



Security Legal Provisions for the Use of Electronic Wallets as Transaction Media Based on Bank Indonesia Regulation Number 18 of 2016 Concerning Implementation of Transaction Processing

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Abstract. The use of this electronic wallet makes it easier for humans to transact at a distance or near. Only need a smartphone without cash and an ATM card, the transaction process can be done. Based on this background, the authors raised the formulation of the problem, namely how the legal regulation of the security of the use of electronic wallets as a transaction medium is reviewed juridically based on Bank Indonesia Regulation Number 18 of 2016 concerning the Implementation of Transaction Processing and how is legal certainty regarding the security of the use of electronic wallets as a transaction medium based on Bank Indonesia Regulations Number 18 of 2016 concerning Implementation of Transaction Processing. The research method in this study is Normative Legal Research with Statute Approach, Conceptual Approach with Primary, Secondary, Tertiary Legal Material Sources which are collected using legal material collection techniques obtained from libraries, the internet and e- journal that will be analyzed qualitatively. The legal regulation on the security of using electronic wallets as a transaction medium does not explain what is meant by including authorization activities, clearing activities and final settlement activities (settlement) giving rise to multiple interpretations or a blurring of norms. Legal certainty regarding the security of using electronic wallets as a transaction medium based on Bank Indonesia Regulation Number 18 of 2016 concerning the Implementation of Transaction Processing, namely the absence of legal certainty providing protection to consumers of payment system services aimed at electronic wallet users. Principles of consumer control consisting of fairness and reliability, transparency, protection of consumer data and/or information, as well as effective handling and resolution of complaints.

Keywords: Legal Certainty, Digital Wallet, Consumer Protection.

1 Introduction

The current development of digital technology has skyrocketed along with the outbreak of the Covid-19 virus pandemic. Various digital services are no longer new to society, from online shopping to banking. The increase in digital transactions has

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made people rely more on digital payment trends, so that they forget what dangers will lurk behind the convenience of it all. The meaning of digital transactions themselves is payments made in non-cash, or without using physical money (cashless).

The digital revolution has had a major impact on all aspects of every individual's life throughout the world, including in Indonesia. Indonesia as one of the countries that feels the impact must be brave and able to compete with other countries in order to face various challenges in the digital era. With this borderless world, money has a very important role. Thus, the development of the payment system has become increasingly rapid and makes it easier for people to make transactions anywhere and anytime without the hassle of carrying large amounts of cash so that this tends to be more in demand by the wider community.

The emergence of financial technology has created avenues for individuals to engage in financial transactions more conveniently through many platforms. In the current era of digitalization, there has been a notable integration of the economy facilitated by the online system. This makes it easier for people to carry out economic activities. Financial companies that participate in using this technology are carried out by storing public money in electronic form or known as electronic wallets (e-wallets).

This progress has prompted the replacement of the role of payment systems that usually use cash (currency) to become electronic money, which is a form of non-cash payment system. Electronic money is a concept of a modern payment system without physical money or it can be called cashless money. In this concept, money is stored electronically and is divided into two types based on where it is stored, namely cards or chips and servers. Electronic money using a card or chip allows us to make transactions offline using a card, for example using a card issued by certain banking institutions and we can easily use it, such as paying tolls, parking, and so on. Whereas if we use electronic money this server requires internet or online coverage, such as payment by barcode via t-cash.

The process of buying and selling goods or services within a company is never separated from evidence of financial transactions. Transaction activities are usually carried out through automatic transfers with banking applications, such as transfers of raw material payments to suppliers. This will also affect the reconciliation process for the company's books. Referring to the survey results from the Indonesian Internet Service Providers Association (APJII) and Mastel, there are three transaction models that are quite popular in Indonesia. The first is transactions via ATM transfers, followed by on-site payment methods (Cash on Delivery or COD) and the last are payments via mobile devices such as: internet banking, credit cards, SMS Banking, and e-money.

Digital transactions are a sale and purchase agreement similar to conventional buying and selling that are usually carried out by the public in general. The difference between conventional buying and selling and e-commerce lies in the media used, in conventional transactions the media used is in the form of paper (paper-based transactions) while in e-commerce transactions, transactions are carried out in a paperless transaction using digital documents (digital documents). Digital transactions do not only virtualize transaction documents, but also about facilities and internet network penetration. In addition, it is also about the ability of the community to use digital

media. E-commerce transactions or digital transactions are becoming an increasingly biased alternative amid the spread of the corona virus. This pandemic requires all institutions, without exception, to use digital media facilities in their daily lives, with the aim of reducing people's mobility. Digital startups are competing to transform the conventional transaction system that has been used in Indonesia into digital transactions. Increasingly sophisticated technological developments accommodate and mobilize the transaction system in Indonesia.

