

# APPLICABILITY AND EFFECTIVENESS OF THE LEGAL TRANSACTIONS ON USING ELECTRONIC MONEY (E-MONEY) IN THE DISRUPTION ERA

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#### Abstract

Human activity encounters a density that is no less incredible in pursuing its needs and ambitions. Some people have attempted to conduct transactions in pair with the abundance of technological development activities, specifically by using electronic money. In this study, the author observes remarkable technological growth, which aims to understand the essence of e-money transactions and their efficacy. Additionally, how effective is the legal defense against e-money transactions? This study uses a normative or doctrinal research method by comparing the Law and the enlightening validity of reading books, texts, journals, print media, and other related information. This study demonstrates that the validity of electronic money transactions has done a lot, whereas the transaction encloses safeness, convenience, and time efficiency. However, there are also obstacles and challenges in it. For effectiveness, there is already a legal validation that controls it. At the same time, electronic money transactions must be protected for legal protection, where it contains elements of worth, which are benefits and time efficiency.

**Keywords**: Legal Conduct, Legal Effectiveness, Legal Protection, Technology and Electronic Money.

#### A. Introduction

Human beings naturally interact with each other in fulfilling their daily desires and needs or other expectations. With the help of other people, it would be easier to realize everything desired. In reality, sometimes peoples form their need on their own (be capable, work and produce) without the support of others. Then someone will convey it. This statement shows the limitations of humans in fulfilling their needs. When the instrument to satisfy human needs cannot be provided on its own, the presence of other parties as a means to complete all needs is a must. The satisfaction of this need is expected to not only happen in one direction, which only happens to one person in an interaction. Yet, it is expected to happen on both sides, no matter whether the cooperation is mutually beneficial.

Cooperation or reciprocal benefit between two or more people in which reciprocity is a form of social interaction. In Indonesian law, it is known as the term alliance. An alliance is a legal relationship between two individuals or two groups, where one group requires something or performance from the other group and the other group is bound to fulfill the demand. An alliance arises from the existence of an agreement. An agreement is an event where one person promises and binds himself to someone else, or two people pledge each other

An alliance or agreement made by both sides while carrying out its job cannot be in perfect conformity with the agreement's content; instead, difficulties and issues beyond forecast will arise. Even things that were not anticipated when

<sup>&</sup>lt;sup>1</sup> Subekti, *Hukum Perjanjian*, Jakarta: Intermasa, 2002, hlm. 1.

an agreement was made do occur,<sup>2</sup> and this is the reality of cooperation, which could be better in theory. Being left alone is not a requirement of this agreement, but rather minimizing the worst-case scenario.

Cooperation in fulfilling needs between people cannot be separated from the current facilities. For example, the norms of transaction tools have existed until now. The researcher carries the example of the function of money as a tool of exchange between one another to fulfill needs and desires. The behavior of money is very effective in facilitating the fulfillment of needs between two or more people who are doing transactions. Transactions are a form of social interaction in the context of fulfilling needs and desires.

The transaction situation using money would replace the transaction with the barter system that existed before. The barter system is quite tricky for people who want to make a transaction because they must meet: the same denominator (lack of common denominator) between two goods to be bartered (exchanged), the goods can be divided (indivisibility of goods), and there must be two desires that exact (double coincidence of wants).<sup>3</sup>

Sometimes things often occur when someone has an item but does not need it yet. At the same time, someone needs another item that does not have. Here is an illustration of barter that is difficult to construct: For example, someone has turmeric and still needs it. At the same time, someone

<sup>&</sup>lt;sup>2</sup> R.Wirjono Prodjodikoro, *Azas-azas Hukum Perjanjian*, Bandung: Mandar Maju, 2000, hlm. 102.

<sup>&</sup>lt;sup>3</sup> Adiwarman Azwar Karim, *Sejarah Pemikiran Ekonomi Islam*, Depok: Rajawali Pers, 2017, Cet ke-8, hlm. 273.

needs a camel for transportation. Others experience the opposite condition. That is, he has a camel that currently does not need it. At the same time, he needs turmeric, which he does not have. However, the two desires that each person has are challenging to realize, if the transaction system still uses barter.

The problem is solved by the presence of an alternate medium of exchange, in this case, money<sup>4</sup>, because with money, the fulfillment of a person's needs or desires can be adjusted to as many goods as are needed and, in the same case, how much money must be issued as a token of the goods.

