

**THE USE OF BLOCKCHAIN TECHNOLOGY IN IMPROVING THE
PROCESS OF INFORMATION EXCHANGE IN THE TAX FIELD**

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Abstract: The use of blockchain technology in the tax system is quite new and has not been studied so far in the context of developing nations. The paper explores how blockchain technology can be applied to the indirect tax system, specifically for exchanging electronic information. In addition, the tax invoices serial numbers transactions are tracked and analyzed.

Key Words: Blockchain, Tax System, transactions, tax invoices.

Introduction

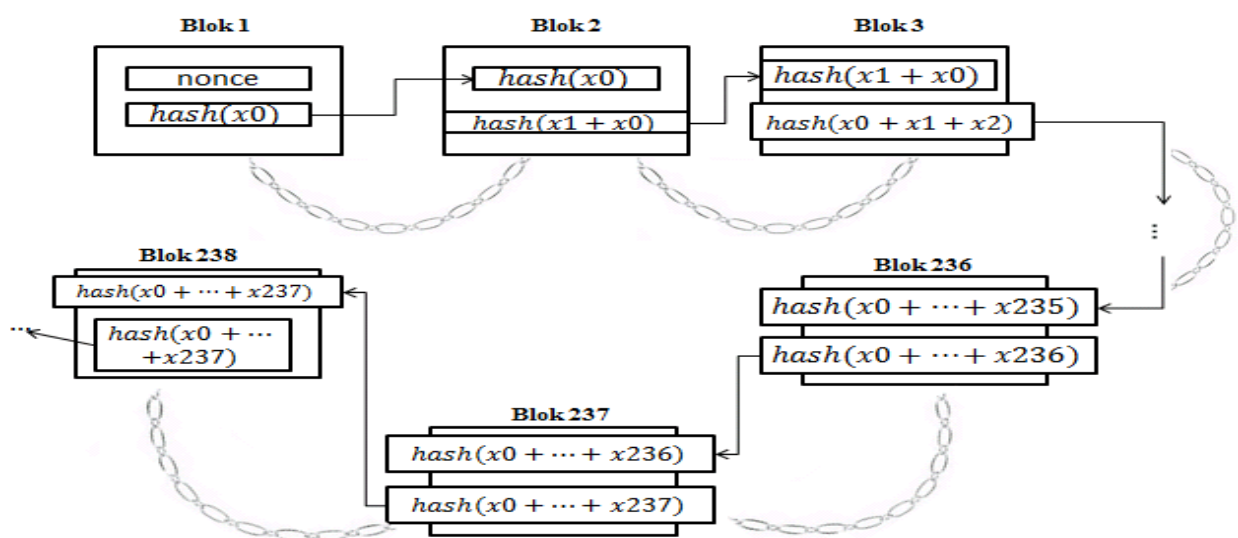
Digitalization is one of the most ambitious challenges for all branches of Uzbek law. In the field of taxation and fees, the process of introducing new digital technologies is manifested as substantial since there is no possibility at present to imagine implementation of tax administration as well as development of the tax law theory without taking into account the impact of the factor of technological development on real tax relations. At the same time, it is generally recognized that the most discussed digital technology in legal science is blockchain.

It should be noted that blockchain technology as such is not a new phenomenon, and its practical application and theoretical studies have traditionally been associated with the fact that it is a necessary technological condition for cryptocurrencies, as well as a necessary technological element in the process of smart contracts functioning.

This means that the task of developing both general legal and sectoral (first of all in the field of tax law) approaches to the issue of legalization in general, as well as to the normative regulation of the scope, forms and methods of using blockchain technology is recognized as one of the primary tasks of the state.

A blockchain is made up of several sets of blocks joined and a series of links that form a chain. Each block identifies the block that came before it by using a hash function to create a single unbroken string. It is extremely difficult to erase or modify data that has already been saved in the blockchain database. An assigned ledger is a decentralized, allocated ledger system used by blockchain. An assigned log is a file that contains all of a community's transactions and may be accessed using all of the community's events. As a result, in a blockchain community, there is no administrative centre that oversees statistics. Before going any further with blockchain, four key

