

The Dynamic Aspects of Smart Contract in Non-Fungible Tokens

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Accepted: 04-06-2022 Revised: 28-06-2022 Approved: 29-06-2022 Published: 04-07-2022

DOI: <http://dx.doi.org/10.30596/dll.v7i2.10381>

How to cite:

Haq, Q.N, et.al. (2022). "The Dynamic Aspects of Smartcontract in Non-Fungible Tokens". De Lega Lata: Jurnal Ilmu Hukum, 7(2), 280-291.

Abstract

Technological advances always lead to various implications in people's lives, not least in the aspect of buying and selling transactions. In the current era, the dynamics of buying and selling transactions are enlivened by the presence of Non-Fungible Tokens (NFT); as an asset embodied in the form of a digital token. Furthermore, one of the components of NFT is the existence of smart contracts; as the presence of smart contracts also raises legal issues. This legal research aims to examine and examine the problems of smart contracts when they become evidence in a dispute; while at the same time reviewing the validity of smart contracts in the positive legal system in Indonesia. This legal research uses primary legal materials and secondary legal materials with a conceptual approach and legislation. The results of this study state that there is no legal instrument that regulates smart contracts, so the implementation of smart contracts is legal under Indonesian law. On the other hand, the existence of a smart contract as a form of an agreement is subject to the enforcement of Article 1320 of the Civil Code, so that the smart contract fulfills the components of the agreement as required in the legislation.

Keywords: *Smart Contract, NFT, Token Digital.*

INTRODUCTION

In today's developments, there are various significant advances, especially in technology; the legal system and cultural aspects must also accompany this development (Sanders, 2022). Generally, law and technology that develop in a country must be able to 'run' side by side in parallel (Mendis et al., 2022), considering that these two aspects are interrelated. Moreover, today's technology is not only included in secondary needs (Disantara, 2021); it can also enter to meet primary needs. In the end, technological developments form a world called the digital world (Harding, 2018). In the digital world, various kinds of activities can be carried out, one of which is the world of capital markets as there are assets that can be traded (Lubis & Koto, 2022); One of them is NFT (Non-Fungible Token). Non-Fungible Tokens are the only assets in the digital world that can be bought and sold like any other property, but they cannot own it in real terms (Rafli, 2022). This NFT is considered a digital

token shaped like a certificate of ownership for virtual and physical assets. These NFTs are usually traded online and are often paid for using cryptocurrencies. Usually, they will code with the same basic software as other crypto assets. In technology, this NFT uses blockchain-based technology but is different from bitcoin.

Physical money and cryptocurrencies are “worth it”, meaning they can be traded or exchanged for one another (Dolganin, 2021). They are also of the same value; for example, 'a thousand rupiah is always worth a thousand Rupiah'; one Bitcoin is always the same as another Bitcoin. Crypto equivalence makes it a trusted tool for making transactions on the blockchain. NFT tokens can be thought of as digital links that connect us to the goods we create. Tokens are also on the blockchain, which we know is an excellent tool for tracking transactions. When we tokenize a digital artwork, we link the artwork to the blockchain where it is useful to prove ownership of the artwork. For NFT itself, Ethereum is a blockchain network commonly used in NFT. However, NFT is different. Each has a digital signature that does not allow NFTs to be exchanged or equivalent to one another (hence, not interchangeable) (Fairfield, 2021). One clip NFT, for example, is not the same as another NFT simply because they are both NFT. NFT was first introduced in 2014 by a platform called Counterparty, with the first NFT made entitled "Quantum" now his work is worth 7 million US dollars (Çağlayan Aksoy & Özkan Üner, 2021). From 2017 to 2020, more and more individuals or corporations are interested in this NFT business, some of which are Nike and the NBA (Çağlayan Aksoy & Özkan Üner, 2021). Nike, for example, launched NFT in the form of its sneakers in digital form, and the NBA used NFT to create digital basketball player cards which could later be collected like conventional basketball cards. In the NFT, there is a digital contract called a smart contracts. Smart contracts provide ownership and transaction details (Rafli, 2022).

