index indicates significant progress, with the inclusion level increasing from 68% in 2017 to 72% in 2023 [9]. The figures confirm that digital financial products continue to fuel the expansion of formal financial participation across the region. Access to financial accounts, whether through banks, microfinance, or mobile outlets, is a critical factor in improving livelihoods and business growth. Individuals with such accounts are more easily able to access financial products such as credit, insurance, and money transfer services, which support personal and entrepreneurial growth added that the use of digital devices to deliver financial services is a feasible means to increase financial inclusion and reduce access imbalances. Furthermore, argue that the adoption of digital financial platforms reduces market inefficiencies stemming from information asymmetry, network effects, and behavioral distortions that typically make financial transactions bumpy.

By addressing such frictions, fintech enhances financial efficiency and provides a platform for inclusive economic participation. Despite fintech's growing influence in expanding financial access, Tanzania continues to face significant challenges in financial inclusion. Although various programs have been initiated to promote digital finance, a large proportion of the population remains underserved or excluded from formal financial networks. The National Financial Inclusion Strategy (NFIS) of 2018 aimed to increase financial service coverage for underserved groups from 68% in 2017 to 75% by 2023. Through 2023, it had covered only 72%, a lower pace of progress than anticipated. This deficit is a testament to the persistent structural and infrastructural barriers to the adoption of fintech, particularly in rural areas. Therefore, this systematic review examines the role of financial

technology in promoting financial inclusion and business growth in Tanzania. Specifically, it aims to analyze how FinTech enhances access to and use of financial services, its contribution to business expansion, and the existing barriers to its adoption [10].

Theoretical Framework

The theoretical framework provides the foundation for understanding the mechanisms through which financial technology affects financial inclusion and business growth. It informs the systematic review by identifying key concepts, relationships, and assumptions about how digital financial innovations affect access, usage, and economic outcomes. The study is based on two main theories: the Diffusion of Innovation Theory and the Technology Acceptance Model (TAM). Diffusion of Innovation Theory, as developed by, explains how new technologies, ideas, or practices diffuse across populations over time [11]. According to the theory, adoption is based on five traits: relative advantage, compatibility, complexity, trialability, and observability. By using financial technology, DOI can explain why individuals and companies use mobile money, electronic banking, and other fintech tools. For instance, services like mobile money for M-Pesa are widely used because of their relative advantages over traditional banking, compatibility with clients' habitual financial situations, ease of use, and the transparency of their benefits [12].

The use of DOI arises from its ability to express the stages of adoption, from awareness to decision and implementation, which can inform policy and implementation choices for fintech. Nonetheless, DOI has a limitation in that it assumes a linear adoption process without accounting for external influences such as regulatory systems, infrastructural constraints, or socio-cultural settings, especially in developing countries like Tanzania. The limitations of diffusion of innovation theory are complemented by the Technology Acceptance model propounded by, The model focuses on the drivers of user acceptance of technology, namely perceived usefulness and perceived ease of use [13]. For the fintech sector, TAM explains why individuals and businesses choose to utilize digital financial services. Users will adopt mobile banking or e-wallets, for example, if they believe these tools are useful for managing their money effectively and are easy to use. TAM provides a realistic perspective on adoption behavior, noting that user attitudes and intentions play a central role in establishing patterns of use. TAM has been widely applied in studies of digital financial services in Africa, including Tanzania. TAM has been panned for failing to account for external factors such as infrastructure, policy, and socio-economic constraints that also influence adoption and ongoing use. The synthesis of DOI and TAM theories in this paper provides a robust theoretical framework for analyzing fintech adoption and its implications for financial inclusion and business growth. DOI describes the diffusion of fintech innovations across populations, and TAM illuminates individual and company adoption and developmental consequences arising from increased access to financial services. When used together, these theories form a multidimensional framework to describe both the adoption process and the broader economic impacts of financial technology in Tanzania.

Materials and Methods

The study is a review of the literature on financial technology and financial inclusion. Google Scholar was the only search

engine used to find relevant materials on financial technology and financial inclusion. The choice of Google Scholar is based on its broad coverage of scholarly literature and its perceived ease of use compared to other search engines such as SCOPUS, Web of Science, Research4Life, and others. SCOPUS provides only comprehensive abstracts and citation database for peer-reviewed literature of scientific journals, books, and conference proceedings, while Research4Life provides access to scientific and professional knowledge for researchers in developing countries only.

