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FINANCIAL TECHNOLOGY INNOVATION AND BANKING INDUSTRY TRANSFORMATION

(A LITERATURE STUDY ON FINANCIAL MARKETS)

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Abstract

This research aims to innovate in technology, finance, and transformation in the banking industry. The research method used in this research is qualitative. Qualitative research is a research method used to understand social phenomena in depth. This type of research is library research, which researchers carry out by collecting, studying, and analyzing references or sources. obtained in writing or written form, such as books, journals, articles, documents, and other sources of information that are significant to the topic or title being researched. The research results show that the impact of development technology on industry banking in Indonesia is positive, namely: Improvement Efficiency and Productivity: Adoption technology has brought significant enhancements to efficiency bank operations, with automation of processes and usage intelligence artificial to reduce costs and improve productivity. Enhancement Experience Customer: Innovation technology has allowed banks to increase customer experience through applications in digital banking, customer chatbot-based services, and self-service platforms. Enhancement Security and Management Risk: Although there are worries related to data security, development technology has the potential to repair significant system security and management risks. With the use of data encryption and analysis behavior, users can identify and respond to threats to security more quickly. Innovation Products and Services: Technology has pushed the development of new products and services in the banking industry, including robo-advisors, peer-to-peer lending platforms, and applications for mobile payments, which deliver a markup for customers and help banks expand their market share. Enhancement Efficiency and Transparency Management: System Management Integrated information and analytical dashboards have increased efficiency and transparency in bank management.

Keywords: Innovation, finance, banking

Abstrak

Penelitian ini bertujuan untuk inovasi teknologi finansial dan transformasi industri perbankan. Metode penelitian yang digunakan dalam penelitian ini adalah penelitian kualitatif, penelitian kualitatif merupakan metode penelitian yang digunakan untuk memahami fenomena sosial secara mendalam, Adapun jenis penelitian ini adalah penelitian studi pustaka yang peneliti lakukan dengan mengumpulkan, mempelajari, dan menganalisis referensi atau sumber-sumber yang diperoleh dengan tertulis atau berbentuk tulisan seperti buku, jurnal, artikel, dokumen, dan sumber informasi lainnya yang signifikan dengan topik/judul yang diteliti. Hasil penelitian menunjukkan bahwa dampak positif dari perkembangan teknologi dalam industri perbankan di Indonesia yakni: Peningkatan Efisiensi dan Produktivitas: Adopsi teknologi telah membawa peningkatan signifikan dalam efisiensi operasional bank, dengan otomatisasi proses dan penggunaan kecerdasan buatan untuk mengurangi biaya dan meningkatkan produktivitas. Peningkatan Pengalaman Pelanggan: Inovasi teknologi telah memungkinkan bank untuk meningkatkan pengalaman pelanggan melalui

aplikasi perbankan digital, layanan pelanggan berbasis chatbot, dan platform self-service. Peningkatan Keamanan dan Pengelolaan Risiko: Meskipun ada kekhawatiran terkait keamanan data, perkembangan teknologi juga telah membawa perbaikan signifikan dalam sistem keamanan dan pengelolaan risiko, dengan penggunaan enkripsi data dan analisis perilaku pengguna untuk mengidentifikasi dan merespons ancaman keamanan dengan lebih cepat. Inovasi Produk dan Layanan: Teknologi telah mendorong pengembangan produk dan layanan baru dalam industri perbankan, termasuk robo-advisors, peer-to-peer lending platforms, dan aplikasi pembayaran mobile, yang memberikan nilai tambah bagi nasabah dan membantu bank untuk memperluas pangsa pasar mereka. Peningkatan Efisiensi dan Transparansi Manajemen: Sistem manajemen informasi yang terintegrasi dan dashboard analitik telah meningkatkan efisiensi dan transparansi dalam manajemen bank.

