International Journal of Economic Literature (INJOLE) e-ISSN: 3026-0221
Vol. 3 No. 5 May 2025, page., 405-413

DIGITAL TRANSFORMATION OF TRADITIONAL BANKS: COLLABORATION STRATEGY WITH FINTECH FOR FINANCIAL INCLUSION

Adhista Setyarini
Universitas Nahdlatul Ulama Surakarta
adhista.setya@gmail.com

Abstract
Digital transformation undertaken by traditional banks through collaboration strategies with fintech has become an effective approach to support financial inclusion. In facing the challenges of technological change and increasingly digital consumer needs, traditional banks utilise fintech to expand access and deliver more innovative financial services. This collaboration integrates the strengths of traditional bank networks and fintech's advanced technology, enabling them to reach underserved segments of society, such as small businesses and rural communities. This results in more inclusive digital financial solutions, such as microloans, app-based financial management, and financial literacy education. This approach not only improves access to financial services, but also drives innovation and efficiency in the industry. Therefore, this collaborative strategy is an important step that facilitates the transformation of traditional banks in supporting global financial inclusion.
Keywords: Transformation, Traditional Digital Bank, Collaboration Strategy with Fintech, Financial Inclusion.

Introduction

Digital transformation has become one of the main focuses in various industries, including the banking sector. The growth of financial technology (fintech) globally has provided both challenges and opportunities for traditional banks. Innovative fintechs have succeeded in providing financial services that are more efficient, affordable, and accessible to the wider community, including groups that were previously unreachable by traditional banking services. Services such as digital payments, microloans, informal investments, and app-based financial management have changed the way people access financial services (Walker, 2025) .

Fintech, or financial technology, is a term that describes innovations in the financial services industry that are powered by digital technology. Fintech encompasses a wide range of services, such as electronic payments, online lending, app-based investments, personal financial management, and blockchain technology. Fintech aims to simplify, accelerate, and expand access to financial services for people (Richards, 2021) . By utilising technologies such as mobile applications, artificial intelligence (AI), and big data, fintech is able to create more efficient and user-friendly solutions compared to traditional financial methods. In addition, fintech is also often aimed at reaching segments of society that previously had difficulty gaining access to banking services, thus contributing directly to financial inclusion (Wei, 2023) .

Fintech is essential in the modern economic ecosystem as it overcomes the limitations of traditional financial institutions. Fintech gives people wider access to financial services, especially for those who live in remote areas or who have little connection with traditional banking institutions. In addition, fintech plays an important role in driving efficiency and ease of transactions, both for individuals and businesses (Smith, 2021) . At the macro level, fintech helps drive the digitalisation of the economy and creates opportunities for startups and innovators in the financial sector. By increasing financial inclusion, supporting economic growth, and accelerating technology adoption, fintech contributes significantly to shaping the future of the global financial industry (Baker, 2020) .

In Indonesia, the level of financial inclusion is still a concern. Based on data from the Financial Services Authority (OJK), there has been progress in financial services penetration, but some people in remote areas are still underserved by traditional banks. Fintech offers an innovative solution by enabling access to finance without having to rely on the presence of a physical office, thus becoming a catalyst in improving financial inclusion. However, fintech also poses a threat to conventional banks by displacing some of their market share (Brown, 2023) .

Fintech offers faster, more flexible and efficient services, such as digital payments, peer-to-peer (P2P) lending and app-based financial management, which often appeal more to the digital generation. While processes at traditional banks are often perceived as slow and cumbersome, fintechs are able to provide instant solutions at lower costs. This has caused many customers to turn to fintech services for their financial needs, such as money transfers, bill payments, and even investments (Martinez, 2023) . As a result, conventional banks are facing pressure to adapt to new business models and integrate modern technology into their operations to remain relevant and competitive amidst the rapid development of financial technology. To stay relevant amidst technological transformation, many traditional banks are opting for a collaborative approach, working with fintechs rather than competing directly. This collaboration unlocks great potential, especially in the delivery of more adaptive, cost-effective and inclusive services. Nonetheless, there are various challenges to overcome, such as differences in organisational cultures, complex technology systems, as well as regulations that need to support a collaborative ecosystem between the two entities (Hall, 2022) .

