КРАТКИЕ СООБЩЕНИЯ | SHORT REPORTS

Современная наука и инновации.
2023. № 3(43). С. 156-161.
Modern Science and Innovations.
2023; 3(43):156-161.

Научная статья / Original article

УДК 327
https://doi.org/10.37493/2307-910X.2023.3.14

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Использование современных цифровых технологий в государственном управлении

The use of modern digital technologies in public administration

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Аннотация. *В статье изучена и проанализирована возможный путь развития и использования криптовалюты в Российской Федерации в сравнительном анализе с Европой и США, как одного быстро развивающегося сектора экономики. Изучена степень исследования легализации криптовалюты в Российской Федерации путём использования методов логического, экономического, исторического анализа научных разработок. Изучено использование токена в качестве одного из инструментов развития отечественной торговой сети «Магнит». Статья является предпринтом, этапом для дальнейшего изучения, путем выявления рисков и особенностей, связанных с особенностями экономической системы Российской Федерации.*

Ключевые слова: криптовалюта, блокчейн, цифровые инвестиции, «цифровые финансовые активы», токен, биткоин

Для цитирования: *Шебзухова Т. А., Кайванова А. А., Вартумян А. А. Использование современных цифровых технологий в государственном управлении // Современная наука и инновации. 2023. № 3 (43). С. 156-161.* https://doi.org/10.37493/2307-910X.2023.3.14

Abstract. *The article examines and analyzes the possible path of development and use of cryptocurrencies in the Russian Federation in a comparative analysis with Europe and the United States as one rapidly developing sector of the economy. The degree of research on the legalization of cryptocurrencies in the Russian Federation through the use of methods of logical, economic, historical analysis of scientific developments is studied. The use of the token as one of the tools for the development of the domestic trading network "Magnet" has been studied. The article is an undertaking, a stage for further study, by identifying the risks and features associated with the features of the economic system of the Russian Federation.*

Keywords: cryptocurrency, blockchain, digital investments, "digital financial assets", token, bitcoin

For citation: *Shebzukhova TA, Kayvanova AA, Vartumyan AA. The use of modern digital technologies in public administration. Modern Science and Innovations. 2023;3(43):156-161. https://doi.org/10.37493/2307-910X.2023.3.14*

Introduction. The 21st century is characterized by a rapid pace of implementation of financial innovations and increased competition.

Traditional forms are being transformed into digital ones, which is confirmed by national and federal projects:

– "Digital Economy of the Russian Federation";
– "Digital public administration."

Digital technologies have become firmly established at all levels of economic activity. Insufficient understanding of the impact mechanisms, lack of correct risk assessment when introducing digital technologies into financial universities, taking into account the peculiarities of historical studies of the industrial revolution, may end in a financial crisis (1873, 1890, 1893, 1929-1933)

The financial sector is undergoing changes, which is expressed in the form of the formation of new concepts and terms:

– cryptocurrency,
– blockchain,
– digital investments,
– "digital financial assets",
– "open banking".

A new direction of fintech is being identified in the field of information and computer technologies (ICT), as well as a new formation of hierarchical levels of the system of financial assets (from decentralized cryptocurrencies to legal digital financial instruments, under the leadership of federal authorities).

Materials and research methods. We will explore and analyze the history of origin and evolutionary development using the example of cryptocurrencies.

The most famous cryptocurrency is Bitcoin (Bitcoin), invented in 2008 by Mr. Nakamoto, which today accounts for more than 90% of the capitalization of all cryptocurrencies in the world community [1,2, 3,4,5].

According to research, Sigova M.V., Klyuchnikova I. K. "...cryptocurrencies completely change ideas about finance, take them beyond national boundaries and form a new global monetary and financial system with the possibility of creating a completely decentralized network economy of finance..." [1,2, 3,4].

As O. Demidov notes in his research, "...The development of cryptocurrencies led to the formation of the concept of "digital financial assets" ..." The concept of "digital financial assets" was formed by 2010 [5].

In the Federal Law of July 31, 2020. No. 259-FZ "...the following definition: a digital financial asset is property in electronic form created using encryption (cryptographic) means (token, cryptocurrency) ..." [6].

Currently, there is no uniform global recognition of cryptocurrencies as legal tender. In different countries, there are diametrically opposed points of view regarding the definition of the legal essence of cryptocurrencies.

Research results and their discussion. Cryptocurrency has been legalized in 15 countries (Table 1).

Table 1. Countries in which cryptocurrency has been officially introduced into electronic money circulation

A country	Year of official legalization	Note
Belarus	2017, the Law "On the Digital Economy" was released. A resolution was adopted to exempt the cryptocurrency market from taxes until 2049	[7]

