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## Personal Data Protection Law in Digital Banking Governance in Indonesia

*Prawo ochrony danych osobowych w zarządzaniu bankowością  
elektroniczną w Indonezji*

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## ABSTRACT

In Indonesia, digital banking is advancing at a fast pace. As the law regulating it is incompatible with the current digital banking, it is necessary to establish new law capable of adapting to the development of digital banking because of the high number of digital account break-ins experienced by customers due to a lack of adequate regulations such as the law governing digital banking. Since digital banks are regulated in the Financial Services Authority (FSA) regulations, they have been unable to address risk issues due to insufficient binding force. This study employed a normative approach by collecting data: library research and discussions. The study's findings indicate the governance of digital banks has flaws: vulnerability to identity theft, online crime, malware assaults, and the inability in accessing by all parties. Regulations governing personal data protection are largely outlined in Article 26 of Law No. 19 of 2016. This rule does not go into depth about personal data security in digital banking governance, thus it can lead to multiple interpretations. Subsequently, Law No. 10 of 1998 on financial is a banking regulation based on conventional not digital. Therefore, these two regulations are incompatible with digital banking governance in protecting personal data and giving legal clarity. Regulations No. 12/FSAR.03/2021, No. 13/FSAR.03/2021, and No. 14/FSAR.03/2021 regulate digital banking. These provisions have flaws: the ease of obtaining licenses, emphasizing administrative punishments, lack of binding force, and the absence of regulations governing personal data protection in digital banking governance in Indonesia. Therefore, it is urgent to regulate personal data in one specific law.

**Keywords:** digital bank; Indonesia; banking governance; Digital Banking Law

## INTRODUCTION

The origins of the bank can be traced back to the discovery of new ways of storing property.<sup>1</sup> Banks are institutions capable of guaranteeing deposits, and deposits can also be utilized to purchase items such as checks and money orders.<sup>2</sup> Banks are generally defined as corporate enterprises that accept money from the public through deposits and distribute money to the community through credit and other means to raise the level of life of the populace.<sup>3</sup>

Banks are classified into two groups based on their operations: conventional and Islamic banks. Islamic banks were formally established in Indonesia in 1992, after the passing of Law No. 7 of 1992 on banking. The passage of this law demonstrates that the Indonesian people have agreed to construct a dual banking system in Indonesia.<sup>4</sup> The banking sector's critical role in reviving economic activity cannot be overstated.<sup>5</sup>

<sup>1</sup> R. Usman, *Legal Aspects of Islamic Banking in Indonesia*, Jakarta 2012, p. 1.

<sup>2</sup> M.F. Fuad, *Riba in Banks, Cooperatives, Companies and Insurance*, Bandung 1983, p. 110.

<sup>3</sup> Wangsawidjaja, *Sharia Bank Financing*, Jakarta 2012, p. 1.

<sup>4</sup> K. Perwataatmadja, *Islamic Banks and Insurance in Indonesia*, Jakarta 2005, p. 3.

<sup>5</sup> E. Putri, A.B. Dharma, *Analysis of Differences in Financial Performance Between Conventional Banks and Sharia Banks*, "Riset Akuntansi Dan Keuangan Indonesia" 2016, vol. 1(2), pp. 98–107.

The influence of industrial revolution 4.0 on technical advancements is expanding swiftly and becoming more difficult. Technology is critical for human needs to be met. Accordingly, financial service providers have begun to embrace technology since it is believed to make them more productive and efficient. This rapid expansion has occurred in Indonesia's banking sector.<sup>6</sup> It is based on the diverse demands of clients who benefit from the advantage of technology. Moreover, that digital bank services can be accessed anytime and anywhere reduces the urgency of direct engagement with bank workers. This aims to improve operational efficiency and the quality of bank services provided to clients. One of the consequences of the digital bank is that it is constantly vital to people although it is no longer required.<sup>7</sup>

The demands for digital banks are further bolstered by a change in the corporate landscape now dominated by the millennial age, which prefers the ease of online transactions through digital platforms to visiting banks and waiting in line to complete transaction requirements.<sup>8</sup> Subsequently, Indonesia's number of internet users has increased to 54.68% of the country's 262 million overall population, where 87% are active chat users and 74.84% are active social media users. This research demonstrates the potential for banks to shift their marketing strategies from conventional to digital which can increase literacy in digital banking services accordingly.<sup>9</sup>

The pace of banking transformation is also being accelerated by the rise of new rivals, especially non-bank financial service providers or fintech. Due to many advantages supplied without cumbersome bureaucracy, the fintech industry has started to erode banking services. According to Capgemini data, more than 70% of banking clients worldwide also utilize the services of fintech businesses. It is due to several issues, including the client that is dissatisfied with their bank's inability to link directly to trading platforms to make debit payments.<sup>10</sup> Thus, in facing intense competition, banks must adapt by building digital banks to garner attention and confidence from the Indonesian population. The digital economy will inevitably influence all spheres of life within the social and economic system,

<sup>6</sup> W. Yuspin, Y.R.A. Putri, M. Ikbal, *Legal Certainty on Financial Technology Organisers: Perspective of Regulatory Sandbox Implementation*, "International Journal of Innovation, Creativity and Change" 2020, vol. 12(2), pp. 338–355.

<sup>7</sup> Financial Service Authority, *Guidelines for Operation of Digital Branches by Commercial Banks*, 2022, <https://www.ojk.go.id/id/kanal/perbankan/Pages/Panduan-Penyelenggaraan-Digital-Branch-oleh-Bank-Umum.aspx> (access: 7.3.2023).

<sup>8</sup> S. Winasis, S. Riyanto, *Digital Transformation in the Indonesian Banking Industry: Impact on Employee Work Stress*, "IQTISHADIA: Jurnal Ekonomi Dan Perbankan Syariah" 2020, vol. 7(1), pp. 55–64.

<sup>9</sup> F. Susjastiana, *Media Literacy of Lembaga Penyiaran Publik Radio Republik Indonesia in the Society of Environment Policy*, "Journal Student UNY" 2019, vol. 2(2), p. 880.

<sup>10</sup> Capgemini, *Word Fintech Report*, <https://www.capgemini.com/news/world%02fintech-report-2020> (access: 20.7.2021).

altering existing norms and methods of operation to accommodate global trends toward digitalization.

The banking system is one of the most susceptible sectors of the national economy to disruption due to the introduction of new technologies and the adoption of new digital solutions.<sup>11</sup> It is even more true in facing tight competition pushed by the COVID-19 pandemic. Establishing a digital bank is a need in light of the pandemic that has affected practically the whole planet and altered the course of human existence. One of the most harmful elements is the virus' rapid spread through airborne transmission. Thus, the government has started restricting human social relationships through Large-Scale Social Restrictions.<sup>12</sup> It suggests that the pandemic is predicted to last long and hence all sectors, including banking, must be prepared to survive under such circumstances. COVID-19 has a substantial economic influence on both the Indonesian and global economies.<sup>13</sup>

The bank earns operating income through operational activities such as credit and extra revenue generated by banking services. Credit revenue is generated by debtor fees, while bank service revenue is generated by operating costs such as administrative and transfer fees. However, COVID-19 had a major impact on the world's economy, especially in the banking sector.<sup>14</sup> Due to COVID-19 in Indonesia and the government laws to restrict community activities, bank operating income declined in both credit and banking service revenue.<sup>15</sup>

The construction of a digital bank is becoming a higher priority since clients no longer need to visit the bank to do different financial operations. All banking transactions should be completed from home without visiting the bank, namely opening account procedures, funding deposits, financing applications, financing approvals, transfers, and payment of different bills.<sup>16</sup>

<sup>11</sup> O. Kolodiziev, V. Shcherbak, K. Vzhytynska, O. Chernovol, O. Lozynska, *Clustering of Banks by the Level of Digitalization in the Context of the COVID-19 Pandemic*, "Banks and Bank Systems" 2022, vol. 17(1), pp. 80–93.

<sup>12</sup> P. Crosman, *Digital Banking Is Surging during the Pandemic. Will It Last?*, 27.4.2020, <https://www.americanbanker.com/news/digital-banking-is-surging-during-the-pandemic-will-it-last> (access: 7.3.2023).

<sup>13</sup> H.T.X. Nguyen, *The Effect of COVID-19 Pandemic on Financial Performance of Firms: Empirical Evidence from Vietnamese Logistics Enterprises*, "Journal of Asian Finance, Economics and Business" 2022, vol. 9(2), pp. 177–183.

<sup>14</sup> M. Wieczorek, *Some Aspects of Labour Law's Protective Function at the Time of COVID-19*, "Studia Iuridica Lublinensia" 2021, vol. 30(1), pp. 339–355.