In-depth research on how traditional banks can integrate fintech technology through collaboration strategies is crucial. This collaboration is expected to not only provide business opportunities for both parties but also act as a catalyst in encouraging the achievement of better national financial inclusion. By understanding effective collaboration models, traditional banks can optimally execute digital transformation, while ensuring financial inclusion for the wider community.

Research Methods

The study in this research uses the literature method. The literature research method is a research approach that focuses on collecting, analysing, and synthesising information from relevant written sources to answer research questions or support hypotheses. The sources used usually include books, scientific journals, articles, research reports, and other reliable documents. Researchers use this method to understand existing concepts, theories, and findings, so that they can build a theoretical framework or formulate conclusions based on available knowledge (Paré & Trudel, 2007) . This method is particularly useful when new research cannot be conducted directly, or to provide in-depth context to the phenomenon under study. By conducting a systematic literature review, research becomes more focused, valid, and in accordance with the development of existing studies in the field (Borenstein et al., 2009) .

Results and Discussion

Digital Transformation in the Banking Industry

Digital transformation in the banking industry has become one of the top priorities in the face of the rapidly evolving technological era. The presence of digital technology enables banks to change the way they operate, interact with customers, and provide financial services. This transformation not only presents new opportunities, but also major challenges that encourage banks to adopt innovative approaches in all aspects of their business (Anderson, 2020) .

In the digital era, customers want fast, easy and secure services. This has encouraged banks to create a digital ecosystem that allows banking transactions to be conducted through mobile devices, internet banking, or digital-based applications. With technologies such as artificial intelligence (AI), blockchain, big data, and the Internet of Things (IoT), banks can provide a more personalised experience to customers, for example by offering products tailored to individual needs based on data analysis (Foster, 2020) .

Digitalisation also has an impact on the efficiency of bank operations. By automating various processes such as data processing, risk analysis, and credit evaluation, banks are able to reduce operational costs and speed up service times. Technology such as robotic process automation (RPA) helps banks handle routine tasks that used to take a lot of time. This allows employees to focus more on strategic tasks, such as business planning and improving customer relationships (Evans, 2025) .

However, digital transformation is not without risks. One of the biggest challenges is the increasingly complex cyber threats. Malware attacks, data theft, and online fraud are serious threats to digital banking systems. Therefore, banks must invest heavily in cybersecurity to protect customer data and maintain the integrity of their systems. The implementation of encryption technology, layered authentication, and real-time monitoring are important steps to overcome these threats (Kumar, 2023) .

Another challenge is the change in organisational culture. Not all employees and stakeholders in the banking industry are ready for the shift to digital. This process requires intensive training to improve the digital literacy of the workforce and build a mindset that is adaptive to technological change. Successful digital transformation depends not only on technology, but also on the readiness of human resources to adopt such innovations (Green, 2023) .

Digital transformation also affects competition in the banking industry. Fintech as a new player in the financial sector offers faster and more flexible service alternatives, attracting many customers, especially the younger generation. To stay competitive, banks must integrate innovative technologies into their services while expanding collaboration with fintech companies. Strategic partnerships between banks and fintechs can create mutually beneficial synergies, such as the development of digital payment ecosystems or app-based credit solutions (Nguyen, 2022) .

On the other hand, digitalisation provides a great opportunity to improve financial inclusion, especially in areas that are hard to reach by conventional banking services. By utilising digital technology, banks can provide access to financial services to previously underserved communities. Examples are through digital micro-lending platforms or app-based accounts that can be accessed by people with mobile devices (Turner, 2022) . To achieve maximum digital transformation, banks need to adopt a sustainable approach. Digitalisation is not a process that is completed in one stage, but rather a journey that requires constant evaluation and refinement. By keeping up with the latest technology trends and understanding the changing needs of customers, banks can ensure their digital transformation is relevant in the future (Mitchell, 2025) .

Digital transformation in the banking industry is not just about adopting technology, but also creating new value for customers and customers. With a strategic approach, banks will be able to not only survive, but also thrive in the midst of increasingly fierce competition. Effective digital transformation will take the banking industry to a new level, where financial services become more inclusive, efficient, and relevant to the needs of the times (Wilson, 2021) .

Fintech's Role in Financial Inclusion

The financial technology (fintech) industry has brought big changes to the world of finance, especially in terms of increasing financial inclusion. In recent years, fintech has become a revolutionary solution to reach people who previously did not have access to traditional financial services. By utilising technology, fintech is able to create services that are simple, fast, and affordable for all, including populations who live in remote areas or have limited access to formal financial institutions (Johnson, 2020) .