The Web of Science search engine requires registration, and when searching, one needs to know the author's name; hence, it is tedious to use. These reasons were the exclusion criteria for the SCOPUS, Web of Science, and Research4Life search engines. The choice of Google Scholar was its ease of use: it does not require registration, and all scholarly literature worldwide can be accessed without limitation. The articles searched were from 2020 to 2025. The search keywords were: financial technology, the influence of financial technology on financial inclusion, financial technology and business growth, financial technology policies, and barriers to financial technology adoption.

The search engine produced 5,534 articles in total for all search keywords. These articles were published from the 1980s to 2025. More of the articles were for the influence of financial technology and financial inclusion, followed by barriers to financial technology adoption. In addition to the results, further screening was conducted to identify relevant articles that fit the study. Among the exclusion criteria, only publications from 2020 to 2025 were considered; the rest were rejected. The screening results indicate that of 5,534 articles, only 334 were retained because their publication dates were between 2020 and 2025, and their titles were relevant to the study under review.

The retained articles were further screened by reading their abstracts to determine their relevance to the study under review. The results implied that only 100 articles were relevant to the current research. At the end, the screening was done by reading the conclusions section, where the writer synthesizes information, connects back to the broader context, and potentially suggests future research directions. Only 20 articles were found that relate to what the current study seeks. Hence, these 20 articles were the only ones used to compile the study's findings. Using a qualitative research method, thematic analysis was employed to describe the phenomenon, and saturation was reached when no new information was gained as more articles were read.

Table 1: Keywords

s/no	Keywords Used in Search Engines	No Articles
1	Financial Technology	335
2	Availability or accessibility of financial Technology	126
3	Usage of Financial Technology	150
4	Influence of financial Technology on financial inclusion	2423
5	Financial Technology and business growth	712
6	Financial technology policies	8
7	Barriers to financial technology adoption	1780
	Total Articles Searched in Google Scholar	5,534

Describe screening of relevant articles as the process of evaluating search results to identify which articles meet the inclusion criteria for a review. It is a crucial step in systematic reviews and other research projects, ensuring only relevant articles are included in the final analysis. The screening process is important, it eliminates articles that do not meet the pre-defined inclusion criteria for the study, helps to narrow down the search results to a manageable set of relevant articles and researchers can ensure that only high-quality, pertinent articles are included in their review. The screening was conducted by reading the publication year and title of the searched articles, and assessing their relevance to the study. The first screening criterion was the year of publication; articles published before 2020 were excluded. The second criterion was the articles' titles; those with irrelevant titles to the study were excluded, and those with almost identical titles were retained for further screening. The third screening cri-

terion was the reading of the abstract. The abstracts were read to determine their relevance to the article under study; those found not related to the study were dropped, and those relevant were retained for further screening. The last criterion was reading the conclusion sections of the articles. This section is important because it provides the final opportunity to reinforce the research's significance, summarize key findings, and leave a lasting impression on the reader. It's where the writer synthesizes information, connects back to the broader context, and potentially suggests future research directions.

Study Findings

This research employs thematic analysis of existing studies to assess the role of financial technology in promoting financial inclusion and business growth in Tanzania, drawing on a systematic review of the literature and policy frameworks.

