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THE ROLE OF DIGITAL TECHNOLOGY IN FINANCIAL INCLUSION: A LITERATURE REVIEW AND SWOT ANALYSIS

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ABSTRACT

Objective: This study aims to explore the impact of digital technology transformation on financial inclusion in the banking sector, focusing on innovations such as fintech, mobile banking, internet banking, e-wallets, blockchain, and artificial intelligence. The objective is to assess how these technologies enhance access to financial services for underserved populations and improve banking efficiency.

Research Design & Methods: The research uses a literature review and SWOT analysis to assess the impact of digital technologies on banking. It highlights both the benefits and challenges of digital transformation for financial inclusion, with a focus on infrastructure, digital literacy, cybersecurity risks, and regulatory.

Findings: The study finds that digital transformation has enhanced financial inclusion by improving access to services for unbanked and underbanked populations, with innovations like mobile banking and e-wallets reducing costs and boosting efficiency. However, infrastructure gaps, low digital literacy, cybersecurity risks, and outdated regulations remain obstacles to wider adoption.

Implications & Recommendations: To maximize the benefits of digital transformation in banking, it is vital to improve digital financial literacy, encourage collaboration among governments, banks, and fintech companies, and address infrastructure gaps. Additionally, updating regulatory frameworks to keep pace with technological advancements is essential for ensuring digital financial services' security and long-term sustainability.

Contribution & Value Added: This study enhances the understanding of digital technology's role in financial inclusion, offering practical insights and recommendations for policymakers and industry stakeholders to address challenges and leverage digital transformation for a more inclusive, secure, and sustainable financial ecosystem.

Keywords: Digital Transformation, Financial Inclusion, Fintech

JEL codes: G21, G28, O33
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INTRODUCTION

Recent years, digital technology transformation has become a global trend that affects various aspects of life, including the economy, education, health, and financial services. This digitalization era has had many good influences on human life, from the way of thinking and behaving to the interaction between individuals and other individuals. In this situation, consciously or not, we must control technology development. Society must continue to accept innovations and advances in global communication technology and the latest technology. A stronger digital economy, supported by technological security in Indonesia, will accelerate information production, consumption and distribution.

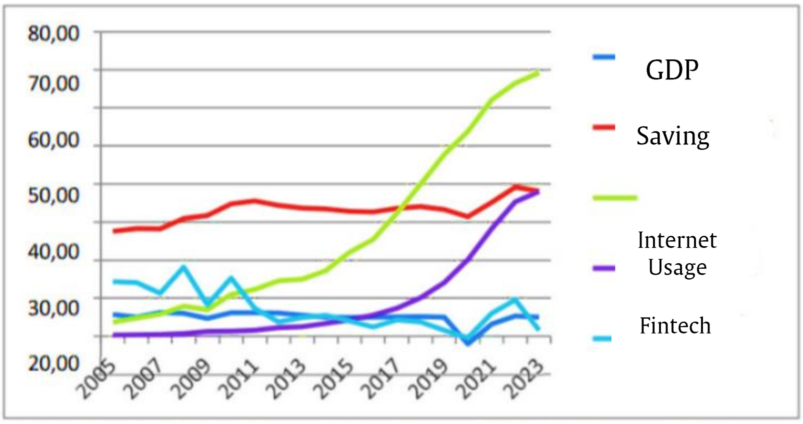

Figure 1. The Development of Digital Economy Transformation in Indonesia 2005-2023

Source: Worldbank, (Pratama et al., 2025).

Figure 1 shows that in the last two decades, the development of digital technology in Indonesia, particularly the internet and fintech, has grown rapidly. The significant increase in internet usage since 2010 and fintech after 2015 shows the role of technology in contributing to the rise of digital financial services, which may impact financial inclusion. Meanwhile, GDP has fluctuated, and the savings rate has been stable. This indicates that digital financial services have not completely replaced conventional methods, but are increasingly contributing to the modern economic system.

