Dyachenko D., graduate student, State Biotechnological University

BLOCKCHAIN TECHNOLOGIES AND THEIR APPLICATION IN THE BANKING SECTOR

Blockchain is a promising technology that is built on the principle of connecting blocks of data that form an integral chain of information. Blocks are linked in chronological order. Data protection is ensured by checking the hash sums of all blocks and ongoing transactions by all participants in this network [1].

The study of the possibilities of using blockchain technology in banking sulfur showed that this technology has both advantages and disadvantages over traditional methods of conducting financial transactions. The main advantages are:

- the ability to create such financial instruments as: cryptocurrencies, national digital currencies, as well as data arrays on operations and transactions;
- obtaining information about all previous owners, which increases the transparency of operations in the financial market;
 - increasing the reliability of information storage;
 - high speed of operations.

The wide possibilities and significant advantages of blockchain indicate that in the future this technology will be widely integrated into the process of circulation of values. On the basis of blockchain technologies, instruments of the securities market and the foreign exchange market can be formed.

The disadvantages of blockchain technology include:

- the absence of rules for determining the zone of territorial jurisdiction;
- contradictions and difficulty in enforcing existing laws.

As the study showed, blockchain technologies are not yet sufficiently adapted for full integration into existing business projects. By providing customers with modern financial products, the bank is trying to maintain its technological advantage. At the same time, there are no clear standards for the implementation of blockchain technology yet, which means that it is problematic to ensure the security and reliability of blockchain-based services. In addition, a certain difficulty is the lack of the required number of specialists who have both knowledge in the field of banking and in the field of blockchain technologies.

At the same time, based on the blockchain, banks invent new promising products and services. The most active in this process are the banks of South America. Thus, one of the largest financial institutions in Brazil, Itaú Unibanco, began using the service for international financial transactions.

Another successful example of the use of blockchain technologies was the service for opening accounts through the blockchain, developed by the commercial bank ABN AMRO (Netherlands).

The prospects for the introduction of blockchain technology are widely appreciated by the government of Ukraine. Currently, an active process of forming a legislative framework is underway, which would effectively implement and apply all the advantages of blockchain in various business areas.

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