Table 2: Empirical Findings on Financial Technology in Tanzania

Theme / Objective	Related Studies	Remarks / Key Findings
1. Accessibility of Financial Services	(Lubawa & Litt, 2025; Macha & Mas-sawe, 2023; Ngeze & Seif, 2024; Nzilano & Magoti, 2025);	Mobile money, agency banking, and digital lending improved access to financial services, especially in rural areas. Reduced transaction costs, time savings, and remote access via agents or mobile phones were key benefits. Infrastructure gaps and uneven smartphone access limited full inclusivity.
2. Usage of Financial Products and Services	Lotto (2020); Malombe (2025); Mmari et al. (2024); Baruti et al. (2022); Nkuba & Ngowi (2024); Lubawa & Litt, 2025)	FinTech increased transaction and savings use; deeper engagement with credit, insurance, or investment products was limited. Digital literacy, awareness, perceived usefulness, and trust were key determinants. Behavioral and institutional interventions are needed to improve adoption depth.
3. Contribution to Business Growth and Development	Nkuba & Ngowi (2024); Lubawa & Kandpal (2024); Maseko & Kalama (2024); Nanzia (2023); Macha & Mas-sawe (2023)	FinTech adoption enhanced MSME efficiency by simplifying payments, improving record-keeping, and enabling easier access to credit. Mobile payments reduced cash-handling risks, improved cash flow, and promoted business formalization. Limitations included interoperability issues, digital literacy gaps, regulatory uncertainty, and uneven impact across institutions.
4. Challenges Affecting Adoption and Implementation	(Lubawa & Litt, 2025; Macha & Mas-sawe, 2023; Mthobi & Kebotsamang, 2024; Mpofu & Mhlanga, 2022)	Key barriers included weak infrastructure, inconsistent network coverage, high smartphone/data costs, regulatory gaps, cybersecurity risks, and low trust. These hindered sustainable adoption, especially in rural and low-income areas. Collaboration between government, regulators, and private FinTechs was needed to address these challenges.

Accessibility of Financial Services through Financial Technology in Tanzania

This section presents evidence from a systematic review of 20 policy reports and empirical studies that investigated the effect of FinTech on access to financial services in Tanzania. The review discusses innovations such as mobile money, agency banking, and digital lending and how they have contributed towards widening access for customers and businesses, especially in rural and hard-to-reach areas. The systematic review found that FinTech is now the catalyst for financial inclusion in Tanzania, transforming how individuals and businesses interact with formal financial services. Empirical studies across the board find that innovations such as mobile money platforms, agency banking, and digital lending have successfully breached the traditional constraints of traditional banking systems, particularly for marginalized and geographically disadvantaged communities [14]. For instance, demonstrate that rural communities, which had no or minimal access to financial systems, have actively contributed to the financial system through mobile money. Similarly, observe that agency banking has introduced banking services to remote locations, making it possible for customers to

make the required transactions, such as deposits, withdrawals, and remittances, without having to travel long distances to the banks, thus saving both time and transaction fees [15].

The intersection of favorable policy environments and robust technology infrastructure further enhances FinTech's impact on accessibility. The National Financial Inclusion Framework (2018–2025) provides strategic guidance to facilitate the universal take-up of digital financial services and to create regulatory environments that promote financial inclusion rather than hinder it. Expansion of mobile networks by providers has also enabled large-scale access to digital platforms, whereas simplified registration processes have removed administrative hurdles, making it easier for individuals and small business owners to participate in financial technologies [16]. These steps collectively constitute a system in which supply- and demand-side drivers increase access: financial service providers can reach larger markets, and users gain the means to participate in the formal economy. Despite these remarkable improvements, literature indicates that accessibility gains remain uneven and constrained by socio-economic and infrastructural limitations. Low-income and

rural communities are generally beset with problems such as low smartphone ownership rates, patchy network coverage, and regular digital service outages [17]. also observe that these disparities make the digital divide even broader: while urban consumers can fully utilize FinTech tools, rural groups are partially excluded. Furthermore, digital literacy or lack thereof is found to be a key determinant of whether individuals can fully leverage these services. Several users, particularly among marginalized groups, might have access but neither the information nor the agency to utilize digital interfaces, thus constraining the real-world impacts of accessibility. Aside from socio-technical limitations, broader system factors such as affordability and agent network density also determine accessibility outcomes. Mobile money take-up is higher in areas with denser, more readily available agent networks, as agents act as intermediaries linking technology and end-users. Conversely, in low-agent-network or high-cost regions, slower adoption indicates that technological access might not be the sole impetus for financial access, but also the distribution and cost-effective provision of service providers. Generally, these results suggest that although FinTech has dramatically improved access to financial services in Tanzania, its potential will require a multi-dimensional solution that brings together technological advancement, policy regulation, digital literacy, and infrastructural investments to address existing socio-economic as well as geographically-influenced imbalances.