Along with the growth of the times accompanied by the development of technology, money exchange likewise experienced development from cash (which can pay directly when doing transactions) to non-cash (in this case, there is a connection with the development of technology). The noncash money is better known as electronic money (e-money).

On the other hand, the people of Indonesia have yet to fully comprehend or even be able to keep up with the development of the times, accompanied by the development of technology. This condition also significantly influences the transition of cash (paper or coins) to non-cash (electronic money or e-money).

Based on the picture above, the researcher tried to express some critical questions related to the development of cash re-transaction tools into electronic money (e-money),

<sup>&</sup>lt;sup>4</sup> Di dalam ajaran Islam, uang tersebut terdiri dari dua jenis, yaitu dinar dan dirham. Dua jenis uang tersebut merupakan jenis logam yang tidak memmberikan manfaat langsung. Kemanfaatannya bisa dirasakan apabila berkaitan dengan barang lain. Misalnya dibutuhkan untuk dipertukarkan dengan dengan barang lain, seperti makanan, pakaian, dan lain-lain. Ibid., hlm 273.

at the same time, not accompanied by the development of knowledge of the society or Indonesian population as a whole.

#### **B.** Literature Review

# 1. Legal Conduct and Legal Activity

The law will be a "dead" thing if it cannot apply. Therefore, Hans Kelsen as a thinker of legal positivism emphasized the importance of separating the law from the elements of social science, such as sociology, anthropology, economics, and politics. Kelsen distinguishes between legal validities. The element of pressure in the law is not a psychic compulsion but the fact that embargoes are specific actions by the rules that make up the law. The pressure element is relevant only as part of the content of legal norms, not as an individual thought process of the subject of the norm. The moral system does not own this. Whether someone obeys the law to avoid the sanction of the law or not has to do with the validity of the law<sup>5</sup>.

According to Kelsen, particular rules determine the legality of a given situation. When a statement presupposes that the existence of a norm has legal significance by applying pressure from sanctions to a person whose acts are governed, mandated, or forbidden, the statement is valid. Law is a rule. The accepted law is the standard. Law is standard with penalties.

<sup>&</sup>lt;sup>5</sup> Jimly Asshiddiqie dan Ali Syafaat M., *Teori Hans Kelsen Tentang Hukum*, Sekretariat Jendral Kepaniteraan MK-RI, 2006, hlm 35.

The same opinion, as presented by Arief Sidharta (2007), is that there is a difference between validity and validity. Validity is related to logical thinking laws or logical methods. In comparison, the related behavior of the law is legalistic thinking. In the context of "law enforcement," specific manifestations can be observed, such as official behavior, law enforcement behavior, documents, legislation, and judge's verdict in a specific framework understood as a specific reference understood as law. At this point, the law is also a creation of the mind. The normative validity of the law can only be understood and thought about as such. It never as such can be found in reality. A statement is something he thinks. Thus, empirical or informative prepositions apply to the validity of the law.

Other than what Ulrich Klug put forward, there are nine categories of behavior, including:

- a. Juridical behavior is similar to positivistic behavior, as presented by Kelsen.
- b. Ethical behavior, behavior that occurs if a legal rule has the nature of a binding rule.
- c. Ideal behavior, the behavior of this category can be realized if the legal method is based on a higher moral method.
- d. Real behavior. Behavior that manifests from a legal rule behaves by referring to that legal rule.
- e. Ontological behavior is a legal behavior that will lose its meaning if the legal method is posited by lawmakers who ignore fundamental demands in forming rules.

- f. Socio-relative behavior is a legal method that does not have the power to apply or act juridically, ethically, and in absolute terms but still offers something to the addressees or targeted subjects.
- g. Decorative effect is the effect of legal rules that function as a symbol.
- h. Aesthetic acting is acting on a legal method with certain elegance.
- i. Logical validity, a legal method that is not internally contradictory, has the force of logical validity.

Behavior needs to be understood differently from attachment to strength. Sudikno Mertokusumo delivered a discussion about the 'power of the law.' There are three kinds of law power: juridical, sociological, and philosophical.<sup>6</sup> The force of positive law identified with the law in achieving its purpose, then as Gustav Radbruch delivered, the law's purpose is justice, certainty, and expediency. The law is constantly in flux, meaning that positing legal rules into the rule of law continue to happen repeatedly. Changes happen frequently and continue continuously, thus raising the question of whether it cannot be determined which legal rule we must adhere to at a particular moment which is a question about the validity of the law. If examined from the point of view of semantics or knowledge about the meaning of words and sentences, the possibility of various opinions about the law in the empirical, normative, and evaluative sense is

<sup>&</sup>lt;sup>6</sup> Sudikno Mertokusumo, Mengenal Hukum – Suatu Pengantar, Liberty, Yogyakarta, 2007, hlm. 94.

open, and all these meanings occupy a central position. The explanation presented of behavior is as follows<sup>7</sup>.