However, there are vulnerabilities in the implementation of digital transaction systems in Indonesia. Several phenomena show the low level of digital security in Indonesia. Data from Veritrans and Daily Social published in 2016 shows that Indonesia is ranked highest in the list of 10 countries most at risk to digital security. According to the treat exposure rate (TER) data, which is a parameter to measure the percentage of computers affected by malware, Indonesia has a malware attack percentage of 23.54%. This figure is higher than China (21.36%) and Thailand 20.78%. In addition, the low awareness of users in Indonesia towards cyber security has an impact on Indonesia's cyber security vulnerabilities to global hacker attacks. According to data released by the International Telecommunication Union (ITU) regarding the 2017 World Cyber Security Index, Indonesia's cyber security is ranked 70th. For the Asia Pacific region, Indonesia is still below Singapore, Malaysia and Australia in matters of user awareness with one of the indications being the intensity of changing electronic mail passwords to minimize security breaches.

The digital industry is experiencing notable growth in multiple nations, including Indonesia. The aforementioned factor significantly influences the progression of Indonesia's progressively varied digital payment systems. The inception of digital payment systems in Indonesia commenced with the introduction of payment cards. The payment card in question possesses a physical form resembling that of a credit card, and is intended for utilization as a medium of financial transaction. The payment card in question has gained significant popularity since the 1980s, being introduced as a viable alternative to traditional cash-based transactions. The advent of payment cards has significantly transformed digital payment methods in Indonesia, with the emergence of mobile banking (m-banking) and electronic banking (e-banking). Since 2001, BCA (Bank Central Asia) has been responsible for the extensive management of electronic banking services through its *Klik* BCA website. In the year 2021, a multitude of electronic wallets and electronic banking platforms have emerged within the Indonesian market, with the primary objective of facilitating digital transactions within the country.

The regulation of the electronic wallet itself is contained in Bank Indonesia Regulation Number 18/40/PBI/2016 concerning Implementation of Payment Transaction Processing. In Article 1 number 7 it is stated that "an electronic wallet is an electronic service for storing payment instrument data, including payment instruments using cards or electronic money, which can also hold funds, to make payments."

An electronic wallet is an electronic device, service or even a software program (application) that allows its users to make online transactions with other users to purchase goods and services. There are several advantages offered by electronic wallets compared to using cash or other non-cash payment instruments, including:

1. Practical and Efficient. The main advantage offered by electronic wallets in carrying out various kinds of transactions is in terms of convenience. Users don't need to carry a wallet with lots of cash or cards, they don't even need to queue anymore for cash withdrawal transactions at ATMs. Supported by the increasing number of smartphone users in the community, all transaction processes can be carried out practically and efficiently.
2. Safe. Electronic wallets have provided various kinds of security features which are considered much safer when compared to other payment methods because they avoid the possibility of theft. Various security features are provided by electronic wallet application providers, for example QR Code, NFC (Near Field Communication) and OTP (One Time Password).
3. The service is widely used. Many service features can be accessed using electronic wallets, users only use smartphones to make various kinds of transactions. Various kinds of services that can be accessed using electronic wallets include online shopping, purchasing cinema tickets, ordering food, transportation for both motorbikes and cars, paying for electricity, water, BPJS and many others.
4. Top Up services are available in various ways. Apart from using ATMs and mobile banking, e-wallet users can also top up at various offline outlets such as *Alfamart*, *Indomaret*, *Hypermart* and many others. In addition, users can also share balances with other users, all they have to do is scan the barcode, the balance will be filled in immediately. The maximum balance offered is much more compared to e-money, which is Rp. 10,000,000. The use of electronic wallets proves that consumers do not have to have a bank account first, everything is available through electronic wallet services
5. Promos and Discounts. Various promos and discounts are offered by electronic wallets which of course provide benefits for their users. Many shops offer discounts when consumers transact using electronic wallet services. Examples of promotions that attract a lot of consumer interest are cashback and Buy 1 Get 1
6. There is a Transaction History. Almost all electronic wallet services display the user's transaction history in their application. This of course makes it easier for users to calculate their financial condition.

The types of electronic wallets in Indonesia include; *OVO*, *DANA*, *LinkAja*, *GoPay*, *iSaku* and so on. The mechanism for using these applications is all just using technology via a smartphone. But the way these platforms work is different.

With this electronic wallet, it makes it easier for humans to transact at a distance or near. Only need a smartphone without cash and an ATM card, the transaction process can be done. The existence of electronic wallets really helps the development of technology in the financial sector. The use of electronic wallets can facilitate various transactions such as purchasing credit, paying various bills, transfers between banks and other electronic transactions. Electronic wallet applications really make consumers interested because they offer many promos that are more profitable when compared to direct or non-cash transactions. However, besides the advantages of these electronic wallets, the existence of sophisticated electronic transactions causes

legal problems to arise. The problem with electronic transactions that is often found is the consumer's loss.

