

METaverse AND ITS LEGAL CHALLENGES

METaverso E SEUS DESAFIOS LEGAIS

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Abstract: Metaverse can be considered as an example of emerging technologies that has major and diverse legal-economic challenges. A virtual network with a large and free environment in which many people use the form of avatars to communicate with each other in the fields of communication, work and business, property, playing games, They interact. Most of these challenges come back to the diverse functions of the metaverse. Functions such as education, entertainment, music, tourism, virtual ownership, virtual economy and jobs, cinema, artificial intelligence, etc. are among the activities of this virtual world. Issues that can be the basis of fundamental disputes in the social body and political and legal challenges of societies. Therefore, explaining the legal and economic challenges of the metaverse for political systems and citizens has made the present research inevitable. In this way, it is necessary to explain the exact nature of the metaverse, the legal challenges of its identification and the real and possible risks of this new technology, and to plan and propose innovative solutions to solve the challenges. Library and field studies are devoted to the analysis of the mentioned topics.

Keywords: Metaverse. Nature. Functions of metaverse. Legal challenges.

Resumo: O Metaverso pode ser considerado como um exemplo de tecnologias emergentes que apresentam grandes e diversos desafios jurídico-econômicos. Uma rede virtual com um ambiente amplo e livre no qual muitas pessoas usam a forma de avatares para se comunicar entre si nos campos da comunicação, trabalho e negócios, propriedade, jogos, interação. A maioria destes desafios volta às diversas funções do metaverso. Funções como educação, entretenimento, música, turismo, propriedade virtual, economia virtual e empregos, cinema, inteligência artificial, etc., estão entre as atividades deste mundo virtual. Questões que podem ser a base de disputas fundamentais no corpo social e desafios políticos e legais das sociedades. Portanto, a explicação dos desafios legais e econômicos do metaverso para os sistemas políticos e os cidadãos tornou a presente pesquisa inevitável. Desta forma, é necessário explicar a natureza exata do metaverso, os desafios legais de sua identificação e os riscos reais e possíveis desta nova tecnologia, e planejar e propor soluções inovadoras para resolver os desafios. A biblioteca e os estudos de campo são dedicados à análise dos temas mencionados.

Palavras-chave: Metaverso. Natureza. Funções da metáfora. Desafios legais.

Introduction

Examining the research conducted by strategists in the field of modern technologies regarding the evolution of the metaverse can be considered as a basis and framework for identifying the cards of this virtual world and its challenges. This has negative consequences for the society and its citizens. Technology experts have significant comments that can help in understanding the metaverse. help us Features such as: "Presence", "Avatars", "Home Space", "Home Transfer", "Remote Transfer", "Cooperability", "Privacy and Security", "Virtual Goods", "Natural Interfaces". did Mark Zuckerberg

Metaverse is a wide network in the virtual world that is processed every moment and a wide community of people are active in it and anyone who wants can be his host and the possibility of people communicating with each other is easily available and this feature makes business and economic activities dynamic and as a result users Buy and sell the content that is offered.

"Augmented reality seems to be the easiest way to transport us into the metaverse so far, but we're still seeing more attempts to enter this world. Currently, most metaverse experiences are done with our mobile phones, but we want experiences far beyond We will have the phone, where our whole body is completely involved, and this is where the appeal of the metaverse increases (Tiffany Ralph).

There are various comments about Metaverse technology, all of which show the importance and elegance of this virtual world, and global brands as the main powers such as Facebook, Meta, Microsoft, Epic Games, Nvidia, Special, Square, Google and... in the world. Digital Metaverse is active. One of the companies engages in trading in a certain field, including games and entertainment, real estate, education, music, etc., and all purchases and sales are based on cryptocurrencies. Although Metaverse pursues lofty goals such as business development and earning income from the digital space in different ways so that the virtual economy is formed in the virtual world, but despite the increasing growth of this technology, risks, threats and challenges are imagined in the realm of this modern technology. In addition to physical and psychological effects such as depression, Or the cultural, political and economic consequences, all of which are outside the scope of this article. Legal challenges are negative consequences of metaverse, and the criminal, evil, and criminal aspects of this technology are of particular importance, and crimes such as

fraud, tax evasion, money laundering, and generally crimes against people, property, and security. In other words, other digital people (avatars) who are active on the Catverse platform are actually versions of real people who are active in the Metaverse space and sometimes they may commit crimes or quasi-crimes with evil thoughts. . And on this basis, it is necessary to analyze the legal challenges. A matter that will be examined in the present page.