Kata Kunci: *Inovasi, finansial, perbankan*

Introduction

Innovation, technology, finance, and transformation Industry banking is an increasing phenomenon dominating financial markets at the moment. This advancement in financial technology has brought about significant changes in the banking industry, which has become an integral part of modern life. With progress in technology like mobile banking applications, digital payments, and service finance-based technology, lots of companies have adopted innovation to increase efficiency, speed, and convenience in service finance. Therefore, a deep study of financial markets is very important to understand the impact of technology on finances and the changes that occur in industry banking (Wilis & Sasongko, 2020).

According to Muhajir et al. (2023), development technology has had a significant impact on financial markets. With the existence of digital technology and the internet, the emergence of fintech (financial technology) has changed the way people interact with system finance. For example, the adoption of mobile banking applications makes it possible for users to do transaction finance. Whenever and anywhere via their smartphone. In addition, transaction finance has utilized blockchain technology to ensure security and transparency. Progress This has created opportunities for innovation in the banking industry as well as changes to operational methods and customer experiences.

Judijanto et al. (2023) Explanation: Innovation in financial technology has resulted in significant changes in the banking industry. Traditionally, banking was done through an office branch with limited service. However, with existing technology, financial and industrial banking have adopted a more digital business model. Banks now provide service online banking, making it possible for customers to do transactions electronically and access service banking through the internet. In addition, many banks have launched mobile banking applications to give convenience and comfort to customers. Change this possible industry banking for increasing operational efficiency, expanding the range of services, and delivering the experience to more customers (Lesmana & Haridah, 2023).

Although several large banks have adopted financial technology, such as applications for digital banking and online payment platforms, a large number of banks have fallen behind. According to Hisam (2023), the gap among banks that have integrated financial technology into their operations relies on manual processes or legacy systems. There is a gap in the availability of digital finance services between big banks and small or regional banks. Big banks tend to own more sources of power to develop and provide sophisticated digital services, while banks are small and possibly still limited in this regard. Although many banks have invested in infrastructure technology, there is a gap in the level of progress in infrastructure. Some banks may have a thorough renewal system, while others may still use outdated infrastructure or not be efficient enough.

Gaps in security and data protection also become important issues. Some banks may have implemented high-level security measures and advanced technology to protect customer data, whereas others may still be vulnerable to cyberattacks or data leaks. There is a gap in the level of customer involvement in digital finance between generations, young and old. More generations of young people tend to be more open to technology in financial services and more active users of digital services. For the time being, older generations may still prefer traditional transaction banking. Gaps in regulations and policies can also influence the development of technology and finance in the Indonesian banking industry. While some banks may face challenges in adhering to changes in regulations or related policies in technology finance, others may be able to leverage these changes to enhance innovation.

Literacy studies in financial markets are very important to understand the impact of innovation, technology, finance, and transformation in the banking industry. With an in-depth study of various sources of literature on financial markets, review literacy can give a deep outlook on the changes that occur, the challenges faced, and the opportunities that arise. In this context, study literacy can be practical for company finance in developing appropriate business strategies, improving operational efficiency, facing competition, and taking advantage of potential innovation and technology in financial. Therefore, it's important to analyze various pieces of literature on financial markets. To gain a better understanding of the current impact of the transformation in the banking industry.

Methods

The research method used in this study is qualitative. Qualitative research is a research method used to understand social phenomena in depth (Iswadi et al., 2023). Qualitative research does not just describe phenomena but also seeks to understand the meaning and context of these phenomena (Jaya, 2020). This type of research is library research, which researchers carry out by collecting, studying, and analyzing references or sources obtained in written form, such as books, journals, articles, documents, and other significant sources of information with the topic or title. researched. And then the researcher analyzes and draws conclusions to find answers to what the researcher is studying.

Results and Discussion

Innovation, technology, finance, and transformation in the banking industry in Indonesia have experienced rapid progress in a number of years. Reviews of the literature indicate that this progress has been substantial. This is not only reflected in the adoption of technology by financial institutions but also in deep, fundamental changes in the way the banking industry operates, interacts with customers, and manages risk. Fintech has transformed the banking industry by introducing efficient, innovative, and decentralized business models. Fintech has possible access to service finance for individuals and businesses not served by traditional finance institutions. Through mobile applications, online platforms, and service-based technology, fintech has given convenience access to banking, payments, loans, and investments (Ngamal & Perajaka, 2022).