Pursuant to Article 2 paragraph (1) of Bank Indonesia Regulation Number 18 of 2016 concerning Implementation of Transaction Processing, states that: Processing of payment transactions is carried out by Payment System Service Providers and Supporting Providers, furthermore in paragraph (2), states that: Processing of payment transactions as referred to in paragraph (1) includes activities:

- a. pre-transaction;
- b. authorization;
- c. clearing;
- d. final settlement (settlement); And
- e. post transaction.

Based on this article, it has not yet been explained who is the supporting party and what is the meaning of paragraph 2 in letter b which states authority, letter c which states the word "clearing", letter d which states the word settlement, the explanation of the article is lacking clear, giving rise to multiple interpretations, on the other hand the meaning has not been explained yet, causing a blurring of norms

Based on this, the authors raised the problem, namely how to regulate the security law for the use of electronic wallets as a transaction medium reviewed in a Juridical manner based on Bank Indonesia Regulation Number 18 of 2016 concerning the Implementation of Transaction Processing and how is legal certainty regarding the security of the use of electronic wallets as a transaction medium based on Bank Indonesia Regulation Number 18 of 2016 concerning Implementation of Transaction Processing.

2 Methodology

The research method in this study is Normative Legal Research with a Statutory Approach and a Conceptual Approach, with Primary, Secondary, Tertiary Legal Material Sources collected using legal material collection techniques obtained from libraries, the internet and e-journals which will be analyzed qualitatively.

3 Result and Discussion

3.1 Laws on the Security of Using Electronic Wallets as Transaction Media are Reviewed from a Juridical Basis Based on Bank Indonesia Regulation Number 18 of 2016 Concerning Implementation of Transaction Processing

The rapid advancement of technology in the 4.0 revolution era is now having an impact on the progress of the payment system in financial transactions, especially in terms of maintaining the balance of business relationships between one party and another. These advances provide new innovations that encourage a shift in the role of the traditional payment system to modern one, cash to transfer.

Electronic money refers to a method of payment that exists in electronic format, wherein the monetary value is held within certain electronic media. The utilization of stored electronic money results in a reduction of its value equivalent to the transaction amount, followed by the option to replenish the funds (top up). The primary objective of this system is to effectively address the diverse requirements of many communities by facilitating prompt, secure, and efficient financial transfers. The ongoing innovation and development of electronic money will persist in enhancing transactional convenience.

Electronic wallets are regulated in Bank Indonesia Regulation Number 18/40/PBI/2016 concerning Implementation of Payment Transaction Processing which provides rights and obligations for electronic wallet users and electronic wallet issuers. Electronic wallets are also a category of financial technology, so they are subject to Bank Indonesia Regulation Number 19/12/PBI/2017 concerning Implementation of Financial Technology. Electronic wallets can be used as wallets that store money in them, electronic wallets store money in the form of non-cash payment instruments, namely electronic money regulated in Bank Indonesia Regulation Number 20/6/PBI/2018 concerning electronic money. This payment system product is likened to a “wallet” that is often placed in a trouser pocket. The use of wallets is often used to store payment instruments such as cash or non-cash such as debit cards, credit cards. However, what distinguishes it from an electronic wallet is that it can store electronic money, store financial data from non-cash payment instruments that can be used to make payments.

In electronic wallets, the storage media for electronic money values is server-based, namely electronic money with storage media in the form of servers. In its use, a connection is required in advance with the issuer of the e-wallet. User identity is recorded based on its type, namely unregistered and registered. Electronic money whose user identity is not registered and not recorded at the issuer is called unregistered. Meanwhile, electronic money whose user identity data is registered and recorded at the issuer is referred to as registered. (Article 3 Paragraph (2) Bank Indonesia Regulation Number 20 of 2018 concerning Electronic Money). Monetary value (monetary value) in electronic money is in electronic form (electronic value) which is obtained by exchanging a certain amount of cash or debiting the account at the bank and then storing it electronically in electronic media in the form of depositing funds.

Electronic money, when utilized by individuals, facilitates payment transactions and fund transfers. It is important to note that the value of electronic money decreases proportionally to the value of the payment transactions or fund transfers conducted, similar to physical cash. In contrast, the appreciation of electronic currency occurs when payments are received or funds are added, a process that can be facilitated through multiple channels such as Automated Teller Machines (ATMs), merchants, virtual accounts, and SMS Banking. Electronic money in electronic wallets has been regulated in PBI regarding electronic money. Bank Indonesia Regulations concerning Electronic Money and Bank Indonesia Regulations Implementation of Payment Transactions explains that payment system service providers can cooperate with other payment system service providers. In response to the suspension of the issuer's electronic wallet operations, *Bukalapak* initiated the introduction of

BukaDana in September 2018 as an alternative digital payment platform. Consequently, *Bukalapak* made the decision to permanently cease the operations of *Buka Domp**pet*, which had served as the primary payment platform since 2017, and transferred its functionalities to the *DANA* platform. *DANA* has a license as an electronic money issuer so that it fulfills the provisions in the PBI regarding Electronic Money. *Toko Cash* is also doing the same thing as *Buka Domp**pet*, namely migrating funds to *OVO*. *Toko Cash* users will automatically get the balance they have in their respective *OVO* accounts. However, users must first activate using the same registered telephone number as registered at *Toko Cash*.