Financial Technology and Usage of Financial Products and Services

The systematic review of 20 empirical studies and policy documents reveals that financial technology (FinTech) has played a significant role in the utilization of financial products and services by Tanzanian firms and individuals. While access to financial services has expanded significantly through mobile money, agency banks, and online lending platforms, the extent of active, diversified use differs across population groups. Studies by and indicate that most users prioritize basic transactions, such as sending and receiving cash, making payments, and performing limited savings activities. The mobility of mobile platforms and reduced dependency on physical bank branches have enabled such basic uses to be feasible, especially in rural or traditionally underserved regions [18, 19]. Yet these papers identify a persistent divide between basic account ownership and engagement with more complex financial products such as credit facilities, insurance contracts, investment plans, or pension schemes. A closer analysis of the reviewed literature reveals that cognitive and behavioral drivers are essential predictors of FinTech adoption. Digital literacy, perceived usefulness, and awareness were consistently shown to be essential for enabling people to move beyond transactional use to end-to-end use of financial services [20].

Those with higher confidence in mobile phone use and FinTech products were more inclined to adopt credit, insurance, and other financial services, while low levels of digital literacy limited participation to basic functions. Similarly, trust was also found to be a factor; the studies reviewed note that insecurity about cybersecurity, data privacy, unexpected charges, and opaque product benefits deterred extensive and diversified use of FinTech products [21]. These findings underscore that technological availability alone is insufficient to promote active and meaningful financial engagement. Use patterns hinge on a com-

plex interplay among users' knowledge, perceived usefulness, self-efficacy, and system trust. Institutional and structural factors were also emphasized as key facilitators of use. FinTech providers and regulatory agencies, together, play a pivotal role in creating an environment that supports more intensive financial product use. Studies such as indicate that awareness campaigns, digital literacy initiatives, and easy-to-use interface designs can enhance usage among less informed users. In addition, financial services need to be salient to Tanzanians' socio-economic realities by ensuring affordability, accessibility, and proximity to daily financial needs. Inadequate infrastructure, such as low connectivity or high smartphone or data plan costs, continues to restrict frequent and widespread use, particularly in rural and low-income areas.

The evidence confirms that while FinTech has been successful in driving account sign-ups and basic transactions, scaling and sustaining product usage require collective efforts, integrating capacity building, product innovation, trust-building, and policy support. In all, the 20-study systematic review confirms that FinTech in Tanzania has been significant in driving the usage of financial services and products. It has promoted transactional efficiency, improved savings behavior, and created a point of entry for engagement with formal financial services. However, factors such as low digital literacy, limited trust, affordability, and infrastructural inadequacies continue to constrain the depth and frequency of use. Achieving meaningful and long-term adoption of FinTech products, therefore, requires holistic approaches that incorporate behavioral interventions, institutional facilitation, and user-driven product design. It ensures that financial inclusion benefits are not only recorded in terms of broad growth but also in active, diversified use, powerful enough to facilitate economic empowerment and business growth.

Influence of Financial Technology on Business Growth and Development

The evidence from the systematic review indicates that digital finance has contributed significantly to business growth and development across industries, especially among micro, small, and medium enterprises (MSMEs), commercial banks, and agricultural businesses. Digital financial services such as mobile money, agency banking, electronic banking, and digital lending platforms have revolutionized the traditional business landscape by enabling more convenient financial transactions, efficient record-keeping, and easier access to credit. Note that mobile money platforms have enabled businesses to pay suppliers, workers, and service providers in a timely and secure manner, without the risks and delays associated with cash-based systems. Such innovation has also enhanced entrepreneurs' ability to track financial flows, manage expenditures, and plan strategically for growth. Similarly, note that the adoption of e-banking by commercial banks has enhanced operating efficiency, customer service, and profitability, indicating a broader impact on the financial environment and the enabling environment for entrepreneurship. Besides, FinTech adoption has been closely linked to the formalization and expansion of entrepreneurial ventures among rural and underprivileged communities [22]. Demonstrate that digital lending platforms, mobile payments, and e-wallet solutions have reduced reliance on informal financial channels, which are costly and unreliable. These platforms provide entrepreneurs with access to working capital when they need it the most, allowing

them to invest in operations, purchase stock, pay employees, and expand service delivery [23].