The application of legal rules factually or effectively can be said if the society to whom the legal rules apply is seen as generally capitulating with the legal rules. The general understanding of the factual application of legal rules needs to be understood from all aspects. That is, every person is permitted to apply the legal rules correctly, which then causes the community's citizens to behave under (refer to) the legal rules.

Positivity, not only effectiveness, is an absolute condition (noodzakelijke voorwaarde) for the normative validity of a legal order. Kelsen (1967) demonstrated that pure law would only be feasible when people recap it from the point it stands (*standpunt*, belief) from its formal structure and based on a higher rule of law. There is a connection between specific legal rules in which the legal rules refer to each other. There is a specific legal rule against general legal rules.

The rule of law is considered valuable if it is based on its substance, which has a binding force (verbindende kracht) or an obligatory nature (verplichtend character). Everyone must obey the rule of law, which he considers valuable or very important for his social behavior. The evaluative behavior of the rule of law is its binding nature, its binding force, or its mandatory nature (technical term for 'mandatory nature).

J.J. H. Bruggink, alih bahasa oleh B. Arief Sidharta, Refleksi Tentang Hukum
 Pengertian-Pengertian Dasar Tentang Teori Hukum, Citra Aditia Bakti, Bandung,
 2011, Cet. 3, hlm. 147-158.

The three applicable legal rules that have been briefly mentioned above are based on the views of J.J. H. Bruggink, modeled as in the picture below.

Bruggink's view above, when juxtaposed with the prevalence of the word 'applicability,' which in this writing is about law, which takes from the term and meaning of legal applicability according to Gustav Radbruch, then normative or formal applicability in other terms is juridical applicability (juristische geltung), applicability factual or empirical in other terms is sociological behavior (soziologische geltung), and evaluative behavior in other terms is philosophical behavior (filosofische geltung). Filosofische Geltung means that the law has power when the law conforms to the ideals of the law (rechtsidee) as the highest positive value (uberpositive Werte: Pancasila, a just and prosperous society). Soziologische Geltung means that the acceptance or application of the law in society depends on whether the legal rules are formed according to formal requirements. In this case, it looks more at the reality in the society. Juristische Geltung is defined as a law or regulation that has met the formal requirements 8.

According to Hans Kelsen, If we talk about the effectiveness of the law, we also talk about the validity of the law. Legal validity means that legal norms are binding, that people must act following what is required by legal norms, that people must obey and apply legal norms. Legal effectiveness means that people act following the

<sup>8</sup> Ibid., hlm. 94-95.

legal norms as they should do, that the norms are really applied and obeyed<sup>9</sup>.

Legal effectiveness, according to the definition above, means that the effectiveness indicator in the sense of the achievement of a previously determined target or purpose is a measurement where a target achieved under what has been planned.<sup>10</sup>

The objective of the law is to achieve peace by forming confidence and justice in society. Legal certainty requires formulating generally applicable legal rules, which must be strictly enforced or implemented. The law must be known for sure by the community members because the law consists of rules set for current events and the future, and the rules apply in general. Thus, in addition to the tasks of certainty and justice, the law's utility element is also concluded. Further, it means that every community member knows what can be done and what is forbidden to be done, in addition to ensuring that the community members are not harmed in their interests within appropriate limits.<sup>11</sup>

# 2. Legal Protection and Electronic Money (E Money)

Legal protection is protecting human rights that others would harm, and the protection is given to the community so that they can enjoy all the rights provided

<sup>&</sup>lt;sup>9</sup> Sabian Usman, *Dasar-Dasar Sosiologi* (Yogyakarta:Pustaka Belajar, 2009), h. 12

<sup>&</sup>lt;sup>10</sup> *Ibid.*, h. 13

<sup>&</sup>lt;sup>11</sup> Soerjono Soekanto, Beberapa Permasalahan Hukum Dalam Kerangka Pembangunan di Indonesia (Jakarta: Universitas Indonesia, 1976), h. 40.

by the law. In other words, legal protection is various legal efforts that the law enforcement apparatus must give to provide a sense of security, both mentally and physically, from interference and various threats from any side<sup>12</sup>.