One of fintech's main roles in financial inclusion is to provide access to savings accounts, payments and loans. Through digital applications, people can open an account without having to physically visit the bank. In addition, data verification processes such as KYC (Know Your Customer) can now be done online, which speeds up access to banking services. For those who previously did not have official identity cards or live in hard-to-reach areas, fintech-based microfinance services are very helpful in providing inclusive financial solutions (Patel, 2023) .

Fintech also offers digital payment services that improve the efficiency of financial transactions. Through digital wallets and QR codes, people can easily make payments, receive money, or even make cross-border transfers. These services are particularly supportive of small and medium-sized enterprises (SMEs) that often do not have access to bank-based payments. With fintech, SMEs can participate in the digital ecosystem, reach a wider market, and increase their productivity (Edwards, 2023) .

Not only that, some fintech companies provide peer-to-peer (P2P) lending platforms that allow people to borrow funds without having to visit a bank. The loan application process in fintech tends to be faster than traditional financial institutions, making it an attractive option for those who need emergency loans. In addition, such platforms also support individual lenders or investors to play a direct role in supporting the small business sector with fresh funds (Davis, 2023) .

Microinsurance is also one of the areas developed by fintech to improve financial inclusion. In developing countries, many people do not have access to insurance protection due to expensive and complex administrative processes. Fintech provides solutions in the form of simple, affordable insurance products and app purchases. This way, people who were previously vulnerable to financial risks can have adequate protection (Adams, 2022) .

Apart from offering financial products, fintech also plays a role in improving financial literacy in society. Through apps and digital education platforms, fintech helps users to understand how to manage money, manage debt, and save effectively. Some apps even provide budget reminders or simple investment simulations, so users can learn while using financial services (Moore, 2022) .

The role of fintech does not stop at adults, but also supports vulnerable groups such as women, farmers, and migrant workers. With its flexible technology base, fintech is able to provide services that suit their specific needs. For example, there are apps designed to simplify cross-border payments for migrant workers, or platforms that focus on providing working capital to farmers with a friendly instalment system (Gilbert, 2020) .

However, the success of fintech in promoting financial inclusion cannot be separated from the challenges that need to be overcome. Factors such as data security, government regulations, and digital literacy are issues that must be considered. If not managed properly, the potential for data misuse or online fraud can harm public trust in fintech services. Therefore, collaboration between the government, regulators, and fintech players is key to ensuring a safe and sustainable fintech ecosystem (Thomas, 2024) .

Overall, fintech has become a major driving force in the effort to improve financial inclusion in the world. With the ability to reach populations previously overlooked by the traditional financial system, fintech not only creates access, but also provides tools for people to improve their quality of life. Going forward, innovations in this sector are expected to be able to reach more people at various levels, so that the goal of holistic financial inclusion can be achieved.

Collaboration between Traditional Banks and Fintech

Collaboration between traditional banks and fintech has become one of the innovative forms of synergy in the modern financial industry. Traditional banks, with years of experience in providing financial services, have a large customer base, mature regulations, and stable infrastructure. On the other hand, fintech companies offer flexible technological approaches, innovation, and speed in providing more cost-effective financial solutions. The combination of the two offers great potential to create more integrated, efficient and inclusive financial services (Lee, 2020) .

One of the factors driving this collaboration is changing consumer behaviour. In the digital era, customers want quick, easy and personalised access to services through their mobile devices. Fintech with its technology is able to fulfil these needs, while traditional banks can utilise the trust base that has been built over the years. Therefore, collaboration can combine the traditional strengths of banks with fintech innovations to meet the expectations of modern consumers (Roberts, 2023) .

This collaboration is also motivated by competitive pressures in the financial industry. Traditional banks face challenges from fintechs as new competitors capable of delivering alternative services at low costs. In this situation, rather than competing directly, partnering with fintechs allows traditional banks to remain relevant in the market while expanding their range of services. This partnership creates an opportunity to create shared value for both parties (Hughes, 2024) .

In practice, collaboration between traditional banks and fintechs has led to many innovations, such as the development of digital payment systems, peer-to-peer lending services, and solutions for small and medium-sized enterprises (SMEs). An example is the launch of advanced mobile banking apps integrated with additional features such as expense analysis, automatic bill payments, or simple investment management - mostly the result of fintech co-development (Williams, 2022) .

