

## Секция 5. Информационные системы и технологии в экономике, образовании и полиграфии

## APLICATION OF TECHNOLOGY BLOCKCHAIN IN ECONOMY Tereshchenko G.Y. Kharkiv National University of Radio Electronics

Blockchain is a database in which you can store records about objects and reallife events. At the same time, blockade is significantly different from other similar technologies due to its openness and reliability. Records in the blockade are almost impossible to forge, replace or delete. At the same time, everything fixed in the block is easy to check and make sure the records are correct.

Currently, this technology is used most often in crypto-currencies, such as the well-known bitcoin. Developers usually try to create their analog bitcoin, in which they try to take into account the errors of the founder and bring something of their own. That is why, when studying the technology of a distributed database, one can see a lot of technologies that are similar to each other [1].

The concept of blockchain arose long ago and is now used primarily in conjunction with the crypto currency bitcoin. The essence of technology in the distributed storage of information relating to any vital issues. Simply put, it's a database, a registry, which allows us to permanently fix an event.

The railway changed our notion of distance: the world became closer, we began to move faster on it. Aircraft helped us to reduce the distance between the continents. Telecommunications allowed to communicate freely and influenced the ways of information transfer. But the issue of fixing property rights remains unresolved. The institution of the state and the notary himself has been discredited: it is easy to forge any documents that prove your ownership of one or another object of the physical world.

Blockchain is needed everywhere, is there a question of potential mistrust between the participants. For example, when buying and selling, there are always at least two questions: will the seller receive money and will the customer receive the service / goods. Similarly, when you receive important documents, you also need to make sure that the documents are not forged and relevant. In addition, in many situations it may be necessary to find out the true history of a product, service, company or person. For these tasks, blockchain will be very useful and relevant. One of the areas of application of block technology is "smart contracts", which are applied in various sectors of the economy, in particular - insurance, lending and notarial services [2].

Blockchain is designed, among other things, to solve the problem of fixing property rights once and for all. That is why it is so important for business, because ownership is one of the cornerstones of business. And if now this way of storing information is a novelty, then remember that the word "google" 20 years ago looked like a set of letters. I believe that after 20 years the blockchain will also not be exotic, but will become a habitual way of storing any important information - financial transactions, property data, and ideally a single passport containing data on DNA, funds and property rights.



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And having lost the documents of the physical world, you can by a drop of blood prove that you are you, and get back all the objects that belong to you by right [3].

It is known about the recent change in Ray Kurtzweil's prediction, Google's technical director, who reduced the timing of the onset of the singularity by almost half. We must now understand that the speed of change, including the emergence of new technologies, is growing catastrophically. And the technology of blockchain will play a significant role in this.

Many are not yet ready to tolerate such changes, but after all, a wired phone was once also a frightening curiosity. Blocking is a serious change that simply changes our attitude to the right of ownership and the way of fixing certain events.

Companies will have the opportunity to conduct any financial, insurance and other transactions in an environment where everything is fully automated, since the transaction will be considered perfect if there are signatures from both parties and all the terms of the contract are fulfilled. All this is fixed within the system, and there is no possibility of interference in the process of execution or signing of the contract, that is, it is impossible to change its conditions at any time, until all the participants in the contract agree to this. This excludes any fraud, which in turn will be very interesting to users of the system and also helps to exclude undesirable intermediaries. In addition, the block can be used in the sphere of notarial services.[4]

Also worth noting is the usefulness of using blockade in the media sphere. In the last two decades, digital technologies have greatly influenced the entertainment industry and the media sphere. Still, the problems have not disappeared, especially when it comes to free copying of content and issues of compensation to authors for the fact that their works are used or sold through legal channels of distribution. With the help of the blockbuster, it is possible to solve this problem both by directly communicating musicians, writers and videographers with their clients, and by restructuring the processes within the main players of the media market. The technology of blocking can also be used to create technologies to automate most business processes. In particular, AIRA technology allows managing a decentralized autonomous organization, adding agents, creating contracts and values, in other words - automating the company's business processes.

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3. Tapscott D. Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money, Business, and the World / D. Tapscott, A. Tapscott. – NY: Portfolio, 2016. – 368 p.

4. Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction / [A. Narayanan, J. Bonneau, E. Felten and others] // Princeton University Press, 2016. – 336 p.