

Protection of property rights in online gaming accounts

Protección de los derechos de propiedad en las cuentas de juegos en línea

Proteção de direitos de propriedade em contas de jogos on-line

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Abstract

This paper considers the issue of users' rights protection, namely regarding the users of online games. Nowadays, the rules for using online gaming accounts are prescribed by the license agreements, which are mandatory for everyone who wants to get the access to digital service. However, such agreements oftentimes break the users' rights, giving large possibilities for providers who are openly abusing users. One of the ways to protect rights of users of online gaming accounts is to recognize their property rights regarding the in-game items. This approach is highly debatable, but there are arguments in favor of such. This paper is focusing on the status of online gaming accounts and in-game items as digital assets and looks into the possibility to extend property rights to these objects. Current issues regarding the rights and interests of users in relation to virtual world providers are also discussed as well as current regulatory landscape for digital assets, including online gaming accounts is briefly reviewed.

Keywords: Digital service; online gaming accounts; property rights; providers; terms of use; users.

Resumen

En este documento se examina la cuestión de la protección de los derechos de los usuarios, concretamente en lo que respecta a los usuarios de juegos en línea. Hoy en día, las normas de uso de las cuentas de juegos en línea están prescritas por los acuerdos de licencia, que son obligatorios para todo aquel que quiera acceder a un servicio digital. Sin embargo, estos acuerdos a menudo violan los derechos de los usuarios, dando grandes posibilidades a los proveedores que abusan abiertamente de los usuarios. Una de las formas de proteger los derechos de los usuarios de cuentas de juego en línea es reconocer sus derechos de propiedad sobre los objetos del juego. Este enfoque es muy discutible, pero existen argumentos a favor del mismo. Este artículo se centra en el estatus de las cuentas de juego en línea y los objetos del juego como activos digitales y examina la posibilidad de ampliar los derechos de propiedad a estos objetos. También se examinan las cuestiones actuales relativas a los derechos e intereses de los usuarios en relación con los proveedores de mundos virtuales, así como el panorama normativo actual de los activos digitales, incluidas las cuentas de juegos en línea.

Palabras clave: Servicio digital; cuentas de juego en línea; derechos de propiedad; proveedores; condiciones de uso; usuarios.

Resumo

Este documento considera a questão da proteção dos direitos dos usuários, principalmente no que diz respeito aos usuários de jogos on-line. Atualmente, as regras para o uso de contas de jogos on-line são prescritas pelos contratos de licença, que são obrigatórios para todos que desejam obter acesso ao serviço digital. No entanto, esses contratos muitas vezes violam os direitos dos usuários, dando grandes possibilidades aos provedores que abusam abertamente dos usuários. Uma das maneiras de proteger os direitos dos usuários de contas de jogos on-line é reconhecer seus direitos de propriedade em relação aos itens do jogo. Essa abordagem é altamente discutível, mas há argumentos a favor dela. Este documento se concentra no status das contas de jogos on-line e nos itens do jogo como ativos digitais e analisa a possibilidade de estender os direitos de propriedade a esses objetos. As questões atuais relativas aos direitos e interesses dos usuários em relação aos provedores de mundos virtuais também são discutidas, bem como o cenário regulatório atual para ativos digitais, incluindo contas de jogos on-line, é brevemente revisado.

Palavras-chave: Serviço digital; contas de jogos on-line; direitos de propriedade; provedores; termos de uso; usuários.

I. INTRODUCTION

The economy of virtual worlds is a multibillion-dollar industry that has been growing steadily. The market size for global online gaming was valued at 61.7 billion dollars in 2022 and the growth is expected to continue because of advancements in technology and a continuing demand from consumers, especially because of the use of mobile devices for online games and an ever growing popularity of esports (Prudour Private Limited, February 01, 2024). Virtual environments and online gaming worlds are important forms of entertainment, Asian countries have for example a large amount of people involved in online games and there are more people in South Korea that spend time in virtual worlds than watching television (Fairfield, 2005, p. 1047). However, the trend is not limited to only Asia, in Europe the number of players in the online games market is predicted to reach 101.8 million users by 2027 (Statista, n. d.). Players invest a considerable amount of time, money and creativity into these virtual worlds. Players in these games can acquire different in-game items that other players value, such as: virtual buildings, swords, clothes, and even avatars (Lastowka & Hunter, 2004).

