



# Legal Protection for Virtual Land Trading Investment Transactions in the Metaverse

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**Abstract.** The existence of the Metaverse is warming the world as a second life, and one can carry out activities in the virtual world, one of which is buying and selling transactions. Metaverse itself is a digital reality that combines aspects of social media, online gaming, augmented reality (AR), virtual reality (VR), and cryptocurrency to allow users to interact virtually. Metaverse has excellent potential for a person to interact, work, learn and create through NFT (non-fungible tokens) that describe the original object. There has been much attention lately about buying and selling virtual land in the Metaverse. Some investors are willing to spend significant funds to buy virtual land in the form of NFT. Purchased digital plots of land are stored in NFT. This is considered an investment and can be profitable in the future. The use of Virtual Currency has spread widely to all corners of Indonesia. However, at this time, the government has not determined how to formulate written regulations regarding its circulation and supervision, then how to formulate policies and aspects of protection for investors or users in metaverse transactions regarding land and building investment. Virtual currency investments are risky and vulnerable to cybercrime, money laundering, and tax evasion. This study uses a normative research method by reviewing and describing library materials in the form of literature, legislation, and some news related to the issues to be discussed.

**Keywords:** Legal protection · investment · virtual land trade · metaverse

## 1 Introduction

The existence of the Metaverse is warming the world as a second life, and one can carry out activities in the virtual world, one of which is buying and selling transactions. Metaverse is a neologism, a fusion of the words “meta” (beyond) and “universe” (universe). Etymologically means beyond the universe. Virtual reality will be the primary determinant of human survival in a world like this. Social elements such as interaction, education, and health have changed, as well as the economic side, such as buying and selling transactions, investment, and even employment.

Metaverse is a term that describes a virtual world with a 3D concept. The term metaverse is virtual reality and digital second life. In the world of Metaverse is to make the user will spend money there, such as clothes and objects for his avatar (three-dimensional self-image) [1]. The term metaverse refers to a virtual world that resembles

real life, with land, buildings, and avatars that can be bought and sold, often using cryptocurrencies. In this world, people can move, make friends, visit certain places, and buy goods and services, just like in real life.

Metaverse is a virtual world that blends elements of social networking, online gaming, augmented reality (AR), virtual reality (VR), and cryptocurrency [2]. Metaverse is a social network with numerous permanent participants, an immersive environment within a platform. This allows for real-time communication and dynamic interactions between people via digital technology (Mystakidis, 2022). In the Metaverse, transactions are often monetized using cryptocurrencies or NFTs (Non-Fungible Tokens). An NFT is a one-of-a-kind digital asset that can be a picture, audio, movie, 3D object, or any other sort of creative work. The NFT industry is thriving. We're talking about sales in the billions of rupiahs at times. Furthermore, Metaverse's Augmented Reality, Virtual Reality, and 3D technologies can build a virtual environment to assist students develop their soft skills [4].

Multiverse began as a technology aimed at establishing a virtual world in which any user may connect via virtual computers. Different encounters. This new virtual reality absorption offers a highly versatile and extensive possibility to be used to many parts of life [5]. Through NFT (non-fungible tokens) that describe the original thing, the Metaverse offers enormous potential for people to engage, work, learn, and create. Buying and selling virtual land in the Metaverse has received a lot of attention recently. Some organizations are ready to pay large sums of money to acquire virtual land in the form of NFT. NFT stores digital pieces of land that have been purchased. This is considered an investment and has the potential to be rewarding in the future. Several prominent corporations, like Adidas, Nike, and Gucci, have begun selling their products in the Metaverse. Metaverse banks like the Industrial Bank of Korea and Hana Bank debuted, claiming to have entered the Metaverse to improve customer service.

NFT is classified as an object under the Civil Code. Objects are defined in Article 499 of the Civil Code as any thing or right that can be the subject of property rights. NFT is a type of intangible digital good. According to Government Regulation No. 80 of 2019 Governing Trading Through Electronic Systems, digital products are intangible goods in the form of electronic information. Furthermore, according to article 25 of Law Number 11 of 2008 concerning Information and Electronic Transactions, which governs electronic information and/or electronic documents compiled into intellectual works, internet sites and the intellectual works contained in them are protected as intellectual property rights under the provisions of the legislation. NFT is a digital form of an ownership or authenticity certificate that is securely maintained in a blockchain ledger.

