

Development of Presentation of Blockchain Technologies in Commercial Banks

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Abstract: It is known that blockchain technologies play an important role in the innovative development of commercial banks. This article provides an analysis of the specifics of the use of blockchain technology in the activities of commercial banks, as well as suggestions and recommendations for the development of their implementation, based on modern requirements.

Key words: commercial banks, blockchain, digital technologies, digital economy.

We know that the President of the Republic at the initiative of Shavkat Mirziyoyev, a lot of work has been done to create a national concept of digital economy to adapt all sectors of the economy to modern requirements, which envisages a number of positive changes through digital technologies, and on this basis to implement the Digital Uzbekistan-2030 program. is being implemented [1].

As a logical continuation of the work being done, on April 28th this year, the President of the Republic of Uzbekistan adopted a resolution “On measures for the widespread introduction of the digital economy and e-government” [2].

The decision designated the Ministry of Information Technologies and Communications as the sole competent authority in the digital economy and e-government, as well as the establishment of the Center for e-Government Project Management and the Center for Digital Economy Research.

It is also planned to implement 12 projects in the field of banking services and 8 projects in the field of e-government services [2].

According to the Decree of the President of the Republic of Uzbekistan “On measures to develop the digital economy in the Republic of Uzbekistan” [3]:

- to diversify investment and entrepreneurial activities in various structures, including the implementation of technologies in the field of crypto-asset turnover, including smart contracting, consulting, issuance, exchange, storage, distribution, management, insurance, crowd funding (collective financing) to present;
- training of experienced personnel with practical knowledge and skills of modern information and communication technologies in the creation and application of blockchain technologies, as well as the involvement of highly qualified foreign specialists;
- activity on crypto-assets, as well as comprehensive cooperation with international and foreign companies in the field of blockchain technology, as well as the creation of the necessary legal framework, taking into account the unique foreign experience;
- creating a favorable environment for close cooperation between government agencies and businesses in the introduction of innovative ideas, technologies and projects to improve the digital economy.

Extensive use of digital economy technologies in the banking system is, first of all, a system of economic, social and cultural communication with customers in the form of digital technologies,

as well as online services, distance learning, electronic payments, Internet markets for goods and services. can be an example.

According to J. Bradley, if we can put blockchain technology into practice, then by replacing some of the energy-consuming systems, services, and locations that support the specified currency, it will be possible to save energy significantly [4].

Also, if we look at the existing financial systems of Blockchain technology, it becomes clear that it has the ability to optimize the global financial infrastructure by addressing the most pressing issues such as sustainability or asset transfer.

According to J. McLean, the use of blockchain in conjunction with real banking systems increases the convenience between counterparties [5].

We could potentially have a common and at the same time existing blockchain that reduces the need for intermediaries in investigating the financial transactions of various intermediaries and events in financial networks that frequently use any technological infrastructure. Theoretically, such an interconnected infrastructure is characterized by increased efficiency, reduced accounting, minimization of errors, and the ability to speed up calculations.

In the current economic literature, one can find some ideas about the impact of blockchain technology on both the financial institutions themselves and their activities. Before we get into these ideas, we want to clarify what blockchain technology is.

Blockchain technology is often a new type of shared database organization system that gives a wide group of participant access to shared data simultaneously, with unprecedented convenience. These technologies combine financial and financial management methods with artificial intelligence, creating opportunities to automate almost all processes in the field of finance.

The advantages of using blockchain technology in our national economy can be seen in the following [6]:

1. Data integrity.
2. In blockchain technology, all data is stored on multiple computers at the same time, which ensures the highest level of data security.
3. Blockchain technologies are cheaper and easier to use;
4. Absence of excess commission fees.
5. These technologies operate directly through the "government-citizen" formula and allow for the elimination of additional commissions as much as possible.
6. Emergency transfer speed, ie the blockchain operates 24 hours a day and delivers transfers to the destination in a few seconds;
7. Transparency.

Information about the history of transfers will be open to all users, and the user will be able to use the information with a registered account.

While blockchain technology has a number of advantages, it also has some disadvantages. These are the main problems with blockchain technology - the mass introduction of technology [7].

Another drawback is that users do not comply with the privacy rules of blockchain technology. In general, this feature of blockchain technology may be convenient in conducting elections and referendums, in business and other similar fields, but the banking system may also be unsatisfactory to users.

We can also understand the use of blockchain technology as a natural process that arises through the demands of the times.

Blockchain technology provides an opportunity to increase the competitiveness and high potential of a number of sectors of the financial market. In the future, it will be the most convenient network for the introduction of Blockchain technology in the financial market, which will be able to manage investment banking and financial transactions. Examples of areas where blockchain technology can be widely used include retail banking, insurance, and real estate investment. At the same time, it is wrong to think of blockchain technology as a solution to all the existing problems in the development of financial markets. At present, the legal framework for regulating the use of blockchain technology in financial markets is not fully developed and there are many unresolved issues in this area and many pending issues in this area.