It has become evident that these in-game items have a real world value. Currently online game players can use online stores and auction sites to sell avatars, currency and other different items from games. The existence of the so-called grey market (when goods are traded outside the authorized manufacturer's channel), seems stable as there are almost no legal alternatives for authorized selling of in-game items, since sales and exchange of in-game items often is prohibited by license user agreements (Nekit, 2020b). Players in virtual worlds such as *World of Warcraft*, *Second Life* and *EVE Online* invest considerable effort in acquiring or developing their virtual assets. Many users therefore feel that these items are something that they should be able to own. Issues, for example, arise when it comes to the protection against theft in these games. In 2008 a player lost about 3,800 dollars' worth of virtual assets, when the player shared his password with the offender, assuming that the offender was going to take care of the player's virtual assets while he was absent (Dilla *et al.*, 2013). The police nonetheless refused to investigate the theft on the basis that "points earned in games are devoid of monetary value" (Nelson, 2010, p. 285). Already in 2003, more than half of the 40,000 reported cybercrimes in South Korea involved online gaming (Ward, September 29, 2003). Virtual worlds not only offer merely entertainment, they can also contain prosperous economies where in-game items and other assets are traded (Dilla *et al.*, 2013, p. 132). It is then not surprising that virtual thefts are just as painful for players as real-world thefts.

There are a number of voices speaking from the consumer perspective, requesting that physical ownership rights should extend to in-game items and other virtual assets to protect player's interests. The role and value of virtual environments in public life and in commerce is growing, therefore legal regulation and protection is of importance (Fairfield, 2005, p. 1059). Hence, this paper will focus on the status of online gaming accounts and in-game items as digital assets and whether you can extend property rights to these objects in order to protect interests of users in relation to virtual world providers.

II. VIRTUAL ASSETS AS PROPERTY

Virtual assets, or sometimes also termed digital assets and users' rights to such property are among scholars two frequently discussed issues (Sheldon, 2007), with researchers having different points of view. As a point of departure, Joshua Fairfield's theoretical approach is that there is a type of code that is created to "act more like land

or chattel than ideas" (2005, p. 1049). Examples of this type of code are entire virtual worlds, in-game items, domain names, websites, and email accounts.

Fairfield argues that this type of digital assets can be treated as a type of virtual property if it has three features: rivalrousness, persistence, interconnectivity. Rivalrousness means the possibility of the digital asset being owned and controlled by a person in a specific period of time and therefore, the digital asset cannot be used by another person in an equivalent way at the same time. The second feature of virtual property according to Fairfield is persistence. Persistence means that it is permanent, the virtual property still exists even when you switch off your computer or leave the virtual world. The third feature, interconnectivity, means that other people can interact with the virtual property. Digital assets that meet these three requirements can be regarded as virtual property according to Fairfield (2005, pp. 1049-1050).

In his paper "Virtual property, real concerns", DaCunha asserts similar characteristics, but also suggests that virtual property must have the ability to "be altered by value-added means" (2010, p. 8). If users can't add personal value to their digital assets and then alter that asset into something of more value, then the need for property rights in virtual property would be unnecessary. Furthermore, DaCunha proposes the feature of transferability. For an object of virtual property to have value, there has to exist a market and the possibility to exchange the object of property for something of value. If you cannot transfer the objects of property you have acquired, then there is really no need for property rights. Lastly, DaCunha (2010, pp. 35-72) defines virtual property as alienable, i.e. capable of being sold or transferred for value.

The mentioned researchers develop the idea that property rights should be extended to digital assets if they meet the suggested characteristics.

III. JUSTIFICATIONS FOR PROPERTY RIGHTS

The first question that arises is: whether property can exist in a virtual world? Three theoretical arguments for extending property rights to digital assets have been put forward by different legal scholars, however, there have also been scholars rejecting those arguments.