The financial sector plays an important role in supporting a country's economy in the current era of globalization. With its various derivative products, this sector not only functions as a means of investment and risk mitigation, but also as a driver of economic activity and social development. Through their role as financial intermediaries, financial institutions contribute to economic growth, increase income equality, reduce inequality, reduce poverty, and maintain financial system stability. One of the strategic steps to overcome these problems is implementing an inclusive financial system. An inclusive financial system not only supports sustainable economic growth, but also strengthens financial system stability by increasing community participation in the formal financial ecosystem, reducing loan sharking practices, and creating a financial ecosystem that is more resilient and adaptive to global economic dynamics.

Technological advances in banking institutions have supported financial inclusion as an integral part of the modern financial system. Banking digitalization, with its competitive advantages and rapid growth, can be a powerful tool to promote financial inclusion and sustainable development (Chu et al., 2023). Financial inclusion refers to the ease of access and availability of financial services for all levels of society, especially for marginalized and unbanked groups. It is crucial in supporting economic development, reducing poverty, and promoting inclusive growth. In recent years, technological developments have drastically changed the landscape of the banking industry, presenting a wide range of innovative financial products and services. Advancements such as mobile banking, digital payments, and fintech solutions have increased access to financial services, especially in remote and underserved areas. However, with these advancements come challenges and issues that must be addressed.

One of the main challenges in financial inclusion is the digital divide, which affects certain demographic groups or regions that do not have access to stable internet connectivity or sufficient digital literacy. This gap hinders the utilization of growing digital financial services, such as online banking and e-wallets, especially in remote rural areas and low-income groups. Studies show that limited access to technology and lack of digital literacy, especially among the elderly and individuals with lower levels of education, still have limitations in understanding and using digital banking technologies, leading to low participation in digital financial services, thus exacerbating economic inequality (Odei-Appiah et al., 2022).

To respond to the challenges of the digital era, Indonesian banks continue to innovate with strategies that include improving digital financial literacy, investing in technology infrastructure, and working with regulators to ensure regulatory compliance. Key factors in the success of this transformation are the adoption of the right technology, readiness of human resources, and strong cybersecurity to maintain customer trust in digital banking services (Irsyad et al., 2024). The development of fintech and collaboration between conventional banks and financial technology companies has also accelerated the adoption of digital services, including in the digital payment ecosystem and technology-based lending (Shabri, 2022). Given these developments, digital transformation is expected to continue and further support broader financial inclusion in Indonesia.

Some recent studies have highlighted various aspects of financial inclusion driven by technological developments in banking institutions that have significantly expanded access to financial services to various levels of society, including to the less affluent. Rahman (2024) highlighted that advances in financial technology, such as digital banking, e-wallets, artificial intelligence (AI) and blockchain, have supported more efficient, secure and low-cost transactions. Fintech innovations and digital financial services enable many unbanked people worldwide to access financial services through mobile devices (Odei-Appiah et al., 2022; Senyo & Osabutey, 2020). Mobile banking and e-money have a positive impact on financial inclusion by expanding access and increasing the use of financial services for previously underserved communities (Fernandes et al., 2021). Therefore, digital technology transformation has great potential to promote financial inclusion, especially in developing countries.

One example of this transformation can be seen in Bangladesh, where fintech-based financial inclusion has successfully reduced the financial services access gap between urban and rural areas. Although inequalities remain, there has been a significant increase in the use of digital financial services, as seen in the growing number of active cards and online banking services, as well as the rapid growth of mobile-based financial service accounts across the country (Datta, 2024). In addition, India is also an example of the success of digital transformation in financial inclusion. Implementing policies such as demonetization and implementing the Goods and Services Tax (GST) have boosted the adoption of financial technology among people. The role of blockchain in India's financial system also shows great potential in improving the transparency and efficiency of financial transactions (Dhingra et al., 2024).

In Indonesia, banking digitization is growing rapidly along with increasing internet penetration and mobile device usage. Digital services have helped improve financial inclusion, enabling the unbanked and underbanked to access financial services more easily (Lydiana et al., 2022). Thus, the adoption of digital transformation in the banking sector needs to be supported by policies that ensure data security, increase digital literacy, and develop innovative services aligned with market needs, so that all levels of society can enjoy the benefits of digitalization equally. This research aims to fill the gap between previous research and the dimensions of financial inclusion influenced by digital technology transformation. The main focus of the research is to provide practical guidance for policymakers, financial institutions, and fintech companies to strengthen the inclusiveness and sustainability of digital financial services. This research analyzes the socio-economic factors that influence the adoption of financial technology, evaluates the regulatory framework, and assesses the impact of technology in improving access and financial literacy among vulnerable groups, to create a more inclusive and sustainable financial system.

