

## **THE LEGAL ISSUES OF METAVERSE AND PERPECTIVES OF ESTABLISHMENT OF INTERNATIONAL FINANCIAL CENTER IN METAVERSE**

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### **ABSTRACT**

*In this article analyzed the main notion and concept of metaverse, history of the notion. In addition in this article tried to give answer for how did the idea of the metaverse come about and how metaverse works. Moreover article investigated crypto currencies, NFT and block chain technologies of metaverse. As a result of this analyzes author give some recommendations and suggestions for establishing international financial center in metaverse platform.*

**Keywords:** *metaverse, NFT`s, Block chain technologies, crypto currencies, avalanche, international financial centers, digital proof of ownership, digital collectability, trademarks and copyright*

### **АННОТАЦИЯ**

*В данной статье проанализировано основное понятие и концепция метавселенной, история возникновения понятия. Кроме того, в этой статье мы попытались дать ответ на то, как возникла идея метавселенной и как работает метавселенная. Кроме того, в статье исследованы криптовалюты, NFT и блокчейн-технологии метавселенной. В результате этого анализа автор дает некоторые рекомендации и предложения по созданию международного финансового центра на платформе метавселенной.*

**Ключевые слова:** *метавселенная, NFT, блокчейн-технологии, криптовалюты, лавина, международные финансовые центры, цифровое подтверждение права собственности, цифровая возможность коллекционирования, товарные знаки и авторское право.*

### **INTRODUCTION**

Today we may face with some new terms in recent research topics such as Artificial intelligence, cyber law, big data, digital law, virtual world and others. Among this list we may see one new term like metaverse.

The metaverse is a concept of an online, 3D, virtual space connecting users in all aspects of their lives. It would connect multiple platforms, similar to the internet

containing different websites accessible through a single browser. The concept was developed in the science-fiction novel Snow Crash by Neal Stephenson. However, while the idea of a metaverse was once fiction, it now looks like it could be a reality in the future.

To understand what a metaverse is, we suggest recalling famous films about a parallel reality in which characters can be simultaneously with physical existence. Cult films such as The Matrix by the Wachowski brothers and Tron by Steven Lisberger that were made before 2000 come to mind. But the term itself was coined by the writer Neil Stevenson, who wrote the book Avalanche in 1992, describing roughly the same thing that we see in The Matrix.

The modern concept of the metaverse has something in common with VR, but they are not the same thing. The Metaverse is a virtual reality space that:

- operates on a permanent basis, never turning off;
- uses many technologies that immerse us in the digital world;
- creates within itself separate laws and the economy, in fact - a single state.

## **DISCUSSION AND RESULTS**

### **How did the idea of the metaverse come about?**

We have already described where the idea of creating a single virtual reality was originally mentioned, but it was an invention of creative people who predict the onset of a dystopia based on the widespread passion for computers.

In 2021, Mark Zuckerberg, the creator of the well-known social network Facebook, announced the creation of the Meta global project, which will create the very parallel digital reality. And it will be possible to exist in it as fully as in the above-mentioned films and the book.

The main signs of the new reality: each person will have his own avatar (another well-known film comes to mind), and internal processes will be depicted as 3D and 4D holograms. Those who become immersed in the "meta" will have their own home and even a workplace in order to lead a familiar life within the framework of the new universe.

The project is truly global: more than 10 thousand employees of the company are working on its development today, and investments have reached 10 billion dollars, and the amount, of course, will increase.

Unlike existing systems of communication on the Internet, people in the Meta universe are not required to have registration in specific social networks.

### **How metaverse works?**

The company is already creating special tools that allow you to immerse yourself in the Metaverse. So, by 2022, Meta (activities in Russia are prohibited) should release special headphones that will virtually complement the existing reality.

It will be possible to mix reality and integrate digital life into physical existence. For example, the headset will be able to recognize facial expressions and determine the mood, as well as catch the direction of the eye and form augmented reality right in front of your eyes.