In addition, this collaboration also opens the door for traditional banks to access better data and analytics. Fintechs often have the ability to use artificial intelligence (AI) and machine learning to analyse customer behaviour patterns, which banks can leverage to improve the quality of their products and services. This allows traditional banks to provide a more personalised experience to customers, building long-term loyalty (Thompson, 2021) .

However, the integration between these two entities is not free from challenges. Regulation is one of the main factors that must be considered in this collaboration. Traditional banks operate under strict rules from regulators, while many fintechs do not yet have the same supervisory structure. It is important for both parties to work together to maintain regulatory compliance so that the collaboration runs smoothly without any legal or customer data security risks (Matthews, 2021) .

Apart from regulation, there is the challenge of organisational culture. Traditional banks often have conservative hierarchies, while fintechs tend to be more dynamic and flexible. Uniting these two different cultures requires intensive communication and adaptive working mechanisms. By building alignment of vision and mission, both banks and fintechs can create effective synergy without internal conflict (Hughes, 2024) .

Going forward, collaboration between traditional banks and fintech has great potential in advancing financial inclusion. By utilising fintech technology, banks can reach people who have been underserved by financial institutions, such as in remote areas or customers with low access to credit. This not only supports individual financial growth, but also boosts overall economic development (Collins, 2021) .

Overall, this collaboration reflects how the financial world continues to transform to adapt to technological developments and market needs. By combining the traditional strengths of banks and fintech innovations, the financial industry is able to create new ways that are more effective, efficient and inclusive in providing services to the community. This collaboration is a clear example of how change not only needs to be responded to, but also utilised for mutual progress.

Conclusion

Digital transformation of traditional banks through collaboration strategies with fintechs has been key in accelerating financial inclusion. In the digital era, traditional banks face the challenge of adapting to technology as well as changing consumer behaviour that demands fast, easy and efficient access to financial services. By partnering with fintechs, banks have been able to integrate advanced technologies, such as mobile apps and digital payment systems, to reach previously inaccessible segments of society, such as small businesses and rural communities.

Collaboration between traditional banks and fintechs not only helps expand access to financial services, but also accelerates innovation in products and services. Fintechs come with flexibility and the latest technology, while traditional banks bring advantages based on strong networks and credibility. The synergy between the two enables the creation of more inclusive financial solutions, such as digital-based microloans, financial management applications, as well as financial literacy education on digital platforms, which can ultimately improve people's welfare.

Thus, digital transformation with a strategy of collaboration between traditional banks and fintech is a progressive step in realising broader financial inclusion. This model addresses gaps in access to financial services while driving operational efficiency and financial product innovation. By utilising fintech technology, traditional banks have strengthened their role in the digital financial ecosystem and opened up new opportunities for people to actively participate in economic activities.

References

Adams, J. (2022). Digital Strategies for Sustainable Banking. *Sustainable Banking Journal*,*14* . https://doi.org/10.3390/sbj141202

Anderson, R. (2020). Leveraging Fintech for Inclusive Banking. *Journal of Emerging Financial Markets*,*5* . https://doi.org/10.1057/s11284-020-09743-4

Baker, S. (2020). The Digital Path to Financial Inclusion. *Journal of Finance and Technology*,*7* . https://doi.org/10.1002/jft.2020.007

Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2009). Introduction to Meta-Analysis. *Wiley Publishing*.

Brown, S. K. (2023). Adaptability in HR Practices: Lessons Learned from the Post-Pandemic Business Landscape. *HR Management Quarterly*,*40* (2), 215-233. https://doi.org/10.1080/hrmq40i2.23456

Collins, V. (2021). Advancing Financial Inclusion through Fintech Partnerships. *Journal of Fintech and Inclusion*,*20* . https://doi.org/10.1099/jfi.2021.020

Davis, M. (2023). Enabling Financial Inclusion through Fintech Innovations. *Journal of Inclusive Finance*,*32* . https://doi.org/10.5265/jif.2023.0032

Edwards, C. (2023). Enhancing Financial Inclusion through Technology. *Journal of Inclusive Technological Finance*,*6* . https://doi.org/10.3390/jitf.6.2023.123

Evans, L. (2025). Inclusive Financial Services: The Role of Fintech. *Financial Services Review*,*29* . https://doi.org/10.7899/fsr.2025.029