<sup>15</sup> S. Wahyuni, Pujihartono, S.N. Azizah, Zulfikar, *Impact of the COVID-19 Pandemic and New Normal Implementation on Credit Risk and Profitability of Indonesian Banking Institutions*, "Banks and Bank Systems" 2021, vol. 16(3), pp. 104–112.

<sup>16</sup> J.S. Harchekar, *Digitalization in Banking Sector*, "International Journal of Trend in Scientific Research and Development" 2018, vol. 6(6), pp. 103–109.

Banking institutions, particularly conventional banks with solid capital sources in Indonesia, have started to actualize the digital bank age. It is illustrated by the number of digital banks in Indonesia listed in Table 1.

Table 1. Data of digital banks in Indonesia

Data of digital banks	Origin of digital banks
Jenius	Bank BTPN
Wokee	Bank Bukopin
Digibank	Bank DBS
TMRW	Bank UOB
Jago	Bank Jago
Motionbanking	MNC Bank
Bank Aladin Syariah	Bank Aladin
Neo Bank	Bank Neo Commerce
Wise	Bank Commonwealth
Blue BCA Digital	Bank BCA
Raya	Bank Rakyat Indonesia Agroniaga
Sea Bank	Sea Bank Indonesia
Nyala	Bank OCBC
Livin	Bank Mandiri
Line Bank	Bank KEB Hana Indonesia

Source: own elaboration.

It is also demonstrated by the following statistics on banks in Indonesia that apply to the Financial Services Authority (FSA) for licenses to operate as digital banks:

- PT Bank Harda Internasional,
- PT Bank QNB Indonesia Tbk,
- PT Bank Fama Internasional Tbk,
- PT Bank Permata Tbk,
- PT Allo Bank Indonesia Tbk,
- PT Bank Capital Indonesia Tbk.<sup>17</sup>

The rapid development of digital banking has increased the risk of digital banking governance in Indonesia. This risk arises because conventional banks used to carry out manual and digital operations, while current digital banking allows all banking operations to be digitally carried out. This will certainly lead to increased risks in the form of identity theft, online crime, malware attacks, etc. This risk has been proven by several cases involving digital banking customers in Indonesia.

The legislation regulating personal data protection in Indonesia is governed by Law No. 19 of 2016 concerning amendments to Law No. 11 of 2008 concerning

<sup>17</sup> Interview with Gunawan Setyo Utomo, Deputy Director of Banking Development at FSA Indonesia, 20 September 2021.

information and electronic transactions (IET).<sup>18</sup> The loophole in this law is that it does not elaborate on protecting personal data in digital banking governance, which might result in diverse interpretations about the implementation of digital banking governance in Indonesia. Moreover, Law No. 10 of 1998 regarding banking is based on a conventional notion, not a digital one in which everything is based on information technology.<sup>19</sup> As a result, these two laws are incompatible with digital banking governance in terms of protecting digital banking of the customers' personal data, lacking legal certainty for digital banking governance, and being incapable of resolving risk issues, particularly those associated with the implementation of digital banking in Indonesia.

From the rules and regulations cited above, it is clear that these laws are no longer consistent with current digital banking governance. Therefore, a new law adaptable to Indonesia's rapid expansion of digital banking and capable of providing legal protection for clients' personal data is highly required.<sup>20</sup>

The regulations related to banking are: FSAR No. 12/FSAR.03/2021 concerning commercial banks<sup>21</sup>, FSAR No. 13/FSAR.03/2021 concerning the operation of commercial bank products,<sup>22</sup> and FSAR No. 14 /FSAR.03/2021 concerning amendments to FSAR No. 34/FSAR.03/2018 regarding reassessment for main parties of financial services institutions.<sup>23</sup> The arising problem is that the regulation has not been able to overcome the risk problems that occur, especially in the application of digital banking in Indonesia. This article aims to find regulatory loopholes and the weak binding power of the Financial Services Authority Regulations (FSAR) can easily be distorted by enactment the data protection law in one standalone law.

The main finding of this research is due to the rapid advancement of technology, requiring the regulator to adapt to a new environment and technology in which the laws governing banking governance are no longer compatible with the

<sup>18</sup> Ministry of Law and Human Rights of the Republic of Indonesia, Law No. 19 of 2016 concerning amendments to Law No. 11 of 2008 concerning information and electronic transactions, 2016, hereinafter: Law No. 19 of 2016.

<sup>19</sup> Ministry of Law and Human Rights of the Republic of Indonesia, Law No. 10 of 1998 concerning amendments to Law No. 7 of 1992 concerning banking, 1998, hereinafter: Law No. 10 of 1998.

<sup>20</sup> P. Handayani, *Prudential Principles of Banks in Providing Credit in View of Law No. 10 of 1998 Concerning Banking*, "Jurnal Dimensi" 2016, vol. 4(2), pp. 1–12.

<sup>21</sup> Regulation of the Financial Services Authority of the Republic of Indonesia No. 12/FSAR.03/2021 concerning commercial banks, 2021, hereinafter: FSAR No. 12/FSAR.03/2021.

<sup>22</sup> Regulation of the Financial Services Authority of the Republic of Indonesia No. 13/FSAR.03/2021 concerning the operation of commercial bank products, 2021, hereinafter: FSAR No. 13/FSAR.03/2021.

<sup>23</sup> Regulation of the Financial Services Authority of the Republic of Indonesia No. 14/FSAR.03/2021 concerning amendments to the Regulation of the Financial Services Authority No. 34/FSAR.03/2018 regarding reassessment for main parties of financial services institutions, 2021, hereinafter: FSAR No. 14/FSAR.03/2021.

implementation of digital banking and are incapable of resolving the arising risk issues. A new regulation in Indonesia that can adapt to the extremely fast growth of digital banks must be enacted. Indonesia's legal system is a civil law requiring all laws to be written down in statutory regulations. This situation creates a legal vacuum due to the lack of legislation capable of keeping pace with the advancement of this technology. This research attempts to provide ways to ensure that there is no legal vacuum in the administration of digital banking in Indonesia. Therefore, this research attempts to answer how personal data protection needs to be addressed by focusing on examining the legal urgency of personal data protection in digital banking governance in Indonesia.

The article starts from the introduction which describes the background of writing this article, including the research question, research gap, and the purpose of writing this study. The urgency of the research is that digital banks can operate in Indonesia without clear legal rules. Additionally, how to regulate data protection closely related to the implementation of digital banks also triggers legal vacuum creating a vulnerability to the emergence of law violations. The next section contains the research methodology which explains the method used to answer the research questions. Furthermore, research and result explain the findings obtained from research results concerning the importance of data protection and the absence of legal rules regarding data protection, especially in digital bank operations. Then the discussion shows the findings to observe and take the way out, namely by considering the personal data protection rules in the General Data Protection Regulation (GDPR). Finally, the conclusion states the final results and recommendations of the research.

## METHODOLOGY

The type of research in this study is normative legal research. Normative research or doctrinal research (law in books) describes what is contained in the legal norm as the main reference data to guide proper behavior for the community. The object of research in normative legal research is emptiness, ambiguity, and conflict of norm. This study is based on the vacuum of data protection regulatory norms in private sector thus creating legal uncertainty. The type of approach used was the statutory approach to examine the relevant legal rules of personal data protection issue. The conceptual approach is the opinion and understandings that exist in the science of law that can provide explanations for authors to find ideas so as to produce an understanding of legal concepts and principles related to the issues studied, namely the concept of personal data protection and comparative approach and the comparison of personal data protection arrangements in the perspective of law. Primary legal material collection techniques are based on the hierarchy of legislation, secondary legal materials, and tertiary legal materials, either in the form of a law

book (textbook) or periodical publication (journal law review) and dictionaries. The technique of analyzing legal materials is the depiction or description of the context of the postulate law which is analyzed in descriptive analysis.

## RESEARCH AND RESULTS

### 1. The development of the banking industry in Indonesia

According to Law No. 10 of 1998, a bank is a commercial company that gathers money from the public in the form of savings and distributes them to the public in the form of credit or other forms to raise people's living standards.<sup>24</sup>

Bank Indonesia is defined as the Republic of Indonesia's central bank and an independent state institution, free from interference by the government or other parties, except for matters expressly regulated in the Act according to Article 4 of the Republic of Indonesia's Law No. 23 of 1999 concerning Bank Indonesia. Meanwhile, according to F. Haqiqi, a bank is a financial entity with primary functions to collect money from the public, reinvest them in the community, and offer additional banking services.<sup>25</sup>

Generally, banks provide the following tasks:

1. Giving orders to print money. Each country's central bank has a monopoly on the issuing of banknotes. The central bank's produced and issued banknotes are deemed an unrestricted mode of payment across the nation. The central bank has been given an exclusive monopoly on the issue of paper money to promote consistency, improved control, flexibility, monitoring, and simplicity. It also eliminates the prospect of any bank issuing an excessive number of notes.<sup>26</sup>
2. Becoming a custodian for cash reserves. All banks in a nation deposit a percentage of their cash holdings with the central bank, either by convention or by law. They collect during the peak season and repay during the off-season. A portion of this balance is set aside for clearance. Other banks member anticipate support, advice, and direction as necessary.<sup>27</sup> It affects

<sup>24</sup> F. Chalim, *Legal Relations between Banks and Depositors according to Banking Law*, "Lex et Societatis" 2017, vol. 5(9), pp. 120–127.