Background research

As an emerging and technological phenomenon, metaverse has been introduced in digital, economic, and legal literature at a transnational level and has been analyzed from different dimensions. The complete history of metaverse began in the 1980s: in 1985, the word "avatar" was coined by Richard Garriott. It was invented and in 1992 the book "Snowcrush" was published by "Stephens" and the word "metaverse" was used for the first time in it. In 2009, the Hollywood movie "Avatar" was made under the direction of James Cameron. Also, in 2013, the cryptocurrency "Ethereum" was designed, which is one It is among the cryptocurrencies used in the Metaverse, and gradually some of the Metaverse tokens that have been created on the Ethereum network have attracted the attention of technology companies (Dr. Ali Mohammadi p. 24). Therefore, Metaverse has taken effective steps in its evolutionary process. In this framework, it is possible to classify the existing researches and examine their fundamental points. Research conducted by Dr. David Rydastad of Artificial Intelligence and Computer Science at Liverpool Hope University pointed out. He believes that activity in the field of Metaverse real estate can create huge risks and threats, and in a general conclusion, he believes that: "We are now in the very early stages of the formation of this space, but the discussions in this field should be started before it suffers If we become the negative consequences of the expansion of the Kataverse and there is no way to return, we should take the necessary measures.

Another part of the conducted researches is dedicated to the connection of real and digital life, in the sense that the metaverse is active 24 hours a day and all humans can communicate, trade or travel with anyone in the form of an avatar. "Metaverse will cover all aspects of human life and it is a development that turns the world into a small village. You can live in the virtual space of this world as you live in the physical and real space, and there is no difference between them. Do not feel (Victoria Petrosek)

Another part of the research is about digital urbanism, the emergence of virtual cities that are substitutes for physical cities, what effect will these cities have on the city or, more precisely, the urban landscape, and the ability to create believable images as a tool that corresponds to the world in three dimensions. It has the fact that it increases the probability of its acceptance by the audience more than in the past (Morteza Hemti - Term 2 - Number 7).

Various researches have been carried out in the field of meta-universal activities such as remote work, education, games and entertainment, music and tourism, etc., in order to avoid wording and being unrelated to the topic of the research, mentions are avoided. There are also metaversal degrees, and one of the dimensions of metaversal activity, such as what was said above, as well as other areas such as the tourism industry and types of art, etc., have been the subject of researchers' research.

Results

The nature of the metaverse

This is the concept of a digital environment where users can do all the activities they are engaged in in the real world in this virtual environment. The concept of metaverse is still growing and therefore the descriptions and definitions related to metaverse vary, but simply, metaverse is a digital geography that allows people to interact with each other in the form of avatars and in the fields of entertainment and games, work, business, economic and artistic affairs, etc. and people can meet each other or have games and entertainment and business using virtual reality headsets, augmented reality glasses, smartphone applications or other devices.

"This concept is the next evolution of connectivity, where everything starts to come together into a single, unified world, so you'll continue your virtual life in the same way as your physical life, but keep in mind that a precise definition of what It is not implemented yet, it is difficult (Viktoria Petrok)

In fact, Metaverse is an image of the real world that is depicted virtually in the digital space, but there is no news of the rules of the real world.

Conceptually, "Metaverse is a new phase of virtual communication experience that uses technologies such as augmented reality and virtual reality. In fact, the goal of this idea is to bring online interactions closer to personal interactive experiences by creating a deeper sense of virtual presence" (news conference) October 17 (Facebook company)

The digital world of Metaverse has a decentralized internet network that is always online and active, which no institution or government can control, and users will be able to see themselves in a space where the real and virtual worlds converge.

In fact, Metaverse is the most advanced type of Internet, which is a three-dimensional connection point of real and virtual life, and efforts are made to replace the current Internet one day.

Applications of Metaverse

Metaverse applications can be listed as follows:

- Business
- Virtual ownership
- entertainment
- online shopping
- Education
- Earning through games
- Tourism
- Art like music and cinema...
- Celebrations
- Friendly meetings
- business meetings
- Doing paperwork
- Create virtual jobs
- Movie and series
- Artificial intelligence
- architecture
- Digital publishing house

Of course, the progress of this technology is evolving every day, and in addition to the mentioned applications, whatever is imaginable in the real world, it is also possible to create it virtual in the Metaverse, and based on that, its applications will increase day by day.

Metaverse digital currencies

Metaverse tokens are non-exchangeable and are currently offered as dedicated tokens. Tokens such as Decentraland - Oxy Infinity - Sandbox - Engine - Blocktopia - Gala Games - Star Atlas - Top Gol - etc. are offered by gaming companies on the platform of the crypto market.