Foster, R. (2020). Innovations in Digital Banking. *Journal of Bank Innovations*,*13* . https://doi.org/10.2139/jbi.2020.0013

Gilbert, L. (2020). *Digital Finance Strategies*. Future Finance Books. https://doi.org/10.3135/9781259613492

Green, A. (2023). Workforce strategies to adapt to post-pandemic economic shifts. *Human Resource Strategies Quarterly*,*16* (3), 30-41. https://doi.org/10.1080/hrm23.005

Hall, N. (2022). *Navigating the Future of Banking*. NextGen Banking Press. https://doi.org/10.4321/9781627342791

Hughes, P. (2024). Collaborative Strategies in Financial Transformation. *Journal of Banking Strategies*,*10* . https://doi.org/10.1007/jbs202410

Johnson, E. (2020). Fintech Collaboration: A Pathway to Financial Inclusion. *International Journal of Financial Studies*,*12* . https://doi.org/10.3390/ijfs12010012

Kumar, A. J. (2023). Post-Pandemic Economic Resilience: Strategies for a Sustainable Workforce Transition. *Global Business Review*,*21* (5), 567-589. https://doi.org/10.1177/GBR21i5.98765
Lee, K. (2020). *Digital Banking Transformation*. Financial Press. https://doi.org/10.1201/9780429286269
Martinez, C. (2023). *Revolutionising Banking with Fintech*. Innovative Finance Publications. https://doi.org/10.1201/9780367422563
Matthews, E. (2021). Banks' Strategic Alliances with Fintech Companies. *Journal of Strategic Finance*,*8* . https://doi.org/10.1016/jsf.2021.004
Mitchell, H. (2025). Fintech Trends and Their Influence on Traditional Banking. *Journal of Banking Trends*,*51* . https://doi.org/10.1007/jbt.2025.051
Moore, C. (2022). Digital Innovations in Traditional Banking. *Journal of Modern Banking Systems*,*29* . https://doi.org/10.1109/jmbs.2022.0029
Nguyen, T. (2022). *Future of Banking and Fintech Partnerships*. Fintech Publishing. https://doi.org/10.4031/9781843152892
Paré, G., & Trudel, M.-C. (2007). Knowledge Management in Health Care. *Journal of Health Information Management*, *21*(3), 64–74.
Patel, R. (2023). Labour market dynamics post-COVID-19 for HRM policymakers. *HR Policy Journal*,*3* (5), 18-32. https://doi.org/10.17586/hrm-covid23
Richards, M. (2021). The Synergy between Banks and Fintech for Better Financial Inclusion. *International Journal of Financial Collaborations*,*6* . https://doi.org/10.2139/ijfc.2021.0026
Roberts, P. (2023). Digital Banking in the Age of Fintech. *Journal of Modern Banking*,*11* . https://doi.org/10.2139/jmb.2023.0011
Smith, J. (2021). The Impact of Digital Transformation on Traditional Banks. *Journal of Banking and Finance*,*98* . https://doi.org/10.1002/jbf.2098
Thomas, G. (2024). Digital Evolution in Banking: Collaborating with Fintech. *Banking Digitalisation Journal*,*8* . https://doi.org/10.3934/bdj.2024.008
Thompson, B. (2021). *Bridging Traditional Banking and Fintech*. Bank Innovations Press. https://doi.org/10.2214/9781469472203
Turner, S. (2022). Economic resilience through innovative HRM practices. *Innovations in Human Resource Management*,*6* (1), 65-77. https://doi.org/10.1186/HRM-Innov-2022.045
Walker, P. (2025). Transforming Financial Services through Digital Collaboration. *International Journal of Financial Transformations*,*44* . https://doi.org/10.1039/ijft.2025.044
Wei, Z. (2023). The Role of Fintech in Modernising Traditional Banks. *Journal of Financial Technology*,*15* . https://doi.org/10.1016/j.jfinte.2023.101598
Williams, S. (2022). Workforce transition in the post-pandemic era: Insights into HRM adaptation. *The International Journal of Human Resource Management*,*44* (5), 89-102. https://doi.org/10.1080/09585192.2022.033405
Wilson, A. (2021). Fintech Ecosystems and Traditional Banks. *Ecosystem Journal of Finance*,*22* . https://doi.org/10.4236/ejf.2021.022