<sup>25</sup> F. Haqiqi, Darmawan, K. Fadli, *Analysis of the Effect of Liquidity and Lending on Profitability Levels at BPR Mega Mas Lestari Bank in 2016–2018 Karimun Regency*, "Jurnal Cafetaria" 2020, vol. 1(1), pp. 73–83.

<sup>26</sup> D. Supian, N. Eldiani, *Review of Third Party Funds at Bank BJB*, "Prismakom" 2020, vol. 17(1), pp. 1–9.

<sup>27</sup> M. Fauzan, *Internal Control System against Cash Receipt Function at PT: Bank Muamalat Indonesia Pematangsiantar Branch*, "Jurnal Masharif Al-Syariah: Jurnal Ekonomi Dan Perbankan Syariah" 2018, vol. 3(2), pp. 1–24.

the centralization of members' bank cash reserves. Centralization of cash reserves in central bank is a significant source of strength for any country's financial system. Centralized cash reserves can at the very least serve as the foundation for a far larger and more elastic lending structure than will be possible if the same amount is scattered among individual banks. When bank reserves are pooled in a single organization responsible for safeguarding national economic interests, these reserves can be utilized to the largest degree feasible and effectively during seasonal strain and financial crises or broader national emergencies.

3. **Becoming a custodian for exchange rate stability.** Banks are tasked with storing gold and foreign currency as reserve records and resolving adverse balances of payments. The banks' role is to maintain the government-set exchange rate and monitor exchange rate regulations and other state-imposed limitations.<sup>28</sup>
4. **Clearing house.** Additionally, the central bank serves as a clearing house for commercial bank accounts. A clearing house is an entity where the bank's collective claims are offset against one another and settled by payment of the difference. As a banker's bank, the central bank manages commercial banks' cash holdings, making it simpler for member banks to modify or pay their claims against one another.<sup>29</sup>
5. **Credit controller.** The central bank's primary job is widely regarded as controlling or adjusting commercial bank credit. Commercial banks generate a large amount of credit, sometimes resulting in inflation. Currency and credit expansion or contraction is undoubtedly the most significant source of business swings. The need for credit regulation is self-evident. It is primarily because money and credit are critical in determining income levels, production, and employment.<sup>30</sup>
6. **Giving loans.** Banks can provide cash to member banks to bolster their cash reserve levels by discarding first-class notes in the case of a crisis or panic at the bank or during a seasonal interruption. Member banks can also get loans from the central bank on authorized short-term securities to quickly bolster their cash reserves.<sup>31</sup>

<sup>28</sup> N.I. Sitepu, *The Role of Sharia Bank in Price Control (Analysis Study of Sharia Banking in Indonesia)*, "Jurnal Perspektif Ekonomi Darussalam" 2017, vol. 1(1), pp. 55–74.

<sup>29</sup> J. Darisa, *An Overview of Bank Indonesia's Institutions as a Central Bank Based on Law No. 6 of 2009, "Lex Privatum IX"* 2021, no. 6, pp. 119–129.

<sup>30</sup> N. Syamsiah, *Internal Control System on the Effectiveness of Credit Provisions at Pt. Bank Rakyat Indonesia (Persero) Tbk. Marisa Branch*, "AkMen Jurnal Ilmiah" 2020, vol. 17(3), pp. 501–508.

<sup>31</sup> S. Parenrengi, T. Hendratni, *The Effect of Third Party Funds, Capital Adequacy and Lending on Bank Profitability*, "Jurnal Manajemen Strategi dan Aplikasi Bisnis" 2018, vol. 1(1), pp. 9–18.

## 2. Overview of digital banking in Indonesia

According to W. Santoso, Chairman of the FSA Board of Commissioners, digital banks have Indonesian legal entities that provide and conduct their primary business activities through electronic channels and do not require a physical office other than the head office or can operate with a limited physical presence. “Digital bank” refers to digitizing all the activities and services associated with conventional banking programs previously only accessible to clients at a bank branch. Digital banks operate online to offer typical banking services; clients do not need to leave their homes to conduct activities such as deposits, cash withdrawals, money transfers, establishing financial product accounts, making loans, and paying bills.<sup>32</sup>

Government Regulation No. 15 of 2021 governs the community activities restrictions enforcement across Indonesia to prevent direct human contact between individuals. There is little guarantee when the legislation will be repealed, given the prevalence of COVID-19 in certain locations. Digital banks will be the greatest approach for decreasing the growth of COVID-19 in Indonesia while still satisfying its people’s financial demands. Digital banks operate via their main office, also the banking company’s parent office. Digital banks’ branches and sub-branch locations do not have offices since all transactions are online.

In Indonesia, digital banks offer similar services to conventional banks, except that all financial transactions are conducted independently through banking programs on smartphones.<sup>33</sup> Digital banks enable users to get financial services independently. They also allow users to create accounts, conduct financial operations, invest, and perform electronic-based transactions, among other things.<sup>34</sup>

Digital banking is not the same as mobile banking, e-banking, or other internet-based services. The distinction is that m-banking and e-banking are all banking services that can be accessed only via smartphones and include payment transactions, purchases, transfers, and cardless cash withdrawals at ATMs. Conversely, digital banking encompasses all aspects of banking, including account administration, transaction authorization, financial management, the establishment and closure of accounts, digital transactions, and other financial product services.<sup>35</sup>

<sup>32</sup> S. Sidik, *FSA Unveils Long Road to Digital Bank Rules, Clear Definition!*, 23.8.2021, <https://www.cnbcindonesia.com/market/20210823150354-17-270510/ojk-ungkap-jalan-panjang-aturan-bank-digital-definisi-clear> (access: 7.3.2023).

<sup>33</sup> D. Yudhakusuma, A.D.N. Rachmatuloh, W.O.N. Yani, *Perception of Digital Bank Service Communication*, “Journal Unla” 2021, vol. 26(1), pp. 55–75.

<sup>34</sup> K.U. Khudori, L. Hendri, *Islamic Banking and Fintech: Sustainable Collaboration*, “Jurnal Ekonomi Dan Perbankan Syariah” 2021, vol. 7(2), pp. 171–82.

<sup>35</sup> E.O. Lailani, T. Regina, *Use of Mobile Banking as an Effort to Streamline Customer Electronic Transactions at Pt. Bank Rakyat Indonesia (Persero) Tbk*, “Kompleksitas: Jurnal Ilmiah Manajemen Dan Organisasi” 2021, vol. 10(1), pp. 24–33.

Electronic banking, or digital banking, is one of the bank's attempts to increase public financial access. It will undoubtedly enhance financial services and enable clients to handle their finances freely. On the other hand, banks must adhere to risk management and fundamental banking principles outlined in the FSA regulations.<sup>36</sup>

According to FSAR No. 12/FSAR.03/2021, a digital bank is an Indonesian legal entity bank that distributes and conducts business mostly via electronic channels and operates without a physical office other than the head office or with a limited physical presence. Digital banks can be new banks or old ones turned into digital.

Forming a digital bank is undoubtedly advantageous for society since it enables individuals to conduct financial transactions more easily in Indonesia.<sup>37</sup> The following are some of the benefits of having a digital bank:

1. Inclusive financial services. The distinction between digital and conventional banks is how they run businesses and grow their service offerings. To extend banking services in new locations, conventional banks must establish branch offices and hire workers, security guards, and ATMs, among other things. Of course, carrying out the above provision will demand significant financial resources. It is in stark contrast to digital banks, which conduct all transactions online and do not maintain physical branch locations. The creation of a digital bank will facilitate the expansion of the broadest range of digital bank services in Indonesia by banking entrepreneurs. As a result, service coverage will be more comprehensive than conventional ones.<sup>38</sup>
2. 24-hours efficient service. In delivering services to all online clients, digital banks excel by increasing their efficiency while doing banking transactions. Digital banks can serve clients online, enabling them to create accounts or access other financial services 24 hours a day, seven days a week, just by utilizing a smartphone and the internet.<sup>39</sup> Digital banks can service clients 24 hours a day, making economic activity in Indonesia simpler and more affordable. Following the McKinsey report, banks can increase operating margins using pre-tax income as a financial benchmark. Additionally, it is reported that around 40% of banks want to improve their efficiency and

<sup>36</sup> R.M. Palilati, *Legal Protection of Banking Consumers by the Financial Services Authority*, "Jurnal IUS" 2016, vol. 4(3), pp. 50–67.

