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Transformation of Conventional Banking to Digital Banking: Regulation and Risk Management

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ABSTRACT
This research discusses the transformation of conventional banks to digital banking by emphasizing the importance of regulation and risk management. The method used is literature review, collecting and reviewing references related to OJK regulations governing digital banking services and risk management related to digital banks. The results show that strong regulations are needed to protect consumers and ensure the stability of the digital banking system. In addition, banks must implement adequate risk management to address threats such as cybersecurity, data protection, and operational risks. Good risk management allows banks to mitigate the negative impacts that may arise during the digitalization process. This research emphasizes the importance of regulation and comprehensive risk management in maintaining sustainability and customer trust in digital banking.

***Keywords:** digital banking, regulation, risk management, OJK, cybersecurity.*

A. INTRODUCTION

The development of a technology-based economy or digitalization has become the dominant global paradigm (Nurhafidz et al., 2023). Digitalization is inseparable in various economic sector activities in order to make efficient use of human resources, increase competition, and benefit in the long run. Digital transformation has been carried out by various economic sectors including the financial sector such as banking (Galazova & Magomaeva, 2019). The adaptation of banking to the era of digitalization is an important milestone in the development of banking practices (Hermsiyetti, 2024). This is because banking competition makes banks have to adjust to the development of digitalization that has penetrated into various economic sectors.

Transformation has been experienced by various banking institutions due to digital advancements as seen from the use of online banking, mobile banking, and digital payments. The public's demand for services that are easily accessible, fast, and convenient means that banks must be ready to face challenges and capitalize on opportunities (Nurjanah et al., 2023). However, digitization of the banking system must be supported by digital skills because it is a new innovation in the financial services industry. The transformation shown by digital banking allows customers to access financial data and services using gadgets such as payments, remote account management, transfers, digital credit cards, and other banking transactions without having to go to the bank or without having to use a card (Tran et al., 2023).

This situation has led to the emergence of new players in financial institutions such as fintech, which has caused great disruption to old players such as banks. This is certainly a challenge for banks so that digital transformation needs to be carried out with various mechanisms either gradually, partially, or fully (Shanti et al., 2022). On the one hand, the transformation of conventional banks into digital banks is accompanied by various challenges both in terms of regulation and risk management. The challenges that arise must be faced by banks with the right strategy in order to direct banking to positive developments.

Regarding regulation, the government and financial authorities must be able to have policies that accommodate digital banking, protect consumers, and maintain financial system stability. One of the main challenges in terms of regulation is the balance between innovation and protection. If regulation is too strict, it can stifle innovation. However, if regulation is loose, it can increase security and stability risks. Digital transformation also brings new risks for banks related to cyber risks, risks related to personal data protection, and operational risks related to the use of technology. Banks must develop appropriate risk management strategies to deal with these risks, including enhancing security infrastructure, data protection policies, and mitigating risks associated with technology system disruptions.

B. LITERATURE REVIEW

Digital Bank

OJK does not define a digital bank as a new type of bank because the existing regulation views that all banks will eventually become digital banks as a form of surviving competition and as a growth strategy in the digital era. (Linggadjaya et al., 2022). POJK Number 12.POJK.03/2021 concerning Commercial Banks regulates that a digital bank is an Indonesian legal entity bank that provides and carries out business activities mainly through electronic channels without a physical office other than the head office or using limited physical offices. According to Febriyanti & Haryanto (2023), digital banking services are able to provide convenience for its users regarding time efficiency and are not limited to places.

Regulation

Regulation is a rule or agreement made by certain parties or the government with the aim of regulating a matter to be orderly and good (Naufal et al., 2022). In Indonesia, learning from the experience of 1998, many regulations have been improved and the big role of technology and digitalization has made banks in Indonesia able to survive amidst many bad loans. A blueprint for digital banking was prepared by the Financial Services Authority and Bank Indonesia in response to the challenges of digital transformation. The regulatory framework focuses on the development of regulation, licensing, and supervision to support the digital transformation of banking (Suharbi & Margono, 2022).

Risk Management

Risk management is a systematic process used by organizations to identify, analyze, assess, and control risks that have the potential to affect their objectives or operations (Sutanto, 2012); (Kleffner, 2003); (Anton & Nucu, 2020). The main objective of risk management is to minimize the negative impact of undesirable events while maximizing opportunities from favorable situations. Effective risk management can be a competitive advantage and determine the survival of the company (Ma'rifah et al., 2023).

