## CRYPTOCURRENCIES AND BLOCKCHAIN AS ATTRIBUTES OF THE NEW ECONOMY

## Ermak D.S.

Belarusian State University of Informatics and Radioelectronics Minsk, Republic of Belarus

Tytiukha Y.A. - Lecturer

In the paper we will consider the features of the use of cryptocurrencies and blockchain in the modern world. Taking into account the development of technology and society, cryptocurrencies are becoming more and more in demand nowadays.

Consider the use of cryptocurrencies and blockchain in the modern world. Taking into account the development of technology and society, cryptocurrencies are becoming more and more in demand in our dynamically changing reality. But, like any new promising technology, they have their advantages and disadvantages, which we need to consider further.

A blockchain is a continuous sequential series of blocks built according to established rules that contains information. In the blockchain, the token itself is a carrier of value determined by the market.

But how does the blockchain work? For a network that transmits data without intermediaries to work, other new blocks must be created in it. When the operation is completed, the data record appears on many computers around the world. Every 15 minutes, a new block appears on the network with information about operations for the past 15 minutes [1].

The first and one of the important points to note is their convenience. Cryptocurrencies allow you to make all the necessary transactions using only your mobile phone or computer. Undoubtedly, this is a very comfortable way, which is truly able to save you from many inconveniences, and already now we can safely say that the future lies precisely behind it or behind similar technologies.

The second point we can call the complete anonymity of transactions. For people who fear for their information security, this will undoubtedly be quite a weighty argument for switching to cryptocurrency transactions, since, thanks to blockchain technology, transactions are almost impossible to track, and this method of making payments is optimal for people who want to keep their payment transactions secret.

It is also possible to note the speed of transactions, in contrast to the rather cumbersome, complex and multi-stage banking system, which is slow and unwieldy. Cryptocurrencies provide a perfect way of carrying out transactions in their simplicity, in which there is no intermediary in the person of a bank. Thus, this payment method also brings convenience to our life full of haste, which is undoubtedly a virtue [2].

Cryptocurrency is a kind of digital currency, accounting for internal units of account of which is provided by a decentralized payment system operating in a fully automatic mode. It can act as a means of payment, property and as a means of storing value in a database.

One of the most important advantages is the smooth operation of the system. Taking into account the previously presented information about the mechanisms of the blockchain, we understand that the decentralization of this process allows the system to work even in the event of failure of individual large transaction nodes. This is quite a profitable side for a simple user.

But, it is worth noting the negative aspects of using this technology. This paragraph is about anonymity. Unfortunately, this property of the technology can be used as a means of hiding financial fraud and providing payment for various kinds of criminal services. All the above-mentioned operations are carried out through cryptocurrencies, as their use minimizes the chance of the transaction being tracked.

The leader among the CIS countries in the introduction and development of blockchain technologies and cryptocurrency transactions is, of course, the Republic of Belarus. A decree "On the development of the digital economy" was adopted in Belarus, where the concepts of cryptocurrency and token (digital sign) were fixed at the legislative level.

As a result, Belarus has achieved great success in this area, many startups and projects have appeared. Here, for the first time among the CIS countries, a crypto exchange has appeared on which you can openly trade and exchange cryptocurrency [3].

It should also be noted the excessive volatility of cryptocurrencies. Unfortunately, the cryptocurrency exchange rate is not tied to the economic state of any state, it is too volatile and unstable [4].

58-я научная конференция аспирантов, магистрантов и студентов БГУИР, 2022 г

There are different opinions about the similarity of electronic money and cryptocurrencies. Although electronic money and cryptocurrency are digital currencies, there are a number of important differences between them.

In order to find the existing differences between cryptocurrencies and electronic money, we will perform a comparative analysis between them (Table 1) [3].

Nº	Parameter	Cryptocurrency	Electronic money
1	Coordinating body	not available	national Bank
2	Control Form	decentralized	centralized
3	Emission	generated on a private network	issued by a state bank
4	Rate	depends on the demand and supply of network users	depends on political, economic and other factors
5	Legal status	not regulated	regulated by the state
6	Client identification	not conducted (anonymous client)	held
7	Presence of intermediaries	missing	there are
8	Degree of risk	high	minimized by the state
9	Transaction cost	low	high
10	Possibility of forgery	excluded	available

Table 1 - Relative evaluation of electronic money and cryptocurrency

In addition, it should be noted that there is no protection when using cryptocurrencies. Various cryptocurrencies do not have legislative regulation, which can create certain inconveniences when trying to resolve any cases related to this form of payment in court.

The growth in the development of blockchain technology shows the active cooperation of organizations from around the world in the creation and use of this technology in the research field, information engineering, in the field of defense technologies, intelligent industries, automation. This shows that blockchain technology is in demand for a good solution to the problems of various organizations in different countries of the world.

## **References:**

1. What is Blockchain in Simple Words? — [Electronic resource]. — Access mode: https://miningcryptocurrency.ru/blockchain/#\_8212 — Date of access: 24.03.2022.

2. Cryptocurrency and Blockchain: This Future (Pros and Cons of Technology) – [Electronic resource]. – Access mode: https://medium.com/theblock1/cryptocurrency-and-blockchain-the-future-9cd689e977ca – Date of access: 24.03.2021.

3. Cryptocurrency and Blockchain Technology – new Realities of the Modern Economy – [Electronic resource]. – Access mode: https://www.researchgate.net/publication/347309383\_Cryptocurrency\_and\_blockchain\_technology\_-\_new\_realities\_of\_the\_modern\_economy – Date of access: 25.03.2022.

4. Blockchain Technology. Cryptocurrency: the Essence and the Future – [Electronic resource]. – Access mode: https://moluch.ru/archive/400/88612/ – Date of access: 25.03.2022.