1. Locke's Labor Theory

In *The Laws of the Virtual Worlds*, Greg Lastowka and Dan Hunter (2004) present a justification for extending property rights to digital assets based on Locke's labor

theory of property. The basic concept of this theory is that one should be able to enjoy the fruits of their labor. If an individual applies his labor and effort to resources it becomes his property. Lastowka and Hunter argue that players in virtual worlds invest time and effort to create or obtain assets and that the players as a result of their labor might have a property claim in their digital assets (DaCunha, 2010, p. 46). David Sheldon supports this argument and points out that players in creative virtual worlds combine labor with resources from these worlds and create new virtual assets that can be treated as property. As an example, providers of these games can offer creation tools that allow the players to create new forms of already existing objects. Even in games where players do not appropriate elements of the commons to develop something new (such as games based on combat or collection), there is still an exchange and investment of labor for virtual objects, as an average player will have to spend at least 350 hours to reach the highest level in *World of Warcraft* (Sheldon, 2007).

John W. Nelson reaches a different conclusion in his article “The virtual property problem: what property rights in virtual resources might look like, how they might work, and why they are a bad idea” – he rejects the idea of labor theory as a justification for applying virtual property rights to digital assets – the first argument he presents is that “labor only justifies the initial acquisition of property from the state of nature” (2010, p. 282). He argues that it was the developers of the virtual worlds that originally combined their labor with the resources from nature. In other words, it was the developers who initially designed the graphics, created the code and the hardware connected to it so the players can access and interact with the virtual objects in the first place. In the case of a virtual object/digital asset being transferred between a developer to a user, the chain of title would pass under “the prevailing legal theory of property transfer” and not under Locke’s labor theory (Nelson, 2010). The second argument is that labor alone does not create property rights in something. The courts in the United States have repeatedly denied the labor theory as a justification of property rights (Nelson, 2010, pp. 13-14).

DaCunha positions himself closer to Nelson, arguing that the labor theory may be useful between players, in the sense that ownership of virtual property should go to the player who invested the most labor into creating the asset. Relating to Nelson’s argument, the real problem is the competing property claims of the developer and the user, since both can invest labor to create new assets. Nevertheless, DaCunha (2010, pp. 51-53) concludes that disregarding the end user license agreement (EULA) using

this justification, particularly in virtual worlds where all or a significant amount of content is developed by the providers of the virtual worlds, could be problematic.

2. Theory of Utilitarianism

Lastowka and Hunter (2004) furthermore, explore whether property rights may apply to digital assets through another normative account of property, the utilitarian theory. Utilitarianism is the belief that the most ethical choice is the one that does the greatest good for the greatest number of people. The literature is full of examples of utilitarianism in respect of granting property rights in real-world tangible property. Intellectual property and the protection of patents and copyright is another area based on utilitarian justifications, according to both authors.

However, just as the theory can provide a necessary basis for providing exclusive rights to intellectual property owners, it can also limit these rights. For example, both copyright laws and patent laws limit the rights of the creator of intellectual property. To attain a patent, certain requirements have to be met and regarding copyright law, there are some exceptions based on fair/private use. Both are also object to time limits, once the time limit expires, so does the copyright or patent protection of the rights holder (DaCunha, 2010, pp. 54-56).

Lastowka and Hunter point out that the limitations placed on intellectual property rights might implicate the necessity to limit virtual property rights as well, regarding time limits, content, or the scope of these rights. Nevertheless, it is obvious that individual users place a high value on the digital assets they create, since they devote time and money into these assets. The collective individual goods of these users total up to a societal good, which justifies extending property rights to users, according to Lastowka and Hunter. One reason for not granting property rights to users is that it may diminish the welfare of other users and virtual world developers and as a result not lead to the greatest good. However, Lastowka and Hunter (2004) conclude that this is a question of allocation of property rights and not a question of granting property rights and do not delve further into this issue. DaCunha problematizes using utilitarianism to justify virtual property rights, and especially the issue of balancing utility between different groups. When issues of balancing occur, who should be favored? If you give the users more utility, it will be at the expense of the virtual worlds developers who will be held more liable. On the other hand, if you provide more utility to the developers, it may affect the users negatively leading to reduced revenue for the developers (DaCunha, 2010, p. 56).