Germany	2017 one of the first EU countries to regulate digital assets at the legal level. The law allows for the issue of digital currency, its ownership and trading, as well as mining.	[7]
Spain	Since 2014, a legal form of electronic payments. Reinforced since 2016 by the state in legislative acts obliging miners to register to obtain a license and pay taxes.	[7]
Italy	According to Coinmap, it is the leader in the use of bitcoins in transactions. There are 39 crypto ATMs in Italy and a project focused on the development of the Bitcoin payment system.	[7]
Norway	Since 2013, they have been recognized as a digital asset; in 2017, VAT was abolished for all transactions for the purchase and sale of Bitcoin and other digital assets .	[7]
Malta	The Ministry of Finance has even developed a law with new provisions that regulate the circulation of electronic currency. Bills have been developed to regulate ICOs. Cryptocurrency companies have been legalized, and citizens of the country can use coins as a payment transaction.	[7]
Canada	Payment for goods and services is carried out using cryptocurrency. There are Bitcoin ATMs throughout the country.	[7]
Salvador	The cryptocurrency was officially recognized in September 2021 and is considered a means of payment on a par with the dollar .	[7]
USA	The legalization of cryptocurrency occurred in 2017. Transactions with altcoins and bitcoins are subject to tax. There are large cryptocurrency exchanges, including Poloniex, Bittrex, etc.	[7]
Ukraine	″ was adopted and is in force in Ukraine.	[7]
Philippines	Any type of electronic currency has the status of a financial instrument,	[7]
Czech	Cryptocurrency circulation is allowed, with tax collection	[7]
Switzerland	Since 2016, the city of Zug began to accept Bitcoin as payment for government services. And already in 2017, the first legal platforms for the development of cryptocurrency startups were created.	[7]
Estonia	Blockchain technologies and digital assets are fully operational.	[7]
Japan	Cryptocurrency exchanges have official status, cryptocurrencies are legal tender, licensed, and a key state in the development of digital coins. The headquarters of the popular Internet service Bitcoin.org is located in Japan.	[7]

The idea of introducing cryptocurrency into the financial system, as a replacement of credit money with virtual funds, is controversial and associated with risks.

Research by domestic and foreign scientists has proven that at the moment cryptocurrency is not a replacement for fiat money, i.e. cannot be a measure of value, the fiat currency remains the US dollar and, to a limited extent, cryptocurrency.

The shadow economy takes advantage of the anonymity of cryptocurrency users to manipulate the market by obtaining abnormally high levels of profitability. The price of cryptocurrencies on the stock exchange directly depends on statements in the media by regulatory authorities [4,5].

The introduction of digital technologies occurs at all levels of economic activity and at the state level. The use of information and communication technologies in public administration makes it possible to cover and control a larger volume of public services, provide them to the population and business on time, and reach various segments of the population. Under the influence of digital technologies, the very concept of “state” is changing; the term “service state” appears, by which we mean a set of digital government institutions that provide the population and business with a range of electronic government services using information and communication technologies . New digital technologies and the commercial use of tokens in cases of creating organized managed systems regulate their circulation (issue, use in the issuer’s business processes, redemption). Blockchain is used for storing and processing financial transactions (register of bank guarantees of the National Bank of the Republic of Belarus, register of transactions on the German Stock Exchange, reporting by credit institutions to the regulator based on blockchain in the UK). Cryptocurrency contributes to the formation of digital financial assets with built-in management mechanisms. NFTs are non-fungible tokens created for the purpose of transferring exclusive rights to unique assets on the blockchain. Tokens for various purposes contain rights to real financial or non-financial assets (rights to debt, equity shares, social rights, management rights), including those issued during the ICO process. Digital innovations have become a source of intensive redistribution of capital in the financial market [4-8]

One of the promising areas of rapidly developing NFT (non-fungible token) technologies in the period from 2021-2022, which has found application in the promotion of more than 50 global brands (Europe, Asia, etc.), through integration into the company's operating activities as an additional channel monetization [8].

D. Sinyagin in his research showed that the use of NFT technologies as a method of promoting brands in the digital economy to increase consumer involvement opens up new opportunities in marketing [8, 9].

The Russian company "Magnit" uses the NFT marketing system, in the form of the "Skrepyshi- NEW " campaign, as one of the types of Russian retail (a new history of the use of tokens) [8, 9].

In the context of changing geopolitical tensions in 2022-2023. There has been a decrease in interest in the NFT phenomenon due to the ongoing recession and the fall in cryptocurrency rates [8, 9, 10, 11, 12].

The global energy crisis caused by the geopolitical conflict between Russia and Ukraine in February 2022 has had a negative impact on the economic efficiency of Bitcoin mining. Energy prices have increased significantly, which has led to a decrease in the share of individual miners and an increase in the number of large players in the market. This process leads to the gradual centralization of mining, when it begins to be managed not by tens of thousands of independent miners, but by just a few large companies. This change causes concern and leads to a change in the original essence of the cryptocurrency. Centralized crypto exchanges stopped cooperating with Russian investors, which led to high volatility and outflow of funds in the cryptosphere, provoking a structural transformation in this area.

Conclusion. Russia's attitude towards cryptocurrencies is in its infancy due to restrictive measures, although cryptocurrencies are actively used at the level of ordinary consumers. The analysis showed that the use of cryptocurrency in Russian sectors of the economy in comparison with other countries showed that the Russian Federation lags behind in the level of development of cryptocurrency relations, but remains among the countries that recognize cryptocurrencies. For the further development of cryptocurrency relations, it is necessary to develop ways to regulate the use of cryptocurrency (introduction of flexible taxation when investing and other regulatory methods), in order to reduce the risks associated with the shadow economic sector.

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Вклад авторов: все авторы внесли равный вклад в подготовку публикации.
Конфликт интересов: авторы заявляют об отсутствии конфликта интересов.

Contribution of the authors: the authors contributed equally to this article.
Conflict of interest: the authors declare no conflicts of interests.

Статья поступила в редакцию: 12.07.2023;
одобрена после рецензирования: 14.08.2023;
принята к публикации: 07.09.2023.

The article was submitted: 12.07.2023;
approved after reviewing: 14.08.2023;
accepted for publication: 07.09.2023.