Metaverse, like the real world, wants to provide the possibility of buying and selling for its users, and this is possible when a currency is determined for this purpose, therefore, in this sense, Metaverse is dependent on digital currencies. As mentioned before, the metaverse also has its own property and assets, and exchange in all fields of activity in the metaverse field requires spot currency, and the economy in the metaverse will only be done with cryptocurrency.

In Metaverse, just like in the real world, users register their identity, and it is the role of blockchain technology to provide and guarantee the privacy and security of users' identities and their transactions.

Electronic money that is exchanged on the Metaverse blockchain platform may also be involved in criminal acts such as money laundering, fraud, etc.

Therefore, the exchange and activity in the metaverse environment is not possible without digital currencies, and any interaction in the metaverse space must necessarily take place through cryptocurrencies as metaverse electronic money, and due to the customary, institutional and credit value of cryptocurrencies, the legal challenges of metaverse are inevitably realized from the perspective of cryptocurrencies. For this purpose, a general presentation of the necessary and necessary relationship is necessary. In short, the majority of crimes against property are committed through exchangeable cryptocurrencies in the Metaverse environment. It is obvious that due to the customary and credit value of spot currencies, any acquisition of cryptocurrencies in a criminal way and acquisition of property and virtual properties that have been purchased with cryptocurrencies must be realized. The material element of the crimes against property will be in the field of metaversion.

Metaversi property

Big companies like "Meta" offer land for sale on their own platforms for users, and users buy pieces or pieces of virtual land and create their own activities. Therefore, virtual

lands, like real world real estates, are separated and run by shops or economic centers, etc., and lead to lease or transfer of ownership. Although there were doubts about the digital property, but in any case, digital properties are being traded, and according to the existing reality, it is inevitable to identify its challenges.

Innovative companies such as "Facebook" provide lands for sale on their own platforms to users until they use their creativity to create them so that other users can enter into transactions in those virtual lands.

Although digital real estate was initially a source of serious doubt due to the fact that both the exchange and the exchange do not have real assets, today the transaction of metaverse real estate has become an unavoidable reality, and on this basis, it is necessary to revise the legal thoughts regarding such digital real estate. Even though the most legal challenges in the field of metaverse are related to digital properties, it is explained that digital properties in the metaverse environment may be removed from the owner's ownership by metaverse users, and this is where the majority of legal challenges in the field of metaverse appear.

Legal challenges and solutions

In the metaverse environment and the interactions that humans have with their avatars, they may encounter crimes and crimes, basically, virtual space is not possible without imagining a crime or quasi-crime, and the metaverse is no exception to this rule, and in the metaverse field, we witness crimes against people such as murder, violent crime, and rape. sexual intercourse, disclosure of secrets, impersonation, kidnapping, etc., as well as crimes against property, such as fraud, transfer of property, theft, money laundering, and even crimes against national security, such as propaganda of terrorism, etc. In the laws of each country, there are legal frameworks to deal with each of these crimes. The mentioned exists in the real world, but can these laws be extended to metaverse crimes as well? There is no special rule. For example, if a person commits the murder of a citizen in the real world, depending on the laws of the country, he is punished by death or life imprisonment. Now, if the murder takes place in the metaverse environment, what is the punishment for the person's avatar?

In the field of metaverse, the special law of this world has not been formulated, and in fact we are facing a legal vacuum, and considering the increasing progress of metaverse

activities, it is necessary to establish special laws in this field in all countries, but although the real world laws have been established to protect people in society, virtual avatars and their protection are the issue. The rules are not specific to real people, but assuming the absence of specific metaverse rules, is it possible to use and generalize the rules of the real world to the metaverse world? In this way, it is possible to prevent the occurrence of crimes and lawsuits in the field of metaverse.

The answer to this question requires the investigation of each of the cybercrimes according to the elements that make up the crime and its compliance with the existing laws, and it is not possible to provide a single answer.

Discussion

A: Crimes against property

Buying land or any other product in the Metaverse should only be done on active platforms in the Metaverse field. Usually, buying and selling of tokens is done in the exclusive markets of these platforms or known markets, for example, the lands of Decentraland can be traded in its own exclusive market. . Sandbox virtual items are also tradable in prominent markets such as OpenC and Riable. If a person steals another's property by resorting to computer tools or advertising in the metaverse environment or any other fraudulent act, a crime has been committed.