Kurniawan et al. (2021) explain one aspect of transformation. This is an enhancement to inclusion finance in Indonesia. Through fintech, a number of large previous residents who had no access to formal finance services can now utilize services like digital bank accounts, money transfers, and payment bills with ease. Inclusion finance This not only promotes inclusive economic growth but also provides social and economic benefits to underserved communities. Apart from that, innovation, technology, and financials also push digital transformation among conventional banks in Indonesia. The banks have invested in the development of applications in digital banking, online payment platforms, and service-based technology to increase operational efficiency, improve customer experience, and reach out to more market segments. Some banks even have an intertwined partnership with fintech or build in-house innovation labs to develop solutions for technology and finance.

However, although there is significant progress, there are still a number of challenges and potential gaps in innovation, technology, finance, and transformation in the banking industry in Indonesia. One of the most significant challenges is related to regulations and policies. Although the Indonesian government has taken steps to support fintech developments, there is uncertainty about applicable laws and regulations that hinder the growth of the industry. This . The same needs to be done between the government, regulators, institutions, finance, and stakeholders to create a conducive environment for innovation and sustainable growth (Abubakar & Handayani, 2022).

Additionally, according to Syakarna (2023), security and data protection have also become the main focus of attention in the context of innovation, technology, and finance. Fintech companies and banks collect and process large amounts of data, making it crucial to safeguard this data against threats, cyber security breaches, and misuse. Next, it's important to remember

that innovation, technology, and financial resources are always evenly distributed throughout Indonesia. There is a gap in access to technology between urban and rural areas, as well as between groups of socially different economies. Collaboration between the government, private sector, and non-profit organizations is necessary to ensure that the financial benefits of innovation technology reach all layers of the public.

Whereas transformation in industry banking also has implications for power work in the sector of finance. Although technology can increase operational efficiency, there is also potential to reduce the amount of work that requires routine skills or repetitive tasks. Therefore, that's important for banks and institutions finances. To develop development strategies, power work that includes training skills and changing culture for support, change this (Mutiasari, 2020). On the other hand, according to Syafri et al. (2023), innovation, technology, and finances are also opening up new opportunities for growth in the economy and entrepreneurship in Indonesia. With the more There are many fintech startups that have emerged with the potential to create fields. Work new, improve Power competitive Indonesian finance globally and encourage sustainable growth.

Ultimately, innovation, technology, finance, and transformation in the banking industry in Indonesia are continuing journeys. Although the temporary progress has been impressive, overcoming the challenge and harnessing the potential of technology and finance to promote inclusion, finance, growth, and prosperity for Indonesian society as a whole remains a significant task. With cooperation between government, institutions, finance, fintech, and stakeholders interested in others, Indonesia can become a center of innovation in technology and a prominent financial sector at regional and global levels (Qothrunnada et al., 2023).

Study results from expert economist Mario Draghi show that development economy banking shows positive results in matter development technology in field finance banking (Draghi, 2022). According to him, this is a reflection of the moderate transformation taking place in the banking industry. This . According to Draghi (2023), progress in technology has had a significant impact on various aspects of operational, strategic, and performance finance banking. As for characteristics that innovation technology has influenced industry banking and why the results of this study show a positive trend as follows:.

- a. Efficiency Operational: One of the most visible impacts of the adoption of technology in the banking industry is enhanced operational efficiency. The use of process automation, robotics, and artificial intelligence has enabled banks to increase productivity, reduce operational costs, and accelerate transaction processing. With the use of technology such as robotic process automation (RPA) and machine learning, banks can automate routine tasks such as

verification of identity, processing of claim insurance, and evaluating risk credit. This not only reduces the need for human intervention but also improves accuracy and consistency in data management and business processes.