Smart contracts allow for more development of blockchain technology because both technologies are applied to the same ecosystem, built using a decentralized network (Fairfield, 2021). Blockchain, which was initially only used to perform simple computing processes, such as recording transaction data, has been developed to perform more complex computing processes with smart contracts integration (Wax, 2021). NFT creators can add details such as identity, secure links to files, and more into smart contracts. Apart from that, they can also define certain rules regarding NFT trading. For example, the percentage of royalties they receive for each subsequent sale. Smart contracts are the technology that makes every NFT unique and valuable. The phenomenon of buying and selling relationships carried out by the parties but virtually or in the digital world through smart contracts raises the possibility of possible problems that will arise in the buying and selling process carried out. Thus, this study examines and examines the problems of smart contracts when they become evidence in a dispute; while at the same time reviewing the validity of smart contracts in the positive legal system in Indonesia.

RESEARCH METHOD

This research is an legal research that examines and examines legal issues based on existing legal sources, both written and unwritten legal sources (Diantha, 2016). Norms and legal concepts are used as the key analysis in this research. The legal materials used in this research are primary legal materials and secondary legal materials. The primary legal material

used is legislation relating to the legal issues studied in this study. Then, the secondary legal materials used in this study consist of legal books and legal journal articles related to the issues studied in this study. The approach used is the statute approach and the conceptual approach. After taking an inventory of legal materials, the researchers elaborated various findings to obtain prescriptions and conclusions on the legal issues studied in this study.

DISCUSS AND ANALYSIS

The Relation between the Basic Elements of NFT and the smart contract as Evidence

In NFT, there are at least some important elements related to digital transactions, namely Ethereum, Accounts, and smart contracts. These three elements become interrelated elements to give birth to a digital contract between buyers and sellers in the NFT facility (Fairfield, 2021). Ethereum is a form of development of blockchain technology that was originally applied to Bitcoin. Ethereum was developed to allow for more complex computational work on the blockchain framework than just computing transaction data recording. Like Bitcoin, Ethereum is a decentralized digital currency payment system (cryptocurrency). The difference between the main application Response Requests (Web/Mobile App); and the Blockchain B20 B21 B22 B23 23 is that the system is built using a Turing-complete programming language to enable more complex computational work, such as smart contracts, done by blockchain mechanism. Ethereum has been widely recognized as a framework for developing decentralized applications (Okonkwo, 2022). The Ethereum blockchain is essentially a transaction-based state machine. The state machine itself refers to managing an array of inputs to change the stored state. The state machine on Ethereum is the Ethereum Virtual Machine (EVM).

Changing a state is done by a node by sending a transaction that contains the input to perform the process of changing the state; which on Ethereum represents all transactions that occur. Similar to Bitcoin, these transactions are combined in a block, where each block is connected to a previously formed block. Blocks will be created using GHOST's consensus protocol (Greedy Heaviest Observed Subtree). The GHOST protocol is a Proof of Work protocol, but with some improvements. The GHOST protocol solves the problem with stale blocks, i.e., other blocks formed at the same time as the validated block. In the GHOST protocol, miners will still receive rewards if they form stale blocks. This is implemented because the pump block on Ethereum is relatively faster when compared to Bitcoin. Then, A transaction in NFT is an instruction generated by an externally owned Account. An Account is an identifier (identity) of an entity, such as a user, node, or Smartcontract, incorporated in Ethereum. Accounts on Ethereum are divided into two types, namely externally owned Accounts and contract Accounts. Externally owned accounts are Accounts owned by users or nodes. At the same time, the contract account is an identifier of a Smartcontract registered in Ethereum. Only externally owned Accounts can start sending messages to other Accounts by creating and signing transactions using a digital signature in a private key, while contract Accounts can only make transactions as a form of response if they have received a transaction from another Account. Accounts are objects that make up the state of Ethereum. Each Account has an address (address) and consists of four state components, in the form of:

1. Nonce, is a value that represents the number of transactions that have been carried out by an Account.

2. Balance, is the amount of Cryptocurrency Ethereum (Ether) held by an Account.
3. StorageRoot, is the Roothash of the contents of a stored Account. By default, Storeroot has an empty value.
4. CodeHash, is the hash of the code owned by an Account that will be executed by the Ethereum Virtual Machine (EVM). In the contract Account, Codehash is the hash of the Smartcontract code that was formed. While on an externally owned Account, CodeHash is a hash of an empty string.