Legal protection is the protection of grace and dignity and the recognition of human rights owned by legal subjects based on legal provisions from arbitrariness or as a set of rules or regulations that can protect one thing from another. Concerning consumers, it means that the law protects customers' rights from something that results in the non-fulfillment of those rights<sup>13</sup>.

Legal protection is a narrowing of the meaning of protection, in this case, only protection by law. The protection provided by the law is also related to the existence of rights and obligations. In this case, humans possess legal subjects in their interactions with fellow human beings and their environment. Humans have the right and obligation to perform a legal action as a legal subject<sup>14</sup>.

According to Setiono, legal protection is an action or effort to protect the community from arbitrary actions by rulers that do not conform to the rules of the law, to create order and peace so that people can enjoy their dignity as human beings<sup>15</sup>.

 $<sup>^{12}</sup>$ Satjipto Rahardjo , <br/>  $Penyelenggaraan\ Keadilan\ dalam\ Masyarakat\ yang\ Sedang\ Berubah.$  Jurnal<br/>Masalah Hukum., hal. 74

<sup>&</sup>lt;sup>13</sup> Philipus M. Hadjon. *Perlindungan Hukum Bagi Rakyat Indonesia*. Bina Ilmu ,Surabaya, 1987, hal. 25

<sup>&</sup>lt;sup>14</sup> CST Kansil. Pengantar Ilmu Hukum dan Tata Hukum Indonesia. Balai Pustaka ,Jakarta, 1989, hal 102

Setiono. Rule of Law (Supremasi Hukum). Surakarta. Magister Ilmu Hukum ProgramPascasarjana Universitas Sebelas Maret. 2004. hlm. 3

According to Muchsin, legal protection is an activity to protect individuals by harmonizing the relationship of values or embodied rules in attitudes and actions to create social order between fellow human beings<sup>16</sup>.

According to Philipus M. Hadjon, there are two types of means of legal protection, namely:

# a. Means of Preventive Legal Protection

In this preventive legal protection, legal subjects can raise their objections or opinions before a government decision gets a definitive form. The purpose is to prevent disputes. Preventive legal protection is considerable, meaning that for government actions based on freedom of action, the government is encouraged to be careful in making decisions based on discretion. In Indonesia, there are no specific arrangements regarding preventive legal protection.

# b. Repressive Legal Protection Means

Repressive legal protection aims to resolve quarrels. The handling of legal protection by the General Court and the Administrative Court in Indonesia includes this category of legal protection. The principle of legal protection against government actions is based and sourced from the concept of the recognition and protection of human rights because, according to history from the West, the birth of concepts about the recognition

<sup>&</sup>lt;sup>16</sup> Muchsin. *Perlindungan dan Kepastian Hukum bagi Investor di Indonesia*. Universitas SebelasMaret, Surakarta. 2003, hal 14

and protection of human rights directed to restrictions and the imposition of community obligations and the government. The second principle that underlies legal protection against government actions is the principle of the rule of law. Linked to the recognition and protection of human rights the recognition and protection of human rights has a central place and can link to the goal of the rule of law <sup>17</sup>.

# 3. Electronic Money (E Money)

In the European Central Bank's electronic money report, it states that *electronic money* is broadly defined as an electronic monetary store that has value in technical devices that can be widely used to make business payments and other needs without having to involve a bank account in every transaction but act as an instrument prepaid.<sup>18</sup>

Electronic money is an electronic payment tool that is acquired by first depositing an amount of money to the issuer, either directly or through the issuer's agents, or by debiting an account at a bank and including the value of the money as the value of money in the electronic money media, which stated in Rupiah units, used to make payment transactions by directly reducing the value of the money on the electronic money media. <sup>19</sup>

<sup>&</sup>lt;sup>17</sup> Philipus M. Hadjon. *Op Cit.* hlm. 30

<sup>&</sup>lt;sup>18</sup> European Central Bank, 1998, *Report On Electronic Money*, Frankfurt: European Central Bank, hal. 7

<sup>&</sup>lt;sup>19</sup> Veithal Rivai, dkk., 2001, *Bank and Financial Institution Management*, Jakarta: PT. Raja Grafindo Persada, hal 1367.