LITERATURE REVIEW

Digital Technology Transformation in Banking Institutions

Digital transformation in the banking sector includes the application of digital technologies to increase operational efficiency, improve customer experience, and strengthen competitiveness (Ionașcu et al., 2023). Digital banking enables financial institutions to provide faster, safer, and more efficient services, including real-time transactions, customer service automation, and the application of artificial intelligence in risk management and service personalization (Nalini & Yuvasri, 2024). Another study revealed that banking digitalization accelerates operational efficiency, improves customer experience, and strengthens consumer confidence in digital banking services (Pristiyono et al., 2022). In addition, using digital technology allows banks to reduce operational costs through automation and advanced data analysis (Agu et al., 2024).

Banking digitization involves the application of technologies such as digital banking instruments, artificial intelligence, and other innovations to improve financial efficiency and resilience. This development is influenced by factors such as the growing need for "contactless" services changing preferences for secure and touch-free financial transactions, especially due to events such as the COVID-19 pandemic (Zuo et al., 2021). Digital transformation in banking also adopts AI, blockchain, and other technology platforms to support customer service in line with sustainable development goals, assisting in fraud detection and improving user experience through more sophisticated automation and data analysis (Sharma et al., 2023).

These developments are also increasingly aligned with sustainable development goals, where digital technology drives green finance and supports more environmentally sound investments (Zhao, 2024). For example, blockchain application in the banking sector has been leveraged to reduce carbon footprints by digitizing processes that previously relied on large amounts of physical resources. In addition, the technology opens up opportunities for greater transparency in sustainable investment reporting, so investors can more easily identify and support projects focused on environmental sustainability. Thus, advances in financial technology not only support economic efficiency, but also play a role in creating a more sustainable and environmentally-friendly financial system.

Digital transformation in the financial sector involves a shift from traditional financial practices to more efficient and innovative digital systems. This development has driven the growth of online platforms, digital payments, and cryptocurrencies, which are key elements in the evolution of the global financial system. The digitization of banking enables the adoption of faster, safer and more convenient electronic payment systems, such as digital wallets and app-based payment services that are increasingly popular among the masses (Lottu et al., 2023; Nigam et al., 2021; Sayari, 2023). Several studies show that digitalization has significantly impacted banks' efficiency and performance (Indriasari et al., 2019; Zuo et al., 2021).

Modern banks are turning to digital services, such as mobile banking, internet banking, and customer service automation, which provide more flexibility and security for customers to access financial services. Research shows that this digital transformation not only brings benefits but also challenges, including cybersecurity threats, the need for more responsive regulation, and resistance to change among customers and the banking workforce (Shanti et al., 2022). In addition, digitalization impacts the financial system's stability, where while it can improve efficiency, it also poses potential risks to the sustainability of conventional banking business models (Hakizimana et al., 2023).

Concept and Theory of Financial Inclusion

The concept and theory of financial inclusion have become an important topic in the study of finance and economic development. Some scholars define financial inclusion as the ability of all levels of society to access and utilize formal financial services that are affordable and appropriate to their needs (Ahmed & Salleh, 2016; Rejeb et al., 2021). Furthermore, Sailendra & Djaddang (2022) stated that financial inclusion, especially in digital form, is crucial in strengthening economic resilience, especially for the Micro, Small, and Medium Enterprises (MSMEs) sector facing global economic challenges. According to Dr. Veena M (2022), financial inclusion is an effort to ensure that financial services can be accessed easily and affordably by all levels of society, especially low-income groups, in order to improve their living standards and reduce vulnerability to economic risks.