In Indonesia, no specific regulation establishes and mentions or NFT. However, blockchain technology and cryptocurrencies will play an essential role in the future growth of the Metaverse. The creation of a virtual world with a metaverse requires funding, and it is obtained through cryptocurrencies. If NFT is a crypto asset, then crypto as a form of investment is also referred to as a crypto asset under Indonesian law. Furthermore, according to Article 1 number 7 of the Regulation of the Commodity Futures Trading Supervisory Agency (Perbappebti) Number 5 of 2019 concerning Technical Provisions for the Implementation of the Physical Market of Crypto Assets on the Futures Exchange, "Crypto assets are intangible commodities in the form of digital assets that

use cryptography, peer-to-peer networks, and distributed ledgers to regulate the creation of new units, verify transaction, and secure transactions without interference from other parties.” As a result, many rules have been enacted in Indonesia to accommodate crypto assets, including the Regulation of the Minister of Trade of the Republic of Indonesia Number 99 of 2018 concerning General Policy for the Implementation of Crypto Asset Futures Trading (Crypto Assets).

Indonesia still needs the protection of essential tools to develop it, which currently do not exist. Such as personal data protection laws. We are challenged to be able to develop models with legal principles that are flexible and can respond to the speed of technology. Whatever the technology, the law can respond to innovations from that technology. For example, Metaverse law can enter into the world of the Metaverse. Policies are related to personal data protection, internet governance, digital rights, and the need for legal reform, including the formulation of agreed principles as a reference in preparing norms for digital policy development. Indonesia needs a strategy and development of laws and regulations that become a reference for each digital layer (infrastructure, logic, and content), emphasizing a human-centric approach. We also need the development of a digital authority to ensure synchronization and harmonization of digital policies, which guarantee legal certainty, including all personal data, electronic and non-electronic, and their aggregation.

Metaverse technology is expected to become a trend in the future. However, such technology has the potential to pose a risk of misuse of personal data. Identity fraud can happen. This allows one of the parties to give up the cryptocurrency Ether (ETH) but get nothing. Alternatively, the project owner may fail to provide the project roadmap that was promised up front in the virtual land transaction. Such things are undoubtedly undesirable for Metaverse Users. It is a common concern that all forms of transactions, whether through the virtual world or the real world, must avoid potential disputes in the future. Especially if the transaction value is significant, of course, there is also the potential for large amounts of losses.

Along with the increase in crypto buying and selling transactions, the number of fraud cases also increases. This risk of fraud can occur if investors do not have basic knowledge of this relatively new investment model. Additionally, beginners generally know crypto only as a place to get big profits without knowing the risks.

Other implications Examples of criminal acts in the Metaverse include money laundering, considering that the Metaverse is likely to be funded with non-fungible tokens (NFT). Therefore, money laundering is easier to do. Likewise, theft of personal data, such as cases of data leakage, will be potentially worse because the amount of data generated when users go through the Metaverse will be more significant than the data obtained on the internet. Aside from the legal coverage that can reach the Metaverse, it's also worth noting who will be sued. This is difficult because it occurs in the Metaverse. The only thing that can be done in the event of a digital crime is to hold the server/host/operator responsible. To be held accountable, however, it is required to determine if the entity is registered in Indonesia or not. If a breach occurs in the Metaverse, the marketplace that advertises the goods might be held liable. Two people can be held responsible. First, the merchant or the entity who advertises the commodity into the Metaverse sues the

nation in which the merchant is registered. The second option is to take a legal action against the marketplace operator who offers access to the product's promotion.