Access to digital financial solutions has not only fostered efficiency but also a culture of transparency and accountability in financial management, which is significant for attracting investors, accessing additional credit, and satisfying regulatory requirements. For example, agribusinesses and smallholder farmers increasingly rely on digital financial services for input purchases, payments from buyers, and saving surplus funds, demonstrating FinTech's role in linking financial inclusion with tangible business development outcomes. Secondly, financial technology translates into improved competitiveness and resilience of Tanzanian enterprises. Utilization of digital solutions reduces operational costs by minimizing bank visits, reducing transaction costs, and automating bookkeeping and accounting. This efficiency enables small businesses to focus on their main operations and growth strategies rather than administration [24]. Point out that enabling factors such as network reliability, regulatory support, and technological infrastructure are crucial to ensuring the optimal impact of FinTech. Further, digital channels allow companies to reach broader markets, including far-off and international customers, thereby broadening income streams and supporting diversification. Results of a study of women entrepreneurs in Dodoma also show that mobile money and agency banking have made financial services more accessible, enabling women-owned businesses to participate more in economic activities and achieve higher profitability. However, challenges such as inadequate network coverage, digital illiteracy, regulatory gaps, and interoperability issues continue to undermine the full potential of FinTech adoption. Training programs, policy reforms, and public-private collaborations are required to surmount these barriers and ensure the benefits of financial technology are inclusive and long-lasting. Collectively, the research covered demonstrates that FinTech is a key enabler of business expansion, operational effectiveness, financial stability, and market reach in Tanzania. Its use formalizes MSME operations, enables access to finance, improves cash flow management, and reduces risks associated with traditional financial transactions. By enhancing financial access and inclusion, FinTech also improves the overall economic environment, supporting employment generation, poverty alleviation, and sustainable development. While there are issues, particularly related to infrastructure limitations, capacity deficits, and regulatory uncertainties, evidence clearly suggests that financial technology provides vital tools and channels for Tanzanian businesses to innovate, grow, and compete in increasingly digitized markets. In that regard, the continued promotion, adoption, and scaling of FinTech solutions hold tremendous potential to catalyze inclusive economic development and expand the financial and operational capacities of businesses in Tanzania.

Challenges Affecting the Adoption and Implementation of Financial Technology

This sub-section describes the main challenges that have hampered the uptake and successful deployment of financial technology (FinTech) in Tanzania. Based on a systematic analysis of 20 studies, it identifies the main obstacles to the potential of digital financial services to enhance financial inclusion, support business expansion, and drive economic growth. The study classifies these challenges as infrastructural, technological, regulatory, so-

cio-economic, and behavioral factors and explains how each restricts the universal adoption and use of FinTech solutions in urban and rural settings. The systematic review findings revealed that infrastructural challenges are among the major limitations to effective FinTech adoption [25], and studies identified that inconsistent network coverage, poor-quality internet connectivity, and insecure electricity supply severely limit access to digital financial services, particularly in rural and remote regions. Even when agency banking and mobile money are within reach, the lack of a reliable network infrastructure reduces transaction reliability and deters ongoing use. Just like high phone and data bundle charges were deemed to be economic barriers that limit low-income earners from being actively involved in digital financial platforms, thus widening the urban-rural divide in financial inclusion, Regulatory and institutional problems are also significant hindrances. Deficiencies in legal frameworks addressing data protection, digital credit, consumer protection, and tax were cited by .These regulatory vulnerabilities create uncertainty for users and FinTech providers alike, stifling trust and adoption. In addition, there is a lack of coordination among FinTech players and institutional support for innovation, e.g., the absence of a "test and learn" apparatus that limits the emergence and scaling of new digital financial products, as noted [26].