Theoretically, various approaches have been developed to understand the concept of financial inclusion. Ozili (2020) classifies financial inclusion theories into several main categories: institutional, social trust, and behavioral finance. Institutional theories highlight the importance of government regulations and policies in creating an enabling environment for wider financial access. Good regulations can encourage innovation in financial services and improve consumer protection, giving people more confidence to use formal financial services. On the other hand, social trust theory focuses on how individuals' level of trust in financial institutions affects their decision to use financial services. If people trust the financial system, they tend to be more active in using services such as digital banking, loans, and insurance. In addition, behavioral finance theory explains how psychological and social factors influence individuals' financial decisions, including consumption, savings, and investment patterns. By understanding these different approaches, stakeholders can design more effective strategies to improve financial inclusion through policies, technological innovations or trust-based approaches.

Lazareva (2023) highlights that financial inclusion is not only about access to financial services, but also their effective and quality use. Recent research by Tomging (2024) reveals that financial inclusion plays a crucial role in promoting more inclusive economic growth, especially by expanding access to credit for marginalized groups. With greater access to financial services, individuals and small businesses that previously struggled to access financial support can have the opportunity to expand their businesses, increase their productivity and improve their economic conditions.

Experts agree that financial inclusion is an important component in supporting inclusive and sustainable economic development. They emphasize the importance of policies that expand access to financial services, especially for marginalized groups, and the use of financial technology to increase the reach and effectiveness of financial inclusion (Mumtaz, 2024; Preziuso et al., 2023). In this regard, there is a need to develop a comprehensive financial inclusion index to measure and monitor progress more precisely and accurately (Sarpong & Nketiah-Amponsah, 2022). This index could include indicators such as access to financial services, use of financial products, and their impact on economic growth and poverty reduction. With a more structured measurement, stakeholders can design more effective strategies to increase financial inclusion, ensure that all levels of society can feel the benefits equally, and strengthen economic resilience in the long run.

METHODS

This research applies a qualitative method with a literature review approach and SWOT (Strength, Weakness, Opportunity, Threats) analysis to examine how digital technology transformation can strengthen financial inclusion in the banking sector. The literature review approach is conducted by collecting and analyzing previous studies that discuss the role of digital technology in the financial industry, including the application of mobile banking, artificial intelligence (AI), blockchain, and digital payment systems (Rahman, 2024). The data sources in this study came from academic journals, industry reports, as well as several case studies that have adopted digitalization in financial services (Taka & Bayarçelik, 2023). In addition, SWOT analysis was used to identify internal and external factors that influence the implementation of digital transformation in improving financial inclusion. This approach allows the research to provide deeper insights into how banks can optimize digital technology to increase financial inclusion sustainably, as well as identify the best strategies to face the challenges (Mavlutova et al., 2022).

RESULT

Technology Innovation in Increasing Financial Inclusion

Technological advances have become a key element in expanding financial inclusion in various sectors by providing wider, more efficient, and safer access to financial services for the community. One significant innovation is financial technology, commonly abbreviated as fintech, which can facilitate and accelerate financial transactions and reach community groups previously unserved by conventional banking (Marginingsih, 2021). fintech is considered a game changer that can bring financial services to previously unreached people, by utilizing information technology and the digital financial ecosystem (Setiawan et al., 2021), by the growth of the internet and smartphones in developing regions.

Fintech has contributed immensely to accelerating financial inclusion worldwide by connecting millions of previously unbanked people into the global financial system (Feghali et al., 2024). Through digital platforms that utilize advanced technologies, such as mobile payment applications, electronic money transfer systems, and app-based financial services, fintech has enabled individuals living in remote areas or those without access to traditional banking services to connect with the broader financial ecosystem. These innovations simplify the financial transaction process and enable access to financial products previously unavailable to many, such as loans, insurance, and savings. As such, fintech is important in empowering people to manage their finances more efficiently, improving quality of life, and accelerating the achievement of financial inclusion goals globally.

