

Crypto Ruble: key characteristics and advantages

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Abstract. In the course of the work, an analysis of the digital ruble (CR) was carried out. The purpose of the study is to analyze the CR to determine its features and the feasibility of introduction, which is of practical importance for further improvement of the project. Methods: classification, typology, observation. The theme has a high degree of development. The object of research is the digital ruble, the subject of research is its significance. The results showed the need to improve the functionality of the CR.

Keywords: Digital ruble; accounting; digital currency; finance; digital economy; Russian development; innovation; financial instrument.

Digitalization is now a common aspect of our world, but it took its roots in 1679 with the introduction of the first ever Binary system made by Gottfried Wilhem Leibniz, and that has gave a start to digitalization and now it has become our future that we must adapt to. Especially if we talk about globalization process which inevitably leads to a rapid adaptation and implementation of modern technologies into companies's policy if it wants to respond to modern market demands.

So, what exactly is digitalization? Let us use a simple term, digitalization is when information is converted into a code which computers can understand and process so that we, humans, are able to perceive and store such information without taking up physical space. For example: large number of documents can be found and sent by just a click of a button, however, before digitalization, there would be enormous rooms with large amounts of physical documents that can be easily

destroyed and/or lost in large piles of documents. This helps organizations and everyone to be a lot more efficient because when it comes to sorting data or searching documents – any task given to a computer makes the job for you easier and faster. There are indeed a lot of benefits of digitalization in various fields of work and life, but we will cover one specific corner of this massive topic. That corner will be digitalization of currency, specifically the Russian (RU) Rubles (RUB).

The beginning of digitalization of currency dates to the 90s, however, the Russian Federation, has launched this currency on August 15, 2023. The early developments on the digital Ruble began back in the early stages of the cryptocurrencies slowly rising to the center stage back in 2017 when The Russian Federation saw huge potential in cryptocurrency. But what exactly is cryptocurrency and what does it mean or even do? Basically, it is a token that people add value to by buying them for a worth they see fit. Then this token, can be used to trade with other holders of this currency for goods or services. However, this currency is not regulated by governments but it is regulated by private organizations which, unfortunately, has led to many cases of creating fraudulent tokens and stealing money from people who have bought these tokens, for example, the Moon token. President Vladimir Putin made a statement on these issues with cryptocurrencies. The use of Crypto-Ruble was to introduce a new way of payment within The Russian Federation and has begun it's testing back in June 2021. The key difference with this currency was that the government is in direct control of the currency and its distribution rather than the third-party individuals. The value of Crypto-Ruble is set by the government and was 1 to 1, meaning that 1 Ruble is an equivalent to 1 Crypto-Ruble.

Description of Crypto Ruble. The introduction of computer technologies in the twenties of the twenty-first century is a promising direction for the development of various sectors of the economy. In particular, the Russian financial industry has undergone changes due to the imminent introduction of the digital ruble into circulation. According to the definition of the Central Bank of the Russian Federation, the digital ruble (CR) is the Russian national currency expressed in

digital format, which is planned to be used as an addition to the existing forms of the Russian Ruble [1]. The transition from physical money to virtual money is considered by the state as a tool to reduce the risk of inflation. The development of the digital ruble began in April 2021 and now the project is at the testing stage. The appearance of a new financial instrument will entail changes in the accounting and auditing systems, as well as in tax legislation.

The problem of the research is what are the advantages and weaknesses of the digital ruble? The main purpose of the study is to identify weaknesses and shortcomings. In August 2023, the results of a survey of the population of the Russian Federation were published, during which the awareness of residents of the Russian Federation about the introduction of the digital ruble was revealed [4].

Advantages of Crypto Ruble. Let's go to the review of the properties of this project. Remembering the Central Bank, the newest form of the Russian ruble has several advantages over other forms:

1. Access to the wallet is possible for any bank that serves the client;
2. Operations of digital rubles are carried out in a single course, which allows you to reduce transaction support;
3. Accessibility without Internet access;
4. High security and preservation of facilities;
5. Expanding the assortment of innovative products and services;
6. Improving customer service conditions [1].