Transactions will be generated using a digital signature based on a public/private key belonging to an externally owned Account. In NFT, every transaction generated will be recorded into the Ethereum blockchain. Transactions in Ethereum are divided into two types, namely message calls and contract creation. Furthermore, every computational process required to process a transaction in Ethereum will be executed by the miner node. Miners will require payment as a form of reward in executing the computational process of a transaction. The Account pays this processing fee as the transaction's sender based on a special unit in Ethereum. Then, what about digital contracts in the form of smart contracts? Contracts are a way to form an agreement to agree on something. Contracts are generally used to establish an agreement protocol for a relationship formed by two or more individual/group parties. Two or more parties will form the contract with the help of supervision from a third party who is considered reliable. This supervision is very important to have from a trusted third party. This supervision is very important to avoid manipulation by one party of the contract formed. Along with technology development, a new contract concept is formed called a smart contract. A smart contract is a digital contract in which the terms of the agreement between users are regulated in a coded contract. This technology is one of the best features of blockchain technology. Smart contracts can also be determined to be fulfilled.

Generally, smart contracts are owned by a decentralized and distributed blockchain network. Smart contracts contain agreement protocols and relationships between two or more parties that are managed using a decentralized system. Supervision of agreements and relationships formed will be carried out by all parties who are members of the network based on system consensus protocols so that the need for supervision from a third party is not required. The smart contracts is a program that can ensure that transactions that occur are following agreements or regulations that have been agreed mutually agreed upon in a distributed database network. The last phase is blockchain 3.0, better known as the digital society phase. In this phase, those involved are no longer only from the business world but from other fields that have started to take advantage of blockchain technology, such as health, education, government, communication, science and others. In this phase, one of the things that stands out the most is the emergence of smart cities and the Internet of Things (IoT) as a new business platform. As previously explained, currently known contracts in the form of smart contracts indicate an agreement (contract) made in a different form, namely in the form of a programming language. One application of smart contracts is to use them in Non-Fungible Token (NFT) transactions (Bachman, 2022). NFT is currently rising and worth trillions of Rupiah per second across NFT stores. One of the well-known NFT stores is OpenSea which displays several images and videos for sale. The NFT is supported by smart contracts that handle transfer capabilities and verify ownership. NFT uses the ERC-721 standard. It is an NFT standard that provides functionality for smart contracts.

The concept of smart contracts is not a relatively new thing, although, in practice, it shows the opposite. Smart contracts were created in the early 1990s by Nick Szabo; according to him, smart contracts are a set of promises converted into digital form and protocols where the parties carry out the promises that have been arranged. Another definition of a smart contract put forward by Szabo is a digital contract whose implementation is carried out automatically, without any human intervention. Then he added that the purpose of a smart contract is to act as a computerized transaction protocol that executes the terms of a contract. According to Tanash Utamchandani, in his research entitled “*Smart contracts From a Legal Perspective*,” he stated that a smart contract, the last phase is blockchain 3.0 and is better known as the digital society phase. In this phase, those involved are no longer only from the business world but from other fields that have started to take advantage of blockchain technology, such as health, education, government, communication, science and others (Tulsidas, 2018). In this phase, one of the things that stands out the most is the emergence of smart cities and the Internet of Things (IoT) as a new business platform. As previously explained, currently known contracts in the form of smart contracts indicate an agreement (contract) made in a different form, namely in the form of a programming language (Filatova, 2020). One application of smart contracts is to use them in Non-Fungible Token (NFT) transactions. NFT is currently rising and worth trillions of Rupiah per second across NFT stores. One of the well-known NFT stores is OpenSea which displays several images and videos for sale. The NFT is supported by Smart contracts that handle transfer capabilities and verify ownership. NFT uses the ERC-721 standard. It is an NFT standard that provides functionality for Smart contracts.

Furthermore, basically smart contract are not conventional contracts written on paper, and even though smart contract are carried out electronically, they have several differences with electronic contracts in general, namely agreement clauses (Corrales et al., 2019). In the form of programming code, which requires blockchain as its distributed storage technology, as well as the nature of smart contract that execute contracts automatically (self-executing). Then, in order for a contract to be truly defined as a smart contract, it is necessary to fulfill several characteristics, including (Sousa, 2022): (1) Visibility; (2) Executed online (online enforceability); (3) Verification; and (4) Privacy. In addition, the implementation and design of a smart contract from a conventional contract are different, but a smart contract also has similarities with a conventional contract when viewed based on its objectives. Similar to conventional contracts, the parties to the Smart contracts previously determined the agreement between the two parties first, which was then translated into reciprocal obligations. It can be said that the preparation of a conventional contract made in writing is different from a contract made based on programming, but the basic idea is still the same, namely making an agreement first and then converting it into programming code. In this case, a conventional contract is at the most basic level of an agreement with the parties' intention to be legally bound to a certain agreement or agreement; that function even though it does not use blockchain in its application, but considering the security issue in the context of data storage, that is what causes blockchain to be used in Smart contracts.