Fintech has revolutionized financial access in the digital era with various significant advantages according to Marginingsih (2021); Sailendra & Djaddang (2022); Buwono et al., (2022), 1) Ease of conducting financial transactions quickly and efficiently, 2) Increase access to funding, especially for Micro, Small and Medium Enterprises (MSMEs) through digital loan services, thus helping to increase financial inclusion, 3) Transaction efficiency and speed, fintech offers digital payment solutions that are faster, safer, and more affordable than conventional financial systems. Besides that, of course, fintech also has some drawbacks, 1) Security and cybercrime risks, such as user data leakage and online fraud involving digital financial services, 2) Lack of digital literacy among the public which leads to unwise use of fintech services, such as online loans with high interest rates, 3) Suboptimal regulation, as the government is still adapting and balancing between technological innovation and consumer protection.

In banking institutions, technological innovations such as digital banking and artificial intelligence (AI)-based services have revolutionized how people, especially those in remote areas, access financial services. Advances in Artificial Narrow Intelligence (ANI) have driven the digitization of various financial services such as account access, loan processing, insurance, and financial information (Rawat et al., 2023). These tools can enhance financial inclusion by providing affordable access to various financial products and services. One important breakthrough in banking digitalization is the BI-FAST system designed by Bank Indonesia. This system allows payments to be made in real-time at a more affordable cost, and supports increased financial inclusion by expanding access to digital banking services (Marginingsih, 2021).

Table 1. Tools Technical Innovation Digital Banking

Tools	Function	Refference
Mobile Banking	Enables access to banking services via mobile phones, increasing financial inclusion in remote areas.	(Rahman, 2024)
Internet Banking	Facilitate financial transactions without the need to go to a physical bank, expanding access to financial services.	(Othman et al., 2023)
E-Wallet or Digital Wallet	Allows users to store money digitally and make transactions easily.	(Arslanian & Fischer, 2019)
Blockchain and Cryptocurrency	Improve transaction security, reduce transaction costs, and provide access to finance for the unbanked.	(Cahyadi et al., 2021)
Poin of Sale (POS) and Smart Cards	Facilitate non-cash transactions, especially for people who do not have access to banks.	(Ahmad et al., 2023)
ATM and Micro-ATM	Provide access to cash and banking services in locations far from bank branches.	(Saputra & Abdul-Majid, 2018)
Agent Banking	Using local agents to provide banking services to communities in hard-to-reach areas.	(Koori et al., 2020)
Peer-to-Peer (P2P) Lending	Provides access to credit for individuals and small businesses who find it difficult to get loans from traditional banks.	(Suryawati & Nurdana, 2021)

Overall, digital technology innovations have the potential to revolutionize the financial services industry, creating a more inclusive, efficient and customer-centric financial ecosystem (Sanyaolu et al., 2024). Technologies such as artificial intelligence (AI), blockchain and fintech have changed how financial services are delivered and accessed. AI enables task automation, better fraud detection, and improved customer experience through chatbots and personalization (Manoharan et al., 2024). On the other hand, blockchain provides decentralized, secure, and transparent transactions, potentially revolutionizing various aspects of the financial industry beyond digital currencies (Karim et al., 2022).

Impact of Digital Technology Transformation on Financial Inclusion

Technological developments in the financial sector, particularly through fintech innovations, have had a major impact on financial inclusion in many countries. The advent of mobile banking and digital payment systems expands access to financial services (Ebirim & Odonkor, 2024). Mobile banking and digital payment systems have enabled individuals and small businesses to conduct financial transactions more easily, quickly, and securely without relying on physical bank branches (Miftari et al., 2024). In addition, fintech has boosted economic growth by increasing access to microcredit and more flexible digital financial services (Mohamed & Algarhy, 2024).

The impact of technological transformation on banking institutions, in this case referring to fintech, on financial inclusion is significant, especially in developing countries with limited traditional banking infrastructure. Fintech companies are leveraging technological innovation to change the financial services landscape, providing disruptive solutions that address the needs of unbanked individuals or those with limited access to bank accounts. The accessibility and scalability of fintech solutions have been instrumental in overcoming long-standing barriers to financial inclusion, empowering individuals and businesses with new access to essential financial services.