principles must be grasped. Firstly shared ledger is a record of all events in a blockchain system that is accessible to all participants in the network. The shared ledger records all transactions from start to finish since it is unchangeable. Transaction data is only recorded once in a shared ledger, after which it is sent to all or any participants on the blockchain network, ensuring that they all have a duplicate with the same information. Be a result, a shared ledger is sometimes referred to as a recordkeeping system. It acts as a trustee within the blockchain network. Secondly, Permissions grant access to non-public blockchain networks to parties who choose to participate. On the blockchain, there are two types of networks: public and private. Permission blockchain causes each participant should have a distinct identification distinct from the others. As a result, the permission blockchain makes the information and accuracy verification a lot more of a priority and efficient. The efficiency is accomplished since transaction information is not readily available confined small number of people. In contrast to a permissionless blockchain, each network participant has access to all the fine print of the network's transactions. The working details published on the private blockchain are short to increase security and protect anonymity. Thirdly, Smart contracts, are used as part of a transaction saved and killed manually within the blockchain. In the actual world, rational agreements are effectively the same as a traditional contract written on paper. Its most significant smart contracts, on the other hand, are different electronic. When smart contracts are stored on the blockchain; all of the contract's statements are transmitted to all parties on the network. There is no need for a third-party assessment if there are terms that contravene the contract. This means that using sensible contracts on the blockchain network removes the need for a third-party intermediary. Sensible contracts are trusted since they require several immutable and distributable qualities.

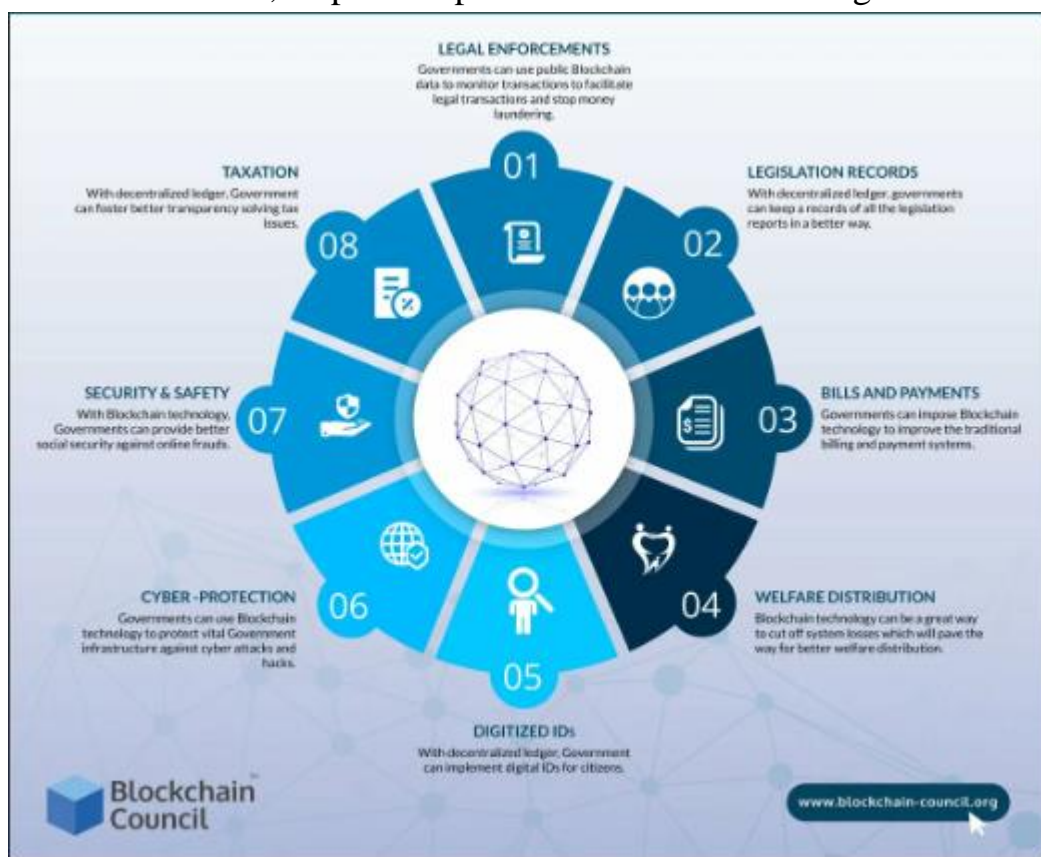


Pic.1.Hash function in blockchain.

In my opinion, these facts and processes add to the relevance of blockchain technology from the point of view of legal consequences analysis of its expansion in the field of taxation. Such analysis should be based on theoretical studies related, first of all, to the assessment of the blockchain technology in terms of existence/nonexistence of legal content. Then it will be clear whether there is the need to develop appropriate legal regulation and/or transform the existing tax legislation of the Republic of Uzbekistan to create the conditions for the progressive development of digital economy allowing to actively apply the blockchain technology in tax administration, as well as establish and execute tax obligations.