After the enactment of the PBI regarding Electronic Money in 2018, the policy also applies that any party acting as an operator must first obtain a permit from Bank Indonesia. In order to obtain a license from Bank Indonesia, it is mandatory to meet the general requirements and eligibility aspects. *BukaDomp**pet* has had its operations frozen by Bank Indonesia because it does not have an electronic money license to manage digital wallets with a nominal value above Rp. 1 billion, this is the same as that experienced by *Tokopedia's Toko Cash*. In this case Bank Indonesia did this in accordance with its authority which is expressly stipulated in Article 73 PBI Number 20/06/PBI/2018 concerning Electronic Money which mandates that if the results of supervision by Bank Indonesia find an operator who cannot carry out electronic money activities adequate, then in the case of an operational suspension, Bank Indonesia will temporarily stop part or all of the activities of administering electronic money. However, the freezing of operational services on the e-wallet was given a way out by Bank Indonesia by giving a cooperation agreement and electronic wallets can transfer user balances to electronic wallets that already have electronic money permits.

In order to ensure legal certainty for users of electronic wallets, it is imperative for cooperation between these platforms to adhere to various obligations outlined in Article 34 of the Bank Indonesia Regulation on Electronic Money. These obligations include the effective and consistent implementation of risk management practices, adherence to information system security standards, and fulfillment of obligations pertaining to money transaction processing. In the domestic context, it is essential to establish interconnection and interoperability. Publishers, particularly suppliers, are obligated to adhere to the principles of anti-money laundering and the prevention of financing terrorism, as well as the principles of consumer protection. Furthermore, the electronic monetary operator is required to effectively and consistently implement risk management measures, as stated in Article 35 of the Bank Indonesia Regulation on Electronic Money. These measures include active supervision of management, ensuring the sufficiency of policies and procedures, establishing an appropriate organizational structure, ensuring the adequacy of the risk management function and human resources, and implementing internal control mechanisms.

In this case, there are different solutions between *Buka Domp**pet* and *Toko Cash*. *Buka Domp**pet* resolved the problem when its operating license was suspended by Bank Indonesia by integrating the *Buka Domp**pet* electronic wallet into another electronic wallet, namely *DANA*, which already has a license to operate as a payment system operator from Bank Indonesia. In the meantime, the sales transaction outcomes at *Buka Domp**pet* continue to be accessible to sellers at *Bukalapak* as a means of

maintaining a balance that might be distributed. However, purchasers of marketplace and virtual products will be instructed to utilize other payment mechanisms. Users of *Buka Dompot* who possess remaining cash in their *Buka Dompot* account have the option to initiate a withdrawal of said funds to a bank account, provided that the minimum transaction amount is Rp. 25,000 (twenty five thousand rupiah). Alternatively, users may opt to transfer the funds to the DANA electronic wallet, with a minimum balance requirement of Rp. 10,000 (ten thousand rupiah). This aligns with the stipulations outlined in Article 61 of the PBI pertaining to Electronic Money. Meanwhile, *Toko Cash*, which was originally used by Tokopedia, is collaborating with other third parties, in this case, *OVO*, to become a partner that organizes the payment system at *Tokopedia*.

The two cases above were basically caused by problems that occurred because they did not have a license for electronic money. Thus the electronic wallet has a vision of a payment system in 2025 which is in line with the description in the payment system blueprint that digitization of electronic wallets needs to move in line with efforts to maintain monetary stability and financial stability and smooth payment systems. On the one hand, the interlink between banks and financial technology needs to be built in a clear standard and contractual mechanism. Established regulations, entry-policy, reporting and supervision need to be aligned with the demands of the digital era including aspects of risk control.

Thus, the overall implementation of electronic wallet payment system transactions carried out by *Toko Cash* and *Buka Dompot*, resulted in the freezing of electronic wallet operational services by Bank Indonesia fulfilling the principle of legal certainty. This can be seen from the settlement of the case of the suspension of business operational licenses for *Toko Cash* and *Buka Dompot* which can be handled properly by applying several legal principles contained in Bank Indonesia Regulations concerning Electronic Money. Fulfillment of the aspect of legal certainty is carried out by cooperating between electronic wallets that have been frozen by operational services and electronic wallets that have an electronic money permit from Bank Indonesia. This cooperation is carried out in accordance with PBI provisions concerning Electronic Money and Bank Indonesia Regulations for the Implementation of Payment Transaction Processing. After the cooperation is carried out, the user's balance from the frozen e-wallet is transferred to an e-wallet that has obtained an electronic money permit from Bank Indonesia. However, it still meets the requirements for obtaining cooperation approval from Bank Indonesia in the Bank Indonesia Regulations concerning Electronic Money and Bank Indonesia Regulations for the Implementation of Payment Transactions.