C. RESEARCH METHOD

The research conducted used a literature study with a descriptive analysis approach involving the identification, selection, and review of written sources. The use of literature study in this research aims to understand the digital transformation of conventional banks towards digital banking related to regulation and risk management. Researchers collected data by reading references obtained from journals and articles. This step involved searching for literature through academic databases, official websites, and online libraries that specialize in the topics of banking, financial regulation, and digital transformation. Afterward, the researcher selected literature that had credibility, relevance, and significant contributions to the research topic.

Then, the literature study in this research is used to understand more deeply about the digital transformation of the banking sector, especially in terms of regulation and risk management. This is done to get a clear and structured picture of the phenomenon of banking transformation. Researchers do not only explain data quantitatively but emphasize more on descriptions based on secondary data obtained from the literature.

D. RESULTS AND DISCUSSION

Digital The Importance of Regulations Related to Digital Banks

Financial Services Authority Regulation No.12/POJK.03/2018 on the Implementation of Digital Banking Services by Commercial Banks, which is related to digital banking services. The regulation was made with the consideration that the increasing competition in the financial services industry has encouraged banks to improve the quality of services to customers more effectively and efficiently and sustainably. In addition, this regulation was made because the provision of digital banking services can lead to increased risk, especially operational risk, strategic risk, and reputation risk, so it is necessary to improve the implementation of risk management in the effective use of information technology by banks.

Regulations related to digital banks are very important to avoid increasing risks that can have an impact on financial system stability. This is because technological developments in digital banks have the potential to face high operational risks such as system disruptions and customer data leaks. This can certainly result in a decrease in public trust. On the one hand, if digital banks fail to keep up with technological trends and do not meet expectations, it can make bank competitiveness decline. This means that digital banks that operate 24/7 are vulnerable to security and service issues, requiring comprehensive and adaptive risk management including strict control mechanisms in technology management. This can be done by providing effective supervision from regulators to ensure banks have risk mitigation protocols and high security standards in managing data and operational systems. Hopefully, stability and trust in digital banks can be maintained in the eyes of the public.

Meanwhile, Constitution No. 7 of 1992 jo. Constitution No. 10 of 1998 concerning Banking, does not regulate digital banking services. Financial Services Authority Regulation No. 12/POJK.03/2018 is organized and detailed into X Chapters and 29 Articles, has a general description explained in the General Explanation, in the form of the role of Information Technology which is the most important aspect seen from the increasing number of mobile devices used in money transactions. This is supported by the expansion of internet network infrastructure that continues to be expanded in various regions to ensure more stable and faster connectivity, even in remote areas.

Digital banks are in dire need of strict regulations regarding the role of information technology given the high use of mobile devices for financial transactions, so they must have regulations governing robust security systems. The system must be able to protect customer transactions from potential cyber attacks that are increasingly complex. Regulations governing information technology security standards are vital for digital banks to implement encryption, double authentication, and real-time monitoring. In fact, regulations must also support digital bank services to reach various regions including remote areas with support related to internet network infrastructure expansion. A supportive network can make digital bank services more widely accessible to the public but in accordance with security standards.

In the era of digital banking, appropriate regulations are needed because many banking activities are carried out on a mobile basis such as account opening, account closing, transfers, purchases, payments, deposits, loan applications, and so on which can be done without having to go to a physical banking office. If regulations do not support this, users can be harmed, especially regarding customer protection. Digital banks are vulnerable to cyber-based crimes so the right rules or regulations are needed. Moreover, in Indonesia according to Febriyanti & Haryanto (2023) there are several digital banks that are developing such as Allo Bank, Line Bank, or BLU.

OJK regulations related to digital banking are also contained in chapter IV articles 23-31 POJK Number 12/POJK.03/2021. The regulation explains that banks with Indonesian Legal Entities (BHI) operating as digital banks must have a business model with the use of innovative and safe technology and have adequate risk management. The regulation also explains that digital banks can also operate through the transformation of BHI banks into digital banks. Digital services in banking institutions are also regulated in POJK 21 of 2023 concerning digital services by commercial banks. The OJK regulation argues that there are public expectations of services provided by banks in a fast, safe and efficient manner to encourage banks to improve digital-based services to customers.