## 2 Method

This legal study kind is normative legal research, which is the process of determining the rule of law, legal principles, and legal doctrines to address legal concerns [6]. In this study, the researcher used normative research to establish a clear link between the rule of law, legal norms, and legal principles. The researchers must decide whether they are qualified to address the issues raised in this study. The researcher employed two problem-solving approaches in this study: the legislative approach and the conceptual approach. 1. Legislative strategy (statute approach). The statutory method is carried out by searching the statute for provisions pertaining to the subjects that the author investigates. In connection with this research, the researcher looks for provisions in laws and regulations pertaining to legal protection for investors in a virtual land exchange in the metaverse world. 2. conceptual strategy (conceptual approach). The conceptual method begins with scholars' or jurists' perspectives and doctrines. Researchers can identify ideas that give rise to legal concepts and principles linked to the topics the author is researching by analyzing these viewpoints and beliefs [6]. Researchers will seek the opinions of legal experts in connection with this research in order to solve questions of legal protection for investment in a virtual land exchange in the metaverse environment.

## 3 Results and Discussion

Legal protection can be divided into two [7]:

1. Preventive legal protection, namely prevention before a violation occurs by establishing a protection provided by the government to the community.
2. Repressive legal protection is if a violation has occurred, the legal protection can be subject to sanctions such as fines or imprisonment.

According to IsnaIni (2016), basically the issue of legal protection in terms of its source can be divided into 2 (two) types:

1. The nature of internal legal protection, in essence, the legal protection in issue is produced by the parties themselves when forming the agreement, where there is an agreement in the formation of contract terms so that the parties will obtain balanced legal protection with the parties' permission.
2. External legal protection is provided by authorities, in this case the government, through regulations for the benefit of the weak, in accordance with the nature of laws and regulations that should not be prejudiced or unbiased, as well as the need to offer legal protection proportionally.

Metaverse technology allows people to gather and communicate by entering the virtual world. In this case, it allows users to get a visual display in the virtual world in such a way that it is similar to the actual world situation. Metaverse technology makes the virtual world look like the real world, and the social processes and interactions are the same as the real world. Metaverse combines human interaction with avatars (human visuals in cyberspace) and various products and services between the natural and unlimited digital worlds, where everything can take place simultaneously and in parallel. Metaverse has excellent potential for people to interact, work, learn and create anywhere. However, the metaverse world cannot be explored without the help of several supporting tools, such as Virtual reality. Virtual reality is a simulation of an image or the entire environment generated by a computer that can be experienced using particular/specific electronic equipment, allowing users to experience the virtual world like the real world with virtual objects. Three-dimensional and even four-dimensional with additional support such as vibration and sound, and able to interact with physical and virtual objects. However, some special tools are needed to feel the sensations obtained when using virtual reality, such as a computer/smartphone set, joystick, oculus rift VR, headset, and teslasuit. Reality Augmented Augmented Reality is a technology that integrates two-dimensional and/or three-dimensional virtual things into a natural environment and then displays these virtual elements in real-time in reality. Ikea, a Swedish home furnishings company, uses the application of Augmented Reality. The Ikea Place application allows users to create simulations when Ikea equipment is placed at home. Artificial Intelligence Artificial Intelligence is a technology that can connect every device so that someone can automate all devices without being on location. The world of metaverse requires Artificial Intelligence to imitate cognitive functions in humans. Cryptocurrency In the metaverse, it is known that there will be financial transactions because the jurisdiction of the metaverse is unlimited, so digital currency in the form of cryptocurrency is needed to be used as a means of payment when making transactions in the metaverse.

### 3.1 Metaverse Development

The development of the Metaverse is very rapid in banking, gaming, tourism, and other fields, as is the case with the Indonesian Catering Museum Foundation, which is currently developing the first museum of Indonesian culinary riches in the metaverse world in collaboration with the WIR Group. The culinary museum in this Metaverse will allow virtual culinary exploration without having to come physically. Everyone will be able to buy virtual land, can build their own virtual business, and there will also be virtual malls, virtual gyms, virtual offices, and virtual tours. Several banks in Indonesia have also contributed to the development of metaverse technology. Even began to show interest in using technology in the banking sector, such as KB Kookmin Bank, Industrial Bank of Korea, NH Nonghyup, and Hana Bank, which is a bank in South Korea. In addition, Bank of America, BNP Paribas, Bank of Kuwait, and Mercobank are also exploring the metaverse world. Indonesian banks that have explored the metaverse world, namely banking, to explore the metaverse world, such as PT Bank Negara Indonesia Persero Tbk (BNI).