Following regulation and infrastructure, socio-economic and behavioral factors are key drivers of FinTech adoption. Digital illiteracy, weak financial literacy, and lack of awareness of products offered were the most prevalent findings in studies. Even among individuals who own digital devices, fear of cyber-fraud, mistrust of the digital system, and perceived transaction costs act as deterrents for frequent utilization of financial products. Gender disparities and cultural expectations also limit access, particularly for vulnerable groups and women, reinforcing exclusion patterns. The evidence as a whole indicates that it takes a multidimensional approach to address these issues, bringing together infrastructure expansion, regulatory reform, financial and electronic literacy initiatives, and trust among regulators, providers, and users.

Discussion

The study sought to analyze the role of FinTech in advancing financial inclusion and business growth in Tanzania, drawing from a systematic synthesis of 20 empirical studies. The discussion focuses on four critical areas aligned with the research objectives: access to financial services, the application of financial products, the role of FinTech in business growth, and issues affecting FinTech uptake. By synthesizing the findings, the discussion highlights not only the potential of FinTech but also its constraints in realizing that potential. To start with, regarding access to financial services, the review indicates that technological innovations of digital finance, such as digital finance, internet banking, mobile money, and digital platforms, have significantly improved access to formal financial services in Tanzania. These technologies reduce transaction costs, save time, and enable remote access, particularly in rural and previously unserved areas. Infrastructural constraints, such as inadequate network coverage, low smartphone penetration, and unstable electricity supply, continue to constrain inclusiveness. Furthermore, gendered exclusion and financial illiteracy limit women's and marginalized groups' participation, as evidenced in sub-Saharan Africa, where access does not always translate into financially inclusive partic-

ipation. This necessitates digital literacy programs and inclusive policy interventions to complement technological deployment and ensure broader, inclusive financial access.

Secondly, on the use of financial products and services, the study confirms that uptake of basic digital transactions has been greater, but use of sophisticated products, credit, insurance, and investment services remains low. Determinants such as trust, perceived risk, attitude toward digital finance, and awareness all significantly influence use. This aligns with the Technology Acceptance Model (TAM) and the Diffusion of Innovation Theory, which both rely on ease of use and perceived usefulness as determinants of adoption. It also indicates that behavioral interventions, in addition to infrastructure upgrades, are required to deepen adoption of advanced financial services. Policy targeting financial literacy, trust development, and user awareness can strengthen the link between access to and use of financial products. Third, in relation to the role of FinTech in business growth and development, the research evidence indicates that e-financial services have encouraged the operational efficiency and growth prospects of micro, small, and medium enterprises (MSMEs) in Tanzania. Services such as mobile payments, digital loans, and e-banking have facilitated easier payment, improved cash flow management, and kept record-keeping more efficient. In addition, digital finance promotes business formalization, reduces the risks associated with cash handling, and enables improved access to credit. Notwithstanding this, issues of interoperability, regulatory silos, and asymmetrical sectoral uptake limit the capacity for FinTech expansion. All these results are consistent with global evidence, which shows that although FinTech can foster business development, complementary institutions and regulations are necessary to sustain impact. Finally, with regard to challenges affecting adoption and implementation, the review finds persistent barriers such as poor infrastructure, high device and data costs, cybersecurity threats, regulatory uncertainty, and low user trust levels. Poor households and rural communities are particularly disadvantaged, with added barriers in the shape of digital illiteracy and low awareness. Mitigating these issues is a multi-stakeholder initiative that involves the government, regulators, financial institutions, and FinTech developers. Measures such as expanding network coverage, implementing consumer protection policies, enhancing digital literacy, and fostering trust through secure platforms are necessary to enable sustainable adoption.

Generally, the discussion confirms that FinTech has significantly contributed to financial inclusion and business growth in Tanzania. But it requires overcoming behavioral and infrastructure constraints, improving regulatory frameworks, and promoting inclusive digital literacy initiatives. It is clear from the research that financial inclusion is more than a technology issue; it is an interaction among technology, policy, education, and socio-economic factors. By combining these elements, Tanzania can leverage FinTech to foster inclusive economic growth and reduce financial disparities.

