

Research Article

Financial Technology Strategies in Overcoming Financial Inequality and Improving Financial Access

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Abstract: This study analyzes the role of financial technology (fintech) strategies in addressing financial inequality and improving access to financial services in Indonesia. Fintech, through innovations like e-wallets, technology-driven lending, and micro-investments, plays a crucial role in promoting financial inclusion, especially for communities underserved by traditional banking systems. By leveraging digital platforms, fintech can offer affordable and accessible financial services to a broader segment of the population, particularly in rural or remote areas where conventional financial institutions have limited reach. The research employs a qualitative approach using a literature review of reports and publications from reputable sources, such as Bank Indonesia, the Financial Services Authority (OJK), and global fintech industry analyses from the past decade. The findings emphasize three key pillars for effectively reducing financial gaps: fostering collaboration between traditional financial institutions and fintech companies, enhancing financial and digital literacy, and strengthening regulatory frameworks and digital infrastructure. Through these strategies, fintech has the potential to drive economic growth, reduce poverty, and promote social welfare. The study concludes that fintech can be a catalyst for creating an inclusive, equitable, and sustainable financial system, thus contributing to Indonesia's overall development and social well-being. These strategies align with broader efforts to build a more resilient and inclusive economy.

Keywords: Digital Literacy; Financial Inclusion; Financial Inequality; Financial Technology; Regulation

1. Introduction

The massive development of technology and information has brought about the role of financial technology. Based on the AFTECH AMS 2022/2023 report, the tremendous growth of financial technology has made Indonesia the second largest funding recipient in Southeast Asia with a total fintech industry of 33% of total funding, while Singapore ranks first with 43% of total fintech company funding (KataData, 2023). The growth of fintech in Indonesia is also supported by the Indonesian public's understanding of fintech services, which stands at 81.75% according to the 2023 financial technology consumer survey (Data Indonesia, 2023). Fintech is projected to grow by 7% in the fintech sector by 2030, with banking fintech companies expected to represent about a quarter of the total global banking market value (BCG Global, 2023).

From an evolving FinTech perspective, e-wallets have become an important tool that has significantly changed transaction methodologies around the world. They have not only redefined the financial sector but also promoted financial inclusion, especially in developing countries (Omarini, 2018). These platforms allow users to easily store, manage, and transfer funds via mobile devices, proving to be very beneficial for those without access to traditional banking, thereby promoting inclusivity (Palmié et al., 2020, Taherdoost, 2023).

According to data from the Financial Services Authority (OJK) in 2022, 51% of Indonesia's adult population still does not have access to formal financial services. Improved access to financial services demonstrates a relationship between financial inclusion and

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financial services for each individual. Many financial institutions have realized that fintech not only contributes to the economy but also plays a role in reducing poverty and improving social welfare (Rolando, 2024). In this regard, much literature has shown how fintech improves financial well-being at all stages of life.

According to Lynos et al. (2022), financial literacy plays a crucial role in enhancing access to FinTech services. The expansion of digital banking introduces new risks for consumers, who must possess both digital and financial competence; otherwise, it may widen the financial access gap (Engels et al., 2020). Uneven implementation of FinTech can lead to social disparities and hinder economic growth (Alfiana et al., 2023). Nevertheless, FinTech holds significant potential to reduce these inequalities through innovations such as digital payments, technology-based lending, and micro-investments. To achieve this, appropriate strategies are required to ensure that FinTech effectively reaches the most underserved populations (Tsakila, 2024).

FinTech also plays a vital role in developing digital financial infrastructure that fosters financial inclusion. The success of financial inclusion can be measured by its ability to improve individual welfare (Kodongo, 2024). Although digitalization has greatly influenced the banking sector, the effectiveness of digital banking strategies depends on customers' ability to use new technologies, products, and services. A lack of digital skills among the population, however, can limit the success of these initiatives (Sun et al., 2020).

Advancements in FinTech continue to enhance digital technologies, transforming financial systems and creating new opportunities. FinTech serves as a key instrument for reshaping the financial sector (Kashif et al., 2024). Innovations involving technology and artificial intelligence (AI) are revolutionizing climate finance by promoting transparency and accessibility. FinTech has significantly influenced climate finance through solutions that enhance efficiency, effectiveness, and environmental sustainability (Tao et al., 2022).

FinTech challenges extend beyond rapid technological development to include ensuring that users benefit from these innovations (Ghaemi, 2024). If not properly addressed, such challenges may restrict financial access. Recent innovations in FinTech—such as cashless payment systems, internet banking, blockchain, and peer-to-peer lending—have transformed traditional financial transaction methods. These developments promote financial inclusion, particularly in developing countries where access to finance remains limited (Vukovic, 2024).