The work cycle of a Smart contracts can generally be described in 4 (four) phases (Idelberger & Mezei, 2022). First, Creation. The creation phase can be divided into iterative contract negotiation and implementation phases. Similar to conventional contract

negotiations, the parties must first agree on the contents and objectives of the contract, which can be done online or offline. After agreeing on the purpose and content of the contract, the agreement must be converted into code. To validate Smart contracts behavior and execution content, most Smart contracts environments provide the infrastructure for creating, maintaining, and testing contracts. Converting contract clauses to code generally requires interaction between stakeholders and (non-partisan) programmers. Once the parties agree on a version of the contract converted into a coded form, the contract is submitted or forwarded to the blockchain during the publication phase. During this phase, the nodes participating in the distributed ledger receive the contract as part of the transaction block, and once the majority of the nodes have confirmed the block, the contract is ready to be executed. Since decentralized Smart contracts cannot be modified once accepted by the blockchain, changes in Smart contracts are not possible and if you want to change them you have to create a new contract. Even though Smart contracts have been stored on the blockchain, it does not mean that there has been an agreement between the parties to the agreement, because basically anyone can send a Smart contracts to the blockchain.

Second, Freeze. After the smart contract has been submitted to the blockchain, it still requires confirmation by most participating nodes. The contract and the parties involved are public from this phase onwards, so anyone on the blockchain can access the contract. Smart contracts transactions on the blockchain generally use the escrow method, where every payment made will be withheld until the contract is fulfilled and the buyer has received the goods and/or assets. Third, Execute. The participating nodes read contracts stored on the distributed ledger. The integrity of the contract is validated, and the Smart contracts interpreter engine will execute the code. The execution of Smart contracts results in a new set of transactions and a new state of the Smart contracts (Conrad, 2022). The result set and the new state information will then be submitted to a distributed ledger and transferred via a consensus protocol. Fourth, Finalize. After the Smart contracts is executed, the transactions and new information will be stored in a distributed ledger and confirmed according to the consensus protocol. The previously promised digital assets are transfused (without assets) and with confirmation of all transactions executed, the contract is deemed to have been fulfilled.

Meanwhile, the workings of smart contracts that involve the role of blockchain in a transaction can be divided into 2 (types) namely On-Chain & Off-Chain. On-Chain transactions are Smart contracts transactions that occur in the blockchain. As for transactions with this type of On-Chain, only include the parties who transact, not involving third parties. Therefore, Smart contracts are said to have the characteristic of "not involving third parties." The workings of on-chain Smart contracts transactions begin with creating terms and conditions or contract clauses regarding an item or product to be sold in the form of programming code, which will then be forwarded to the blockchain technology platform so that it can be stored. After the smart contract is stored in the blockchain, it will be forwarded again to the buying and selling platform to be marketed. Suppose there is a buyer who agrees with the terms and conditions of the contract displayed. In that case, the buyer can sign and verify his identity by entering his private key and paying the amount specified in the contract. Funds will be released to the seller when the buyer has received the goods following the contract, and the transaction can be considered complete. Off-Chain, Unlike on-chain smart contract transactions, off-chain Smart contracts transactions are matters relating to

transactions outside of blockchain technology. Therefore, it can still include third parties, such as banks, concerning payments. However, the bank's role here is to provide additional information related to transactions. Before the information is entered into blockchain technology and used by Smart contracts, the information will first be filtered and verified by a device or software called "oracle." If it has been verified by the oracle and the information is declared to be able to enter the blockchain, then it can be used by Smart contracts.