Financial technology innovations contribute to lowering transaction costs and increasing transparency and play an important role in improving people's financial literacy and awareness. With digital-based financial services, people can access financial information more easily, understand personal financial management, and learn about investment and savings through digital applications and platforms (Komara & Mustadim Wahyudi, 2024). The advancement of financial technology (fintech) also encourages financial literacy among the younger generation, especially millennials and Gen Z. Fintech applications allow them to start investing with small capital, whether in stocks, mutual funds, or other digital assets, previously only accessible to certain circles. This allows the younger generation to build better financial habits early (Utami, 2023).

The transformative impact of fintech on financial inclusion goes beyond providing access to credit and payment services. Fintech offers a range of benefits, including improved financial literacy, reduced transaction costs, increased transparency, and the introduction of more innovative credit evaluation methods. As fintech continues to expand its reach, collaboration between fintech companies, regulators, and conventional financial institutions is becoming increasingly important to optimize its potential in creating an inclusive and sustainable financial ecosystem globally. This synergy can drive financial solution innovation, regulatory improvement, and expansion of financial access, which ultimately benefits individuals and communities from various socio-economic strata. As a result, previously underserved groups now better understand financial concepts, such as budget planning, saving, investing, and managing debt. This helps them navigate the financial world more effectively and make decisions that align with their long-term financial goals.

SWOT Analysis of Digital Transformation in Financial Inclusion

SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis in the context of digital transformation and financial inclusion in banking institutions is a strategic approach used to evaluate internal and external factors that affect the success of banking digitalization in expanding access to financial services. This analysis helps banks identify strengths that can be utilized, weaknesses that need to be improved, opportunities that can be developed, and threats that must be anticipated in adopting digital technology to increase financial inclusion (Muhammad, 2023), especially related to the implementation of digital technology to increase access and use of financial services for people who have not been served or underserved by the conventional banking system.

In its implementation, SWOT analysis becomes an important tool for banks in understanding how digital transformation can improve accessibility to financial services. The analysis aims to evaluate the internal and external factors that influence banking digitalization about financial inclusion. Internal factors, such as strengths and weaknesses, are within the control of financial institutions, while external factors, such as opportunities and threats, must be anticipated (Sharath & Praveena, 2023). In digital banking, SWOT analysis can cover various aspects, including cybersecurity, adoption of new technologies, customer experience, and applicable policies and regulations (Asmar & Tuqan, 2024; Khanh Quan et al., 2023).

Table 2. SWOT Analysis of Digital Transformation in Financial Inclusion

Indicators Internal	Strengths	Increased operational efficiency, reduced transaction costs, and easier access to services for the wider community. Innovations such as mobile banking, e-wallet, and BI-FAST enable faster, safer, and more accessible transactions anytime, enhancing customer experience and expanding the scope of financial services, especially for the unbanked.
	Weaknesses	Limited digital infrastructure in some areas, a lack of readiness of human resources to manage new technology, and a low level of digital financial literacy in certain groups may slow down the adoption of digital banking services and hinder the improvement of financial inclusion.
Indicators External	Opportunities	Digital transformation opens up huge opportunities for banks through the growth of the fintech ecosystem and regulatory support. Digitalization enables the expansion of service coverage to remote areas and collaboration with fintech in providing innovative solutions such as digital microfinance, P2P lending, and blockchain-based payments.
	Threats	Digital transformation faces serious threats, such as increased cybersecurity risks, digital fraud, and fierce competition with fintech and big tech. Cyberattacks and data leaks can reduce public trust, which, if not properly addressed, can hinder the growth of financial inclusion.

The implementation of SWOT analysis in banking digital transformation for financial inclusion enables financial institutions to formulate effective strategies, capitalize on existing strengths and opportunities, and address weaknesses and anticipate potential threats. This is important to ensure that digital transformation improves operational efficiency and contributes to increased inclusive and sustainable access to finance (Abdel-Basset et al., 2018; Alam et al., 2018). While digital transformation provides great opportunities for financial inclusion in the banking sector, financial institutions must face challenges carefully. Success depends on implementing the right strategy, managing technology in line, and effectively addressing regulatory and security aspects.