Special augmented reality glasses are also being created, which, like a headset, integrate new digital elements into life. Such glasses were already created by Google several years ago, but then they were not popular with users.

Today, there are technologies that are available to everyone: ordinary electronics stores sell virtual reality glasses in two formats.

The first, in the form of ordinary sunglasses, are more likely to function as an ordinary Bluetooth headset.

The second is a real prototype of immersion in VR, these are glasses for using computer games that allow you to feel like a real participant in the digital process. On the basis of the latter, it is planned to create special glasses to supplement reality.

Let's try to imagine how the system will work.

You create your avatar in the Meta reality, where you give it certain appearance qualities. By the way, it is not clear whether there will be an opportunity to change appearance at will, or an avatar is a complete digital copy of a real person, with all the features of appearance.

At your disposal will be tools for immersion: glasses, a special headset, maybe game joysticks and other necessary technological devices.

In a "virtual morning" in the metaverse, you'll go to work, where you'll have a meeting to discuss the creation of a new collection of clothes from the designer you work for.

Avatars of your colleagues will be nearby, but physically you are in Tashkent, designer Maryam is in Ankara, PR manager Lukas is in Germany, and the owner of the company spends the winter in Thailand. However, all together in one virtual room you determine the direction of the spring-summer collection and distribute your responsibilities.

For lunch, you and Timur (recall, he is physically located in Turkey) go for a walk in a virtual park, during which a colleague complains that he is having problems building a virtual home: the cost of digital designers has increased.

If, in the future, we work, socialize, and even purchase virtual items in the metaverse, we need a secure way of showing ownership. We also need to feel safe transferring these items and money around the metaverse. Finally, we will also want to play a role in the decision-making taking place in the metaverse if it will be such a large part of our lives.

Blockchain developers also take influence from the video game world too. Gamification is common in Decentralized Finance (DeFi) and GameFi. It seems there will be enough similarities in the future that the two worlds may become even more integrated. The key aspects of blockchain suited to the metaverse are:

**1. Digital proof of ownership:** By owning a wallet with access to your private keys, you can instantly prove ownership of activity or an asset on the blockchain. For example, you could show an exact transcript of your transactions on the blockchain while at work to show accountability. A wallet is one of the most secure and robust methods for establishing a digital identity and proof of ownership.

**2. Digital collectability:** Just as we can establish who owns something, we can also show that an item is original and unique. For a metaverse looking to incorporate more real-life activities, this is important. Through NFTs, we can create objects that are 100% unique and can never be copied exactly or forged. A blockchain can also represent ownership of physical items.

**3. Transfer of value:** A metaverse will need a way to transfer value securely that users trust. In-game currencies in multiplayer games are less secure than crypto on a blockchain. If users spend large amounts of time in the metaverse and even earn money there, they will need a reliable currency.

**4. Governance:** The ability to control the rules of your interaction with the metaverse should also be important for users. In real life, we can have voting rights in companies and elect leaders and governments. The metaverse will also need ways to implement fair governance, and blockchain is already a proven way of doing this.

**5. Accessibility:** Creating a wallet is open to anyone around the world on public blockchains. Unlike a bank account, you don't need to pay any money or provide any details. This makes it one of the most accessible ways to manage finances and an online, digital identity.

**6. Interoperability:** Blockchain technology is continuously improving compatibility between different platforms. Projects like Polkadot (DOT) and Avalanche (AVAX) allow for creating custom blockchains that can interact with each other. A single metaverse will need to connect multiple projects, and blockchain technology already has solutions for this.

