

The Evolution of Property Rights in the Digital Economy

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Abstract: In today's digital era, ownership of intangible assets has become so widespread that the concept of property ownership increasingly appears to be a fiction. This is because the notion of "digital property" has yet to find its place in legislation. To address this issue, should electronic assets also be recognized as personal property, or is it more beneficial to maintain the traditional legal theory unchanged?

Keywords: economy, digital economy, platform, digital property, artificial intelligence, digital rights, blockchain, bitcoin, property law, intellectual property.



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First, it is appropriate to define the term "economy." The economy is a system of managing resources, utilizing various goods created by humans to sustain and improve life, and ensuring the continuous circulation of goods and services between firms and households.¹

As Professor Harbhajan Kehal writes, "The essence of the new economy lies in the transition from an industrial economy to an economy based on information, intangible assets, and services, as well as in structural shifts related to changes in work organization and institutional forms. Many new terms have been created to describe this new economy, including 'knowledge-based economy,' 'borderless economy,' 'weightless economy,' 'networked economy,' 'digital economy,' 'information-based economy,' and 'interconnected economy'" (Woodall, 2000; Sharma et al., 2004).

The digital economy consists of the integration of communication, computing, and information technologies. The new economy primarily focuses on coordination, innovation, selection, and learning (Gärden, 2002). The convergence of computing technologies and new business models

¹ D.Tojiboeva. Iqtisodiyot nazariyasi. To'ldirilgan, 2-nashri. O'quv qo'llanmasi. TMI., T.: 2005, 438 bet. 6-bet

has created entirely new markets, industries, businesses, and work methods, shaping today's digital economy.

The new economy, or digital economy, develops primarily through intangible assets, information, innovation, and creativity, expanding economic opportunities (Persaud, 2001). Unlike the traditional economy, it is based not on physical goods but on the exploitation of ideas. The focus of the new economy has shifted from processing material resources to creating, exchanging, and distributing knowledge, intellectual property, and intangible assets.

The transformation of production and business processes and their symbiosis with information and communication technologies (ICT) is the main driving force behind the new digital economy. Understanding the new economy requires recognizing the role of services and how they are measured. Modern industrial enterprises primarily produce services that are integrated or embedded in products. A large portion of these services relies on information in some form (Gärdin, 2002).

Key Elements of the Digital Economy:

- ✓ Widespread and intensive use of information and communication technologies (ICT);
- ✓ Codification of knowledge;
- ✓ Conversion of information into tradable goods;
- ✓ New methods of organizing work and production.”¹

According to a publication by the Center for Advanced Legal Studies of the Ministry of Justice of the Republic of Uzbekistan, the need for a digital economy has been one of the factors leading to the emergence of cyber law.¹

Thus, the digital economy refers to economic activities arising from the interconnection of individuals, enterprises, devices, data, and certain operations through digital technologies. It involves online transactions carried out via information and communication technologies, the internet, big data, and mobile technologies. Its main difference from the traditional economy lies in the effective use of innovations and technologies.

The digitalization of the economy compels property law to evolve to a new level. Issues such as property relations based on blockchain technologies, digital property rights, digital inheritance, ownership of objects created by artificial intelligence, and smart contracts are directly related to property law and require legal regulation. While these matters are not entirely unregulated, the existing laws may not be sufficient.

For instance, consider digital property. "Digital property" (sometimes referred to as "virtual property") consists of assets that exist in digital form, belong to a specific individual, and have material value. Examples include cryptocurrencies; digital content such as e-books, digital music, and online videos, which are intellectual property objects; purchased digital software and online subscriptions; social media profiles; domain names and websites; and other virtual goods. In Uzbekistan, Article 3 of the Law "On Property" lists the objects of property rights. However, none of the listed objects explicitly recognize digital assets as property.

Professors' Opinions on Virtual Property Rights

According to the theory of property law, if a person has the legal right to possess, use, and dispose of an object, that person is considered as full owner of that object. Professor M. Baratov states that "ownership rights refer to a person's actual control over an object."¹ The scope of ownership rights is not limited by physical distance (the distance between the owner and the property is not a determining factor). The most important aspect is that the owner must be able to exercise their authority over the property at any time and apply legal influence. Ownership rights should not be

obstructed by third parties. If third parties interfere with an owner's right to possession or if the property is under someone else's actual control, then full ownership rights cannot be effectively exercised.²

From an international perspective, legal scholars have proposed four theories to justify users' property rights over virtual objects in massively multiplayer online games (MMOGs). These theories are:

1. Lockean Labor Theory
2. Personhood Theory
3. Theft Protection and Deterrence Theory
4. Utilitarian Theory.¹

One of these, the **Personhood Theory**, developed by Margaret Jane Radin, argues that personal property should be inalienable from the market. "Under the Personhood theory, property that can be considered 'personal' property should be made inalienable from the market. This is based on the premise that, if a virtual object is really invaluable to a user, they cannot put a price on it. What this means is that users can never sell this type of property. This becomes problematic when users try to sell 'personal' property like avatars. 'Personal' property should have the user so personally invested in it that it has become part of their identity, making it market inalienable. The main reason users want property rights is to be able to sell their virtual property, including avatars. This theory would either prevent them from doing so or would fall apart completely as a theory for justification. After all, we would need to start treating avatars as 'fungible' property so that they can be sold. This conflicts with the initial justification for property rights based on the fact that users so closely identify with their avatars that they can be considered 'personal' property.¹" Thus, this theory imposes **restrictions on an individual's right to control and dispose of virtual property**, limiting their ability to trade or transfer their digital assets.

Negative Consequences of Unregulated New Property Rights

Welcome to 2023. I own nothing, have no privacy and life has never been better.