3. Personality Theory of Property

Hegel's theory of property as an extension of personality, has been suggested by Lastowka and Hunter as a potential justification for extending property rights to digital assets. The concept of personality theory is that property rights are closely related, or linked to human rights values such as, privacy, identity and liberty. Property can be seen as an extension of one's personality and one's sense of self. The property value of an object, according to this theory, is not connected to the real-world value, instead, it is based on the inherent value that comes from a person's emotional connection to the object. Granting property rights in virtual property is really not different from granting property rights in real world property, according to this theory, as the effect of property rights to one's sense of self or personality are assumably no different. Lastowka and Hunter argue that there are strengths to this argument, as players feel attachment to their avatar as an extension of themselves. Even some users claim that they relate more to their online personas they have created online than to their real personas (Lastowka & Hunter, 2004). Players in virtual worlds perceive virtual objects as their property, in some cases they even seek help from law enforcement when they feel that their rights have been infringed, such as in cases of theft of virtual objects (Dilla *et al.*, 2013, p. 139).

DaCunha, on the other hand, points out one issue relating to the personality theory of game developers. The developers of virtual worlds create the world in the first place. They invest time, money and creativity into these worlds to the same extent as players, if not even more. Creators of the virtual worlds, get just as emotionally attached to their virtual property as players. DaCunha argues that the developer's original emotional attachment exceeds the one of the player, as the labor invested by developer is far greater than the one of the player (DaCunha, 2010, p. 54).

IV. CURRENT ISSUE OF UNBALANCED RELATIONS BETWEEN USERS AND PROVIDERS

Perhaps one can theoretically argue that users should be granted virtual property rights. But to fully understand the discussion regarding property rights for digital assets, a couple of questions need answers. What are currently the rights of the users and the providers in relation to each other? How are rights and interests currently allocated regarding virtual objects such as in-game items? Can users actually claim ownership of what they perceive as their digital assets? Today providers of virtual

worlds and online games have allocated rights to digital assets through contract, more precisely through the drafting of the EULA.

David Sheldon (2007), in his article "Claiming ownership, but getting owned: contractual limitations on asserting property interests in virtual goods", has analyzed the terms of the EULAs, overseeing a number of different virtual worlds. In particular, he has looked at the way in which rights are formally allocated, through the right to use, the right to exclude and the right to transfer. Firstly, all users must accept the EULA, before they can play in these virtual worlds. To begin with, how is the right of use allocated? Users are generally allowed to use avatars and in-game items connected to their accounts within the context of the game. Though, Sheldon points out that the right of use in virtual worlds is very limited compared to the right of use of a physical thing in the real world. As an example, the providers of virtual worlds require users to abide by certain rules of conduct. Complying with the rules of conduct becomes therefore a crucial condition for the right to use, which is not the case for the use of an object in the real world (Sheldon, 2007, p. 764).

When it comes to the right to exclude, i.e. the right to refrain others from exercising control over the digital asset, this right is not recognized by any provider for its users. Providers retain the right to exclude concerning avatars and in-game items in their EULAs, and that goes for both provider-generated content as well as content created by users in virtual worlds. One exception exists in the game *Second Life*, where users possess intellectual property rights to content they have created, but this is not an absolute right as the provider still reserves some rights (Sheldon, 2007, pp. 764-765).

