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### BLOCKCHAIN AS A LEGAL MEANS OF PROTECTING DIGITAL RIGHTS

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This article discusses the specifics of a new type of activity for the Republic of Belarus – Blockchain as a means of protecting digital rights of subjects of civil law relations. Within the framework of the subject under study, the features of Blockchain are considered in conjunction with financial instruments. The types of Blockchain technologies with the help of which it is possible to obtain information on transactions and deals as well as their features are discussed. The conclusion on the relationship of the smart contract and the Blockchain technology is proposed. The necessity to introduce a definition of the concept of "digital rights" into the legislation is justified.

Currently, the development of modern telecommunication systems has led to the creation of new objects of civil circulation, such as cryptocurrency, as well as related activities: cryptocurrency mining, cryptocurrency blockchain. The transformation of values that are of interest to civil society actors is the consequence of the factors that have contributed to the transition to the digital economy. In the context of this phenomenon, issues of digital rights of entities inevitably arise.

Being regulated by law, public relations in the field of implementation and protection of digital rights become legal relations. Determining the nature of these relationships and their place in the civil law system and the digital economy is inextricably linked to the very understanding of digitalization.

As noted by R. Sitdikov and R. Sitdikova, the term "digital rights" refers to universal human rights adapted to the conditions of the information society, in particular, the right to information exchange, the right to privacy, the right of access to an electronic network [1].

The normative consolidation of "digital rights" is contained in Art. 141.1. of the Civil Code of the Russian Federation. According to this article, "digital rights" are recognized as mandatory and other rights referred to as such in the law, the content, conditions and the implementation of which are determined in accordance with the rules of the information system that meets the criteria established by law. Unless otherwise provided by law, the owner of a digital right is a person who, in accordance with the rules of the information system, is entitled to dispose of this right [2].

In the Republic of Belarus, digital rights in general do not have a normative legal basis: in the Civil Code of the Republic of Belarus in article 128 only a list of types of civil rights objects is defined [3]. Although the Decree of the President of the Republic of Belarus No. 8 of December 21, 2017 "On the development of the digital economy" contains such notions as digital money, the types of these rights are not mentioned [4].

Of course, the current situation raises the issue of protecting the interests of users of the system, including the protection of their digital rights, which is reflected in the form of "blockchain" technology.

The given Blockchain technology (blockchain) is implemented and takes place next to digital rights. Since digital distribution is the basis of every modern service (VKontakte, Instagram), the technology of register distribution is becoming the main and probably the only factor of influence on the Internet [5].

It is noteworthy that in the framework of the legal structures of different countries, the use of the term "financial instruments" is carried out on a par with the Blockchain, but at the same time it has significant differences. Today, financial instruments have their own characteristics:

1. Absolute cross-borderness.

2. Cross-platform.

3. Ease of use.

- 4. Instant operations.
- 6. Low and zero transaction fees.
- 7. High security level thanks to cryptography.
- 8. Decentralization.

9. Full transparency of the origin and movement of funds between accounts [6].

According to the Decree of the President of the Republic of Belarus No. 8 of December 21, 2017 "On the development of the digital economy", the register of transaction blocks (blockchain) is a sequence of blocks with information about the operations performed in such a system, built on the basis of given algorithms in a distributed decentralized information system using cryptographic methods of information protection [4].

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Based on the definition of the concept, Blockchain can be attributed to ways to protect civil rights. In the broad sense, Blockchain can be compared to the work of an antivirus that protects software on a computer, laptop, pad or smartphone.

Blockchain technology is usually divided into two types that are used in the modern world: public and private.

1. Public Blockchain technology is available to a wide range of individuals. Their essence is that any person can record and read data. In this case, there is a certain resemblance to mining with the help of video cards.

2. Private one is available to a limited number of individuals. In this case, data recording and data reading are carried out only by certain individuals who can set priority nodes for the transaction. At the same time, there is some resemblance to the cryptocurrency exchange, where the organizer of the auction and the members of the auction participate. It should be noted that in a private Blockchain all transactions are carried out much faster than in a public Blockchain [7].

When considering Blockchain from legal positions, including civil law ones, certain reasons are identified for classifying this activity as a component of electronic transactions. In fact, this is an electronic code with the help of which certain transactions are carried out, and the corresponding legal relations arise. They are carried out at stock exchanges and trades held on the Internet, they do not require much time for their verification or preparation. Electronic transactions also secure certain rights and obligations of the parties; in addition, they may entail risks associated with their implementation.

In special and legal literature, electronic transactions (or part of them) are sometimes defined as a smart contract. Their convenience is determined by the following factors.

1. Such transactions are signed only in electronic form, and their implementation can occur through a certain code (block) – Blockchain.