In the future, related to Legal Arrangements for Electronic Wallets in the Future, Bank Indonesia is trying to provide a sense of security to users of electronic wallets where Bank Indonesia (BI) will soon issue regulations regarding electronic wallets or e-wallets as a data storage facility for non-cash payment instruments. Later, this latest regulation will become part of the Bank Indonesia Regulation (PBI) concerning Implementation of Payment Transaction Processing (PTP).

Apart from that, the regulation plans to regulate the maximum balance value for unregistered electronic money of IDR 1 million. Meanwhile, registered electronic

money can reach IDR 10 million. Then, other things that will be regulated, such as companies that want to use e-wallets for payments, only need to submit approval to BI. Meanwhile, for banks or non-banks wishing to set up a non-cash payment business, apart from having to be a legal entity, they are required to use rupiah in every transaction. This is intended for consumer protection in the future. For electronic wallets (e-wallets), BI will allow e-wallets not only to store data, but also stored-value. Examples of e-wallets include the Go-Pay feature in the Go-Jek application-based transportation service.

Legal interpretation, also known as interpretation, refers to the method employed in the process of uncovering the meaning and application of legal laws when their application to specific occurrences is not explicitly evident. Conversely, it is plausible that the judge may encounter situations where they are required to analyze and make decisions on instances that lack explicit guidelines or regulations. In this scenario, the judge encounters a situation where there is a lack of comprehensive legislation, necessitating the need to address and supplement the existing law. It is imperative for a judge to fulfill their duty to evaluate and adjudicate a case, without using the absence or incompleteness of the law as a reason for refusal. The judge determined that the legislation effectively addressed the legal gap.

The process of interpretation holds significant importance within the field of law. Interpretation serves as a systematic approach to comprehending the inherent significance encapsulated within legal documents, so facilitating their application in the resolution of cases or the formulation of decisions pertaining to actual situations. Furthermore, within the realm of constitutional law, the process of interpretation, particularly through judicial means, can serve as a mechanism for modifying the constitution by including, removing, or rectifying the intended significance embedded within the constitutional language. According to K.C. Wheare, the Constitution has the potential for modification through three distinct mechanisms: (i) formal amendments, (ii) judicial interpretation, and (iii) constitutional usage and conventions.

According to Solichin, the concept of implementation, as cited in Webster's dictionary, can be summarized as the act of providing the necessary resources to carry out a task or to bring about tangible results [25]. According to this definition, implementation can be understood as the act of executing choices related to implementation, typically in the form of legislation, governmental regulations, court rulings, presidential orders, or presidential decrees. Van Meter and Van Horn (year) assert that policy implementation can be defined as the deliberate acts undertaken by individuals, government officials, or private organizations with the aim of realizing the objectives specified in policy choices.

According to the author's analysis of the fuzzy legal norms of electronic wallets as a transaction medium referring to the theory described above, it can be given an analysis that the hazy norms that occur in electronic wallet arrangements must be temporarily overcome with legal interpretation because of the blurring. The ambiguity of these norms must be overcome in order to implement the law so that misunderstandings do not occur in implementing the law.

3.2 Legal Certainty Regarding the Security of Using Electronic Wallets as a Transaction Medium Based on Bank Indonesia Regulation Number 18 of 2016 Concerning Implementation of Transaction Processing

The emergence of financial technology has facilitated the creation of several platforms that streamline financial transactions for individuals. In the current era of digitalization, there has been a notable integration of the economy facilitated by the online system. This facilitates the execution of economic activity for individuals. Financial institutions that engage in the utilization of this technology facilitate the storage of public funds in electronic format, commonly referred to as electronic wallets (e-wallets).

Digital modernization and technology continues to develop day by day, making activities that are conventional in nature or carried out manually begin to become completely digital and make people's lives begin to change, affecting the transaction system that can currently be done online. At present there are many kinds of innovations created by humans with the aim of facilitating life in this world because the digital era has developed rapidly. In the increasingly digital era, there has been a shift in the transaction system to become one of the technological innovations which today is a trend in many countries, both developed and developing, this trend can even support a country's economic growth. The shift or development of transaction methods is also driven by the high value and capacity of transactions, increased risk, and the complexity of transactions.