<sup>37</sup> Allo, *Strategy for Implementing Balanced Scorecard Tools on Digital Banking at PT: Bank Negara Indonesia (Persero) Central Jakarta Head Office*, "Celebes Equilibrium Journal" 2020, no. 2, pp. 10–24.

<sup>38</sup> U. Hidayanti, L.N. Pratiwi, D.A.D. Tamara, *Comparative Analysis of Financial Performance Before and After Implementation of the Branchless Banking Program*, "Journal of Applied Islamic Economics and Finance" 2021, vol. 1(2), pp. 276–296.

<sup>39</sup> M.I. Faza, S.R. Mawarni, *Implementation of Sharia Bank Digital Banking as a Customer Retention Effort during the Covid-19 Period*, "ALIQTISHOD: Jurnal Pemikiran dan Penelitian Ekonomi Islam" 2021, vol. 9(2), pp. 39–54.

save money to convert to digital banking. Indeed, the advantages realized are not limited to the cost reductions associated with automating operations and removing duplication. There are other advantages, particularly synergy, regarding data access and reaction times.

3. Lower admin fees. The deployment of an entirely online digital bank has the potential to cut administrative expenses significantly. Customers will benefit from lower administrative expenses due to all-online digital bank services. This conclusion can be drawn because digital banks do not require the establishment or management of numerous branch offices throughout the country, nor do they require human resources to serve customers directly, implying that online services will reduce the costs and administrative costs charged to customers in Indonesia.
4. Increasing competitiveness. The use of digital technology enables banks to access a broader client base and develop stronger ties with the tech-savvy generation. It has ramifications when the fintech community grows like mushrooms in Indonesia, and the banks want to compete with modern-era technological giants. The banks must be able to provide basic services with the same degree of quality.<sup>40</sup>

### **3. Data protection overview in Indonesia**

The Indonesian government ensures the implementation of sanctions for personal data misuse by third parties without rights and guarantees of personal data protection in the virtual world. The application of sanctions is compliance with legislation and regulations through Law No. 11 of 2008 amended by Law No. 19 of 2016 and Regulation of the Minister of Communication and Informatics No. 20 of 2016 concerning protection of personal data in electronic systems (PM 20/2016).

The Ministry of Communications and Informatics has also coordinated with the Directorate of Cyber Crime of the Indonesian National Police Headquarters to conduct an investigation of alleged criminal acts in cases of personal data misuse by third parties. Regulation of Minister of Communication and Informatics No. 20 of 2016 took an effect since December 2016. The personal data protection includes protection against the acquisition, collection, processing, analysis, storage, display, announcement, transmission, dissemination, and destruction of personal data.

Every electronic system operator is required to notify the Personal Data Owner in case of there is failure to protect the personal data confidentiality. The information that must be submitted includes:

<sup>40</sup> K. Wijaya, *Digital Banking vs Digital Bank*, "Majalah Info Bank" 2021, no. 1, [https://lppi.or.id/site/assets/files/1890/kw-serial\\_berbagi-digital\\_banking\\_vs\\_digital\\_bank.pdf](https://lppi.or.id/site/assets/files/1890/kw-serial_berbagi-digital_banking_vs_digital_bank.pdf) (access: 7.3.2023).

- reasons or causes for failure of confidential protection of personal data done electronically,
- information sent to the Personal Data Owner whether the failure contains a potential loss for the person concerned,
- written notification sent to the Personal Data Owner no later than 14 (fourteen) days after the failure is detected.

#### **4. Personal data settings in a selected country**

##### **4.1. European Union countries**

General Data Protection Regulation is a regulation on data privacy (data protection) globally applied to all companies that store or process residents' personal data of 28 countries that are members of the European Union (EU). This regulation has been approved by European authorities since April 2016 and became effective worldwide on 25 May 2018. The main function of GDPR is to give consumers control over their personal data collected by companies, such as: basic information such as name, address and ID number; web data such as location, IP address, cookies and RFID; health and genetic data; biometric data; ethnic and racial data; political opinion; and sexual orientation.

GDPR applies to all companies, but the hardest hit will land on those who hold and process large amounts of consumer data such as technology companies, marketers, and the data brokers that connect them.

GDPR is a law that regulates the protection of personal data that is generally applicable in EU countries. There are several advantages of GDPR. First is about a fine of €20 Mio or 4% of global revenue. The fine for the GDPR is so serious that it shows that compliance with the GDPR is the same as complying with anti-bribery or money laundering regulations. It is worth emphasizing that the problem of data privacy is not just an IT problem. This very high fine is felt to be able to cause a deterrent effect on the violators so that it will reduce the number of people who commit personal data violations. Second, it is a mandatory notification of breach that is mentioned every organization must notify the authorities within 72 hours of finding a data breach and must inform which data is affected. Thus the authority can take precautions on the negative effect of the personal data breach. Thirdly, extraterritorial, this regulation applies not only in the European Economic Area but all companies in the world that store personal data of EU residents. Lastly, prohibition of data processing activities means that if a company is found to be in violation, the regulator has the right to prohibit the company from processing the personal data of both customers and employees.

#### 4.2. United States of America

The United States of America does not have a specific or single regulation regarding privacy protection for personal data. The concept of protecting the privacy of personal data between Europe and America differs. The concept of privacy protection for personal data was first coined around 1960. The United States began enforcing the rule of law protecting personal data privacy in 1974, namely the US Privacy Law. The protection of personal data privacy is regulated comprehensively with a preventive approach to privacy violations of personal data or other sensitive data that applies both in the federal state and in the states. There is new legislation regarding the protection of privacy of personal data, namely the California Consumer Privacy Law (CCPA) 2018, which took effect in January 2020. The regulation emphasizes new privacy rights for consumers and changes the privacy programs of California businesses regarding the privacy protection of personal data.

#### 4.3. Hong Kong

Hong Kong became the first country to comprehensively regulate privacy issues for personal data in Asia, namely the Personal Data Privacy Ordinance of 1995 (PDPO) which made major changes in 2012. The legislation was carried out by a special agency for handling personal data privacy issues called the Privacy Commissioner for Personal Data (PCPD). The principle of protecting the right of personal data privacy in Hong Kong includes limitations on the purpose of data collection legally carried out, the use and disclosure of personal data in accordance with its objectives and the owner's consent, correct quality of personal data, time limitation of personal data storage by third parties, personal data managers required to protect against irresponsible access, and the disclosure of "user data" used by Hong Kong which requires third parties to manage data (organizations or companies) to publish privacy policies to the public.

#### 4.4. Malaysia

Malaysia has the Personal Data Protection Act No. 709 of 2010 (PDPA Malaysia). There are seven principles in PDPA Malaysia adopted from the EU Data Protection Directive of the OECD Guidelines or the APEC Framework. With the 2012 PDPA in Malaysia, the guarantee of the security of personal data from internet users is increasing. Because Malaysia's PDPA refers a lot to the rules in the EU Data Protection Directive from the OECD Guidelines or the APEC Framework, Malaysia also stipulates in the PDPA that it is not permitted to transfer personal data outside Malaysia unless it has obtained permission from the Minister of

Information, Culture and Communication. Moreover, the country or place where personal data are transferred can guarantee personal data protection equivalent to PDPA.

## THE URGENCY OF PERSONAL DATA PROTECTION IN DIGITAL BANKING GOVERNANCE IN INDONESIA

Information technology has played a significant role in people's everyday lives in this information and globalization era. The use of information technology has grown ingrained in human existence.<sup>41</sup> The world has entered the industrial era 4.0, characterized by the emergence of new technologies capable of revolutionizing the entire supply chain and management in every industry sector, including the financial sector, and is commonly referred to as financial technology and digital banking.

The growth of technology-enabled financial services appears to be accelerating in Indonesia, as evidenced by the emergence of pioneering firms in payment systems, savings and loans, insurance, financial information service providers, crowdfunding capital markets, and technology-enabled wealth management.

The rapid adoption of financial technology and digital banking demonstrates that technology has played a critical role in facilitating access to financial services. It is consistent with customer behavior when obtaining services without physically visiting a bank, insurance agency, or financing institution. Customers, both people and enterprises, place a premium on the availability of digital banking services and products, particularly in the numerous Micro, Small and Medium Enterprises (MSMEs) in Indonesia.<sup>42</sup>

This invention is a digital transformation succeeding in converting an information and communication technology system by adding practicality, simplicity of access, speed, convenience, low cost, and transparency to supplant the previous economic age. In conjunction with the advancement of information and communication technologies, the financial services industry's diversity of competitors results in a high degree of rivalry, particularly for client acquisition. On the other hand, times have changed people's behavior patterns when using financial services institutions. This era's development has influenced people's preferences for technology-based financial services.