Using this strategic approach, digital transformation not only focuses on improving operational efficiency and innovation in banking services, but also expands access to finance for previously hard-to-reach groups, including in remote areas and communities with limited access to traditional banking services. Digitalization enables the development of more flexible financial products, such as digital microfinance, app-based banking services, and faster and more secure payment systems through blockchain technology. In addition, with the support of adaptive regulations and collaboration with fintechs, banks can create financial solutions that are more inclusive and tailored to user needs. However, the sustainability of this transformation requires a focus on data security and cyber risk mitigation to maintain public trust in digital services. With an integrated strategy, digital transformation will drive the growth of the banking sector and build a more inclusive, stable and sustainable financial ecosystem in the long run.

DISCUSSION

The Digital Technology Transformation in Enhancing Financial Inclusion of Banking Institutions" analysis provided an in-depth understanding of the complex interplay between technological innovation and enhancing financial inclusion. Through a thorough analysis, the findings confirm and strengthen the existing literature, showing that technological advancements mainly related to banking digitalization, such as mobile banking apps, digital payment platforms, AI-based customer service, and blockchain technology, have a significant impact in expanding access to financial services for previously underserved groups. These developments not only increase ease of access to finance and lower transaction costs, but also increase transparency, efficiency and convenience in financial activities. Alignment with these fundamental principles emphasizes the crucial role of technology in addressing disparities and promoting financial inclusion, which contributes to broader socioeconomic development and empowerment. This discussion explores the relationship between the research findings, the concept of digital literacy, and the challenges of cybersecurity, data privacy, and the digital divide.

This research emphasizes the importance of addressing these challenges to effectively utilize and adopt digital financial services. Initiatives promoting financial education and improving digital literacy are key elements in supporting digital transformation, especially in the financial sector. Digital financial literacy not only includes an understanding of how to use digital banking apps and services, but also covers aspects of security, personal financial management, and wise decision-making in digital transactions. With the increasing digitization in financial services, many individuals, especially from vulnerable and unbanked groups, still face obstacles in understanding how these technologies work effectively and safely (Yang & Masron, 2023). Furthermore, various efforts have been made by the government, financial institutions, and fintech companies to support digital financial education. Programs such as online trainings, webinars, and interactive educational applications have proven effective strategies in improving people's understanding of digital financial services (Alexander & Karametaxas, 2020). In addition, integrating financial and digital literacy in the education curriculum from an early age in schools can help the younger generation develop a better understanding of managing finances in the digital era.

The government and private sector play an important role in ensuring that access to digital financial information is inclusive and can be understood by all groups, including those living in remote areas or having limited literacy. This can be achieved through accessible and tailored education campaigns, such as using social media, interactive video tutorials, and simple guides in easy-to-understand language. With this approach, individuals who previously had difficulties understanding digital finance concepts can be more confident using banking services and digital transactions. In addition, collaboration with local communities, educational institutions, and non-governmental organizations can expand the scope of education to areas with limited access to the internet and technology. Inclusive digital literacy programs can also include hands-on training, mentoring in using financial applications, and digital transaction simulations to provide real-life experiences for new users. Through these initiatives, the gap in understanding of financial technology can be narrowed, encouraging more individuals to participate in a broader and safer digital financial ecosystem.

CONCLUSION

The transformation of digital technology has had a significant impact on improving financial inclusion in banking institutions, opening up access to broader and more efficient financial services, especially for previously neglected communities. Innovations such as fintech, mobile banking, internet banking, e-wallets, blockchain, and artificial intelligence have changed how banks operate, improving efficiency, reducing transaction costs, and providing easy access to various levels of society. However, challenges such as infrastructure gaps, low digital literacy, the threat of cybersecurity risks, and regulations that still need to be adjusted to technological developments are obstacles that must be overcome. The SWOT analysis highlights that digitalization opens up opportunities to reach the unbanked and underbanked, as well as collaboration with fintech, although digital transformation offers great opportunities to accelerate financial inclusion, financial institutions must face existing weaknesses and threats, such as cybercrime and digital fraud, which need to be anticipated. Therefore, improving digital financial literacy and close collaboration between the government, banking sector, and fintech companies are crucial to ensure that digital transformation can be utilized to its full potential, creating an inclusive, secure, and sustainable financial ecosystem in the long-term.

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