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CONNECTING BLOCKCHAINS WITH SOFTWARE SYSTEMS IN THE DIGITALIZATION OF THE HEALTHCARE SECTOR

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Abstract:

The article defines the concept of digital economy and blockchain, and provides information about its working system. Areas and areas of application of this technology are discussed. In particular, prospects for the application of "blockchain" technology and its effective use in the activities of economic entities and hospitals were considered.

Keywords: *Digital Economy, Digital Technology, Blockchain, Cryptocurrency, Bitcoin, Transaction, System, Financial Institutions, Economic Processes, Block Chain, Anonymity.*

I. INTRODUCTION

The modern development of information means using its achievements not only in everyday life, but also in all areas necessary for humanity. The problem is that modern innovation tools are changing so quickly that people who do not have a special education in the field of information technology cannot include them in their business strategy in time and cannot imagine what opportunities some digital tools create to improve work productivity and efficiency.

The purpose of this study is to analyze modern digital tools, specifically digital platforms, and their capabilities from the perspective of the global population. The choice of this system in the development of the economy and medicine is not accidental, because both of these sectors are very sensitive to the emergence of new digital tools, without the knowledge of this sector, their rapid development is impossible today.

The research methodology is based on a comparative analysis of modern trends in the introduction of digital technologies in all areas of our activity, modern achievements in the field of digitalization, as well as the opportunities that digitalization provides for business.

Blockchain is a continuous chain of data blocks, that is, a whole database, in which all information carried out with cryptocurrencies is stored. It can also be thought of as a large ledger that shows who made transactions, when, and how many.

Anonymity - the blockchain participant's electronic wallet will not be tied to a phone number, name, or address. It only contains the wallet number recorded in the blockchain and the associated password known to the owner. Using the transparency of the blockchain, it is possible to see how many bitcoins wallets have received when viewing transaction data, without identifying its owner (unless he himself says so, of course). If the owner of the cryptocurrency loses the wallet number or password, then he himself will not be able to enter the system.

II. LITERATURE REVIEW

"Blockchain" technologiestheoretical aspects of the issues of usingto this day in our republicalthough not extensively studied,but this is technologyin part Paul Vigna, Michael Casey., Melanie Swan., William Mougayar., RogerWattenhofer., Pawan Duggal., Siraj Raval., Edward Castronovaresearched in his works. In particular, Paul Vigna blockchain to the global economythe sphere of influence of technology, the role of large corporations in this processissues, and Michael Casey innovative economyin developmentinstead of blockchain, mine technologies, with special emphasis on themanalyzed the scope of positive and negative effects [6].

Don and Alex Tepscottow(Don & Alex Tapscott), in The Blockchain Revolution, blockchain isthat it is a digital distributed log of economic transactionswho defined [8].

William Mougayar entrepreneurial subjects in his worksspecific practical examples of the influence of blockchain technology on the activityintroducing this technology todayproblems arising in the process and issues of their eliminationcommented on [10].

III. RESEARCH METHODOLOGY

The methodological basis of the research was formed as a result of the study of theoretical and practical information, legislation and other legal documents, literary sources and publications. The research is based on the connections between theory and practice, but also made extensive use of methods such as analysis, comparison, and synthesis.

IV. ANALYSIS AND RESULTS

Today, in order to further develop the digital economy

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"blockchain" taking into account the advanced experience of foreign countriesintroducing technologies into the activities of business entities of the medical fieldhas become one of the current proverbs. The reason is that the need and demand for this field is increasing day by day, as a result of which the blockchain software system creates a number of conveniences in the use of modern communication technologies.

The meaning of the term "Blockchain" is "Block" is a block, "Chain" isit's a chain. "Blockchain" means a chain of blocks. But this chain is not simple, it is strictthere is a fixed sequence.

Blocks are information about transactions and contracts within the system, manifested in the form of cryptography. From the beginning and to this day, the blockchain is the basis of the Bitcoin cryptocurrency

Security - Due to the fact that no one can independently make changes to the blockchain, cryptocurrency is also impossible to counterfeit.

In particular, the ICO mechanism (blockchain crowdfunding) systems are becoming more and more popular. Startup companies can also issue their own cryptocurrencies for later development purposes. Investors can buy this cryptocurrency and get a good profit if the startup is successful. Nowadays, a lot of ICOs are being organized and new records are being set for the amount of financial resources attracted by them. For example, Brave, a startup founded by Brendan, the former CEO of the Mozilla browser, managed to raise $35 million in ICO in 30 seconds. Why is there not so much interest in such technologies in our country? Because, firstly, our banking and finance specialists are very cautious about new technologies, secondly, they prefer to use technologies that have been tested and used for a long time, and thirdly, the practical and theoretical training of our specialists in the field of banking and finance is at a sufficient level from the point of view of digital technologies it's not. But Cyprus, Japan, Russia, China, Singapore, Germany, Canada and the USA are planning to gradually switch to digital electronic currencies. For example, at the beginning of 2016, the People's Bank of China announced plans to switch to cryptocurrency, and these days the necessary steps are being taken to gradually transfer cash to blockchains. For citizens of the country of China, this work will not cause any inconvenience, because the use of this system is not much different from the currently used WeChat or Alipay systems. But this change will be of great importance to the business, because it will eliminate the middlemen.

