

Features of the use of Blockchain Technology in the Economy

Mukhammedova Zarina Murodovna

Associate Professor of the Department "Finance"

Abstract

The paper also describes the main technological aspects and principles of the blockchain, which allows us to evaluate the use cases presented. After all, throughout history you can see evidence of the ability to change the value of a business. Today's Internet serves as a digital marketplace, a platform for economic activity and a repository of virtually all human knowledge. The authors describe the main stages of evaluating a potential idea regarding the main aspects of the blockchain. This helps to understand the need to develop a detailed model of the feasibility of a blockchain. The overarching theme is that an increasing number of daily transactions involving money, stocks, and valuable documents can begin to be transmitted through distributed network registers based on a chain of blocks with cryptographic protection and with a better level of detail.

Keywords: blockchain, economy, banks, money, digital asset, payments, technology.

In the last decade, the concept of "digital economy" has become widespread in scientific circulation in the practical activities of a number of countries. The rapid development of digital technologies against the backdrop of the globalization of the economy served as the basis for the digital revolution and the transformation of the role of information from an auxiliary to the main resource for the activity of market entities. The transition to a digital economy is manifested in the digitalization of business processes, the introduction of digital technologies in the activities of industrial enterprises, service organizations, government agencies, and financial institutions [1].

The development of digital technologies provides economic entities with undeniable advantages in the form of increasing the efficiency of business processes, increasing competitiveness, synergistic effect due to network interaction between market participants, expanding business opportunities based on the use of digital payment systems and digital money.

Despite the active development of digital technologies in all areas of economic activity, their capabilities, advantages and disadvantages have not yet been studied enough. Discussions continue among theorists and practitioners about the prospects for digitalization and possible risks associated with the transition to digital technologies in strategically important areas of the economy, in particular, in financial and banking activities, where blockchain technology is used. Therefore, analyzing the current state of development of blockchain technology, features and directions of application of projects in various areas of the economy and finance, developed on its basis, is an urgent task.

The modern economy is post-industrial, while it is often called a new, innovative economy of knowledge, competencies, and networking.

The main distinguishing features of the post-industrial economy: - the formation of a network method for coordinating economicities implemented through the creation of cluster-network systems with horizontal connections and mechanisms of spatial integration and interaction;

- the development of activities is transferred to services: education, tourism and recreation, healthcare, finance, etc.;
- the predominant form of knowledge is tacit knowledge;
- the prevailing innovations in the economy are open;

information and human resources become the main resources capital.

The use of encryption ensures that users can only modify those parts of the block chain that are available to them, in the sense that they have private keys that restrict access to files. In addition, encryption allows you to synchronize copies of a distributed chain of blocks available to all users [2].

The security feature is built into the blockchain technology at the database level. Security in blockchain technology is achieved through the use of a decentralized time-stamped server and peer-to-peer network connections. As a result, the created database does not have a single center and is managed autonomously. This makes blockchains a versatile tool for event logging (such as bank customer records) and data operations, as well as the ability to manage identity and authenticate the source. It follows that the blockchain is a system in which all its elements depend on each other. All participants in the system are interested in maintaining its integrity and its normal functioning.

The use of blockchain in business creates the preconditions for eliminating intermediaries in transactions between the consumer and the seller. The development of digital technologies in the energy sector opens up new opportunities for individuals who will be able to sell surplus electricity to other consumers at their own set price, bypassing the intermediary of energy companies, which today are monopolists in the electricity supply market. The most promising is the introduction of blockchain in banking practice. When making payments using the blockchain, in order to make a payment, it is necessary to have a minimum of information about the payer, i.e. whether there are enough funds in his account. When drawing up a mortgage agreement, it is necessary to have information about the income of the borrower, his financial history, as well as the property owned by him.

The prospects and advantages of using blockchain in financial practice lead to the need to unite large financial institutions and government agencies to study the principles of blockchain technology and prepare the necessary infrastructure for its implementation. Thus, for the development of blockchain technology, the R3 consortium was formed, which included world-class banks such as Goldman Sachs, JP Morgan, Credit Suisse, Barclays, etc. In total, by the end of 2015, the consortium united more than 20 largest banks in the world. Banks consider blockchain technology as a tool to reduce or completely eliminate operating expenses.

Given the potential of blockchain technology, the R3 consortium is the goal of its comprehensive and in-depth study and identification of application opportunities in the modern banking system. According to experts, the databases created on the basis of the blockchain platform can store information not only about payments made, but also about foreign exchange transactions, credit and factoring transactions.

In general, the study of the possibilities of using blockchain technology allows us to distinguish three levels of its application. The first, upper, level includes specific programs and products where added value is created. The middle level is a layer of competencies where platforms are created on the basis of which products arise. Research and development is carried out at this level. The third

level forms the basis, including infrastructure, qualified personnel and the regulatory environment, which creates the conditions for the transformation and implementation of digital technologies [3].

It should be noted that only the second and third levels were substantiated in the developed state programs and regulations. Thus, at the present time, regulatory documents and government programs are being developed at the state level, which are aimed at supporting technological innovations, protecting intellectual property, interests and rights of information owners, regulating data circulation in a managed and secure mode, etc. Equally important the direction of creating an infrastructure for the implementation and use of blockchain technology is to ensure the training of IT specialists. According to forecasts, by the time of the mass launch of digital services based on the blockchain, their staffing needs to be increased at least tenfold. It is natural that traditional professions also require the development of an additional set of competencies related to digital technologies. Consequently, the educational trajectory of universities and schools also requires appropriate correction.

It should be noted that in the context of the implementation of the digital economy in the country, blockchain as a special technology opens up new opportunities for various economic entities, including financial market participants, and also provides benefits in the form of resource and time savings in financial transactions.

Reference:

1. Digital economy: how experts understand this term.
<https://ria.ru/science/20170616/1496663946.html>
2. Saveliev I.E. Blockchain technology and its application // Applied Informatics. 2016. No. 6. S. 19-23.
3. V.V. Dorokhov, Blokchein-technologii: budushchee finansovoi sistemy, Sovremennye innovatsii, 6 (2016) 44-46.
4. Исхакова С. А. Влияние развития сферы услуг на уровень доходов ее работников // Экономика труда. – 2021. – Т. 8. – №. 2. – С. 159-174.
5. Akhmedova, Aziza Tokhirovna. "Innovative Strategic System Management of the Enterprise." Academic Journal of Digital Economics and Stability 10 (2021): 52-55.
6. Mukhammedov M. M., Murodov S. M. State and Priority Directions of Development of the Tertiary Sector of the Economy in Uzbekistan // Academic Journal of Digital Economics and Stability. -2021. -Т. 7. -S. 44-56.
7. Akhmedova, Aziza Tokhirovna. "DEVELOPMENT OF THE FINANCIAL MARKET INFRASTRUCTURE IN UZBEKISTAN." Web of Scientist: International Scientific Research Journal 2.12 (2021): 504-508.
8. ИСХАКОВА С. А. FEATURES OF BUSINESS ACTIVITY IN THE SERVICE SECTOR // Экономика и финансы (Узбекистан). – 2021. – №. 2. – С. 2-8.