<sup>41</sup> M.I. Bangsawan, Absori, D. Syamsuddin, Waston, D.K. Diarti, A. Budiono, Rizka, *The Politics of Sharia Banking Law Development in the Era of the Industrial Revolution 4.0*, "International Journal of Multicultural and Multireligious Understanding" 2022, vol. 9(1), pp. 42–47.

<sup>42</sup> A.Z. Tayibnapis, L.E. Wuryaningsih, R. Gora, *The Development of Digital Economy in Indonesia*, "International Journal of Management and Business Studies" 2018, vol. 8(3), pp. 14–18.

The development of digital banks in Indonesia is accelerating, owing to the fierce competition between banks in the country, which drives banking companies to transform their businesses into digital banks. Indonesian clients prefer doing everything online, particularly when conducting financial transactions to meet their daily needs. It is depicted by the statistics on digital bank customers in Indonesia (Figure 1).

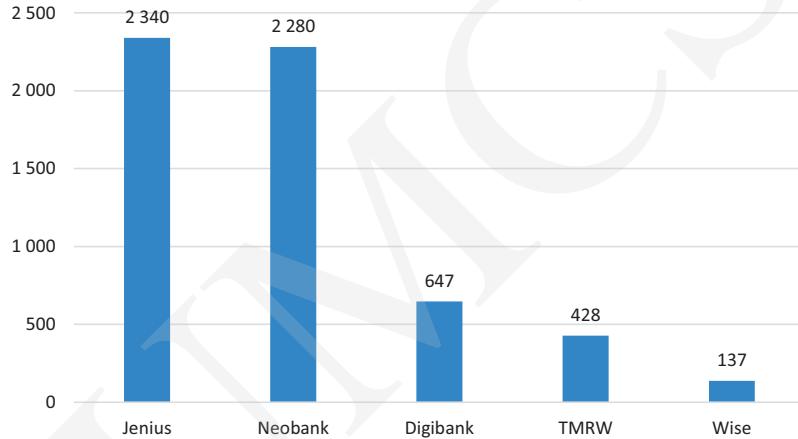


Figure 1. Data of digital bank users in Indonesia (in thousands)

Source: own elaboration.

Following the data of Figure 1, digital bank customers in Indonesia have reached 5,832,000. This statistic excludes newly acquired digital bank subscribers not previously included in APP ANNIE's State of Mobile 2022 report. In 2021, financial application users in Indonesia grew fast, according to APP ANNIE's State of Mobile 2022 research. According to statistics, there were 382,120,000 financial application downloads in Indonesia in 2021. It increased 82% over the 210,070,000 financial app downloads in 2021. Following APP ANNIE's State of Mobile 2022 research, the predicted digital bank user base in 2026 will reach 748 million. The rise in digital bank users in Indonesia is attributed to the perceived simplicity of service by digital bank customers.<sup>43</sup>

The rapid growth of digital banking in Indonesia is backed up by the fact that the value of digital banking transactions has continued to increase over the previous

<sup>43</sup> R. Pahlevi, *Number of Monthly Active Users of Bank Digital Indonesia in 2021*, 18.1.2022, <https://databoks.katadata.co.id/datapublish/2022/01/18/jumlah-pengguna-aktif-bulanan-bank-digital-jenius-tertinggi-di-indonesia> (access: 7.3.2023).

five years. According to Bank Indonesia, Figure 2 represent the value of digital banking transactions in Indonesia from 2017 to 2022.

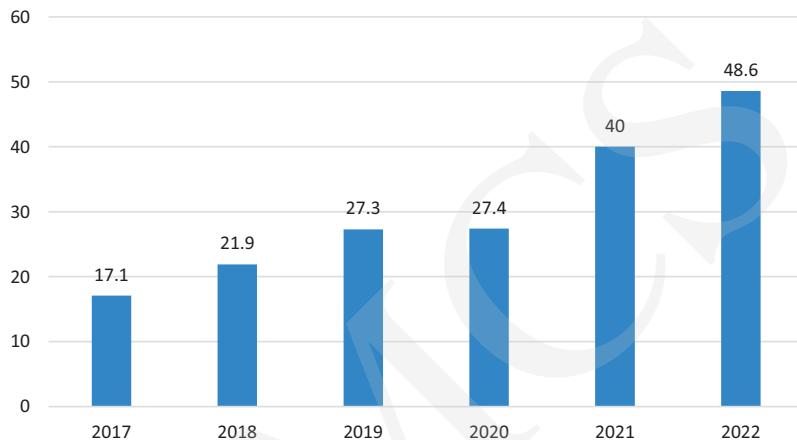


Figure 2. Value of digital banking transactions in Indonesia (2017–2022; in billions of Rp)

Source: own elaboration.

Following the trend in the value of digital banking transactions has grown over the previous five years. It was estimated at Rp 17,100 trillion in 2017. It then climbed by 28.07% to Rp 21,900 trillion in 2018. Digital banking transactions climbed by 24.66% the following year, reaching Rp 27,300 trillion. In 2020, the growth of digital banking transactions decreased to 0.37%, reaching Rp 27,400 trillion. In 2021, digital banking transactions increased by 46.1% to Rp 40,000 trillion. By 2022, transactions will grow by 21.8% to Rp 48,600 trillion.<sup>44</sup>

According to the FSA, digital banking services are transactions conducted electronically or digitally by the bank and through digital media held independently by clients. Digital banks provide services similar to conventional banks, but with one distinction: all financial transactions are conducted independently, without the need to visit the bank. The following are the digital banking services that users can utilize:

- obtaining banking-related information,
- communicating,
- registration,
- account opening,
- banking transactions.
- account closing,

<sup>44</sup> A. Karnadi, *BI Projects Digital Bank Transactions to Grow 21.8% in 2022*, 19.1.2022, <https://dataindonesia.id/digital/detail/bi-proyeksi-transaksi-bank-digital-tumbuh-218-pada-2022> (access: 7.3.2023).

- obtaining information and transactions on non-banking products,
- financial advice,
- investment,
- electronic-based trading transactions,
- other needs of bank clients.

Digital banks are expanding at a rapid speed in Indonesia. It is based on technological advancements and the interests of the broader society, particularly young people, who prefer online transactions using smartphones as a transaction instrument for payments and other activities.

Digital banking services are conducted independently using electronic or digital facilities held by the bank and digital media owned by potential bank clients. It enables potential clients and digital bank users to access banking services digitally from any location with a decent internet connection. It will undoubtedly simplify the public's everyday electronic transaction demands.

Adequate infrastructure is required to create a business plan for digital banking services. Risk management, information technology adjustments, business models, business processes, internal control, and human resources contribute to the convenience, security, and reliability of digital banking services when it comes to providing information, communication, registration, account opening, transaction processing, and closing account.<sup>45</sup>

With the fast expansion of digital banks in Indonesia, it is critical for policy-makers and digital banking entrepreneurs to identify the best solutions to overcome the following limitations in implementing digital banking:

- prone to identity theft,
- prone to online crime,
- prone to malware attacks,
- not all people can access digital banks.

The preceding information is critical to safeguarding digital banking clients from crimes, such as identity theft or password harvesting fishing (phishing). Phishing is a fraudulent activity involving the deception of other users through forged emails or websites. The purpose of sending bogus emails or visiting bogus websites is to find the user's info. User data are usually utilized to send emails that seem to originate from an official organization, such as a bank, to obtain personal information, such as User ID, PIN, account number, or credit card number. Criminality on the internet phishing is often accomplished by impersonating another person, typically via a bogus website or link, to dupe someone into acquiring or stealing personal information. In this scenario, the attacker sends an email that seems to originate from a well-known corporation or online service. The subject line can read, "Please enter your user ID/password". However, the email is often

<sup>45</sup> Financial Services Authority, *op. cit.*

a phishing link that seems to be directed to a website but is a fraud site. Phishing culprits often utilize this approach to profit, whether through electronic money or using other people's users to commit additional crimes such as distributing hoaxes and hate speech.