One of the next problems hindering the spread of blockchain technology is that its legal status is not clearly defined. This is especially the case when used in financial markets. All national currency systems are created and regulated by national governments. Given the use of blockchain technology, both nationally and internationally, there are a number of pressing and difficult issues in ensuring the legitimacy of its technology. Another problem that hinders the development of blockchain technology is the implementation of large-scale computing operations to form a block of transfers. One of the reasons why blockchain technology is not fully developed is that it consumes a lot of energy and has a high capital value.

The use of a blockchain system is a technology that allows financial system employees to securely exchange and store financial information with each other. For example, in a blockchain system, it is possible to record records of money transfers and store them securely. There is no possibility of outside interference in the operation of the blockchain, forgery and corruption of documents. In particular, it allows you to record and store a number of financial transactions that are currently stored on paper in a blockchain. Blockchain is also an important tool to prevent corruption due to its complete lack of transparency and the possibility of interference. In addition, it will create a number of opportunities for the liberalization of the banking system.

At the same time, there are a number of other digital technologies that have been introduced in our country in recent years and to some extent affect the financial system. For example, money transfers and financial transactions through Click, Payme, Humo and other applications installed on mobile phones, it is important to develop and implement an incentive system to further expand the opportunities for their use.

In conclusion, we can say that the benefits of digital technologies are enormous. They will radically change the life of society, including the financial system, bringing its development to a new level. Due to the coronavirus pandemic, the need for the use of digital technologies in our society is growing. But there are also negative consequences to this process. That is, the need for traditional positions in the financial system will decrease. That's why it's important for financial professionals to learn about digital technologies and adapt to the times, and to take their rightful place in the global digital financial environment.

References

1. Address of the President of the Republic of Uzbekistan Shavkat Mirziyoyev to the Oliy Majlis 25.01.2020
2. Resolution of the President of the Republic of Uzbekistan No. PP-4699 "On measures for the widespread introduction of digital economy and e-government" 28.04.2020
3. Nozimov, E. A., & Kholmirezayev, E. B. (2022). MAIN PROBLEMS OF THE BANKING SYSTEM OF THE REPUBLIC OF UZBEKISTAN. *Miasto Przyszłości*, 24, 143-145.
4. Resolution No. PP-3832 of July 3, 2018 "On measures to develop the digital economy in the Republic of Uzbekistan"
5. Bradley J. The Energy Efficiency of Bitcoin 2016. Available online: <https://www.cryptocoinsnews.com/energy-efficiency-bitcoin/> (accessed on 9 January 2017)

6. Nozimov, E. A. (2021). The Role of Information Technologies in Innovative Development of Banks. *Journal of Marketing and Emerging Economics*.
7. McLean J. Banking on Blockchain: Charting the Progress of Distributed Ledger Technology in Financial Services; Technical Report; Finextra Research Ltd.: London, UK, 2016
8. Axmedov Z.X. Advantages of using blockchain technologies in the tax system of Uzbekistan. Proceedings of the Republican scientific-practical conference "Digitalization in public administration: problem solutions" April 12, 2019. 4-6 b.
9. Anvarovich, N. E. (2023). Economic Growth and Increasing Investment Attractiveness of the Region. *Central Asian Journal of Innovations on Tourism Management and Finance*, 4(11), 1-7.
10. Yulia Rieth. Преимущества и недостатки технологии блокчейн. – magazine.decenter.org, 18.01.2020. <https://magazine.decenter.org/ru/1-blokchein-i-kriptoalyuty/2-preimushhestva-i-nyedostatki-tekhnologii-blokchein>
11. Zaynalov, J. R., Ahrorov, Z. O., & ugli Akhadov, I. E. (2020). The Importance and Characteristics of Application of Blockchain Technologies in the Tax System. *ECLSS Online 2020a*, 297.
12. Nozimov, E. A. (2020). Theoretical fundamentals of financial health of the enterprise. *Indonesian Journal of Innovation Studies*, 10.
13. Lesta, R. D., & Ahrorov, Z. O. (2023, May). Boosting Stock Returns in Coal Mining: Key Strategies Revealed. In *International Conference on Intellectuals' Global Responsibility (ICIGR 2022)* (pp. 600-610). Atlantis Press.
14. Ходжимамедов, А. (2023). Рақамли трансформация шароитида инновацион банк хизматларидан фойдаланиш йўллари. *Economics and Innovative Technologies*, 11(1), 368-378.
15. Anvarovich, N. E. (2024). The Concept of Electronic Commerce and The Importance of Developing this Field in Uzbekistan. *EUROPEAN JOURNAL OF BUSINESS STARTUPS AND OPEN SOCIETY*, 4(1), 33-37.
16. Ходжимамедов, А. (2022). Банк тизими мисолида иқтисодий тни рақамлаштириш масалалари: https://doi.org/10.55439/ECED/vol23_iss3/a10. *Economics and education*, 23(3), 66-71.