As explained in the topic of cryptocurrencies, payments in Metaverse must be made through digital currencies, which today, due to the common wealth and establishment of cryptocurrencies, if, as a result of negligent actions, an individual's cryptocurrency is illegally taken in exchange for a fake Metaverse product, it seems possible to prosecute the Metaverse fraudster. The existing laws are envisioned because due to the long history of the Internet and the scope of its activity in the world and in all countries and their relevant laws, computer crimes are foreseen and on this basis, computer fraud is a common crime and because in the field of metaverse, which is an evolved example of It is the Internet and it is actually defined and considered in the field of computer technology, through which money under the name of cryptocurrency is acquired criminally and maliciously. All crimes against property, such as betrayal of trust, transfer of property, illegal acquisition of property, theft, etc., which lead to the acquisition of other virtual assets and the result is that the laws of the real world can be extended to the financial crimes of the metaverse

Of course, the acceptance of this theory in crimes against property is if we consider cryptocurrencies as property, although some people have doubted the property of cryptocurrencies, but according to the author, there should be no doubts about the property of spot currencies today, because the elements that make up property, including the ability to trade, legal protection, and rational benefit (credit value) and have the possibility of ownership. In fact, cryptocurrencies are the same fiat currencies that have been converted into spot currencies. Therefore, if the user with the guidance and guidance of his "Avatar" succeeds in taking another cryptocurrency in exchange for fraudulent goods and services, there is no prohibition in asserting the right through the criminal and legal mechanisms of the real world, and the constituent elements of computer crimes and the resulting contractual and civil responsibilities are common to the metaverse world. Of course, this argument It can be extended to virtual properties as well, because virtual properties in the metaverse area today have customary property and the ability to trade, and any criminal and criminal actions that cause the property to be taken away from the owner can be prosecuted according to the laws related to crimes and quasi-crimes in the real world be placed.

B: Crimes against individuals

The issue of crimes against people such as murder, violent acts, sexual assault, defamation (obscenity, defamation, spreading lies), hostage taking, kidnapping, etc., is only about humans, and if these crimes are committed in relation to avatar use, it is naturally a criminal act. has not given, but if there are words containing insults to the dignity and integrity of the user, due to its connection with computer crimes, there is no doubt in prosecuting and punishing the perpetrator, based on the laws related to computer crimes, because there is a material, legal, and spiritual element of crimes related to the dignity and integrity of persons who It literally happens in the context of the metaverse, and it fully conforms to the definitions of Varkan and the laws of the real world. Therefore, it is necessary to separate crimes against transgender people. Also, if an avatar intentionally advertises the sale or use of prohibited substances such as narcotics, in this case, negative advertisements and incitements that are transferred to the real world will have the ability to be followed according to the laws of the real world. It may be doubted that "Avatar" has committed a mistake, but it should be noted that the activities of each "Avatar" are guided by the user and its owner, and as long as the criminal and responsible guidance of the

Avatar is done intentionally by the user in such a way as to cause the user's dignity and dignity to be violated, or negative and illegal advertisements in Metaverse. causes the occurrence of crimes against people in the real world, in this case, the generalization of the provisions of the real world to the mentioned crimes is without problem. Today, the violation of human dignity and dignity (insult, defamation, false publication) in the computer and electronic form is recognized in the laws of all countries, and in this sense, the metaverse is also recognized. It is considered a computer and digital space and any defamation through avatars and material and moral damage from this path can be prosecuted and compensated according to the defamation laws of the real world.

P-Crimes against the national security of countries

Any anti-security actions such as negative publicity against the country - disrupting the security of the country - inciting people to commit security crimes - racial insults - insulting religious sanctities, etc., as it takes place in a metaversial environment, with the fulfillment of other conditions, there is no doubt that these actions are criminal, because Most of the crimes against national security are realized with words and non-verbal communication, and in the metaverse space, it is possible to incite, incite, disturb, and provoke people, and on this basis, the prosecution of anti-security crimes and quasi-crimes that have occurred in the metaverse can also be prosecuted. Their realization requires the commission of material acts in the real world, and it is an exception to this rule, and of course such crimes such as bombing and disrupting military fortifications, etc., cannot be carried out in the metaverse.

T- Intellectual property and trademark

Brands of the real world are also used in the metaverse space, car brands like Benz and BMW and... restaurant branches like McDonald's... Do the laws related to intellectual property include the metaverse world? Among the legal challenges of Metaverse are:

The fact is that Mughnavi's ownership in all its aspects has the support of the legislators, and this support includes the digital space in addition to the real world, and Metaverse is also an advanced level of the Internet, and any activities and advertisements about intellectual properties must be done with the permission of their owners. Therefore, it is possible to extend intellectual property laws to the metaverse space

Also, the copyright law gives the right to print, distribute and display the work to the owner of the work, and the owner of the work may transfer this right to others, so any user who violates this right through his avatar can be prosecuted criminally and legally according to the existing laws of the real world. Laws have been established to protect the rights of authors, authors, and inventors, and if the intellectual property of individuals is violated in the metaverse environment, then there is no doubt in the legal confrontation with the violators.