However, until now, the NFT still does not have a special regulation in Indonesia (Sukmariningsih et al., 2022). Currently, the relevant regulation is the regulation that Rupiah is the only currency in transactions. Then the BI regulation regarding the prohibition of the use of crypto as a means of payment (Ashyira, 2022). Moreover, BAPPEBTI rules that crypto is not money but a commodity (Ashyira, 2022). So there is no explanation to say this is prohibited as a digital asset. The use of Smart contracts is possible to construct to facilitate payments for crimes, such as data leakage and real-world crimes, such as murder and arson. Meanwhile, if the occurrence of the case proves that the role of positive law is important in accompanying the presence of Smart contracts for legal certainty. The reason is that Smart contracts still cause polemics for legal experts related to legal certainty. The use of smart contracts does not have the power of interpretation in interpreting the legal principles in the contract. Certain limitations evidence this in including a clause in the smart contract. Not all issues can be included in a code, such as the subjectivity of each party, the determination of the choice of law in the event of a dispute, or the possibility of a coercive situation occurring. The problem is that Smart contracts cannot provide explanations in natural language that make it easier for users to understand the clauses. In this case, this topic is important because the rapid development of the times must be balanced with the development of law itself. There needs to be a rule that initiates a legal certainty in Smart contracts. Regarding evidence, the ITE Law already recognizes electronic evidence in Electronic Information and/or Electronic Documents as regulated in Article 5 paragraph (1) of the 2008 ITE Law. So regarding this smart contract can be used as evidence. This is triggered by the neutral principle of technology, where the ITE Law, as a regulation in the use of electronic technology, is not focused on certain technologies so that it will not be affected by rapid technological developments.

It is very difficult to get this smart contracts as evidence because it is difficult for law enforcement officials to see the algorithm of the programming code in the network of this blockchain itself, except for private blockchains that have few network nodes. This makes it difficult for legislators to provide a legal umbrella for what is predicted to be a technology to replace conventionally written agreements. The reason is that with the way smart contracts work like that, the technology can be easily used to become a tool in carrying out unlawful acts. This is fueled by a blockchain system that upholds anonymous transactions. Because this research was conducted, it was impossible to know the financial flow when it entered the public blockchain network, especially in Smart contracts, because the parties were automatically disguised using cryptographic methods. However, if at one-time law enforcement officers can find a way to crack the cryptography to see the provisions of the Smart contracts, the ITE Law can still accommodate Smart contracts, becoming electronic evidence. Legislation in Indonesia can still accommodate transactions against leakage of personal data using smart contracts because the Smart contracts itself is only a forum for

carrying out legal actions. However, apart from that, legislators still have to finalize laws and regulations that have the principle of establishing Information and Communication Technology regulations that are in line with the Legal Development Theory, which has adhered to the principles of technology neutrality, virtual jurisdiction, and has accommodated electronic evidence so that the court can implement cases efficiently related to the electronic evidence.

The Validity of Smart contracts In Indonesian Positive Law

Along with the development of the times, contracts that are identical to the existence of physical writing on paper or black and white terms are no longer mandatory (Simanjuntak, 2015). With the number of electronic transactions currently being carried out to meet the needs of life, the contract from the transaction will automatically follow electronically. An electronic agreement in an online transaction has the term a smart contract. Some of the rules in Indonesia that regulate Smart contracts are the Civil Code, the Consumer Protection Act, and the Information and Electronic Transaction Law (Sukmariningsih et al., 2022). Indonesia's contracts and agreements are broadly regulated in Book III of the Civil Code regarding engagements (Koto & Faisal, 2021). Agreements made between legal subjects will give birth to an engagement. This means that every agreement made will bind the parties to their achievements in the form of their respective rights and obligations. At the same time, the object of the engagement itself is an achievement. Based on Article 1320 of the Civil Code, it is stated that there are four valid conditions for a contract (Fauzi & Koto, 2022), namely: (1) Agreed; (2) Proficient; (3) A certain thing; (4) A lawful cause. The terms of agreement and competence are subjective requirements because they relate to the person agreeing. Elements of certain objects and legal causes are objective requirements because they are outside the personal self of the contractors. If an agreement does not fulfill the subjective element, the agreement is invalid, and the legal consequence is that it can be canceled, not null and void (Sulistianingsih & Khomsa Kinanti, 2022). This implies that the agreement can be canceled but can not be canceled (Ramadhani, 2022); these two things depend on the contracting party, who does not meet the subjective requirements.

Meanwhile, if the objective element is not fulfilled, it will be null and void by law because the object in the agreement must be related to the object. As a form of the agreement, Smart contracts must follow the principle of proportionality. In the principle of proportionality, the contract must be balanced between the rights and obligations of the parties. Balance can occur if it has fulfilled several things (Yulia et al., 2022), such as: (1) Fair and balanced distribution in carrying out achievements in the form of rights and obligations of each; (2) The parties are in an equally strong position so as not to overthrow or harm one of the parties; (3) The active role of the State in implementing the rules in the Consumer Protection Act. It is hoped that the rules that have been made are not only written as a formality but are implemented in daily activities. Besides the principle of proportionality, there is also the principle of freedom of contract. In an agreement, the principle of freedom of contract is also one of the important things to agree on. The principle of freedom of contract is regulated in Article 1338 of the Civil Code, which includes five things (Ramadhani & Ramlan, 2019), namely: (1) Free to choose the parties involved in the contract; (2) Free to determine the form (written or oral); (3) Free to determine the type of agreement (named or

not named); (4) Freedom to determine the contents of the contract, including the number of articles in it; (5) Free to determine the dispute resolution forum.

