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## IMPACT OF BLOCKCHAIN STRUCTURE ON THE STRUCTURE OF THE ECONOMY

Modern economy does not stand still. In many respects, its development is influenced by the emergence of various technologies that can have their application in the economy. One of such technologies is blockchain, which in case of its development, gives the opportunity to reduce the role of centraliser on the economy and in the long term its elimination. It is important to note that this technology can have applications in various fields, but we will only consider it within an economic context.

This research paper aims to describe blockchain technology, identifying its advantages and disadvantages, expressing our opinion on the impact of the introduction of this system in the economy.

First of all it is necessary to give a definition. Blockchain is a distributed ledger technology that allows transactions without intermediaries and guarantees their transparency and security. This technology was invented in 1991, but it was first used in 2008. The blockchain system was first used in the cryptocurrency Bitcoin. Cryptocurrency is a digital asset that uses cryptographic methods to ensure the security and anonymity of transactions and manage the creation of new units. Subsequently, the success of Bitcoin led to the emergence of other cryptocurrencies. In order to understand the reason for the development of cryptocurrencies Cryptocurrency transactions work under this scheme: when a cryptocurrency is transferred, its current owner uses cryptographic methods to sign information containing the hash of the previous transaction and the public key of the next owner. This information is then attached to the coin and transferred to the next owner. When the cryptocurrency is transferred, each next owner can verify the correctness of the chain of ownership by using signatures that were made by previous owners and contain the hash of the previous transaction and the public key of the next owner.

Unlike electronic money, cryptocurrencies do not have centralised control and are independent of governments and financial institutions, i.e. they do not have a centraliser. A centraliser is an organisation or instrument that brings together and coordinates different aspects of an economy to ensure that the system functions more efficiently. Decentralisation is one of the most pronounced benefits of the blockchain system. Cryptocurrencies are not controlled by central governing bodies, making them more independent and free from government interference. Decentralisation of cryptocurrency ensures the security of transactions as their information is stored in a distributed database that cannot be tampered with or altered. Decentralisation also ensures the anonymity of users during transactions, which protects their personal data from theft and fraud. Another important factor is Another important factor in favour of decentralisation is that transactions are carried out at low fees, as there is no need to pay

for the services of intermediaries. Of course, this system has a number of disadvantages. One of them is price instability. Cryptocurrencies can be subject to significant price fluctuations, which can lead to large losses for investors. The risk of hacker attacks is also a major disadvantage. Storing cryptocurrency online can be vulnerable to hacker attacks, which can lead to loss of funds. The main problem with the blockchain system, however, stemming from its advantages is the lack of regulation. Cryptocurrencies are not strictly regulated, which can lead to the possibility of using them for illegal purposes such as money laundering and terrorist financing.

From my point of view, blockchain system has a high development potential and subsequently cryptocurrencies will become the main medium of exchange in the future, replacing traditional fiat currencies. Blockchain technology and cryptocurrencies will help create new economic models where people can exchange value without intermediaries and without restrictions. Cryptocurrencies can help solve many of the problems associated with the financial system, such as high fees, lengthy transfers and restrictions on international transactions. They will help create a fairer economic system where everyone has access to financial services and can control their own money.

The blockchain system has a number of reasons that point to its long-term development and scalability. It allows transactions to be carried out without intermediaries, which may lead to a reduction in the role of banks and the state in the financial sphere. This may enable small and medium-sized businesses to access financial resources without unnecessary costs for commissions and interest. However, there are also risks associated with the instability of cryptocurrency rates and the possibility of using them for illegal purposes. In addition, the blockchain system requires large computing power and energy consumption, which can lead to environmental problems. Overall, cryptocurrencies and the blockchain system have a high potential to change the structure of the economy in the long term, but require more in-depth study

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## IT MARKET TRENDS IN BELARUS

IT industry influences not only the lives of individuals but also the world's economy. The first IT product dates back to 1948. That machine was programmed to perform mathematical calculations using machine code instructions [1]. Currently, IT products assist businesses, corporations, government, and ordinary users in solving their tasks and optimizing their activity. In their turn, IT market and industry in Belarus have their own trends and perspectives.