For instance, the theft of a digital account was suffered by one of PT Bank BTPN Tbk's clients who utilized a Jenius account. According to reports, a client called Anggita Wahyuningtyas was the victim of a burglary of more than Rp 50,000,000. The burglary began with a phone call from a scammer posing as a Jenius contact center on 7 September 2020. The call's contents said that there was a system upgrade and an ATM card replacement, for which the victim ultimately provided her details. The perpetrator was able to siphon the victim's money in a matter of minutes and then transfer it to another Jenius account in the name of Lutfi Putri Mardiana; upon being tracked down, it was discovered that the account's owner lived in Lampung and admitted that an unknown person had hacked her account. The member's stolen funds were moved to two more accounts on the same day. The BTPN, the FSA, and the police have all been notified by the victim. However, the criminals have evaded detection and arrest.<sup>46</sup> Another case is the burglary of Wirawan Candra's digital account, resulting in the loss of about Rp 21,850,000 and a time deposit of Rp 220,000,000. On 10 July 2021, the burglary began with a call from a WhatsApp number purporting to be the Jenius Bank BTPN contact center. The individual said that feasible rates had been adjusted and ordered Wirawan to fill out the fictitious website [geniusbtpn.com](http://geniusbtpn.com). However, after filling out the website and attempting to withdraw money from the bank, Wirawan Candra could not locate the funds in the Jenius Bank BTPN.<sup>47</sup> The third case is 14 BTPN's Jenius digital bank users who were victimized by account burglary. Account burglary victims incur losses due to money being transferred to many accounts without them knowing. Polda Metro Jaya was able to disassemble the theft. In connection with this case, police seized evidence of a crime in smartphones and illegal guns, detained two criminals, and the locations of two further perpetrators are unknown; they are now included on the Wanted List.<sup>48</sup>

Along with the issues mentioned above, virus attacks provide a barrier to the deployment of digital banking in Indonesia. Typically, this assault will lock the

<sup>46</sup> M. Ricards, *There Is a Digital Account Burglary, This Is What BTPN Says about Jenius Account Security*, 21.9.2020, <https://finansial.bisnis.com/read/20200921/90/1294614/ada-pembobolan-rekening-digital-ini-kata-btpn-soal-keamanan-akun-jenius> (access: 7.3.2023).

<sup>47</sup> D.M. Hutaeruk, Y. Winarto, *Beware of the Risk of Theft of Customer Funds in the Middle of the Digitalization Era*, 24.12.2021, <https://keuangan.kontan.co.id/news/waspadai-risiko-pembobolan-dana-nasabah-di-tengah-era-digitalisasi?page=2> (access: 7.3.2023).

<sup>48</sup> I. Buhori, *Police Uncover Case of Jenius Customer Account Burglary*, 13.10.2021, <https://www.merdeka.com/foto/peristiwa/1363874/20211013170048-polisi-bongkar-kasus-pembobolan-rekening-nasabah-jenius-001-.html> (access: 7.3.2023).

database and system and then demand payment as ransom. This kind of assault is referred to as a hijacking.

In other words, malware purposefully produced for a particular purpose will obstruct the adoption of digital banks unless they are accompanied by rigorous oversight from the appropriate authorities. Additionally, access has not been distributed fairly, particularly in rural areas of Indonesia. Government initiatives have not yet made the equitable distribution of technology a priority; although the government is now focusing on infrastructure development, not all locations in Indonesia have easy access to the internet.

As a result of the preceding explanation, it is clear that digital banking governance in Indonesia faces several challenges, setbacks, and losses, most notably for digital banking clients. It is because Indonesia lacks particular legislation governing the security of personal data in the regulation of digital banking. The legislation regulating personal data protection in Indonesia is governed by Law No. 19 of 2016. Article 26 (1) and (2) require that the use of any information about a person's personal data sent through electronic means be approved by the person concerned. As described in paragraph 1, any individual whose rights have been infringed can sue for the damages sustained due to this law. There is also an explanation which states that information technology and personal data protection are two components of personal rights (privacy rights). Personal rights are defined as follows:

- a. Privacy rights to enjoy a private life and be free from all kinds of interference.
- b. Privacy rights to communicate with other people without spying.
- c. Privacy rights to monitor access to information about a person's personal life and data.

In Indonesia's deployment of digital banking governance, if clients face a loss of personal data due to their usage of digital banking, causing losses in account break-ins and threats, the digital bank is accountable for their loss. It is consistent with the general provisions of Article 15 of Law No. 11 of 2008, stating that the electronic system operator must operate the electronic system reliably and safely and be accountable for its proper operation. This provision is clarified in Article 24 of Government Regulation No. 71 of 2019: paragraph 1 states that electronic system operators (ESO) must have and implement procedures and facilities for securing electronic systems; paragraph 2 states that ESO must maintain a security system covering policies and processes for preventing and reacting to threats and attacks that result in disruption, failure, or loss; and paragraph 3 states that in the event of a system failure or disturbance with a significant impact due to another party's actions against the electronic system, ESO is obligated to secure electronic information and electronic documents and to notify law enforcement officials and related ministries or institutions at the earliest opportunity.

The preceding rules govern the protection of personal data in Indonesia in general. However, these rules do not specify how personal data will be protected

in digital banking governance. Indeed, it can result in numerous interpretations about the implementation of banking governance in Indonesia and is incompatible with its implementation. Evidence confirms many instances of identity theft, online crimes, malware attacks, and other crimes committed by outsiders or banks staff during the deployment of digital banking administration in Indonesia.

These rules require banks to maintain the confidentiality of all client data and information to prevent incidents that might harm them. Nonetheless, many individuals still execute illegal crimes by exploiting clients' personal data for their advantage. As was the situation in 2021, Mrs. Rosmanian, Mrs. Pothasari, and Mr. Nasution were robbed in the Riau Government Bank Rokan branch by NH as a bank teller and AS as a head teller bank. The victims sustained a \$1.3 billion loss. It demonstrates the inadequacy of Indonesia's legislation controlling the safety of personal data managed by banks.

Additionally, the restrictions above do not include digital banking, which can protect client data. Meanwhile, it is well established that digital banking governance is riskier than conventional banking governance. As a result, there is a need for legislation governing digital banking governance to protect the personal data of clients.<sup>49</sup>

Specifically, FSAR No. 12/FSAR.03/2021 regulates digital banks in Indonesia. In Chapter 1 Article 1 a digital bank refers to an Indonesian legal bank that does business largely through electronic means and operates without a physical office other than its headquarters. Bank Hukum Indonesia is permitted to function as a digital bank under Article 23 if it maintains a single head office. Digital banks run the business through electronic channels and do not need a physical office other than the head office; alternatively, digital banks can utilize the head office. Digital banks operating in Indonesia must adhere to the following rules established by the FSA according to Article 24:

- a. Having a business model using innovative and safe technology to serve client needs.
- b. Having the ability to manage a prudent and sustainable digital banking business model.
- c. Having an adequate risk management.
- d. Fulfilling governance aspects, including the fulfillment of directors who have competence in information technology and other competencies following the FSA regulations regarding the fit and proper test for the main parties of financial service institutions.
- e. Carrying out the protection of client data protection.

<sup>49</sup> S.S. Kurniawan, *The Story of a Bank Teller Stealing Rp 1.3 Billion from a Customer's Savings, This Is How It Works*, 31.3.2021, <https://keuangan.kontan.co.id/news/kisah-teller-bank-curi-uang-tabungan-nasabah-rp-13-miliar-begini-modusnya?page=2> (access: 7.3.2023).

- f. Providing efforts that contribute to the development of a digital financial ecosystem and financial inclusion.

Bank Hukum Indonesia is expected to comply with the above requirements as long as it operates as an Indonesian digital bank. According to Article 25, Bank Hukum Indonesia can function as a digital bank through the following two establishments:

- a. The new Indonesian Law Bank has proposed to become a digital bank.
- b. Bank Hukum Indonesia, transforming into a digital bank.

According to Article 26, the establishment of a new digital bank must make a capital deposit equal to at least 30% of the paid-up capital (\$674,918,000) at the time of application to obtain approval in principle for the establishment of Bank Hukum Indonesia, and the digital bank must establish a head office network and branch offices performing activities other than those specified in the digital bank business plan. As for the bank that will convert to a digital bank following Article 27, it must maintain the electronic banking terminal that it already owns, gradually or completely close the office network owned by the bank other than the head office, and add office networks or electronic banking terminal.

Article 31 of FSAR No. 12/FSAR.03/2021 specifies that Bank Hukum Indonesia, acting as a digital bank, is obligated to comply with all relevant laws and regulations. Bank Hukum Indonesia that runs its business as a digital bank and breaches the requirements of Article 23 (2), Article 24 (2), Article 29 and Article 30 shall face administrative consequences in fines:

- a. Restrictions on certain digital banking services.
- b. Prohibition of expanding business activities.
- c. Freezing of certain business activities.

The FSA regulates the deployment of digital bank products in Indonesia through FSAR No. 13/FSAR.03/2021. Bank goods asserted under Article 4 are classified into two categories: basic bank products and advanced bank products. Digital banks are advanced bank products since this provision explains that in inclusive finance, information technology-based bank products include electronic banking services, digital banking services, and office less financial services.