## **The issue of trademarks and copyright in the metaverse**

Various forms of intellectual property exist in the metaverse, one aspect of which is trademarks, as the name, logo, slogan, melody (sound trademark), visual forms of any distinctive characters in the metaverse, the graphic appearance of virtual goods that can be purchased, the names of avatars, and unique colours (colour trademarks) can all be legally be protected, which is worth prioritising when creating IP inside the metaverse, to protect the brand. The other side of the relationship between the metaverse and trademarks is that goods can be tokenised and potentially purchased in the metaverse, including brands that are used in the metaverse. Brands that have not yet covered services, virtual goods, virtual services, software, graphics, etc. related to the metaverse in the classes of goods and services covered by their trademarks will be forced to revise the classes of goods and services covered by their trademarks and potentially file new trademark applications to protect their brand and trademarks, as has been done by, e.g. Victoria's Secret in the US (**Official: Victoria's Secret forays into NFTs and metaverse with 4 blockchain-related trademark filings**), which filed trademarks for its virtual clothing line, and McDonald's (**McDonald's files trademarks for virtual restaurants in metaverse**) regarding virtual food, drinks and virtual restaurants.

The copyright protection of software and graphical and musical works that form part of the metaverse is self-evident and identical to the traditional world of copyright. It does not raise any particular issues in the existing copyright environment. However, this is not the case with tokenised works, such as NFTs for digital and virtual works of art that can be purchased in the metaverse, where it is important that by purchasing the NFT, the holder of the NFT does not acquire any copyright in the tokenised work on which the NFT is based, and will not be entitled to use the underlying work in any way other than the free uses that have existed in copyright law until now, without the permission of the copyright holders and without paying royalties.

An interesting question arises if someone tokenises a digital work that they did not create: in this case, copyright infringement will not necessarily be established for the tokenisation itself, but the online display of the work as a token in the metaverse, even in thumbnail form, may constitute a copyright infringement.

In addition, the question of authorship arises in copyright law if an avatar creates a work of authorship in the metaverse, and since only an individual person can be an author and an avatar is a virtual person, the question is whether the individual person who created the avatar will be entitled to copyright in the work so

created. As an analogy, reference can be made to the well-known copyright practice of pseudonymous works, where the individual person behind the pseudonym will be the copyright owner, not the artificially created pseudonymous person. Consequently, the copyright in works created by an avatar will also belong to the individual person who created the avatar. It is a question of how the creator proves through their avatar that they are the author of the works.

However, the biggest challenge for trademark and copyright holders will be the detection and enforcement of infringements in the metaverse, for which the application of artificial intelligence to the metaverse is essential. Without it, the detection and discovery of infringements would face serious obstacles. In the area of enforcement, the transnational and cross-border nature of the metaverse will raise questions of applicable law, jurisdiction and competent authorities, especially if the action is not against the metaverse provider but against the user of the metaverse hiding behind an avatar.

### **NFTs in the metaverse**

NFTs are a solution based on blockchain technology, which is primarily used to tokenise digital assets and to trade these tokens. NFTs can be the enablers of interoperability between areas of the metaverse and have made it possible and easy to channel the trade in virtual assets in the metaverse into the real economy. The issuance of NFTs raises several legal issues, but in most countries such as Hungary, it is not yet subject to specific regulation. In addition to copyright and trademark aspects, the issuance of NFTs may also raise general contractual, civil law issues related to the smart contracts that are automatically created and executed on blockchain for the sale of NFTs together with the payment. In the case of these smart contracts, enforceability and provability, especially regarding anonymity, hiding behind avatars, formal validity, and the handling of breaches of contract, are always relevant issues. Fundamental legal questions also arise as to which country's law applies to the purchase of NFTs in cross-border metaverse transactions, and what rights the person acquiring the NFTs has in the NFTs purchased. The property regime (which currently applies only to physical objects and money in Hungary, but not to NFTs) can be used as an analogy. In the near future, the forthcoming Mica Regulation (a draft regulation on markets in crypto-assets) will settle the legal situation of crypto-assets at the EU level, but will not cover all crypto-assets, as the current text of the draft Mica Regulation has identified as an exception to the scope of the Regulation crypto-assets that are unique but not fungible with other crypto-assets, which may include NFTs.

### **Civil law principles are also called into question in the metaverse**

Even basic civil law principles become complicated regarding the metaverse and the avatars it contains. For example, if the person who created an avatar dies, can their avatar, the virtual assets (NFTs) assigned to it (acquired by it) be passed on? On the other hand, can the avatar itself die in the metaverse without the person who created it dying?