Various rules made regarding digital banks are fundamental aspects in terms of security, transparency, and consumer protection. This is because banks can be forced to implement strong security protocols such as automated monitoring systems, layered authentication, and data encryption to protect customer data and transactions. Regulations are needed so that every digital service has clear and measurable security standards that not only protect customers but also maintain public trust in digital banks as a whole.

If there are no strict rules, there could be misuse of personal data, digital fraud, or unclear services. In fact, if there are no adequate regulations, hacking or digital identity theft can occur, which can ultimately damage the bank's reputation and reduce the adoption of digital services by the public.

Strong regulations can guarantee protected consumer rights including dispute resolution and data security. Digital bank consumers or customers also get guaranteed consumer protection through mechanisms regulated by regulations so that banks can handle any problems quickly and effectively. Moreover, if there is no strict supervision, it can become a source of instability so regulation is needed to prevent this from happening.

Banking Risk Management in Digital Transformation

Indonesian incorporated Bank, which has undergone digital transformation, is not only guided by the provisions in the POJK. The bank must be able to comply with other provisions that are closely related to its business model. That is, not just using the digital bank label as a business gimmick. This is because it will lead to innovation risks related to innovation costs that are greater than the benefits if it is only used as a gimmick (Abubakar & Handayani, 2022). Digital transformation according to Sari & Fransiska (2023) can lead to various risks. Even recorded between 2017 and 2020, there were reports of 16,845 cyber fraud violations so that this is also a threat to the banking world.

Digital banks that are included in Indonesian Legal Entity Banks must comply with various regulations that are in accordance with their business model and the risks of the business being carried out. This certainly must make banks must be serious in adopting digital innovation as a planned business strategy or in other words seen from the point of view of business effectiveness. If banks are able to adopt a value-oriented approach, they will not only increase efficiency but also build a sustainable competitive advantage in the digital market. This means that it is necessary to implement broader regulations so that it is not just an obligation but an important strategic step for banks to maintain consumer confidence, protect digital assets, and create secure bank services in the digital era.

Apart from cyber security risks, there are data protection risks and legacy system risks so that risk mitigation is necessary (Ngamal & Perajaka, 2021). According to Tim Riset Stabilitas LPPI (2021), Utami & Septivani (2023), Irsyad et al., (2024) the digital transformation is carried out by strengthening information technology risk management. Wise risk management will be able to identify, evaluate, and mitigate risks so as to reduce the negative impact on banking operations. In fact, according to Mutiasari (2020), the presence of digital-based banking allows activities to be more flexible but is a challenge because of its complex nature, especially in terms of security.

The importance of mitigation in the transformation of conventional banks to digital banks to maintain operational stability, public and customer trust, and data security. Digital transformation is changing many aspects of banking including how data is managed and transactions are conducted, which can increase the risk of digital banks. Increased exposure to various risks makes it necessary for digital banks to implement various measures to mitigate risks such as early detection systems, data encryption, or multiple authentication (layered). This is expected to reduce vulnerability to external threats and protect sensitive information that is the foundation of customer relationships. If risks are not mitigated, the bank could face financial losses and impact the bank's reputation.

In addition, risk management in the transformation of conventional banks to digital banks is very important to ensure that the transformation provides real added value. Thus, transformation is not just a technological change but also has a significant impact on banking growth. If risks are not mitigated properly, this can cause losses in efficiency and service. Risks must be well managed so that the digitalization process runs smoothly and benefits can be felt by institutions and customers such as accessibility, speed of service, and a modern and safe banking system.

E. CONCLUSION

The research found that the transformation of conventional banks to digital banking brings significant changes in the financial industry, both in terms of regulation and risk management. Regulations implemented by the Financial Services Authority play an important role in ensuring that digital banking runs efficiently and safely. These regulations are made to adjust the needs of increasingly digitized banking services and protect consumers from potential risks. Risk management is a crucial element in the banking digitalization process. Banks are required to be able to identify, evaluate, and mitigate various risks that arise, such as cybersecurity risks, data protection, and operational disruptions. By implementing effective risk management, banks can reduce the negative impacts that may arise during the transformation process. Overall, this study confirms that good regulation and risk management are necessary to support the success of digital banking transformation and maintain customer confidence and financial system stability in the digital era.

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