Characteristics of Digital Savings Account as the Latest Innovation in Digital Banking Services

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Abstract : The development of banking services along with technological advances has proven to be able to produce new products including digital savings account. This product has been issued by various state-owned banks and private banks, its presence has begun to replace conventional savings models. Legal problems occur when the security of digital savings is not fully protected against security risks and the fact that digital savings is still equated with other digital banking services such as internet banking and mobile banking whereas digital savings has its own peculiarities so the legal implications are different. Therefore, the research compiled by this normative method will examine issues concerning: (1) the characteristics of digital savings as the latest innovation in digital banking services, (2) legal remedies against hacking accounts of digital savings customers. The results of this research are digital savings have unique characteristics so that legal remedies applied are different by involving the role of the special complaint service unit.

Keywords : digital savings account, digitalbanking, banking law

1. Introduction

Banking as a financial institution that plays an important role in economy (Nur Kholis, 2018) also faces the threat of disruption and business competition between fellow banking institutions and with non-banking institutions that offer similar products. Therefore, banks are required to actively innovate in order to be able to survive in the midst of intense competition between financial institutions, some banks have even tried to apply the blockchain (Mark Buitenhek, 2016). One of the

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latest innovations in digital banking services is digital savings accounts. Digital banking is now dominated by state-owned banks in the first position (PWC, 2018). From the perspective of banking sector regulators and public policy, digital banking can cause problems related to the impact on bank solvency, risks in the banking system and consumers protection. It also has positives impact in the form of increased competition and expanding potential market.

Aligning strategies and innovations in banking services involving the sophistication of information technology is an attempt by banks to compete in the era of digital banking services. However, similar to information technology-based products in general, this product also has risk factors in terms of identity security, data leakage, error possibility, etc. Risks in operational, strategic and reputation require the serious application of risk management in the effective use of information technology by banks that are regulated by law. This risk has implications for the hacking of customer deposits either due to direct theft or by hackers.

Digital savings account are regulated at Financial Service Authority Regulation No.12/POJK.03/2018 on The Implementation of Digital Banking Services Commercial Banks (hereinafter referred as FSA Regulation No. bv 12/POJK.03/2018). Legal remedies that can be applied to hacking must be adjusted to the characteristics of it, which is certainly different from conventional savings. Besides, interpretation of the legal rules needs to be done before it can be applied to the activities related to the theft or hacking of consumer data. The problems examined in this study are ; (1) The characteristics of digital savings account, (2) Legal remedies against hacking of digital savings customer accounts.

2. Theoretical Framework and Hypotesis Development

Digital saving is a type of savings that all services are completely digital, all services entirely done by the internet and simply done via gadget. The attachment of digital savings to the internet makes the main target of the digital savings account market are teenage customers from Generation Z and adults or millennial (Carolyn A. Martin, 2016). Regarding to its function, a digital savings account is still the same as a

conventional savings account, which is saving customer funds and making it easier for customers to manage their transactions. The difference is in facilities and forms, i.e. eliminating the role of savings books that used to function as proof of account ownership, ATM cards, internet banking tokens, and mobile banking applications. All of these components has summarized in one account on application.

In this case, if we examine further, digital savings also play an important role to support banks to innovate products (Rajashekara Maiya, 2017), saving operational budgets and streamlining employee structures because the role of the front office can be minimized by the presence of digital banking service concepts that make customers less likely to come directly to bank offices.

When there is a burglary case of digital savings account which is proven that the loss of money is not due to customer error but due to burglary by hackers, the bank is obliged to help resolve the problem and compensate the customer losses in accordance with the nominal lost. There are a comparison between theft, consumer fraud and hacking (SGA Van de Weijer, 2018).

3. Research Methods

The research method applied in this study is a normative juridical method using the statutory approach in Indonesia and conseptual approach in the field of digital banking services and banking law.