Ida Auken

The digital economy brings significant benefits in today's digital world. However, from a property rights perspective, this evolution also has considerable drawbacks. The video "How Gen Z is Doomed to Own Nothing, but Pay Forever" by Ashley Embers on YouTube explores this issue in detail. According to the video, the development of the digital economy will result in Generation Z (born between 1997 and 2012) living a lifetime of payments without actually owning anything. Why? Because many companies today are not just offering services—they are restructuring their economic models. Take, for instance, the applications we use daily. Major platforms like Telegram, Canva, CapCut, Netflix, and Spotify have begun operating differently. Specifically, when you download these apps, you receive standard services, but if you are a professional videographer, designer, film, or music enthusiast, these basic services may not be sufficient. You can only access premium features after purchasing a monthly subscription. Subscription-based policies have evolved to such an extent that companies, in pursuit of higher profits, now introduce additional "terms" disguised as opportunities.

² Mulk huquqi / Huquqshunoslik ixtisosligi bo'yicha oliy o'quv yurtlari magistratura talabalari uchun darslik. -T.: TDYI nashriyoti, 2009. -336 bet. 53-bet.

Loss of Digital Ownership: A Threat to Property Rights

There have been cases where **Spotify and Kindle** deleted certain users' accounts. Imagine losing your favorite **songs or books** in an instant, even though you paid for a premium subscription. Such digital services undeniably violate an individual's **property rights**.

A well-known case from **2009** highlights this issue. The details of the incident are as follows: **Amazon customers had purchased certain books from the Kindle store**. Later, Amazon remotely deleted these books from users' Kindle devices, arguing that the books had been illegally published. This situation demonstrates that **digital ownership is not equivalent to traditional ownership**, as users have limited control over their digital assets. In reality, **online profiles, uploaded content, and purchased digital items—what we perceive as personal property—are not fully under our control and can be revoked at any time**.

Traditionally, property rights include three key aspects: **ownership, usage, and disposition**—all of which belong exclusively to the property owner. However, as seen in the cases above, **the right to control a digital asset is not only in the hands of the owner but also in the hands of the platform that stores it**.

Evolution of Property Rights in the Republic of Uzbekistan

Property rights are one of the fundamental elements of any legal system, and in Uzbekistan, their formation and development have gone through various stages. In particular, after the country gained independence, significant changes were made to property rights regulations. In the modern era, the rise of the digital economy has led to the emergence of new forms of property rights.

As part of the "**Digital Uzbekistan – 2030**" strategy, several reforms have been implemented. In the draft of the **Labor Code of the Republic of Uzbekistan**, several innovations related to digital rights have been introduced. Specifically, **Articles 167-168** define regulations on **digital currency and digital rights**. Notably, **Article 168** establishes who holds the right to dispose of digital property. According to this article, the use and disposal of digital rights—including their transfer, pledging, or restriction—must be carried out exclusively through an **information system**, without involving third parties. Unless otherwise specified by law, the individual authorized to dispose of these rights within the information system is considered the **legal owner of the digital right**.

Although this draft law has not yet come into force, it serves as clear evidence of the **development of property rights in Uzbekistan**. Additionally, Uzbekistan has adopted the **Law on Creative Economy**, which defines creative economy as a sector focused on creating economic value through creativity, intellectual abilities, innovations, and technologies. The primary objective of this law is to develop the economy by leveraging **modern technologies**.

Furthermore, **Professor Yakubov A. N.**, in his dissertation titled "**Digital Property Rights in Cyberspace and Their Legal Regulation**," has identified gaps in **Uzbekistan's legislation** and proposed amendments and additional provisions to improve existing laws.

International Experience

The **Gesetz über elektronische Wertpapiere (eWpG)**, or the **Electronic Securities Act**, is a legal document in Germany that regulates the issuance and use of securities in electronic form. This law was adopted in **June 2021** to modernize Germany's financial market for the digital era. Previously, German legislation required all securities to be issued in **paper form**, making transactions more complex and costly. The **eWpG** eliminated this requirement, allowing securities to be issued and traded using **blockchain or other electronic registries**.

The **Kapitalanlagegesetzbuch (KAGB)** is a fundamental law regulating the activities of **investment funds and their managers in Germany**. It came into force in **2013** and establishes

rules related to the **formation, management, and oversight of investment funds**. Amendments made to the **KAGB in 2021** enabled **professional investors** to invest in **cryptocurrencies and digital assets**, marking a significant step in solidifying the **legal status of digital financial instruments in Germany**. Furthermore, the term “virtual currency” used in Article 1(2)(d) of the 5th Money Laundering Directive, which is designed to cover all potential uses of virtual currencies, will also prove significant: “digital representation of value that is not issued or guaranteed by a central bank or a public authority, is not necessarily attached to a legally established currency and does not possess a legal status of currency or money, but is accepted by natural or legal persons as a means of exchange and which can be transferred, stored and traded electronically”¹ In 2018, the Federal Supreme Court (BGH) ruled that the **contract of use of an account on a social network is inheritable** (BGH, judgment of 12 July 2018, ref.: III ZR 183/17, para. 22). Accordingly, the heirs enter into the contractual legal position under § 1922 (1) German Civil Code (BGB), so that any rights and obligations of the deceased under the contract of use pass to them. This matter also applies, in principle, to email accounts.³

Conclusion

In conclusion, the development of the **digital economy** has significantly impacted **property rights**. New concepts such as **digital property, crypto assets, blockchain technologies, and smart contracts** require **legal regulation**. In Uzbekistan, it is essential to **improve the legal framework** for clearly regulating **digital property rights**. The relationship between the **digital economy and property rights** needs to be studied in greater depth. Utilizing **international experience** and **advanced legislative practices** in this area will contribute to the further **development of the country's legal system**.

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