2. The named code (block) is calculated through a specific program or system – it can be, for example, mining. Its implementation requires special systems and programs.

Mining is an activity other than creating your own digital signs (tokens) aimed at ensuring the operation of the register of transaction blocks (blockchain) by creating new blocks in this registry with information about transactions [4]. In other words, "mining" is a way of obtaining cryptocurrency using certain operations. Mining, in fact, means earning money by the creation of certain combinations and codes for cryptocurrency, thereby making some specific profit.

3. There is no third party in such transactions, all the fulfillment of obligations lies on the parties of the transaction (for example: buyer and seller) [8].

Mining, as a type of activity, is inseparable from the final result to which it is directed. However, determining its legal nature (be it work or a service) is problematic today. The indicated activity makes it possible to transfer work to automatic mode. Thus, the personal participation of the user in the auction is minimized, while he continues to receive a stable profit. This method is very attractive, but its application requires special knowledge.

Based on the foregoing, we can conclude that a smart contract is a computer algorithm designed to generate, control and provide information about owning something. In a narrower sense, a smart contract is a set of functions and data located at a specific address in Blockchain.

Therefore, there is a certain relationship between the categories of "digital rights" and "Blockchain", which means that it is necessary to develop and adopt legal standards governing relations in this area in a complex and interconnected manner.

Blockchain technology itself is important for creating rights registries that confirm digital rights to civilian objects [5].

Thus, Blockchain (blockchain), as noted earlier, is a means of protecting digital rights on the Internet, and therefore, it would be advisable to include the definition of "digital rights" as a norm of the Decree of the President of the Republic of Belarus No. 8 of December 21, 2017 "On the development of the digital economy". In the future, it seems to be necessary to adopt a permanent legal act regulating relations in the digital sphere.

However, as N. Makarchuk notes, sometimes Blockchain technology does not cope with information leaks due to hacker attacks, therefore, it is necessary to provide for the protection of digital rights, as in the case of civil rights [9].

Since digital technologies create new prerequisites for the legal regulation of public relations, their development requires an adequate legal regime for the regulation of digital rights.

#### REFERENCES

1. Ситдикова, Р.И., Ситдиков, Р.Б. Цифровые права как новый вид имущественных прав // Гражданское право. Вопросы имущественной политики. – 2018. – № 9. – С. 75–80.

# ELECTRONIC COLLECTED MATERIALS OF XII JUNIOR RESEARCHERS' CONFERENCE Edication, Social Studies, Law, Gender Studies

2. Гражданский Кодекс Российской Федерации. Часть первая [Электронный ресурс] : Федеральный закон, 30 ноября 1994 г., № 51-ФЗ : принят Государственной Думой 21 октября 1994 г. : одобрен Советом Федерации 8 дек. 2006 г. // Официальный интернет-портал правовой информации [Электронный ресурс]. – Режим доступа: http://www.pravo.gov.ru/proxy/ips/?docbody=&nd – Дата доступа: 19.03.2020.

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- 3. Гражданский кодекс Республики Беларусь [Электронный ресурс] : 7 декабря 1998 г., № 218-3 : принят Палатой представителей 28 окт. 1998 г. : одобр. Советом Респ. 19 января 1998 г. : в ред. Закона Респ. Беларусь от 4.05.2019 г. // ЭТАЛОН. Законодательство Республики Беларусь / Нац. центр правовой информ. Респ. Беларусь. Минск, 2020.
- 4. О развитии цифровой экономики [Электронный ресурс] : Декрет Президента Респ. Беларусь, 21 декабря 2017 г., № 8 // ЭТАЛОН. Законодательство Республики Беларусь / Нац. центр правовой информ. Респ. Беларусь. Минск, 2020.
- 5. Карцхия, А.А. Цифровое право как будущее классической цивилистики // Копирайт. Вестник Российской академии интеллектуальной собственности. 2019. № 2. С. 1–15.
- 6. Генкин, А. Блокчейн. Как это работает и что нас ждёт завтра / А. Генкин, А. Михеев. Минск: Альпина, 2019. 586 с.
- 7. Вайпан, В.А. Основы правового регулирования цифровой экономики // Право и экономика. 2017. № 11. С. 5–18.
- Лукоянов, Н. В. Legaltech: смарт-контракты сквозь призму современного частного права [Электронный pecypc] // Юридические исследования. 2018. № 7. Режим доступа: https://nbpublish.com/library\_read\_article.php?id=26782. Дата доступа: 09.01.2020.
- 9. Макарчук Н.В. Публично-правовые ограничения использования криптовалют как способ минимизации возможных рисков цифровизации экономики // Право и цифровая экономика.– 2018. № 1. С. 21–24.