4. Discussion

4.1 The Characteristics of Digital Savings Account

Technological advancements and the increasing of public needs demanded bank to fulfill the consumer demands. There has been a change in the behavior patterns of banking consumers to new products that prioritize ease of use (Carmen Cuesta, 2015). It has simplified customer activities, i.e. customers who previously had to come directly to the bank teller to conduct transactions, now have been facilitated by internet banking. The current method of saving money is not only physical money in the wallet or account, but also in the form of e-money. There are still many types of

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banking services that have been facilitated by technology. The latest development of banking service updates is the digital savings account. A long time ago, customer deposits in a bank account were proven by books, then banks developed a type of savings in the form of a current account (*giro*) whose transaction records were actively sent by mail to customers as a substitute for a savings book. The concept of bank deposit, now and in the future, will be increasingly sophisticated and paperless.

Digital savings products in Indonesia i.e. Digibank (DBS), Jenius (BTPN), Wokee (Bukopin), etc. There are also digital savings accounts which are the results of the development of conventional savings that have enhanced features, such as BNI Taplus and BNI Taplus Muda. The thing that needs to be underlined is that digital savings do not only mean adding technology and internet to conventional savings. Digital savings are not just replacing manual transactions to be completely online. It is more than that, they make it easier for customers to manage finances without relying on the role of banks and financial consultants, i.e. there are "in & out" features and estatement features on "Jenius", digital savings from BTPN, that make it easier for customers to control their debit and credit deposits also print their transaction history independently. These features need the help of artificial intelligence and biometrics, so it is not just a savings that involves an internet connection.

Digital savings apply biometric that is not adopted by conventional savings. Biometrics has been used for facial recognition purposes through certain points on our face that can be used as a substitute for PIN also to substitute our attendance when registering a new account (Alex Lipton, 2016). Biometrics helps verify the similarity of fingerprints in e-KTP with the fingerprint recorded on a smartphone. Artificial intelligence also changing transaction systems across bank industries (Chris D'Souza, 2017). The artificial intelligence feature plays an important role in helping customers manage their funds, the example is the use of artificial intelligence in "Digibank" (Siew Kien Sia, 2016). Digibank customers can submit questions to the virtual assistant feature for a list of standard questions. There are the summarizes of the characteristics of digital savings account compared with conventional :

No.	Aspects	Digital Savings Account	Conventional Savings
			Acccount
1.	Existence	 Proof of savings in the form of an account in the application No card required for transactions at ATMs (<i>cashlesswithdrawal</i>) 	 Saving book ATM card for transactions at ATM machines
2.	Interests	An average of 5% per year	Much lower
3.	Legal basis	FJA's regulation No. 12/POJK.03/2018 on the Implementation of Digital Banking Services by Commercial Banks	Act No. 10 of 1998 regarding Bank alsoother legal instruments in the banking sector
4.	Customer data security features	 Identification verification involving biometric technology (face scanners, fingerprints and identity cards) and the KYC (Know Your Costumer) principle. Username and password on digital savings account All transactions are carried out independently by the customer 	 Identification verification involves "Know Your Costumer" (KYC) principle ATM pin Customers are required to bring a saving book and affix their signature if they want to do offline transactions through a bank teller
5.	Charged fees	In general, costs are cheaper and more efficient, including free of additional fees when registering, the cost of interbank transfers is cheaper and even free, cash withdrawal at the machine is free of charge, free of charge below the minimum balance	In general, costs are more expensive and varied, including monthly administration fee, penalty fees if the savings balance is below the minimum balance per month, costs for printing and replacing saving book, bank transfer fees
6.	Flexibility	Services are more flexible because customers do not need to come to the bank	More procedural services
7.	Customer independence	Customers are more independent and don't depend on the assist of	Customers are more dependent on bank employee assistance

Table 1. Comparison of characteristics of digital savings and conventional savings

		bank employees	
8.	Features	More complete features, such as separation of bills, separation of deposits, debt collection, variable of time period, expenditure control, online loan apllication	Its features are not as complete as digital savings account. The main purpose is to save, transfer and withdraw funds
9.	Artificial Intelligence	Fully implemented	Not applied
10.	Internet	Depend on internet	Not always dependent on internet

4.2 Legal Remedies Against Hacking of a Digital Savings Account

The law always adhere the development of practices that occur in society or "*het recht hint achter de faiten aan*" which means the law always follows the development of society, not vice versa (Abdul Manan, 2018). Based on these reasons, the law was created by the government should ensure the stability of the community according to times. If we did a historical flashback, the act of taking other people's belongings has existed since time immemorial, since the Indonesian Criminal Code (ICC) has been applied in Indonesia through the concordance principle, that action is called theft (Article 362 - 367 ICC). As time goes by, theft is no longer on tangible but also intangible objects such as theft of electronic information.