While according to the bank-indo.com site written by Septiano Pratama, it says that electronic money is money stored using a chip commonly known as RFID (Radio Frequency Identification) and connected to computer networks and the Internet. The way to transact with electronic money is by attaching a card that is the form of electronic money to a device called EDC (Electronic Data Capture). The card that functions as a substitute for your money has an RFID chip mentioned earlier and is connected to a computer network and the Internet as digital media storage using EFT (Electronic Funds Transfer).<sup>20</sup>

In Bank Indonesia Regulation Number 16/8/PBI/2014 in article 1, paragraphs 3 and 4 it states that Electronic Money is a payment tool that meets the following elements:

- a. published based on the value of money deposited in advance to the publisher;
- b. the value of money is stored electronically in a media server or chip;
- c. used as a means of payment to merchants who are not issuers of electronic money; and
- d. the value of electronic money managed by the issuer is not a deposit as intended in the law governing banking

<sup>&</sup>lt;sup>20</sup> Septiano Pratama, "Menggunakan Mesin Pencari Google dengan kata kunci uang elektronik" dalam http://www.bank-indo.com/pengertian-uang-elektronik-dan-macam-bank-penyedianya/. Diakses tanggal 17 Maret 2016.

Electronic Money is the value stored electronically on a media server or chip that can be transferred for payment transactions or fund transfers. <sup>21</sup>

### C. DISCUSSION

# 1. Conduct and Effectiveness of Electronic Money Transactions (E-Money)

Based on the information released by Bank Indonesia (BI), states that in the modern economy, the traffic for exchanging goods and services runs very fast. Hence, it requires a high-speed payment device as well, and it is done to counterbalance the traffic speed of exchanging goods and services. The machine is a faster, more efficient, and more secure payment. The use of cash as a means of payment felt to be causing problems, especially the high cost of cash handling and the low velocity of money (Bank Indonesia, 2006, p. 2)

Transactions using micropayment instruments, such as electronic media, subsequently known as electronic money, are desperately needed. Based on the speed at which technology is developing, different facets of life should follow. Second, there is a significant increase in the community's requirements. On the other hand, they must fulfill all their duties as government employees and business owners. They need more time to complete all the requirements of the transactions that require cash payments.

<sup>&</sup>lt;sup>21</sup> Peraturan Bank Indonesia Nomor 16/8/PBI/2014, *Tentang Perubahan Atas Peraturan Bank Indonesia Nomor 11/12/PBI/2009 Tentang Uang Elekronik (Electronic Money)* Pasal 1 ayat 3 dan 4.

Aside from these restrictions, cash is more convenient, secure, and effective. Said those who transact should not meet in person or travel with paper in their possession. Safe in that the person transacting does not have sheets of money, which might arouse envy and occasionally inspire immoral deeds for others who want the money. Therefore there is very little or even no sense of social envy from others. Efficient in that it takes little time, and the transaction is still relatively new. This transaction is quite crucial for those with much work and little free time to conduct transactions to meet their daily necessities.

Concerning the effectiveness of electronic money, it refers to what was delivered by Hans Kelsen, who stated that to determine the effectiveness: one must look at the validity of the law. The validity of the use of electronic money has been regulated by Bank Indonesia Regulation (PBI) Number: 11/12/PBI/2009 Regarding Electronic Money (EloctronicMoney) which was later changed by Bank Indonesia Regulation Number 16/8/PBI/2014, Regarding Changes to Bank Indonesia Regulations Number 11/12/PBI/2009 Regarding Electronic Money (Electronic Money), then there was also a second chance with Bank Indonesia Regulation Number 18/17/PBI/2016 Regarding the Second Amendment to Bank Indonesia Regulation Number 11/12/PBI/2009 Regarding Money Electronic (Electronic Money). Then came Bank Indonesia Regulation Number 20/6/ PBI/2018 about Electronic Money.

The regulations governing electronic money transactions occasionally need to be corrected or

improved. This suggests that the government is serious about using money to control parties. The goal is to prevent injury to any group.

The legal validity of transactions using non-cash or electronic money already exists and is relevant to the current conditions because it is easier, safer, and more efficient. However, at some points, six factors become obstacles and challenges in its implementation<sup>22</sup>. Covering:

- a. User acceptance. According to Kumaga, user acceptance is influenced by a person's tendency to use electronic money compared to cash. If consumer acceptance of electronic money improves, the chance of achieving Bank Indonesia's goals will improve.
- b. Stability. The security factor is a challenge in the development of electronic money. Bank Indonesia also emphasizes the aspect of consumer protection through setting up cost structures and floating fund management mechanisms. Everything should be more transparent and accountable by still prioritizing liquidity and insolvency risk mitigation. That is, users must always be able to access information about the amount of balance they have and liquidate it. Trust is crucial to creating a non-cash society.