The ongoing advancement of technology and information systems has led to the emergence of numerous innovations, particularly in the realm of financial technology (fintech), aimed at fulfilling the demands of society. This includes the provision of payment system services, encompassing instruments, organizers, mechanisms, and infrastructure required for the execution of payment transaction processing. The ongoing support for the implementation of payment transaction processing is crucial in order to maintain a seamless, secure, efficient, and dependable payment system. Therefore, it is imperative to establish regulations for payment system service providers that complement existing provisions. These regulations should prioritize the adherence to the principle of prudence and effective risk management. Additionally, they should consider the expansion of access, national interests, and consumer protection, while also taking into account international standards and practices.

The prevailing state of affairs is characterized by an increasing prevalence of digital payment methods, such as electronic money (e-money) or non-cash transactions, being employed by a growing number of retail establishments and outlets. The utilization of digital wallets, also known as e-wallets, is experiencing a rise in prevalence, which can be attributed to various contributing factors. One such factor is the growing adoption of digital payment methods among the younger demographic, specifically teens and students. The Cashless Society is a collective endeavor undertaken by individuals who opt for non-cash means of conducting transactions in their day-to-day activities. The realization of a cashless society does not solely revolve around the transition of transaction mechanisms, but rather encompasses broader alterations in behavior and culture.

Electronic money (e-money) was originally known as a stored value card, which is a card that functions to store a deposited amount of funds. Its function is almost the same as a debit card, but a fund storage card does not store the identity of the user or cardholder. Judging from the media used, there are two types of electronic money products (e-money), namely:

1. Prepaid cards, also known as electronic purses, possess the following attributes: a. Monetary amounts are transformed into electronic values and securely kept on an embedded chip within the card; b. The transfer of funds is facilitated by inserting the card into a designated card reader.
2. Prepaid software/digital cash possesses the following distinctive attributes: a. The process involves the conversion of monetary values into electronic equivalents, which are then stored on the hard disk of a Personal Computer (PC). b. The transfer of cash occurs through online means, utilizing a communication network such as the internet, throughout the payment process.

Electronic Wallet (E-Wallet) is an electronic application that can be used to pay for transactions online. Without cards and without cash, users only need to bring their smartphones. Apart from offering convenience, digital wallets are also considered more secure because they are protected by passwords that can only be accessed by users. The function of this digital wallet is very similar to a credit card or debit card, namely payments made in a non-cash or cashless manner.

The development of fintech payments in the form of e-wallet services, e-wallets themselves are a type of electronic payment. Payment transactions like this have replaced physical money with non-cash payments. This electronic payment method mainly uses a smartphone and is done online so it doesn't take up much time. This online service consists of applications that help provide services increasing flexibility and efficiency for users in business and life. Digital wallet (e-wallet) has a different meaning from Electronic Money (e-money), where a digital wallet or e-wallet is based on Bank Indonesia Regulation Number 18/40/PBI/2016 of 2016, Article 1 number 7 concerning Implementation of Transaction Processing Payment is an electronic-based media container whose function can be equated with a place to store electronic money as a payment method.

Electronic wallets have emerged as a significant facilitator of transactions in the realm of digital development. This is mostly attributed to the advancements in digital technology, which have substantially streamlined the process of conducting transactions, particularly when engaging with geographically distant counterparts. The advent of digital technology presents a favorable circumstance for a corporate entity to engage in the exchange of its services and participate in commercial competition. Indonesia boasts a diverse array of e-wallet companies within its borders. The digital wallet is a transactional tool that holds significant influence in the realm of digital advancement. By leveraging digital technology, it facilitates seamless transactions, particularly in remote settings, hence enhancing convenience for individuals.

The electronic wallet, often known as e-wallet, is a type of financial technology (Fintech) that leverages internet-based platforms and serves as a substitute payment mechanism. E-wallet transactions encompass all activities associated with a user's account, wherein payment to the seller is made without the use of physical currency,

but rather by directly deducting the corresponding amount from the user's account balance.

An e-wallet refers to an electronic wallet application or service that facilitates transactions between users, hence enhancing accessibility for the general public. E-Wallets facilitate many transactions, including the transfer of funds to acquaintances or individuals, as well as the payment for products and services. These transactions are executed by restricting the monetary value stored within the application. The level of technological sophistication has been steadily improving, allowing for more accessibility to the general people in conducting online and offline payment transactions.

Implementation of payments using electronic money has been regulated based on Bank Indonesia Regulations has been regulated according to Bank Indonesia Regulation Number 16/08/PBI/2014 concerning Amendments to Bank Indonesia Regulation Number: 11/12/PBI/2009 concerning Electronic Money in the provisions of Article 1 Number 3, "Electronic Money is a means of payment that fulfills the elements of (a) issued on the basis of the value of money deposited in advance to the issuer; (b) money values are stored electronically in a media server or chip; (c) used as a means of payment to merchants who are not issuers of the electronic money; (d) the value of electronic money managed by the issuer is not a deposit as referred to in the law governing banking."