With regard to the right of transfer, there are differences in the approach of the providers. According to Sheldon, most of the EULAs do not permit transfer of in-game items for real-world money. In other words, there is a total limitation of the right to transfer. Some games, such as *Second Life*, *EverQuest II* and *Entropia Universe* permit transfer of avatars and other in-game items if it is done within authorized platforms or within provider run systems. Providers appear to be incentivized to facilitate these transactions between users, as they stand to gain a share of the revenue that is generated. Nevertheless, the absolute majority of sales of in-game items occurs in so-called grey markets, in unauthorized places that are not recognized by the end user license agreements (Sheldon, 2007, pp. 767-768). The limited rights users are granted are also dependent on providers assisting users in exercising their rights, as the digital

assets in the form of accounts, avatars and in-game items can be found within a specific virtual world (Nekit, 2020a).

Not only are the rights between providers and users initially allocated to favor the interests of the providers, but also during the continued participation of the users in these virtual worlds. In addition to the fact that the providers have the right to write the rules, they can also one-sidedly modify the terms of agreement. This gives the providers extensive power with the effect that users who do not accept the amended agreements have only the choice of either dismissing the agreement completely or agreeing with the new terms by continuing to take part in the game (Sheldon, 2007).

Przemysław Palka points out that providers of virtual worlds have the right and capacity to interpret the terms of the agreements and have the right to make decisions on the basis of their particular interpretation of the terms and to enforce these decisions, since they are in control of the system and the in-game mechanics. This is what Palka refers to as the use of "digital force" (2017, p. 213).

Each of the end user license agreements analyzed by Sheldon allows providers to modify or even delete accounts, avatars and virtual objects. This can be done either by the provider shutting down the virtual world, with the consequence that the accounts, avatars and virtual objects cease to exist, or more commonly by deleting a users' account. A majority of the end user license agreements appear to give the provider of the online games the right to delete a user's gaming account only if the user has violated the terms of the agreement or the code of conduct. Sheldon argues however, that this leaves deceptively extensive powers to the providers, as they can determine if a violation has taken place as they see fit. Providers sometimes even have the right to delete accounts if they suspect that the terms have been breached, or sometimes even for no reason, with the result that users lose their accounts, avatars and virtual objects, with no right to a refund (Sheldon, 2007).

To summarize, the providers have through the drafting of the EULAs the actual power. By maintaining all property rights to all digital assets within the virtual worlds, they can use their digital force to delete what users perceive as their digital possession of their digital assets.

Are there any remedies available to users who wish to protect their interests under the agreements if the provider breaches the agreements? The main remedies available to users are to terminate or cancel their account or to get a refund of paid access fees. According to Sheldon, these remedies will not help much, as they will result in users losing the time and money they have already invested in the game, and losing

the ability to further profit from that investment. Leaving a virtual world will also be difficult due to the wish for users to uphold social and emotional connections within the virtual world. Other remedies than those mentioned are strictly limited. Most of the agreements include provisions that disclaim any interest to or value in digital assets, avatars and accounts. If a user does have a viable claim against the provider of a game, the agreement restricts the ways in which they can seek it, as the EULAs contain mandatory clauses concerning arbitration, fora and choice of law (Palka, 2017, pp. 771-772). It is clear that the current approach is not effective when it comes to protecting users' interests and that the providers want to limit their liability.

V. PROPOSALS FOR PROTECTION OF THE USER'S RIGHTS

Perhaps it is fair to say that the current contractual relationships, provided through the EULAs do not offer users reasonable protection against the arbitrary actions of providers. However, if users deserve more protection and rights to the digital assets they have acquired or created, then how can this current inequality between users and providers be balanced?

Some commentators suggest a more practical approach that goes beyond theoretical justifications for extending property rights to digital assets in virtual worlds.

In his paper, "Virtual property: towards a general theory", Palka (2017, p. 218) suggests that protection of users' interests might be realized by other means than by extending property rights to users. He proposes a solution in the form of a user protection law, which takes on attributes similar to labor law or consumer law. The argument is based on a principle of private law, that is when private relations are subject to conspicuous de facto inequalities due to socio-economic factors, then this should be balanced out. The imbalance should be approached with the perspective of "the protection of a weaker party principle" (Palka, 2017, p. 226). The principle of weaker party protection originates from the European civil law system. The principle has been identified as one of seven general principles in EU civil law, such as the principle of proportionality, principle of non-discrimination and the principle of effectiveness. The idea behind the principle of weaker party protection, is that if legal equality is inadequate to reach full equality or an acceptable balance of power between the parties, then the weaker party should be allowed more rights and a better legal position. This

can also be achieved by restricting freedom of contract to a greater extent than in the more standard area of contract law (Palka, 2017, p. 226).