Banks implementing advanced bank products must fulfill the two requirements outlined in Article 14, namely that they have never been held by a bank before and are developments of bank products that result in meaningful changes to previously held bank products' risk exposure. Banks must have a methodology for quantifying or evaluating the materiality of increased risk exposure due to bank product development. The FSA will issue a written warning to banks that contravene. Digital banks that satisfy the following requirements will be eligible to apply for new advanced banking products.

Banks must apply for a license in the form of notice of their intention to implement new advanced bank products at the FSA and a comprehensive documentation

application prior to the digital bank implementing the product. If the FSA does not object to the documentation presented by the digital bank within 10 days, the product is effective. Banks that fail to comply with their notification duty will face administrative consequences, including a written warning and a fine of \$674.92 every bank product.

Article 17 provides for the withdrawal of digital bank products on the initiative of the bank concerned and according to the FSA directives. Termination orders for bank products are issued based on the following criteria:

- a. The product does not have a permit and does not comply with the permit application, the realization report, and applicable laws and regulations.
- b. According to the FSA assessment, the adoption of new products can result in substantial and severe losses to the bank's financial situation, considerably raise the bank's legal risk or reputation, and have a detrimental effect on financial system stability.
- c. The bank does not require proper risk management for the items it does business with.

Banks that breach the requirements above will face administrative consequences in a written warning, a limitation on implementing new bank products, and a reduction in their soundness rating.

Article 7 of FSAR No. 13/FSAR.03/2021 requires banks to have established the following policies and procedures to manage the risks associated with bank products:

- a. Systems and procedures as well as authority in the management of bank products.
- b. Identification of all risks inherent in bank products.
- c. Methods of measuring and monitoring risk on bank products.
- d. The accounting recording method for bank products.
- e. Analysis of the legal aspects of bank products.
- f. Transparency of information to clients following the FSA regulation regarding client protection in the financial services sector.

Banks are expected to develop risk management policies and processes, which must be reviewed and updated regularly. Banks that breach their responsibilities encounter a written warning in the form of administrative consequences, including the freezing of bank products, the restriction of new bank product operations, and a decrease in their soundness in enforcing client protection laws.

In Article 5 of FSAR No. 14/FSAR.03/2021, the primary controlling party, management and authorities not being stockholders are stated to be engaged or accountable for concerns of integrity or financial feasibility, covering:

- a. Taking actions to influence or order the management, officials and or employees of the Financial Services Institutions (FSI) as follows: to obscure violations of a provision of financial conditions and actual transactions, to

provide unfair benefits to related parties so that it can harm or reduce the profits of the FSI and to commit acts that violate the prudential principle in the financial services sector and the principles of good financial services management.

- b. Proven to have committed a crime decided by the court and has permanent legal force.
- c. Causing the FSI to experience difficulties that endanger the business continuity.
- d. Not carrying out orders from the FSA.
- e. Having bad credit or financing at FSI.
- f. Found guilty of causing a company to be declared bankrupt or revoking its business license.
- g. Not taking the necessary efforts when the FSI faces solvency and liquidity difficulties.
- h. Refusing to make commitments or do not fulfill commitments with the FSA.
- i. Committing or playing a role in violations or irregularities in the activities of a representative office of a bank domiciled abroad, for the head of a representative office of a bank domiciled abroad.
- j. Obstructing or interfering with the efforts and implementation of the authority of the FSA or the efforts of the main LJK parties.
- k. Integrity, financial reputation and competence issues other than letters a to j contrary to the laws and regulations.

The primary controlling party or management not implicated in the above issues will be deemed passed if they continue to meet the standards to remain the primary controlling party. The primary controlling party, as established by the predicate, does not pass for the following reasons:

- 1. Integrity problems; they are prohibited from being the main controlling party, owning shares, and being the management in FSI.
- 2. Financial reputation; they are prohibited from being the main controlling party, owning shares, and being the main management party or official in the financial services industry where the main party is reassessed.
- 3. Competency problems; they are prohibited from becoming the main management party in the financial services industry where the main party is reassessed.

According to the rules of the act, the main party indicated by the disqualification predicate is considered a related party to the FSI.

According to Mr. Gunawan Setyo Utomo, the Deputy Director of Banking Development at the FSA Indonesia, the regulations issued by the FSA encompass FSAR No. 12/FSAR.03/2021, FSAR No. 13/FSAR.03/2021, and FSAR No. 14/FSAR.03/2021. These rules have enabled the development of digital bank products in Indonesia to proceed rapidly. However, he cannot dispute that these rules are not

ideal and that they will need to be improved in the future to address the issues and constraints confronting digital banking enterprises in Indonesia. The goal is that with the backing of the FSA regulations, it will be able to accelerate the growth of digital banks, strengthen the economy, and serve as a solution for Indonesia to overcome COVID-19. According to Mr. Gunawan, the law governing the management of digital banks is critical to fostering the growth of digital banks in Indonesia, ensuring legal certainty in their implementation, providing legal protection for clients, particularly regarding the protection of personal data that can be used against them, and resolving any problems encountered by Indonesian digital banking.<sup>50</sup>

Mrs. Niken, the Head of Bank Bukopin's Surakarta Branch, responsible for the Wokee digital banking in Surakarta, mentioned that the FSA regulations comprise FSAR No. 12/FSAR.03/2021, FSAR No. 13/FSAR.03/2021, and FSAR No. 14/FSAR.03/2021. These regulations benefit digital banking in Indonesia by making it simpler to build efficient, professional, and user-friendly digital banking solutions that enable persons impacted by COVID-19 to conduct financial transactions electronically to satisfy their daily needs. Moreover, it also aims to ease entrepreneurs to do business regularly. However, these policies have flaws that the FSA must address as Indonesia's financial regulator. The following are the shortcomings:

1. The FSA regulations have a limited binding force. It is demonstrated by the absence of the FSA regulation adoption by Indonesian financial institutions. Banking entrepreneurs will be more inclined to adopt the FSA regulations, which will benefit the country's banking growth. On the other hand, if these regulations do not help banks, entrepreneurs will take action against them. As stated earlier by the FSA regulations, business people are highly satisfied and embrace them since they enable entrepreneurs to build digital banking in Indonesia. Wokee digital banking is dedicated to enforcing all the FSA laws, whether they benefit banks or are difficult for banks but lucrative for clients.
2. The FSA regulations have failed to safeguard clients, particularly when it comes to personal data protection, since digital banking can raise the danger of harming clients, and these regulations have failed to give digital banking clients legal clarity. There is no language in the FSA regulations stating that if a client suffers a loss due to the deployment of digital banking, he will get compensation commensurate with his loss. At Wokee digital banking management, promotion legislation facilitates banking entrepreneurs' operations while also providing legal protection for clients. Thus, both sides profit and no one is hurt. Hence, Wokee digital banking supports establishing rules in

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<sup>50</sup> Interview with Gunawan Setyo Utomo, Deputy Director of Banking Development at FSA Indonesia, 20 September 2021.

legislation that facilitate banks' development of digital banking products while also providing legal protection for clients.<sup>51</sup>

As asserted by Mr. Stephanus Budhi Satya Putra (Director of CV. Tri Buwana Winatra Darya), as a priority client at Bank BTPN and Bank Digital Jago, the digital bank has positively impacted him over the last two years, specifically in assisting him in running his business, particularly if he wished to transfer funds abroad, specifically to China and Singapore, to purchase goods for his business production easily and efficiently. However, from a negative standpoint, digital banks lack features that protect their clients if their money is lost through no fault, such as when their communication equipment is stolen or damaged by others. Digital banks do not yet have a method to refund client money, such as those received through GoPay. Thus, the availability of this functionality demonstrates the digital banking party's responsibility for money lost due to clients' fault or carelessness. It demonstrates that digital banks in Indonesia continue to have minimum client protection. Therefore, creating legislation governing digital banking in Indonesia that provides legal clarity and client protection is necessary.<sup>52</sup>

Mr. Ilham Aji Setiawan, Director of UD. Chicken Barokah, noted that as a priority client of Bank Bukopin and a digital banking customer of Wokee, he has experienced convenience in all transactions conducted for the benefit of the company's financial management. Utilizing the digital bank becomes apparent when purchasing firm equipment in China is simple and rapid, even with a big volume of transactions. However, this speed comes with several concerns, most notably with the safety of clients' personal data, which can be detrimental. It was experienced by Mr. Ilham Aji Setiawan when he conducted digital banking transactions; he suffered a virus assault on his laptop due to doing a job-related search on Google and clicking on a link; as a result of the attack, the Wokee program was unable to operate. After a few days, Mr. Ilham received a WhatsApp message with threats from an individual requesting money. If Mr. Ilham failed to pay, the culprit would use his data to commit crimes against him. Mr. Ilham then reported to the Wokee. However, even though the banking side answered positively, there has been no follow-up on this matter so far. As a result, Mr. Ilham emphasized that it is critical to have rules governing digital banking management that particularly control personal data privacy and penalize banks when digital banking programs cause damage to clients. Thus, legislation will safeguard clients and give legal clarity to digital banking users in the future.<sup>53</sup>

<sup>51</sup> Interview with Niken, Head of Bank Bukopin's Surakarta Branch, 15 November 2021.