Conclusions

This study examined the role of financial technology in promoting financial inclusion and enhancing business growth in Tanzania through a systematic review of 20 empirical studies. The findings demonstrate that FinTech has substantially improved

accessibility to financial services, particularly through mobile money, agency banking, and digital banking platforms, reducing transaction costs and enabling remote access, especially in rural and underserved areas. However, the penetration depth of value-intensive financial services such as digital credit, insurance, and investment is low due to low digital literacy, trust, and perceptions of risk. The study goes on to highlight that FinTech has contributed to the positive growth of businesses by improving MSME operational efficiency, cash management, record-keeping, and business formalization. Despite these strengths, adoption and implementation face tremendous challenges, including inadequate infrastructure, cost, regulatory loopholes, security issues, and uneven distribution of impact across population groups. Overall, the evidence suggests that while FinTech is a powerful driver of financial inclusion and economic growth, it can realize its full potential only with policy incentives, behavioral changes, and infrastructure development.

Recommendations

Based on this systematic review's conclusions, several recommendations can be developed to leverage financial technology in Tanzania better. In the first place, financial policymakers and regulators need to focus on creating a robust and enabling environment for FinTech by addressing existing regulatory loopholes, ensuring consumer protection, and improving interoperability across web platforms. Secondly, investment in infrastructure, including expanding mobile networks and improving electricity quality, is needed to enhance accessibility, particularly for rural communities. Thirdly, financial institutions and FinTech providers need to prioritize making financial literacy programs and campaigns their first-line response to boost trust, use, and familiarity with complex financial products, mainly by women, youth, and vulnerable groups. Fourth, interagency coordination, private FinTech firms, and development partners should be engaged to address barriers such as high data costs, cyber risks, and technological challenges to ensure prolonged equitable access to financial services. In the end, future research shall give top priority to longitudinal studies that evaluate the long-term impact of FinTech adoption on economic growth and financial inclusion, and how behavioral and socio-economic determinants affect the success of digital financial interventions. Through this, Tanzania shall realize the full potential of FinTech to foster inclusive economic progress and reduce financial exclusion.

References

1. Demir, A., Pesqué-Cela, V., Altunbas, Y., Murinde, V. (2022). Fintech, financial inclusion, and income inequality: A quantile regression approach. *The European Journal of Finance*, 28(1), 86–107. <https://doi.org/10.1080/1351847X.2020.1772335>.
2. Ellili, N. O. D. (2022). Is there any association between FinTech and sustainability? Evidence from bibliometric review and content analysis. *Journal of Financial Services Marketing*, 1.
3. Uña, G., Verma, A., Bazarbash, M., Griffin, M. N. N. (2023). Fintech payments in public financial management: Benefits and risks. International Monetary Fund. https://books.google.com/books?hl=en&lr=&id=GxuuEAAAQBAJ&oi=fnd&pg=PA3&dq=Improving++Transaction+Reversal+Mechanisms+in+Payment+System&ots=5-7wW46-I2&sig=fT-MXc8O3e4jmJ_q7IvXv7hZwDO4.

4. Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. World Bank Publications. <https://books.google.com/books?hl=en&lr=&id=ZtiVEAAAQ-BAJ&oi=fnd&pg=PA39&dq=THE+ROLE+OF+FINANCIAL+TECHNOLOGY+IN+Demirg%C3%B-C%C3%A7-Kunt+&ots=hu7n3M-yaa&sig=MIQd5vBaQxJa6Q-WkxdjKWSKGG8>.
5. Menon, R. (2021). Singapore FinTech: Innovation, Inclusion, Inspiration. In Monetary Authority of Singapore, *Resilience, Dynamism, Trust* (pp. 479–489). WORLD SCIENTIFIC. https://doi.org/10.1142/9789811250125_0048.
6. Morgan, P. J. (2022). Fintech and Financial Inclusion in Southeast Asia and India. *Asian Economic Policy Review*, 17(2), 183–208. <https://doi.org/10.1111/aep.12379>.
7. Awosika, S., Zhu, R. (2020). Unveiling the Real Digital Savings: An Exploratory Study on Emerging Enablers of Financial Inclusion.
8. Telukdarie, A., Mungar, A. (2023). The impact of digital financial technology on accelerating financial inclusion in developing economies. *Procedia Computer Science*, 217, 670–678.
9. Tanzania, B. (2023). *National Financial Inclusion Framework (NFIF) 2023–2028*. Bank of Tanzania.
10. White, E. B., Meyer, A. J., Ggita, J. M., Babirye, D., Mark, D., Ayakaka, I., Haberer, J. E., Katamba, A., Armstrong-Hough, M., Davis, J. L. (2019). Feasibility, acceptability, and adoption of digital fingerprinting during contact investigation for tuberculosis in Kampala, Uganda: A parallel-convergent mixed-methods analysis. *Journal of Medical Internet Research*, 20(11), e11541.
11. Rogers, E. M. (1962). *Rogers' Innovation Diffusion Theory*. IGI Global, Hershey, PA. Rogers, R., Shamsuddin, A., Bolatitio, S., & Masibo, S. (2023). Theoretical and conceptual frameworks in research: Conceptual clarification. *European Chemical Bulletin*, 12(12), 2103-2117.
12. Ferreira, W. S. de S., Vale, G. M. V., Corrêa, V. S. (2022). Diffusion of Innovation in Technological Platforms: The Uber Case. *BAR-Brazilian Administration Review*, 19.
13. Davis, F. D., Granić, A. (2024). *The Technology Acceptance Model: 30 Years of TAM*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-45274-2>.
14. Lubawa, G. G., Litt, V. K. D. (2025). Advancing Financial Inclusion through Digital Finance Innovations in Tanzania. In E. D. R. S. Gonzalez, V. Kandpal, P. K. Ozili, & P. Chatterjee (Eds.), *Fintech for ESG and the Circular Economy* (1st ed., pp. 255–287). Wiley. <https://doi.org/10.1002/9781394234035.ch14>.
15. Macha, D. P., Massawe, N. M. (2023). Financial technology in Tanzania: Assessment of growth drivers.
16. Ngeze, R. M., Seif, M. (2024). The impact of financial technology (Fintech) on economic growth: Evidence from Tanzania. *African Journal of Economics and Business Research*, 3(2). <https://doi.org/10.4314/ajebr.v3i2.7>.
17. Lotto, J. (2020). Examination of the status of financial inclusion and its determinants in Tanzania. *Sustainability*, 10(8), 2873.
18. Malombe, H. (2025). Digital Financial Literacy and Financial Inclusion among Rural Tanzanian Women: A PLS-SEM Mediated Moderated Model. *Eminent Journal of Business and Management*, 1(2), 12–34. <https://doi.org/10.70582/242c2h93>.
19. Mmari, P., Horne, R., Appiah, E., Gobind, J. (2024). The Role of Digital Financial Literacy for Inclusive Banking in Tanzania.
20. Baruti, M. H., James, S., Chusi, T. (2022). Potential innovative strategies for using mobile money systems to enhance financial inclusion in Tanzania. *EPR International Journal of Economic and Business Review (JEBR)*, 10(3), 1–10.
21. Maseko, F. E., Kalama, A. (2022). The effect of electronic banking on commercial banks' financial performance in Tanzania. *The Journal of Informatics*, 2(1), 33–53.
22. Nanzia, R. (2023). *Effect of Financial Technology on Financial Performance of Commercial Banks in Tanzania [Diss.]*. University of Nairobi.
23. Koloseni, D., Mandari, H. (2024). Expediting financial inclusion in Tanzania using FinTech: The perspective of diffusion of innovation theory. *Technological Sustainability*, 3(2), 171–194. <https://doi.org/10.1108/TECHS-11-2023-0048>.
24. Mothobi, O., Kebotsamang, K. (2024). The impact of network coverage on the adoption of Fintech and financial inclusion in sub-Saharan Africa. *Journal of Economic Structures*, 13(1), 5. <https://doi.org/10.1186/s40008-023-00326-7>.
25. Mpofo, F. Y., Mhlanga, D. (2022). Digital financial inclusion, digital financial services tax, and financial inclusion in the fourth industrial revolution era in Africa. *Economies*, 10(8), 184.
26. Nzilano, K. L., Magoti, S. N. (2025). Digitalisation of Banking Services and the Potential of Women Entrepreneurs for Financial Inclusion in Dodoma Municipality, Tanzania. *African Journal of Empirical Research*, 6(2), 398–411. <https://doi.org/10.51867/ajernet.6.2.33>.