Hypothesis 1: The important role of fintech services in improving financial access

Based on these issues, the author fills the research gap by analyzing the role of fintech in overcoming financial inequality and strategies for improving financial access as outlined in the thesis proposal entitled **"Financial Technology Strategies for Overcoming Financial Inequality and Improving Financial Access."**

2. Preliminaries or Related Work or Literature Review

Financial Technology

Financial Technology (Fintech) refers to the integration of financial services with modern technology that is designed to be flexible, fast, and cost-efficient. Its popularity stems from the wide range of services it offers, its user-friendly nature, and its high level of transparency. Fintech encompasses various financial activities, including banking-related services such as personal loans, payment systems, money transfers, and credit facilities (Dur Almulla & Abdullah A. Aljughaiman, 2021). The term "FinTech" itself comes from the combination of the words "finance" and "technology" (Balcázar & Rivas, 2021). FinTech solutions have emerged as innovative alternatives that leverage the internet, automated data processing, and advanced technologies like big data, artificial intelligence (AI), the Internet of Things (IoT), and cloud computing (Lee & Shin, 2018). These innovations aim to modernize traditional approaches to delivering financial products (Milian et al., 2019) and to broaden access to payments, credit, wealth management, and insurance across both advanced and developing markets (Verma et al., 2023). Nonetheless, the level of FinTech adoption still differs significantly among developing nations (Frost, 2020).

Financial Access

Financial access refers to efforts aimed at ensuring that everyone can obtain basic financial services by reducing existing barriers. The World Bank defines financial access as a condition in which “individuals and businesses have access to useful and affordable financial products and services that meet their needs—such as transactions, payments, savings, credit, and insurance—provided responsibly and sustainably” (Demirguc-Kunt et al., 2017). Similarly, Yoshino and Peter Morgan (2016) describe it as “the degree to which households and firms, especially low-income households and small and medium-sized enterprises (SMEs), can access financial services.” In general, scholars agree that financial access focuses on expanding the availability of financial services to disadvantaged groups. Providing such services to unbanked individuals is believed to help reduce economic inequality (Kling et al., 2022). In the same vein, Demirguc-Kunt et al. (2017) interpret financial inclusion as the process of delivering financial services to all adults in a secure and efficient manner.

3. Materials and Method

This study uses a qualitative method with a literature study approach (library research) to analyze financial technology (fintech) strategies in overcoming financial inequality and improving financial access. This approach was chosen because the researcher wanted to explore various theoretical sources, previous research results, and relevant policies in order to obtain a conceptual and contextual understanding of the phenomenon being studied (Creswell & Poth, 2018).

The data was obtained from reputable scientific journals, reports from Bank Indonesia, the Financial Services Authority (OJK), the World Bank, and global fintech publications published in the last ten years. The data collection process was carried out by searching relevant literature using keywords such as financial inclusion, fintech strategy, and financial gap.

Data analysis was performed using thematic content analysis, which involves "reviewing, identifying, and grouping the main themes from the literature to find patterns of strategy and their implications for financial inclusion" (Braun & Clarke, 2019). This approach enabled the study to produce a strong theoretical synthesis regarding the role of fintech in reducing gaps and expanding access to financial services.

4. Results and Discussion

The results of this study were obtained through a systematic analysis of various academic literature, reports from national and international financial institutions, and publications discussing the relationship between financial technology (fintech), financial inequality, and financial inclusion. In general, the literature findings show that fintech has great potential in expanding access to formal financial services, especially for groups that have not been reached by the conventional banking system.

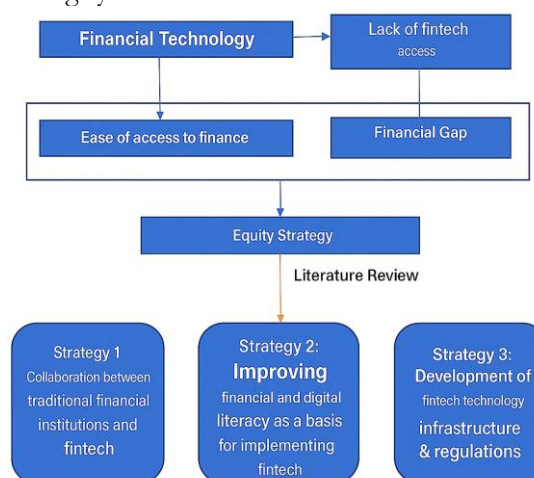


Figure 1. Research synthesis results

The strategies found in the literature indicate several key approaches used to address the financial gap through fintech. One example is collaboration between traditional financial institutions such as banks and fintech companies. According to Setyarini (2024), "Digital transformation undertaken by traditional banks through collaboration strategies with fintech enables them to reach underserved segments of society." This type of collaboration allows banks to leverage fintech innovations to reach people in remote areas, while fintech companies gain legitimacy and trust through cooperation with established institutions. This collaborative approach can give rise to hybrid business models that expand service coverage, reduce operational costs, and accelerate financial inclusion.