<sup>52</sup> Interview with Stephanus Budhi Satya Putra, Director of CV. Tri Buwana Winatra Darya, 10 November 2021.

<sup>53</sup> Interview with Ilham Aji Setiawan, Director of UD. Chicken Barokah, 1 January 2022.

As a result of the preceding discussion, it is clear that the necessity of implementing digital banking governance norms for banks in Indonesia is to have them strengthened by legislation. The following are the reasons:

1. **Philosophical considerations.** The advancement of information technology, which is then utilized to advance the financial sector, has the potential to accelerate the rise of alternative banking services significantly. To promote it and ensure that it contributes more to the national economy, it is vital for Indonesia to have unique rules governing digital banking. As is generally known, Article 33 (1) and (4) of the 1945 Constitution demand that: (1) The economy is organized as a cooperative endeavor based on the kinship concept, and (4) The national economy is structured based on economic democracy, cooperation, efficiency with fairness, sustainability, environmental awareness, and independence, and the premise of development while preserving national economic unity. To carry out Article 33 (1) and (4) of the 1945 Constitution, the government must mitigate the effect of risks associated with implementing digital banking in Indonesia. Additionally, the presence of rules in the form of legislation can undoubtedly offer parties legal certainty, particularly in transactions and the deployment of digital banking.
2. **Sociological considerations.** The instances mentioned earlier depict the victims of personal data and money theft. It is, of course, due to the lack of robust rules, such as laws regulating digital banks, particularly for banks in Indonesia, as long as the regulations remain in the form of the FSA regulations.
3. **Legal aspects.** Legally, digital banking is governed by three FSA regulations. To begin, FSAR No. 12/FSAR.03/2021 regulates the strengthening of institutional rules beginning with the requirements for the establishment of new banks and operational aspects, including but not limited to the simplification and acceleration of licensing for bank establishments, office networks, business process arrangements, covering digital services, or the establishment of digital banks. Subsequently, FSAR No. 13/FSAR.03/2021 controls the transition from a capital-based strategy to a risk-based approach in bank product licensing and operation. In addition, FSAR No. 14/FSAR.03/2021.

These policies have failed to address risk issues, particularly in introducing digital banking governance in Indonesia. With loopholes and a weak binding force, the FSA regulations can be readily violated, particularly concerning clients' data security, which will eventually hurt them in a situation similar to the ones previously described. It has had a little deterrent impact on criminals, and organizers face only administrative punishments for violating licenses, advanced product implementation (digital banks), and violations committed by controllers, bank administrators, and officials.

The FSA regulations help the pace of digital banking in Indonesia. However, these regulations are extremely damaging, particularly for digital banking clients. It can be seen in the following ways:

1. It is simple to apply for permits and digital banking products without regard for legal protection and legal certainty for digital banking clients.
2. The application of sanctions in the FSA regulations prioritizes administrative sanctions, relatively easy to carry out for digital banking. As a result, this punishment is highly favorable to the banking industry while being destructive to society. It demonstrates that even after the existence of the FSA regulations, several banks continue to violate the restrictions established by the FSA. In other words, the FSA's punishments are ineffective and inefficient. The FSA should impose more severe punishments on violating digital banks.
3. The FSA regulations have a weak binding power, making them can readily be violated. Hence, it is vital to enact legislation regulating digital banks in Indonesia. With a robust legal foundation, legislation can control digital banking governance, mitigate risks associated with digital banking governance, and offer security for clients' personal data. The law will provide legal clarity and protection to clients.
4. No provision in digital banking governance oversees the safety of personal data. It is extremely negative for clients who lose personal data due to digital banking, owing to a lack of client protection for digital banking users. It illustrates a lack of legal clarity and protection for digital banking users in Indonesia.

## CONCLUSIONS

Following the study findings, digital banks in Indonesia have flaws, including their susceptibility to identity theft, online crime, virus assaults, and their inaccessibility to all groups. Regulations regulating personal data privacy in digital banking governance are typically governed by Article 15 of Law No. 11 of 2008 and Article 26 of Law No. 19 of 2016. These rules do not go into depth about the security of personal data in digital banking governance, which can result in numerous interpretations of how digital banking governance is implemented in Indonesia. Concurrently, Law No. 10 of 1998 is a banking arrangement based on a conventional idea, not a digital one in which everything is based on information technology. As a result, these regulations are incompatible with digital banking governance in protecting customers' personal data and providing legal stability for digital banking governance in Indonesia. The FSA has issued digital banking regulations, including FSAR No. 12/FSAR.03/2021, FSAR No. 13/FSAR.03/2021, and FSAR No. 14/FSAR.03/2021. These policies have

failed to address the risk issues, particularly with the deployment of digital banking in Indonesia. The FSA regulations with loopholes and a weak binding force can easily be violated, particularly concerning customers' protection, which can eventually affect clients if a case arises in Indonesian digital banking. They have helped the pace of digital banking in Indonesia. However, these regulations possess downsides for Indonesian digital banking clients:

1. It is simple to apply for permits and digital banking goods without regard for digital banking clients' legal protection and assurance.
2. Penalties are applied in the FSA regulations with a preference for administrative sanctions, which are relatively easy for digital banks to implement and have a little deterrent impact on digital banking in Indonesia.
3. The limited binding force of the FSA regulations allows for easy deviation.
4. The absence of a provision regulating the security of personal data in digital banking management has caused clients to lack protection.

Consequently, to establish the resilient digital bank in Indonesia, it is necessary to set up solid legal rules regarding data protection. Data protection is the center of the operational regulation of digital banks so it is highly essential and required to be regulated in a separate law. The regulations that can make into a good form of personal data regulation is GDPR, thus it needs a concept to be able to adopt this rule in the rule of law in Indonesia.

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## ABSTRAKT

Bankowość elektroniczna w Indonezji rozwija się w szybkim tempie. Ponieważ prawo regulujące tę dziedzinę nie odpowiada obecnemu stanowi rozwoju bankowości elektronicznej, konieczne jest przyjęcie nowej ustawy, dostosowanej do aktualnego stanu bankowości cyfrowej, ze względu na dużą liczbę włamań na bankowe rachunki elektroniczne klientów, których doświadczają z powodu braku odpowiednich regulacji, takich jak ustanowiona regulująca bankowość elektroniczną. Ze względu na to, że banki elektroniczne podlegają rozporządzeniom Urzędu ds. Usług Finansowych (Financial Services Authority, FSA), z powodu nieodpowiedniego poziomu mocy obowiązującego prawa nie były one w stanie rozwiązać problemów związanych z ryzykiem. W badaniu zastosowano podejście normatywne, wykorzystujące dane zebrane podczas kwerend bibliotecznych i dyskusji. Wyniki badania wskazują, że zarządzanie bankami cyfrowymi ma takie wady jak: podatność na kradzież tożsamości i przestępcość internetową oraz ataki z wykorzystaniem złośliwego oprogramowania, a także brak powszechniej dostępności. Przepisy regulujące ochronę danych osobowych są w dużej mierze określone w art. 26 ustawy nr 19 z 2016 r. Przepis ten nie reguluje szczegółowo kwestii bezpieczeństwa danych osobowych w zarządzaniu bankowością cyfrową, dlatego może prowadzić do wielu interpretacji. Z kolei ustanowiona nr 10 z 1998 r. o finansach jest regulacją bankową dotyczącą bankowości tradycyjnej, a nie elektronicznej. Dlatego te dwie regulacje nie odpowiadają stanowi systemu bankowości internetowej w zakresie ochrony danych osobowych i pewności prawnej. Rozporządzenia nr 12/FSAR.03/2021, 13/FSAR.03/2021 i 14/FSAR.03/2021 regulują bankowość elektroniczną. Przepisy te mają takie wady jak: łatwość uzyskania koncesji, nacisk na kary administracyjne, brak odpowiedniego poziomu mocy obowiązującej oraz brak przepisów regulujących ochronę danych osobowych w zarządzaniu bankowością cyfrową w Indonezji. W związku z tym pilną sprawą jest uregulowanie kwestii danych osobowych w jednej konkretnej ustawie.

**Słowa kluczowe:** bank elektroniczny; Indonezja; zarządzanie bankowością; prawo bankowe