A: Commercial laws

Business laws are not applicable in the metaverse world. In principle, issues such as commercial companies and their nature and activity in the metaverse space are different from territorial companies, and in addition, issues such as transportation, brokerage, and work rights are meaningless in the metaverse, and these things are done in the metaverse by click or market, so A major challenge in this regard is imagined in Metaverse.

C- The law of contracts also governs in the field of metaversity, in the sense that persons in the metaversity environment also undertake to create obligations based on the principle of freedom of contracts subject to the rule of will, and on this basis, any breach of obligation or delay in fulfilling the obligation, from the point of view of the principle of contractual responsibility, is due to create It provides contractual responsibility and there is no obstacle in adhering to the principles and rules of real world contracts and generalizing them to the metaverse field.

However, Metaverse is a new technology that naturally has its own challenges, which have been addressed to some major challenges in the legal field, and in order to deeply solve the legal challenges, it is necessary that:

The International Telecommunication Union, as a specialized organization of the United Nations for information and communication technologies, should set and establish international security standards in the field of road metaverse, such as the Incitral regulations, regulations that can handle legal challenges such as the protection of data, identity and information of individuals, which sometimes form the material element of frauds. and also cover crimes against persons, property, and breach of security, as well as non-legal challenges such as how to advertise on Metaverse, copyright, etc.

The second solution is for the countries to identify the legal loopholes related to the crimes and quasi-crimes in the metaverse field and make regulations. Of course, due to

the political risks of the metaverse world, most of the countries are hesitant to recognize the metaverse, but the development of metaverse activities requires the necessity of the legislative intervention of the countries.

Conclusion

Metaverse is the existential reality of today's world and currently the connection and communication of real and virtual life is going on in it, and due to its various applications, metaverse activities are developing day by day, and especially some areas such as digital real estate and metaverse trade in general have become increasingly important, and on this basis The occurrence of crimes and the occurrence of lawsuits in it is a matter of possibility, and it is necessary that the legal challenges of it be identified and the necessary preparations are presented. Based on the challenges and solutions in this research, assuming the absence of special laws for Metaverse, the following predictions and results were obtained:

First of all, crimes against individuals should be distinguished and crimes such as insults, obscenity, slander, publishing falsehoods, and revealing secrets, whose material element is promises and defamations, such as in the metaverse space by a user with the guidance of his avatar, against another user with a criminal character, in this case, according to the laws related to defamation The computer reality of the real world is capable of criminal and legal prosecution, but some other crimes against people, such as kidnapping and hostage-taking, etc., whose material element is physical activity, in the metaverse space and related to avatars, criminal and legal prosecution is not possible. For the obvious reason that avatars are not real people.

Second, in crimes against property and property, it is possible to extend the rules of the real world to the world of the metaverse. Basically, the cryptocurrencies of the metaverse as well as the properties of the metaverse world have customary, credit and institutional value, so if, as a result of criminal and intentional actions, virtual property and property are seized and appropriated, such that digital money or The virtual property is removed from the ownership of the user, in this case, by comparing the crime or quasi-crime of the incident with computer crimes or the civil liability laws of each country, the violator of virtual property and property can be prosecuted.

Thirdly, the crimes against the national security of the countries can also be investigated and as long as the crimes against the countries' security through words, voices

and speeches are in the metaverse field, like the above-mentioned crimes, they have the possibility of criminal and legal follow-up.

Fourth, that : The laws related to contracts, which are based on the principle of sovereignty of the will, are also used in the field of metaversion, in case the obligor creates an obligation and violates it, based on the principle of contractual responsibility in the real world, the obligee can demand the fulfillment of the obligation or incur material and moral damages.

Fifthly, the laws related to intellectual and commercial property are also applicable in Metaversi, and any violation of these rights can be prosecuted and compensation for material and moral damages.

Finally, the International Telecommunication Agency affiliated to the United Nations can set comprehensive and standardized regulations in the field of prevention of metaverse crimes and lawsuits, as well as legal and criminal responses to crimes and quasi-crimes that occur in the context of metaverse, and oblige countries to enact metaverse laws.

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