Blockchain and Tax System

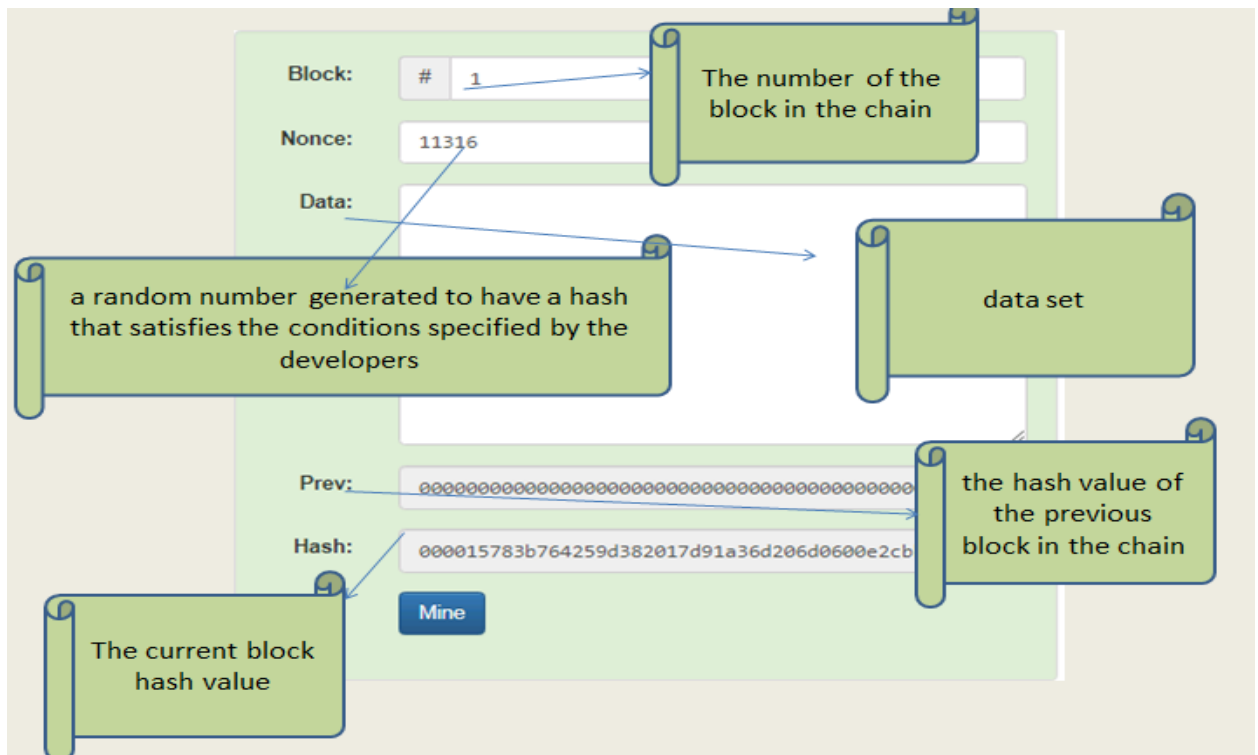
With the Blockchain-based automatic tax regime, compliance with tax can be improved because the authorities have access to all wallets and can track the flow of money. Furthermore, the tax network will reach a larger number of people and will be enlarged. Tax collection could be raised in this instance. Because more people will be taxed as a result of the growth of the tax network, the tax burden for each taxpayer will be reduced for the government meant to fulfill its tax potential, and each individual will pay less tax. As a result, disposable personal income and savings are increased.



Pic.2. Blockchain for government services.

There is a lack of research on the implementation of blockchain in a tax system where indirect taxes are collected, particularly in the context of an emerging economy. Our study contributes to the literature on the implementation of blockchain technology

in an indirect tax system that was overlooked by prior studies. The contribution supports the implementation of blockchain on public data. Furthermore, as the tax is a source of revenue for the Government.



Pic.3. Blockchain block corpus.