- b. **Experience Better Customers:** Innovation and technology have brought about significant changes in the way banks interact with customers. Applications like digital banking, customer chatbot-based services, and self-service platforms have increased accessibility and comfort for customers. Customers can now conduct transactions in banking whenever and wherever they want using their mobile devices, eliminating the need to visit a branch physically. Features like payment bills, fund transfers, and product finance can be done quickly and easily through the application of digital banking. This not only increases customer satisfaction but also helps banks expand their client base and defend loyal customers.
- c. **Enhancement Security and Management Risk:** Although worries about data security often appear along with the adoption of technology, progress in cyber security is also a result of innovation in industry banking. Banks have made significant investments in advanced security systems to safeguard customer data and address complex cyber security threats. Technology like data encryption, analysis behavior, and detection of real-time threats has helped banks identify and respond to threat security more quickly and effectively. Apart from that, technology is also used to increase management risk through the use of more advanced data analysis to identify potential risks in credit, operations, and compliance.
- d. **Innovation Products and Services:** Innovation technology has pushed the development of products and services in the banking industry. The banks have introduced various digital products, such as robo-advisors for investment, peer-to-peer lending platforms, and applications. Integrating mobile payment features, like payment using NFC or QR code technology. Innovation This not only gives customers more choice and flexibility but also helps banks expand their market share and gain a competitive edge.
- e. **Enhancement Efficiency and Transparency Management:** Technology has also helped banks increase efficiency and transparency in their management. System management Integrated information and an analytical dashboard give more clear views about bank performance, finance, operations, and possible management. To take more decisions, good and fast. Apart from that,

blockchain technology has also been used in industry banking to increase transparency and security in process solutions, transactions, and supply chain management.

- f. **Collaboration with Fintech:** One significant trend in industry banking is collaboration between traditional banks and companies in technology finance (fintech). The banks have started to adopt an open and collaborative business model with fintech to develop innovative solutions in various fields, from payment to loan. Collaboration This not only helps banks increase innovation and speed launching new products, but also allows fintech to utilize existing infrastructure and customer base (Capano & Sandri, 2022).

With such positive impacts, it is not surprising that the findings of expert economic banking studies show a positive trend toward the development of technology in industry banking. Development technology has brought significant benefits in terms of efficiency in operations, customer experience, security, innovation in products, management risk, and collaboration between banks and fintech. Therefore, the role of technology in industry banking in Indonesia is expected to continue to develop and become more important in the future.

Conclusion

Based on the results of the analysis and discussion above, it can be concluded that development technology has a positive impact on industry banking in Indonesia, namely:

Improvement Efficiency and Productivity: Adoption technology has brought significant enhancements to efficiency bank operations, with automation of processes and usage intelligence artificial to reduce costs and improve productivity.

Enhancement Experience Customer: Innovation technology has allowed banks to increase customer experience through application digital banking, customer chatbot-based services, and self-service platforms, thereby increasing accessibility and comfort for customers.

Enhancement Security and Management Risk: Although there are worries related to data security, development technology has the potential to repair significant system security and management risks. With the use of data encryption and analysis behavior, users can identify and respond to threat security more quickly.

Innovation Products and Services: Technology has pushed the development of new products and services in the banking industry, including robo-advisors, peer-to-peer lending platforms, and applications for mobile payments, which deliver a markup for customers and help banks expand their market share.

Enhancement Efficiency and Transparency Management: System Management Integrated information and analytical dashboards have increased efficiency and transparency in bank management, making it possible for management to take more decisions and make them more

quickly. Collaboration with Fintech: Collaboration between traditional banks and fintech has the potential to develop innovative solutions and accelerate rate innovation in the banking industry.

The main conclusion is that development of technology has had a significant positive impact on industry banking in Indonesia, increasing efficiency operations, customer experience, security, innovation products, management risk, and collaboration between banks and fintech. Banks must continue to adopt cutting-edge technology to remain competitive in today's market.

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