BNI's BNI's IT & Operations Director explained that BNI had signed a memorandum of understanding (MoU) with WR Group, an augmented reality technology company.

BNI stated that it is not only following the trend, but with the presence of BNI in the Metaverse, it is expected to provide the best service for customers to enjoy digital banking services. In addition, PT Bank Mandiri Tbk (Bank Mandiri) is also conducting digital innovation by developing its business into the metaverse ecosystem. The state-owned bank also cooperates with WIR Group. The President Director of Bank Mandiri stated that the collaboration would give a new color to the banking sector. Indeed, most of the metaverse transactions use crypto transactions. Because it is considered to make transactions easier. Even crypto in Indonesia has not been legalized. BNI stated that commercial transactions in the Metaverse branch would continue to use the rupiah currency. However, it is also possible that crypto will also be used in transactions that are providers of virtual assets in the metaverse world, such as international companies that only accept crypto. In addition, the Metaverse has also penetrated the world of tourism.

### **3.2 NFT Settings in Indonesia**

According to the Civil Code, NFT is classified as an object. Objects are defined in Article 499 of the Civil Code as any thing or right that can be the subject of property rights. As a result, NFT might be classified as intangible digital commodities. According to Government Regulation No. 80 of 2019 Governing Trading Through Electronic Systems, digital products are intangible in the form of electronic information. Furthermore, under the provisions of the legislation, article 25 of Law Number 11 of 2008 concerning Information and Electronic Transactions, which regulates electronic information and/or electronic documents compiled into intellectual works, internet sites, and intellectual works contained in them, are protected as intellectual property rights.

NFT is a digital version of a certificate of ownership or authenticity that is securely recorded in a blockchain ledger. There is no formal rule in Indonesia that establishes and references NFT. However, if NFT is a crypto asset, then crypto as a form of investment is also considered to as a crypto asset under Indonesian law. Furthermore, according to Article 1 number 7 of the Regulation of the Commodity Futures Trading Supervisory Agency (Perbappebti) Number 5 of 2019 concerning Technical Provisions for the Implementation of the Physical Market of Crypto Assets on the Futures Exchange, "Crypto assets are intangible commodities in the form of digital assets that use cryptography, peer-to-peer networks, and distributed ledgers to regulate the creation of new units, verify transactions, and secure transactions without interference from other parties."

### **3.3 Validity of Transactions on Metaverse**

Recently, there have been many land sales in the Metaverse. The question is whether the sale and purchase agreement of virtual objects in the Metaverse is recognized as valid according to Indonesia's prevailing laws and regulations. Transactions carried out in the Metaverse have legally complied with the provisions of Article 1320 of the Civil Code. The provisions of Article 1320 of the Civil Code explain the conditions for the validity of an agreement which include: There is an agreement for those who bind themselves; In this case, there is no coercion, oversight, or deception against the parties to the agreement. The ability of the parties to enter into an engagement, being competent means having grown up with a healthy mind, not under guardianship, and not prohibited by law. Proper

in this case is someone who is 18 years old. A particular thing; and a legal cause. The reason that is lawful or permissible is that the object in the agreement does not conflict with the laws and regulations.

Transactions carried out in Metaverse are the same as transactions in general, the difference being the place where the transaction is carried out and the object of the transaction. Objects rather than transactions are properties or items that are virtual and can only be used in the Metaverse. These transactions are also often referred to as trading through electronic systems. First, it is necessary to understand that the object purchased in the Metaverse is an object in the form of a Non-Fungible Token (NFT). This means that the proof of ownership of an asset in the form of land is proven from the ownership of the NFT. NFT is a digital asset representing real-world objects such as paintings, music, or even land in the Metaverse. Is NFT recognized as an asset or object under Indonesian regulations so that it can be used as an object of sale and purchase? Objects in the provisions of Article 499 of the Civil Code are defined as each item and each right, which property rights can control. In this case, it can be in the form of tangible goods and intangible goods.