Is the personality right of the individual person who created the avatar affected if the good reputation of the avatar is violated in the metaverse, or if their avatar is hacked and private communications made through the avatar accessed (violation of privacy), or their personal data relating to the avatar are misused, which personal data relate to the virtual avatar and are not the same as the personal data of the person who created the avatar (protection of personal data, right to informational self-determination)?

Can anyone be sued for infringements in the metaverse against another avatar? And if yes, who?

What rights do users who buy a virtual plots/land/property in the metaverse have in these areas? Can other users enter such areas in the metaverse with their avatar without permission?

There are so many issues for which there is no legislation or case law, only some of which can be addressed in the general terms of use of the metaverse, which are published by metaverse providers.

The second part of our article continues with questions regarding data protection, cybersecurity, artificial intelligence, advertising and employment law.

### **Proposed actions for companies involved in the metaverse**

Based on the above, the responsibilities of companies and organisations involved in the utilisation of the metaverse are:

- The trademark portfolio should be mapped and, if necessary, new ones should be registered for the metaverse.
- It is worth looking for technological solutions to detect copyright, trademark and other IP infringements in the metaverse.
- It is recommended that copyright and trademark holders issue their own NFTs for their protected products, services and works themselves, and offer them in the metaverse to prevent others from tokenising and selling their works, products and services.
- As a metaverse service provider, the areas and issues not yet settled by legislation should be settled in the general terms and conditions.

## **Data security and privacy issues in metaverse**

Digital security and privacy will be among the most significant legal issues facing platform owners. These concerns are not news to tech companies, which face increasing scrutiny from regulators and users alike. But data in the metaverse will become exponentially more valuable than it already is, and technologies will become increasingly integrated into multiple aspect of users' lives. This developing technology will stress-test existing laws and put even greater pressure on regulators to match the sophistication of the technology. Further, a singular metaverse, if operated by multiple entities, will require interoperability standards that siloed, disparate metaverses will not.

User information will be at particular risk of exploitation given the vulnerabilities involved when data is ported from one application to another, and platform operators will need extensive agreements to govern data transfers, information security standards, and responsibility for compliance (as well as data breaches, which could cause even more chaos than they do today). Major technology companies are already facing significant antitrust scrutiny and increasing regulation around the world, and the development of the metaverse may spur additional scrutiny and action from antitrust enforcers. Interoperability between platforms, which is widely believed to be an essential component of the metaverse, requires industry standards in order to be effective. While antitrust law generally permits businesses to jointly create pro-competitive technical certifications, including standards that improve interoperability, the standard setting process can nonetheless give rise to antitrust concerns. In addition to concerns around a fair standard-setting process, cooperation agreements and industry standards risk restricting output and can violate the antitrust laws if not sufficiently tailored to their pro-competitive purpose. As major technology companies seek to build the infrastructure for the metaverse, they may encounter claims of antitrust violations and additional scrutiny from antitrust enforcers and legislators.

## **CONCLUSION**

Based on the above threats and the experience we have learned, we will focus on the establishment of an international financial center in metaverse, the establishment of an international financial center in metaverse will not only increase the position and work of our country in the field of international business and finance, but also the direct attraction of foreign digital investments, digital assets and digital,



as well as increase the investment potential of our country, we can achieve growth and many other opportunities.

In addition, we can attract digital investments in Western countries and create opportunities for foreign investors to invest on the basis of the rights they believe and know from their countries. But there is a high probability that some problems will arise in the introduction of international financial stamps in metaverse. Therefore, we believe that it is advisable to establish an international financial center in metaverse and carry out its activities in stages.

We will conditionally divide the measures for the formation of the international financial center and the full establishment of its activities in metaverse into 4 stages:

Stage 1: development of a roadmap for the formation of the international financial center in metaverse;

Stage 2: preparation of the legal framework for the formation of the international financial center in metaverse;

Stage 3: practical measures for the formation of the international financial center in metaverse;

Stage 4: Establish activities of international financial center in metaverse;

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