

Digital innovations give companies an opportunity to use automation to increase productivity. For example, core business functions such as HR can use technology to automate key areas such as payroll and employee adjustment, which gives employees more time to focus on other tasks [5].

As the global market becomes increasingly digital, companies must also evolve to remain competitive. There are a number of advantages, such as optimized business processes resulting from automation; integrated technological solutions; digital solutions that reduce costs, increase ROI and increase revenue; and competitive advantage. Since software is a key differentiating component and innovation driver in most modern products, processes, or services, digital innovation is now being practiced by an increasing number of companies.

Digital innovation is the best solution for businesses that want to grow and stay competitive.

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BLOCKCHAIN

Blockchain technologies have attracted huge attention in the world in the last few years mainly due to the surge of cryptocurrencies such as Bitcoin, Ethereum, Ripple and

many others. In order to apply this technology in Belarus in the future, the thesis provides an overview of the current state of blockchain implementation, its technological architecture, how blockchain technology and smart contracts work, as well as the associated advantages and problems.

Blockchain is the latest technology, the interest in which has grown along with the popularity of cryptocurrencies. Today it is widely discussed not only in the world of finance. They are also trying to use blockchain for storing and processing personal data and identification in marketing, medicine, energy, insurance, environmental protection, logistics and many other industries.

The term *Blockchain* itself partially describes its tasks and purpose. Blocks are data about transactions and deals within the system, presented in cryptographic form. All blocks are built in a chain, that is, connected to each other. It turns out that Blockchain is a chain of blocks. To write a new block, the information about the old blocks must be read sequentially. The blockchain circuit is inextricable, since each block contains a reference to the previous one. Blocks cannot be modified or deleted, you can only add new ones. Thus, you can always restore the history of the transition of a particular asset from hand to hand and find out its current owner.

There are two types of chain:

- Public Blockchain – an open, extensible database. This type of blockchain is used in the Bitcoin cryptocurrency. Each participant can write and read data.
- Private or private blockchain has data write/read restrictions. Priority nodes can be set.

Blockchain Features:

- *Decentralization* – there is no server in the chain. Each participant is a server. It keeps the entire blockchain running.
- *Transparency* – information about transactions, contracts, and so on is kept in the public domain. However, this data cannot be changed.
- *Theoretical unlimited* – the blockchain can be supplemented with records indefinitely. Therefore, it is often compared to a supercomputer.
- *Reliability* – a *consensus* of blockchain nodes is required to record new data. This allows you to filter transactions and record only legitimate transactions. It is unrealistic to substitute the hash.

The practicality of blockchain is undeniable in everything related to data storage and authentication. Potentially, this decentralized data system can destroy corruption. In the blockchain you can record the dates of birth of people, financial transactions, fingerprints; keep information about documents like diplomas, passports, driver's licenses. In the future, this can help in the fight against various types of fraud.

Traditionally, to transfer money from one person to another, we used the services of intermediaries. Such an intermediary ensured the safety of funds. Banks act as such intermediaries. Blockchain technology allows you to eliminate intermediaries and make the transaction process decentralized. The most popular option for using the technology is cryptocurrencies. With a sufficient blockchain scale, all transactions are easy and simple.

Such realignments in certain areas can turn the entire world economy upside down, having the greatest impact on the investment market and stock exchanges. The

shares of some companies may soar sharply, while others will sharply rush down. The future of investment lies in projects focused on the use of blockchain.

This technology is changing the approach to financial relationships, severing outdated economic ties and setting new standards. Blockchain can cause an effect similar to the reaction to the emergence of the Internet. The widespread adoption of the technology will reduce the speed of any transactions to a minimum, as well as reduce the cost of conducting them to zero. This will cause a natural process of desegregation of all existing business models and the emergence of new market rules.

However, this development is not beneficial to everyone. Blockchain threatens the extinction of an entire industry of mediation and consulting services, whose market share, today, is huge. There are many obstacles in its path in the person of corporations and influential persons who will incur losses along with the development of technology. But arguing with the need for blockchain is pointless. This technology is necessary, both in terms of the comfort of conducting any transactions, and from the side of ensuring their absolute safety.

Blockchain technology and cryptocurrency can really become a starting point for the transformation of the global economy. Why, despite the fact that new technologies are constantly appearing in the modern world, it is with the use of blockchain that many experts associate global changes in the structure of the world economy? The answer to this conceptual question is that with the help of blockchain, the relations “state-business”, “business-business”, “population-state” can significantly change. In other words, the main transformation will be associated with the ability to delegate computer a program (algorithm) for carrying out and certifying transactions without the participation of third parties (the state, banks, other intermediaries), the results of which will be trusted by all or most of the subjects of the economy (market).

On the basis of the National Bank of the Republic of Belarus and the High Technology Park, it is necessary to create a favorable ecosystem that provides blockchain projects with the maximum possibilities for testing, since at this stage of development the blockchain market is quite young and non-competitive, but with a competent development strategy (for example, when attracting qualified Belarusian IT specialists to develop blockchain projects) there are absolutely all conditions to take leadership positions in this market.

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