As per the aforementioned provision, electronic money serves as a viable alternative to physical currency. It functions as a payment method that is generated based on the pre-deposited monetary value by the holder to the issuer. This value is electronically stored in a medium, such as a server or chip. It is important to note that the monetary value of electronic money does not serve as a form of savings, but rather as a means of payment to merchants who are not the original issuers of said electronic money. This issuance is contingent upon the pre-deposited monetary value by the holder to the issuer;

1. Money is typically held in an electronic format within a designated media, such as a server or chip, which serves as a repository for its worth.
2. Electronic money serves as a medium of exchange for transactions conducted with merchants who are not the original creators of said currency.

Based on Article 4 of Bank Indonesia Regulation Number 18 of 2016 concerning Implementation of Transaction Processing, states that:

- (1) Any party acting as a Payment System Service Provider as referred to in Article 3 paragraph (1) must first obtain a license from Bank Indonesia.
- (2) The party that has obtained the permit as referred to in paragraph (1) and will carry out: a. development of payment system service activities; b. product development and payment system service activities; and/or c. cooperation with other parties, must first obtain approval from Bank Indonesia.

The security level of digital wallets in Indonesia continues to grow along with the growth of technology and the adoption of digital wallets by the public. The following is an overview of the security level of digital wallets in Indonesia:

1. Data Encryption: Digital wallets generally use encryption to protect user data. Sensitive information such as bank account numbers, PINs and passwords are encrypted making it difficult for unauthorized parties to access them.

2. **Password Protection:** Digital wallets generally have strong password security requirements, such as a specified password length and a combination of special characters, numbers, and upper and lower case letters. In addition, some digital wallets also implement two-factor authentication (2FA) to provide an additional layer of security.
3. **Transaction Security:** Digital wallets take seriously the challenge of transaction security by using security protocols such as SSL (Secure Socket Layer) or TLS (Transport Layer Security) to protect the communication between user devices and servers.
4. **Protection of Personal Data:** Digital wallets in Indonesia must comply with Personal Data Protection regulations and usually have clear privacy policies on how users' personal data will be managed, used and protected.
5. **Identity Verification:** As a measure to prevent fraud and illegal activities, digital wallets often require verification of the user's identity. This process involves sending official identity documents, such as a KTP, driver's license or passport, as well as additional information such as a selfie of the user to ensure the authenticity of the identity.
6. **Protection from Malware:** Digital wallets regularly develop and update their applications to protect users from malware attacks. They also encourage users to download their official apps via trusted app stores.
7. **Transaction Monitoring:** Digital wallets often use artificial intelligence technology to monitor user activity and detect suspicious activity. If there is a suspicious transaction, additional security measures can be taken to protect the user.
8. **Security Education:** Digital wallets in Indonesia are also trying to increase users' security awareness through educational campaigns on good digital security practices, such as not providing personal or account information to untrusted parties.

According to Radbuch, as cited by Riswandi, there exist three fundamental goals in the realm of law, namely fairness, benefit, and legal certainty [5]. The concept of justice necessitates that the law consistently places a higher emphasis on justice, whereas expediency necessitates that the law consistently emphasizes advantages. Additionally, legal certainty particularly requires the presence of legal regulations. The government ensures the implementation of legal certainty by effectively enforcing laws and regulations once they have been enacted. Legal certainty refers to the principle that individuals possess the right to request the enforcement of the law, and such requests must be honored. Furthermore, any transgressions of the law are subject to legal prosecution and subsequent imposition of appropriate legal penalties. The concept of certainty is inherently linked to the field of law from a legal standpoint. According to Mertokusumo, the concept of legal certainty serves as a legitimate safeguard against arbitrary actions, ensuring that individuals are able to attain expected outcomes within specific circumstances [26].

Legal certainty according to Jan Michiel Otto defines as the possibility that in certain situations:

- 1) The state, by virtue of its authority, issues and acknowledges rules that are characterized by their clarity, consistency, and accessibility.
- 2) The authorities, namely the government, regularly enforce and adhere to these legal regulations.
- 3) In essence, individuals conform their conduct to these regulations.
- 4) The judiciary, comprised of impartial and judicious judges, consistently applies legal principles in a manner that is devoid of bias or undue influence while adjudicating legal disputes.
- 5) The implementation of the court's decision is executed in a definitive manner.

Sudikno Mertokusumo posits that legal certainty encompasses the assurance that the law is executed in a manner that is deemed satisfactory [26]. Legal certainty necessitates the endeavor to establish regulatory frameworks through legislation enacted by duly authorized and authoritative entities. This ensures that these regulations possess a juridical dimension, hence ensuring certainty in the functioning of the law as a binding rule that must be adhered to.