Furthermore, intangible goods can also be in the form of rights such as copyrights, patents, and others. From the article's description above, NFT is included in the category of intangible goods in the form of digital assets protected by copyright, where NFT is encrypted on the blockchain and cannot be duplicated so that NFT assets are guaranteed to be authentic. In transactions in Metaverse, smart contracts are also carried out by both parties. Smart contracts are the same as agreements in general—80 of 2019 concerning Trading Through Electronic Systems. Furthermore, a smart contract is an electronic agreement in the form of computer code that can automatically execute and enforce the terms of the agreement, which will be stored on the blockchain. This technology continuously collects and distributes transaction data between parties. Then the data is verified digitally and instantaneously to ensure its security. In principle, the transaction is legal. This is because of the agreement between the two subjects, who have stated their agreement following the provisions of Article 1320 of the Civil Code. The object is also not prohibited in the laws and regulations, even though the object is virtual or NFT. So from a normative juridical perspective, land sale and purchase transactions in the form of NFT in the Metaverse are recognized as valid according to the laws and regulations in Indonesia.

**Dispute Resolution in the Metaverse** Perhaps there are currently no disputes and problems, especially regarding transactions in the Metaverse. However, there may be legal issues that can harm some parties in the transaction. For example, where an avatar represents everyone, identity fraud can occur. This allows either party to give up the cryptocurrency Ether (ETH) but get nothing. Alternatively, perhaps the project owner failed to provide the project roadmap that was promised up front in the virtual land transaction. Such things are undoubtedly undesirable for Metaverse Users. Therefore, all forms of transactions through the virtual world and the natural world must avoid potential disputes in the future. If the transaction value is significant, there will also be a potential for large amounts of losses. Therefore, users must be careful and minimize the potential for disputes or avoid losses in carrying out transactions in Metaverse. Various kinds of dispute resolution in the Metaverse can be done by the parties involved. Usually,

in both conventional and smart contracts, there is a dispute resolution clause at the end of the agreement, which is agreed by the parties to have which law will be used as a reference for dispute resolution (choice of law). This is also governed by Article 73 of PP No. 80 of 2019, which states: “The parties have the ability to determine the law that applies to commerce through the international electronic system they build.” The parties have the ability to construct judicial forums, arbitration panels, or other alternative dispute resolution institutions to settle problems that may arise from trading on the International electronic system they have developed. Because, in theory, electronic dispute resolution refers back to the parties’ agreement. If the parties do not pick the law while dealing over the international electronic system, the relevant law is based on international civil law principles.

The idea of the defendant’s defendant’s home (the foundation of presence) and effectiveness in international civil law stresses the location of the defendant’s defendant’s property (principle of effectiveness). Furthermore, Article 75 PP No. 80 of 2019 about Trading Through Electronic Systems protects Indonesian consumers who do transactions via electronic system with smart contracts with foreign business actors who do not make legal decisions and pick dispute resolution venues. Dispute resolution in this context is carried out by an entity entrusted with settling conflicts between consumers and business actors or courts within the general judiciary in compliance with consumer protection law requirements.

## 4 Conclusion

The Metaverse is set to be a digital world that takes pieces from several other worlds to create an all-encompassing world. Social media, online gaming, virtual reality, augmented reality, cryptocurrencies, and even the physical world will come together to create the Metaverse. There have been no disputes and problems, especially regarding transactions in the Metaverse. However, there may be legal issues that can harm some parties in the transaction. For example, where an avatar represents everyone, identity fraud can occur.

All forms of transactions through the virtual world, as well as the real world, must avoid potential disputes in the future. If the transaction value is significant, there will also be a potential for large amounts of losses. Therefore, users must be careful and minimize the potential for disputes or avoid losses in carrying out transactions in Metaverse. It is hoped that the government and legal experts prepare themselves to face future problems regarding the world of digitalization because sooner or later, we will face entering the Metaverse era. In addition, the government and legal experts also need to map out the concept of legal protection for investment in Virtual Land Trade in the Metaverse World.

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