As an example, this was achieved in consumer law by forbidding unfair commercial practices, introducing an obligation to inform before concluding contracts, creating new remedies for breach of contract, unfair terms legislation and regulating liability. Palka argues that this principle could give a point of compass as this principle is already familiar to the European private law system and would provide consistency. Today virtual world providers have almost unlimited power as a result of their use of “digital force”. Palka (2017, pp. 210-212) presents different ways in which providers can be restricted regarding the use of “digital force”.

The first example given is that providers will have to restrict the use of “digital force” to situations or reasons that are specified in the EULAs or terms of service. This would prevent virtual world providers from arbitrarily terminating accounts, avatars or in-game items for no reason at all, providing more certainty and predictability for users. Secondly, the reasons or situation stated in the agreement would have to be concretely defined and clear. He also proposes that users could have a right to appeal and be given the opportunity to challenge a decision if they feel that the decision is wrong or infringe on their rights, e.g. if the provider has decided and executed the removal of an in-game object or terminated an account for no reason. Lastly, Palka (Palka, 2017, pp. 215-217) suggests a remedy for users – if providers act gratuitously or in breach of contract, they could be obligated to help restore the deleted account or pay compensation.

VI. PROTECTING USERS' RIGHTS THROUGH A THREE-TIERED SYSTEM

DaCunha proposes a methodology to protect users' rights and balance the interests of users and developers in virtual worlds. The method consists of three levels, where the first one is the law that is built into the code. He argues that the foundation for property rights of users is established in the code. Virtual world providers can through the code decide whether users will be granted property rights or not. If providers allow for the creation of virtual objects that meet the requirements to be considered digital assets, i.e. virtual property, then the providers have granted users property rights in these objects by the means of code (DaCunha, 2010, p. 69). The second level presented is the rules of the game. However, the code itself is not enough. The code cannot protect against theft or different kinds of fraud, for example. The rules provided in the game become “virtual statues” that users are obligated to follow. If users don't abide by the

rules, then they can be held liable for loss. Neither the code nor the rules of the game can protect the user from the actions of the providers, because they are created by the providers.

That is when the third level steps in, which is the criminal and civil justice system. DaCunha argues that the courts can solve property disputes between users by interpreting the rules of the game to protect property rights. In the event that a provider causes damage to a user, the user can seek redress in court and ask for assistance in recovering lost property. DaCunha (2010, pp. 70-71) also points out that extending property rights to users might increase the liability and costs of the providers, which may need to be limited, for example by not holding them liable for property loss that is caused by software bugs.

VII. CURRENT DEVELOPMENTS REGARDING THE PROTECTION OF USERS' PROPERTY RIGHTS

As seen above, there are different approaches to the complexities of creating a virtual property regime. The status for digital assets or virtual property is far from certain. Nonetheless, these are current issues that courts have to deal with. What are some current developments regarding the question of virtual property rights? One early case regarding the enforceability of an EULA under American contract law, was the *Bragg v. Linden Research* case from 2007¹. In this case, Bragg, a user of the game *Second Life* sued the provider of that virtual world, for illegally terminating his account and his in-game property. The case was later settled between the parties, however the court came to the conclusion that the EULA of *Second Life* was unenforceable as a result of its unconscionable arbitration clause². Arguing against a contract as unconscionable was also suggested by Sheldon (2007) to protect users' interests.

Regarding the question whether stealing a virtual object is regarded as theft in the real world, the Dutch Supreme Court decided in 2012 that a boy was guilty of theft, after he had stolen another boy's virtual amulet and mask in the online game *RuneScape*. The court reasoned that the in-game items had intrinsic value as a result of the time and effort he had invested in acquiring these items (Lodder, 2013, pp. 1-12).