Financial and digital literacy must be a top priority in fintech development strategies. This is reinforced in the Bank Indonesia (2024) report, which states that increasing public financial literacy will strengthen the absorption of digital innovation in the financial sector. This is in line with Braun and Clarke's (2019) statement that "thematic analysis of financial inclusion research reveals that knowledge and digital capability are foundational for technology-based inclusion." Financial inclusion policies should not only focus on providing fintech products, but also on preparing the public to use these products safely and productively. Community-based financial literacy education programs, digital training, and the integration of financial literacy materials into the education curriculum are important parts of a long-term strategy.

Regulations and infrastructure are also key components that determine the success of fintech strategies. Abubakar et al. (2019) emphasize that "Fintech has a role in broadening the community's access to financial systems; therefore, it requires comprehensive regulation and cooperation between authorities and institutions to optimally empower financial inclusion." This means that fintech development must go hand in hand with policies that protect consumers, maintain financial system stability, and ensure healthy competition among service providers. Governments and financial authorities need to strengthen regulations related to data protection, cybersecurity, and interoperability between digital financial systems so that fintech services can be widely accessed without causing systemic risks.

The development of digital infrastructure is also an important prerequisite for expanding technology-based financial access. Ramadhan et al. (2025) emphasize that "limited digital infrastructure remains one of the biggest obstacles to inclusive financial growth." Uneven internet access, limited networks in rural areas, and the high cost of digital devices are the main obstacles. Fintech-based inclusion strategies must be accompanied by investment in digital infrastructure, especially in remote areas. The government and the private sector can play a role in expanding internet networks, providing affordable devices, and increasing the technical capacity of communities in disadvantaged areas.

Reducing financial inequality emphasizes that the success of fintech is not only measured by access but also by meaningful usage and welfare impact. The results of research by Zubairu et al. (2025) show that "meaningful financial inclusion involves dimensions beyond mere access, including active usage, service quality, and welfare impacts that still require deeper attention." Effective fintech strategies must be oriented towards empowerment, not just affordability. Fintech products that enable people to save regularly, invest in microfinance, or access microinsurance can strengthen household economic stability and reduce long-term financial risk.

A study conducted by Wati et al. (2024) shows that financial inclusion through fintech and e-commerce accounts for 70.1% of the variation in SME performance improvement in semi-urban areas. This indicates that the integration of fintech into daily economic activities can create a multiplier effect on productivity and community welfare. Fintech is not merely a means of transaction but also an instrument economic development that strengthens the sustainability of the micro and small business sector.

From these findings, it can be concluded that fintech strategies to address financial gaps are multidimensional, involving technological, social, economic, and regulatory aspects. Collaboration between financial institutions, increased literacy, and infrastructure development are the three main pillars in building an inclusive digital financial system. Successful fintech strategies must be adapted to the local conditions of each country, including cultural factors, education levels, and digital infrastructure readiness.

This discussion shows that fintech plays an important role in reducing financial inequality and expanding access to formal financial services. The effectiveness of fintech greatly depends on the extent to which implementation strategies take into account literacy, regulation, and adequate infrastructure.

Fintech can be a catalyst for equitable financial inclusion if it is carried out based on collaborative principles, empowerment, and support for marginalized groups. With a holistic approach, fintech strategies can not only open up access, but also build inclusive, sustainable, and equitable finance for all levels of society.

5. Conclusion

Based on the results of the literature analysis, it can be concluded that financial technology (fintech) has a strategic role in overcoming financial gaps and expanding access to formal financial services in Indonesia. Fintech is an important catalyst in creating a more inclusive financial system through various digital innovations such as e-wallets, technology-based loans, and micro-investment services that are able to reach groups of people who were previously not served by conventional banks. The effectiveness of fintech implementation is highly dependent on three main pillars, namely collaboration between financial institutions traditional and fintech companies. Improving the financial and digital literacy of the community, as well as strengthening regulations and digital infrastructure that support a secure and sustainable financial ecosystem. In addition, government policy support and active private sector involvement are key factors in expanding the reach of fintech services to remote areas. With a holistic and community-empowerment-oriented approach, fintech not only functions as a financial transaction tool, but also as a means of equitable and sustainable economic development for all levels of society.

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