Smart contracts, in this case, are an embodiment of the principle of freedom of contract in the Civil Code. The form of the Smart contracts, which is different from a written agreement, physically makes this agreement fulfill the element of free form. NFT trade itself is international, considering that trade is carried out online. In NFT trading, some producers and consumers are parties to contracts, such as direct transactions in everyday life. Any contract relating to the existence of a consumer in a transaction is referred to as a consumer contract. Meanwhile, the characteristics of a consumer contract are: (1) The parties are business actors, namely producers and consumers; (2) Top-down relationship in bargaining position; (3) Standard form (standard contract, standard contract); (4) In many standard consumer contract models, there is no negotiation of the parties; (5) It is a contract made by one of the parties, generally a producer or business actor; (6) Standard contract products are generally manufactured in large quantities; (7) There is an exoneration or exclusion clause; and (8) Concerning consumer contracts, the intervention of certain authorities aims to provide legal protection for consumers by enforcing coercive rules. Thus, the Smart contracts contained in the NFT transaction is classified as a consumer contract. Even though a smart contracts is not visible on paper, the Smart contracts still gets protection if it is found that there is unilateral fraud by the manufacturer. Based on Article 18 paragraph (3) of the Consumer Protection Law, even though producers can provide unilateral agreements through standard clauses, each standard clause will be null and void by law if they violate existing provisions. This is in line with the principle of proportionality in an agreement.

Electronic contract arrangements in the Electronic Information and Transaction Law (UU ITE) have a general nature. Based on Article (1) number 17 which reads “*Electronic contract is an agreement of the parties made through the Electronic System*”. Through the article's sound, Electronic Information and Transaction Law has provided space and acknowledged the existence of Smart contracts in Indonesia. Thus, it can be said that the Smart contracts is legally valid in Indonesia. So far, there are no laws in Indonesia that contradict the existence of a Smart Contract as a form of an agreement. Referring to Article 1320 of the Civil Code, the validity of the Smart contracts is also subject to the validity of that Article. Consumers in electronic transactions based on Smart Contract agreements are legally protected in the consumer protection law because smart contract are essentially regulated in the Electronic Information and Transaction Law .

CLOSURE

Conclusion

Smart contract are software containing agreement protocols and relationships between two or more parties managed using a decentralized system. Supervision of agreements and relationships formed will be carried out by all parties who are members of the network based on system consensus protocols so that the need for supervision from a third party is not required. The NFT still does not have a special regulation in Indonesia until now. Currently, the relevant regulation is the regulation that Rupiah is the only currency in transactions. Then the BI regulation regarding the prohibition of the use of crypto as a means of payment. Moreover, BAPPEBTI rules that crypto is not money but a commodity. So there is no

explanation to say this is prohibited as a digital asset. Smartcontract contained in NFT transactions are classified as consumer contracts. Even though a smart contract is not visible on paper, the Smartcontract still gets protection if it is found that there is unilateral fraud by the manufacturer. Electronic contract arrangements in the Electronic Information and Transaction Law have a general nature. Based on Article (1) number 17, which reads "*Electronic contract is an agreement of the parties made through the Electronic System*". Through the article's sound, Electronic Information and Transaction Law has provided space and acknowledged the existence of Smartcontract in Indonesia. Thus, it can be said that the Smartcontract is legally valid in Indonesia. So far, there are no laws in Indonesia that contradict the existence of a Smartcontract as a form of an agreement. Referring to Article 1320 of the Civil Code, the validity of the Smart contracts is also subject to the validity of that Article. Consumers in electronic transactions based on Smartcontract agreements are legally protected in the consumer protection law because Smart Contracts are essentially regulated in the ITE Law.

Suggestion

The importance of special regulation regarding smart contracts is very necessary given the increasing trend of using smart contracts. In addition to providing legal certainty, a sense of security and protection must also be felt by the community, this is based on the possibility that the implementation of smart contracts is not part of what is legalized by the government, let alone associated with cryptocurrencies. Therefore, the government must immediately make clear regulations regarding these smart contracts.

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