The regulatory landscape regarding digital assets is currently under development in Europe. In the report "ELI Principles on the Use of Digital Assets as Security", published in 2022, the European Law Institute suggests a definition of digital

¹ *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593 (E.D. Pa. 2007).

² *Idem.*

assets that includes several types of virtual objects. Online gaming accounts can be considered digital assets if they meet the following requirements, firstly that they exist, exclusively, in the digital world. Secondly, that the accounts (may) embody value. Thirdly, that the accounts are subject to substantial (or, indeed, exclusive) control and lastly, that the gaming account may be transferable/assignable between parties. The last requirement will not only be dependent on the provisions in the contractual agreements, i.e. the EULA between the provider and the user, but also on the recognition by the courts of the validity and enforceability of such agreements (European Law Institute, 2022, p. 20). As mentioned earlier, most providers of virtual worlds restrict the right to transfer in their EULAs, which can be an obstacle for fulfilling the proposed requirements.

The categorization of digital assets is however not uniform. UNIDROIT presented in 2023 their *Draft UNIDROIT Principles on digital assets and private law*. The aim of UNIDROIT is to create uniform and co-ordinated law instruments, principles and rules between different countries. In their draft, social media accounts or the data stored in them, are not recognized as digital assets as the licensing agreements prevent users from obtaining "control" which is a requirement according to Principle 6 (UNIDROIT, 2023). Online gaming accounts and in-game items share the same issue of licensing agreements preventing the user from obtaining control and would probably also not be recognized as a digital asset according to the principles.

The EU has developed the Digital Services Act that aims to protect users of digital services' fundamental rights online. The rules set out in the Digital Service Act apply primarily to online platforms and intermediaries. The Digital Services Act concerns digital services, such as social media platforms, online marketplaces, app stores, content-sharing platforms and online platforms that accommodate travel (European Commission, 2023). The Digital Services Act provisions are applied to all platforms from February 17, 2024. Depending on its functionality, an online game or virtual world may fall under the scope of the Digital Services Act. Examples of such functionalities are games which have a guild or clan system, which allows multiplayer communication (but the regulation does not apply in cases where the communication is only a subordinate or minor part of the digital service). A game may also fall within the scope of the regulation if the game facilitates the creation of content by users and the distribution of the content within the game (such as recording and sharing videos). If the virtual world provides some kind of social media functionality that allows for communication to all users in the virtual world, then it may also fall within the scope of

the regulation. Those who are subject to the Digital Services Act must comply with new obligations, such as providing clear and unambiguous terms and conditions regarding the use of their service, obligation to inform users of any significant change to the terms and conditions, providing a notice and action system and providing an internal complaint handling system with option to appeal to an out-of-court dispute settlement body (Linklaters, June 05, 2023).

VIII. CONCLUSION

There might be theoretical justifications for extending property rights to digital assets, such as online gaming accounts and in-game items as they share features similar to real world property. But there will indeed be complex issues and concerns arising from their contractual nature. However, even if it is possible to recognize property rights to online gaming accounts and in-game assets, the question of how these rights are going to be allocated remains. The providers of online games and virtual worlds have retained all property rights, leaving users with no useful remedies if they fall victim to the arbitrary actions of the provider, such as getting an account terminated for no reason. Solutions to balance this inequality have been offered by different commentators, with some proposing solutions other than recognizing property rights to virtual objects, such as a user protection law. Palka's approach is probably not too far from reality as the Digital Services Act, might be the first practical attempt and an advancement in Europe towards a safer digital world that is more protective of users and consumers' rights and interests.

As the regulatory landscape for digital assets and user protection evolves, the courts will also need to address the issues that arise. It is perhaps not unreasonable to assume that courts in the recent future will have a different approach and perception towards providers' use of EULAs and their use of "digital force". This paper only covered questions of property rights in online gaming accounts and virtual worlds, nonetheless this draws attention to similar questions regarding providers contractual control over users' interactions on the internet and even in society, specifically considering the giants of online platforms.

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