Transferring the Uzbek national currency, the soum, to the blockchain would allow the state to solve a number of problems. Including:

- Increasing the transparency of current banking operations;
- Improving the efficiency of the public sector;
- Eliminate the secondary and underground banking sector;
- Overcoming the bureaucracy in the state apparatus;
- Paying taxeseffective fight against tax evasion by improving the process;
- Providing new opportunities for the development of small business and entrepreneurship;
- Broad attraction of international currency and credit resources to the economy of Uzbekistan;
- Further improvement of the work of financial and credit institutions, etc.

For this behavior to develop successfully four types of routes can be offered in our country:

- In the first scenario, soum can be put into circulation. The transfer of the Uzbek national currency to the blockchain and digital format may provide it with a number of advantages, but in this case, a number of problems will have to be properly resolved on the basis of legislation. For example, who will manage this blockchain and whether it will be given the status of a government or will it have the status of a corporation. It is also necessary to find a concrete answer to the questions of how the soum is used in the domestic and foreign markets and by whom it is controlled.

- In the second direction, a state blockchain system will be established in Uzbekistan and will cover the functions of various financial institutions. Such institutions can include banks, depositories, pension funds, tax authorities and administrations. This action allows to automate the work of paying taxes and transferring funds to funds.

- The third option is to implement cryptocurrency in individual organizations or regions, and after gaining enough experience in this field, this work will be carried out on a republican scale (for example, in open economic zones in the Republic of Uzbekistan or in innovative enterprises with the help of foreign experts).

- The last, fourth possibility is to launch a pilot project (masterchain project) that will work with digital cryptocurrencies by the Central Bank, as in Russia. This platform is intended for electronic exchange of information between market participants and identification in blockchains. This system can also

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ensure that a number of government interactive services will be transferred to the blockchain as crypto expertise grows.

Taking into account the lack of qualified specialists in crypto-currency in our republic and the lack of experience in this field, training of qualified specialists in this direction remains a requirement of the time. But implementing blockchain technology and implementing the innovative idea of Uzbek cryptocurrency step by step

it is a necessity of life that should be started from now on. Because most of the developed countries in the world are implementing their own national or corporate cryptocurrency projects and they will then use all the digital

owning cryptocurrencies and pushing other countries out of this process

they act. Money is one of the most important actions in the monetary policy of the state

as it is to control the emission, abandoning the cryptocurrency can significantly derail the country's financial and credit system and its relations with the world financial credit system.

In the blockchain, data is mainly protected based on a consensus mechanism.

Blockchain works without anyone's control. It is transparent and no one can influence it from the other side. As you can see, there are hundreds, if not thousands, of blockchain networks on earth.

The most popular of them are bitcoin, etherium, ripple, litecoin.

We call the electronic currency of the blockchain system a cryptocurrency. In the form of a banknote, it is called "coin" or "token", "pixel".

If we want to send money to a loved one, we contact a broker, that is, a bank service. Of course, if this service is not working, the transfer of funds may take longer. But in cryptocurrency, this can be done at any time, in any amount, and anywhere. Also, the information we have is sent anonymously to the other party. And the broker has the opportunity to know the information we have.

We send funds from one address to another, and transfers are encrypted using cryptographic methods. Blockchain works 24 hours a day, 7 days a week. The cost of transfers is much lower and free in some non-barrier systems.

With this, blockchain technology is taking over the whole world and developing.

Bitcoins are often used in black markets. It is a fast, anonymous and relatively safe method. It is for this reason that many people think that such purchases and use of bitcoins are illegal. It's just that they are not reflected in the current legislation - no one is ready to take responsibility for their circulation. However, the situation may change with the adoption of relevant cryptocurrency bills.

In it bitcoin is not called digital gold for nothing — its issuance and the appearance of new coins in the system is constantly decreasing and limited by a mathematical formula (99% of bitcoins will be issued by 2034). As the demand increases, the prices should also increase. On the other hand, 10% of the coins that can be used in the system are currently actively traded in the market. Therefore, a sharp increase in the exchange rate can be compensated by attracting a new flow of bitcoins to the exchange.

Examples of the use of blockchain technology in various sectors of the national economy:

Blockchain technology is already being used in the medical field from a logistic point of view. Agreements can be concluded without the participation of intermediary bodies and directly between the parties who concluded them.

V. CONCLUSION/RECOMMENDATIONS

Based on the above information, the combination of blockchain and artificial intelligence can open up completely new possibilities, and crowdsourcing is currently focused on areas such as predictive models, hedge funds or investment platforms. Our goal in applying this programming system to the medical field is to get the security system right. In the blockchain, all data sets are replenished by forming the database.

It is not possible to delete or replace any data from this database. The base is "infinite" - it is infinitetransaction information can be entered. This is blockchain technologyis the main feature. In blockchain technology, all participants are connected to the blockchain systembecause all operations are carried out directly between entitiesis increased.

Today, blockchain technology is bringing great benefits to society. The system is used in almost all areas. As mentioned, the main purpose of creating a system is to store data safely. In the age of technology, the demand for such a strong protection system is very high.

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