Literature Review

Satoshi Nakamoto coined the term "blockchain technology" for the first time. In 2008, a peer-to-peer electronic nodes system was published. Crypto cash's generation factor is a chain of cryptographically chained blocks of information. On a web page uploaded to the Cryptography Mailing List, he mentioned Bitcoin contracts. He was the driving force behind the development of Bit currency, authoring articles about it till 2010. He was the first to present dispersed information storage in the form of a chain of blocks, which became the inspiration for the bit-coin blockchain. A blockchain network is a system in which each money transaction is recorded. Apart from banking, blockchain mechanization can be employed as a high-rise security system in a variety of fields (Yayman, 2021). A supportive system and a comprehensive government assistance mechanism are required for the successful integration of blockchain-based full solutions. This needs to assist in the broad adoption of blockchain technology and the establishment of regular requirements, which include criminal identification and the understanding of taxation and accounting impacts at the time of reservation (Pwc, 2017). Government institutions in several nations are now heavily utilizing blockchain technology as it is directly tied to network organizations, unlike other technologies (Jun, 2018). Individuals and businesses are refusing to pay fees and taxes alternative payments due to state government budgets in whole or in part. Depending on how the

fraud is committed, tax evasion is classified as legal, dishonorable (illegal) tax evasion, customs evasion, cloaked tax evasion, short fraud, phoenix syndrome - or long-term, calculated tax fraud; multiple firms syndromes; insignificant manipulations; underground tax economy, and tax havens (Pwc, 2017). In most nations around the world, these sorts of tax evasion are met to varying degrees. Tax evasion and minimization are widely acknowledged as serious issues. Computer science will be acclimated to dominate tax fraud through its new technology, Blockchain (Cho et al., 2021). Furthermore, using the permission Blockchain, completely different roles could be given completely distinct knowledge views, limiting data gaining access to some (MOȘTEANU, 2011). Triple-entry accounting systems may be configured to meet accounting rules and laws mechanically using good contracts and can even amend tax filings through continual updates, thanks to Blockchain (Faccia and Mosteanu, 2019a). The digital revolution has changed, and the continued progress of digital technology has a significant impact (Jain, 2019).

The development of digital economy is closely linked to the issues of further structural transformation of the economy, public administration, as well as the creation of new models of interaction between the state, business and population based on digital technologies. Eric Brynjolfsson and Brian Kahin first discussed the issues of digitization of the economy in the mid-1990s, with the first definitions being made as a means of bringing together businesses and consumers in the virtual world.

By the end of the 1990s, the analysis mainly focused on ways to increase economic efficiency in enterprises through the use of the Internet in the economy. The impact of the Internet resource on the digitization of the economy has been widely evaluated and discussions on its hidden capabilities have begun. There has been some data on the issues that are the basis of the digital economy, the mechanism of transition to the digital economy, and the hashing functions that are an important element of cryptography. Subsequently, the logic of the transition from cryptography to digital currencies, the main types of cryptocurrencies and their properties are reflected in the works of Michael Crosby.

Currently, most researchers adhere to the opinion that there is no need for legal regulation of the concept of blockchain technology both in a general manner and specifics of industry regulation. For example, K.V. Nam (Nam, 2019:24—27) argues that it would be better if blockchain is not normatively defined since, in his opinion, the legal definition of technical solutions cannot always bring certainty to legal regulation, and vice versa. E.Yu. Barakina is of the opinion that it is not technologies that should be subject to regulation, but the activities carried out with their use (Barakina, 2018:53—58).

Effect of Blockchain on Individual Taxes and Tax Collection/administration Systems

The proper application of blockchain for taxation isn't limited to the existing space and needs to take into account every aspect of government activities. Besides integrating Computer networks on differing levels, it is indeed clear that deploying blockchain would demand serious constitutional reforms, such as modifications to databases, material possession, and legal identity regulations. Conversely, the advantages of Blockchain network technology for government are difficult to overlook. For both small and large firms, blockchain will be a driving issue in adopting real-time, machine-driven tax processes in the long run (Ledger Insights, 2019) Blockchain can help with compliance while also giving tax authorities visibility into microtransactions.

Conclusion

Blockchain technologies have a huge impact on the country's economy. Because countries are gradually moving to the policy of cryptocurrency. We can give many examples of this. The digital economy in the Republic of Uzbekistan is developing day by day. Blockchain, Bitcoins all this is getting into the normal way of life of people. The main problem is in the absence of this draft law. The legalization of blocking technologies and the wide opening of roads to free, private entrepreneurs will not remain without contributing to the development of the industry.

Thus, the review of academic literature on the development of tax and legal regulation on applying blockchain technology, carried out within the framework of this scientific article, allows us to draw the main conclusion about the undoubted value of legal regulation of tax relations that arise, change and terminate due to the transition of taxation to a new stage of digital development — digital maturity.

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