According to the author's analysis of the ambiguity of terms in the processing of Article 2 paragraph (1) of Bank Indonesia Regulation Number 18 of 2016 concerning the Organization of Transaction Processing, it can be concluded that payment transaction processing is carried out by two types of operators, namely Payment System Service Providers and Supporting Providers. However, the article does not provide a clear explanation regarding the party who is the Supporting Provider. Furthermore, in paragraph (2) of Article 2, it is stated that payment transaction processing includes several activities, including:

- a. Pre-transaction: This refers to activities before the actual payment transaction takes place, such as data checking and verification.
- b. Authorization: Is the process of authorizing or approving a payment transaction by an authorized party, such as a card issuer or bank.
- c. Clearing: This article does not provide a clear explanation of what "clearing" means. Clearing in the context of a payment system can refer to an interbank settlement process in which funds and transaction information are exchanged to facilitate interbank transactions.
- d. Final Completion (Settlement): This refers to the final stage where the payment is actually settled, and the funds are transferred between the parties involved in the transaction.
- e. Post Transaction: This refers to activities that occur after a payment transaction has been completed, such as reconciliation, reporting, and resolution of issues that may arise.

In the context of legal certainty, it is true that there is a lack of clarity regarding the parties who are Supporting Providers and a clearer definition of the term "clearing" in the said Bank Indonesia Regulation. This ambiguity can raise doubts in the application and interpretation of these regulations. In situations like this, it may be considered important to refer to further explanations provided by Bank Indonesia or related authorities, such as implementing regulations or operational guidelines which can provide a more complete and clearer interpretation regarding these vague terms. In addition, if there are differences in interpretation or unclearness, it can be used as a

basis for submitting clarifications to the competent authority, in this case Bank Indonesia.

Based on the analysis of the article mentioned, there is a lack of explanation regarding the supporting parties and the definitions of several terms used, such as "clearing", "settlement", and "post-transaction". This ambiguity can lead to legal uncertainty, because the parties involved in processing payment transactions and the activities that must be carried out by them are not clearly explained. In law, legal certainty is an important principle needed to provide clear guidance for legal actors. If the article does not provide an adequate explanation of the supporting parties and the terms used, this can lead to legal uncertainty. In this case, it is necessary to take action to clarify and provide a more detailed explanation of the supporting parties in payment transaction processing, as well as to define terms such as "clearing", "settlement", and "post-transaction". This action can be taken through additional regulations, official explanations, or changes in existing regulations.

Ensuring legal certainty in this case, further action is needed to provide a clear and firm explanation regarding supporting parties and definitions of terms that have not been explained in the regulation. This will help legal actors understand and apply the rules correctly, thereby avoiding blurred norms and legal uncertainty.

4 Closing

4.1 Conclusion

1. The legal regulation regarding the security of using electronic wallets as a transaction medium is legally reviewed based on Bank Indonesia Regulation Number 18 of 2016 concerning the Implementation of Transaction Processing, namely Electronic Wallets are regulated in Bank Indonesia Regulation Number 18/40/PBI/2016 concerning Implementation of Payment Transaction Processing that provides rights and obligations for electronic wallet users and electronic wallet issuers. Electronic wallets are also a category of financial technology, so they are subject to PBI Number 19/12/PBI/2017 concerning Implementation of Financial Technology. Electronic wallets can be used as a wallet that stores money in it, an electronic wallet stores money in the form of a non-cash payment instrument, namely electronic money regulated in PBI Number 20/6/PBI/2018 concerning electronic money. This payment system product is likened to a "wallet" that is often placed in a trouser pocket. The use of wallets is often used to store payment instruments such as cash or non-cash such as debit cards, credit cards. However, what distinguishes it from an electronic wallet is that it can store electronic money, store financial data from non-cash payment instruments that can be used to make payments.
2. Legal certainty regarding the security of using electronic wallets as a transaction medium based on Bank Indonesia Regulation Number 18 of 2016 concerning Implementation of Transaction Processing, there is a lack of explanation regarding supporting parties and definitions of several terms used, such as "clearing", "final settlement (settlement)", and "post transaction". This ambi-

guity can lead to legal uncertainty, because the parties involved in processing payment transactions and the activities that must be carried out by them are not clearly explained. Legal certainty is an important principle needed to provide clear guidelines for legal actors. If the article does not provide an adequate explanation of the supporting parties and the terms used, this can lead to legal uncertainty.

4.2 Suggestions

1. Policy makers, especially policies on electronic wallets, should make arrangements regarding supervision and who is authorized to supervise the existence of electronic wallets so that supervision can minimize fraud from service providers to users.
2. The public should better understand the procedures and conditions for using electronic wallets so that it is hoped that increased public understanding can minimize losses to users of electronic wallet services.

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