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BLOCKCHAIN AS A SYSTEM FOR ACCOUNTING AND FINANCIAL INFORMATION

BlockShow Europe in May of 2018 published the Top-10 best countries for active use of "Blockchain" technology, which takes into account the regulatory framework, initiatives and use of blockchain. The leaders are Estonia, Switzerland and Japan. The main positive criteria in the above-mentioned countries are progressive legislation in the field of digital economy and regulation of "crypto-relations", active support for startups, mainly starting with the introduction of technology into the public administration system, effective operation of cryptocurrency exchanges, and some other aspects, including political and economic development in general.

With the adoption of Decree of the President of the Republic of Belarus № 8 "About the development of the digital economy" [1] the technology of the register of transaction blocks "Blockchain" was legalized in Belarus and legal entities and individuals were given the right to own digital signs – tokens.

A blockchain is a decentralized database in which all records (blocks) are linked using cryptography. The technology was proposed in 2008 as a base of such cryptocurrency as Bitcoin, where it played the role of a distributed registry for all

transactions with digital coins. **Cryptocurrency** is a type of digital currency, accounting for its internal units of account is provided by a decentralized payment system that operates in a fully automatic mode. In other words, it is just a number which is indicating the amount of data of payment units, which is recorded in the corresponding position of the information package of the data transfer protocol and is often not even encrypted, as well as all other information about transactions between the addresses of the system. A **token** is a compact device designed to ensure the user's information security. It is also used for identification of its owner, remote secure access to information resources, and so on. This is usually a physical device used to simplify authentication.

How is it possible to apply the "blockchain" technology in accounting? First, the technology can be compared to a typical accounting program, just in a primitive form and with minimal details. This is not a positive point, but it gives an incentive to improve the system, cause of the technology was not originally created specifically for accounting and control purposes. Second, it meets some of the basic principles of accounting: the information contained in the " blockchain" is a reliable and truthful, as any changes in already written blocks is impossible, and there is no possibility of forgery or substitution of data; this information can be trusted, even if trust to the counteragents is absent; each transaction is made only with the approval of both parties and is recorded twice in the same amount, each of the parties and reflected in a common understanding on the debit one and credit another account. This corresponds to the accounting principle of double entry.

The system's information is both open and protected, which ensures its transparency. But there is a problem of confidentiality of information. However, this is considered resolvable, because users of the chain can have codes-ciphers, or so-called "keys" to view certain information, that is, use a private blockchain.

The main advantage of the technology is the acceleration of operations: the ability to work without intermediaries, banks; there is no need to reconcile calculations. The formation and write-off of receivables and payables of the parties to the transaction will occur simultaneously in the same estimation at the time of the transaction. You don't need to confirm the transaction and its evaluation. The accountant will only need to correctly classify the acquired/transferred asset and the corresponding income/expense.

In accordance with the above-mentioned Decree [1], tokens generated (extracted) in the course of mining or otherwise acquired are recognized as assets; the placement of tokens created by legal entities leads to an obligation to the owners of these tokens.

The Ministry of Finance of the Republic of Belarus has adopted the National Accounting Standard "Digital signs (tokens)", which defines the procedure for generating information about tokens in accounting. According to it, tokens received by an organization are accepted for accounting, depending on the method of obtaining them and their intended purpose [2]. The value of cash, electronic money, the token of another species, raised from the first owners as a result of sharing their own tokens, is reflected on the debit of the account "Long-term financial investments", "Goods", "Settlement accounts", "Foreign currency accounts", "Special accounts in banks", "Short-term

financial investments", etc. accounts and credit accounts "Calculations on short-term credits and loans", "Calculations under long-term credits and loans". In other words, tokens are recognized in accounting either as an investment asset, as a cash equivalent, or as finished products or goods. And there're no exact instructions about accounting for cryptocurrency as such. And, since it's essentially a digital currency, and the current standard chart of accounts doesn't provide for its accounting, it's advisable to open a new account, for example, "Cryptocurrency accounting accounts".

Returning to the refinement of technology "Blockchain" as the accounting system, it is worth noting the following: 1) to each block containing the fact of the transaction needs to be linked to the documents or other useful information on the performed operation (document on the basis of which it conducted, conditions, mandatory requirements, the counterparties to the transaction), and simultaneous reflection in the financial and tax accounting, that is, the original documents could be generated automatically inside the system on the condition of the electronic digital signature; 2) it is possible to develop automated generation of standard reporting forms, thus not missing a single completed operation; 3) each subsequent block contains information from all previous ones, which makes it impossible to make additional operations between already built blocks – on the one hand, this may create a problem of lack of completeness of information, if there are cases in which the logical sequence of operations is violated, and on the other hand, increasing the requirements for accuracy and reliability of operational accounting.

Thus, the use of "blockchain" technology can accelerate the process of economic activity of companies, as well as bring all accounting, reporting and control to the same global standards. However, it is necessary to assess the feasibility of such a transition and its consequences, taking into account the economic situation in the world. At least, since any practical action requires a theoretical Foundation – the most important at the moment is the development of a regulatory framework for the transition of the economy to "digital" and the development of a plan for the introduction of technology.

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