<sup>&</sup>lt;sup>22</sup> Kirana Widyastuti, Putu Wuri H, dan Iik Wilarso, "Tantangan dan Hambatan Implementasi Produk Uang Elektronik Di Indonesia: Studi Kasus PT XYZ" Jurnal Sistem Informasi. Vol.13 No. 1 (April, 2017).

- c. Infrastructure Availability. The infrastructure provided by the government is indeed sufficient, but it needs to be more comprehensive for the middle and lower communities. Internet and electronic money reader machines are only limited to urban areas.
- d. Social and cultural factors. Indonesians habitually still to cash, and some have yet to experience banking services, so they are reluctant to switch to electronic money.
- e. User convenience. According to Sahut, user convenience is one of the success factors of electronic payment solutions. User convenience can attract users' interest in e-payment services. <sup>23</sup>
- f. User preferences. According to Sahut, one of the challenges of electronic money is the competitive factor, which is influenced by the number of other institutions also issuing electronic money. When viewed from the user's perspective, the challenge faced by electronic money issuers is the user's preference in choosing a specific electronic money product.

# 2. Legal Protection Against Transactions Using Electronic Money (E-Money)

Electronic money (e-money) transactions are a form of transaction with convenience, security, and time

 $<sup>^{23}</sup>$  J.M Sahut and M. Galuszewska, "Electonic Payment Market: A Non-Optimal Equilibrium", Internasional Symposium on Applications and the Internet Workshops. 2004 Workshops

efficiency. The three elements are a form of goodness found in the transaction. Goodness is part of the benefit that must occur in every action, including in a transaction.

From a juridical perspective, the transaction has met legal certainty, that is, with the existence of a law that has regulated it. In this case, Bank Indonesia Regulation (PBI) Number: 11/12/PBI/2009 Regarding Electronic Money (Electronic Money), which was later changed by Bank Indonesia Regulation Number 16/8/PBI/2014, Regarding Changes to Bank Indonesia Regulation Number 11/12 /PBI/2009 About Electronic Money (Electronic Money), then there was also a second change with Bank Indonesia Regulation Number 18/17 /PBI/2016 About the Second Change to Bank Indonesia Regulation Number 11/12/PBI/2009 About Electronic Money). Another Bank Indonesia Regulation's Number 20/6/PBI/2018 about Electronic Money.

From a sociological aspect (benefits), electronic money transactions (e-money) are very beneficial because they are not complicated, and the time required does not interfere with other activities.

While the philosophical aspect (justice) is also present in the transaction because transactions use electronic money (e-money) or non-cash, the legal consequences are the same as transactions using cash. So in the non-cash interaction with cash legally, there is no difference.

The benefits of transactions using electronic money (e-money), in this case, convenience, security, and

time efficiency, are the primary basis for providing legal protection related parties must provide. This protection is as stipulated in Bank Indonesia Regulations (already detailed in the previous paragraph).

### D. Conclusion

Transactions using electronic money (e-money) are a transaction that takes time to do, considering the uncontrollable pace of development. In the development, two things justify the transaction. That is, the development of technology has been sufficient. At the same time, the needs of society for the fulfillment of life and its desires are very complex, so it is impossible when it does transactions using cash.

Regarding the effectiveness of the implementation, legal validity regulates and protects the transaction. Such as Bank Indonesia Regulation (PBI) Number: 11/12/PBI/2009 Regarding Electronic Money (EloctronicMoney) which was later changed by Bank Indonesia Regulation Number 16/8/ PBI/2014, Regarding Changes to Bank Indonesia Regulation Number 11/12/PBI /2009 Regarding Electronic Money, then there was also a second chance with Bank Indonesia Regulation Number 18/17 / PBI/2016 Regarding the Second Amendment to Bank Indonesia Regulation Number 11/12/ PBI/2009 Regarding Electronic Money (Electronic Money). Another Bank Indonesia Number 20/6/ Regulation's PBI/2018 about Electronic Money. Although here and there, some should note obstacles and challenges in implementing electronic money transactions (e-money).

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