Examples of savings burglary have occurred in the digital savings product "Jenius" owned by Bank BTPN. Based on the hacking, the perpetrators are known to have succeeded in conducting transactions on one e-commerce platform with a nominal value of hundreds of thousands to millions (Ipak Ayu, 2019). Burglary of digital savings usually begins with account hacking by stealing customer identities, its because the savings is protected with customer's personal information that is supported by biometric technology for face recognition and fingerprints to scan IDs that are not easily known by others directly. Hacking can be done by sending a spam e-mail containing a link to the customer's e-mail connected with their digital savings account so that the victim is directed to fill in his personal data unconsciously. The offenders of burglary digital savings in addition to being punished by Article 362 of the ICC concerning theft in general, may also be punished by Act No. 11 of 2008 on Electronic Information and Transactions (hereinafter referred to Act No. 11 of 2008), the rules that can be applied are Article 46 *juncto* Article 30, and / or Article 48 *juncto* Article 32, and / or Article 50 *juncto* Article 36Act No. 11 of 2008 *juncto* Act No. 19 of 2016. The security of digital savings account is a bank's obligation. Banks are required to applying the principle of data and transaction security control on their electronic system. Banks that conduct digital banking services are required to form units that obliged to handle the operation of digital banking services.

Digital savings customers also act as consumers of banking products, so that the customer has the right to be protected by legal instruments in the field of consumer protection law other than POJK No. 12/POJK.03/2018, including Act No. 8 of 1999 on Consumer Protection and other regulations related to consumer protection in the financial services sector. Therefore, the customer has a right to report his complaint to bank through a special complaint service unit. The principles of consumers protection include providing confidentiality and security of consumer data, handling complaints and settling consumer disputes in a simple, fast and affordable way. The mechanisms for handling customer complaints can be facilitated through various media. Banks are required to have functions and mechanisms in handling question and / or complaint from customers. According to Article 26 verse (1) FSA Regulation No. 12/POJK.03/2018, banks that do not implement these consumer protection measures are subject to administrative sanctions in the formof :

- a. admonition;
- b. reduce the level of bank health, in the form of a downgrade in governance factors in assessing the healthiness of the bank;
- c. prohibition to publish products or implement new activities;
- d. business suspension; and/or
- e. listing the names of members of the board of directors, board of commissioners, and executive officers in the list of people who did not pass through the fit and proper test mechanism.

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Bank as the responsible party also should implement preventative measures such as providing consumer education on how to protect the security of their digital data independently, such as information about separating emails connected to digital savings accounts from emails used for social media, *e-commerce* sites, work and daily life, as well as routinely change PIN and password. Consumer education can be provided both online and offline through official email, articles on the official website, social media, push notifications and direct counseling. This is also in accordance with one of the characteristics of digital savings, which is the dominant element of customer independence aspect in managing their savings.

5. Conclusion, Implication & Limitation

5.1 Conclusion

- 1. Digital savings account have different characteristics from conventional savings account such as existence, interest and costs, customer data security features, flexibility, customer independence, completeness of features and the role of artificial intelligence.
- 2. Legal remedies that can be applied when a customer's digital savings account has been hacked are started with a costumer complaint efforts to the complaint service unit that must be owned by each bank. If the case continues in court, then the legal rules applied also involve articles in Act No. 11 of 2008 because it is related to theft of electronic information.

5.2 Implication & Limitation

 Legal remedies that can be applied to digital savings account must be distinguished from prevention and treatment measures that have been applied to conventional savings account because of differences in their characteristics. Non-litigation settlement efforts must be maximized through the role of the complaint service unit so that cases can be resolved immediately considering that digital information theft happens faster and harder to detect. 2. Besides being obliged to accept and resolve consumer complaints regarding cases of digital savings account hacking in accordance with POJK No. 12/POJK.03/2018, Banks should implement preventive measures by educating consumers considering the high level of consumer independence is one of the characteristics of digital savings account.

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