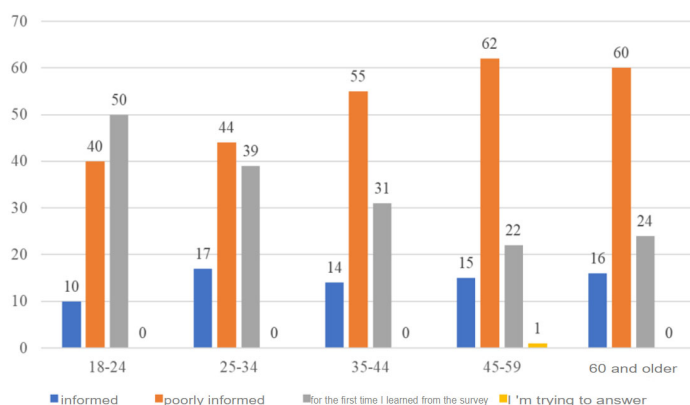
These advantages can attract both businesses and individuals to use digital rubles. People who are interested in opening an electronic wallet, but do not do so due to distrust of existing companies, can turn to the digital ruble as a more reliable alternative.

The state is interested in attracting individuals, since transactions with digital rubles are not a subject to customs duties and fees. The research shows that it is more profitable for legal entities to use the digital ruble. For example, the purchase fee is 1.3% of the payment amount. In addition, with the early use of digital rubles by legal entities (until 2025), tariff rates are not applied, which makes early use profitable.

However, it should be noted that, despite the favorable tariff rates, the problem of low awareness of the population remains significant and may negatively affect the transition from a classic electronic wallet to a digital ruble.

Problems and difficulties. The survey results (pic. 1) show that young people are less aware of the introduction of the digital ruble than older people. The largest number of respondents aged 18-24 years (50 people) first heard about the digital ruble in this survey. The largest number of respondents aged 45-49 (62 respondents) were partially aware of the digital ruble, which also indicates the weak effectiveness of the digital ruble awareness program among young people.

Picture 1 – Awareness of the population of the Russian Federation about the introduction of the Digital Ruble



This is primarily since television and radio, which are the main means of covering this topic, are not very popular among young people. In this regard, it is necessary to use the Internet to distribute digital rubles. In addition, for the effective dissemination of a new financial instrument, it is possible to organize information sessions at classes and conferences through educational institutions, for example, universities and research institutes. The lack of information about digital currencies confirms the reasons for the Russian public's distrust of digital currencies in general and the digital ruble [2].

To begin with, 52% of respondents are not ready to use digital money. This leads to distrust, which is expressed in the fact that 36% of respondents are afraid of

state control, 25% do not have information about electronic money and 28% are afraid of hacker attacks [3]. This indicates the need to improve the quality of information for all segments of the population. Let us look over possible disadvantages, the Digital Ruble may face:

1. Storage and the development of such systems are very expensive and can take a long time before it is safe and stable enough to be utilized;
2. Hacking is a common concern in this field, especially in our current political climate. Hackers may be able to take full advantage of underdeveloped systems;
3. The transactions are irreversible. This can lead to an increase in crime within the cyberspace and people taking advantage of simple mistakes that us humans are prone to make;
4. The current level of technical awareness is on the lower side of The Russian Federation, which can lead to many issues for the older generations as it is quite hard to understand the full switch to the digital ruble;
5. Cultural reasons are also a big player in the negative side of digitalization, as many individuals of all generations, prefer to keep their savings in physical form, as many individuals have trust issues in the banking systems;
6. Many places do not accept payment using the digital Ruble as it hasn't been fully integrated into the economy [5].

Conclusion. The newest monetary instrument has a bright future and its ability to be so flexible is remarkable. The digital ruble has many advantages for individuals and legal entities. However, in the recent years we have seen that cryptocurrencies are only a threat to individuals and have been used with malicious intent which has made people lose faith in digital currencies as a whole including the dissemination of truthful information about this instrument among citizens of the Russian Federation. This leads to a lack of qualitative understanding of its advantages. In addition, since the NPC is at the stage of development and testing,

there are gaps in the field of taxation, which will be eliminated after the completion of the project. The Russian Federation hopes to resolve that issue and make the use of this fascinating technology for the good for its people and the world by not having a tight grip on cryptocurrencies, but to create state owned cryptocurrency that can be used worldwide.

References

1. Digital ruble. [electronic resource]. URL: <https://cbr.ru/fintech/dr/> (Date of request: 10.10.2023).

2. Half of Russians do not know why a digital ruble is needed. [electronic resource]. URL: <https://www.vedomosti.ru/finance/articles/2023/08/09/989183-o-vvedenii-tsifrovogo-rublya-ne-znaet-polovina-rossiyan> (Date of application: 13.10.2023).

3. Research: will Russians use the digital ruble. [electronic resource]. URL: <https://finance.mail.ru/2023-08-02/issledovanie-budut-li-rossiyane-polzovatsya-cifrovym-rublem-57248234/> (Accessed: 13.10.2023).

4. Tariffs for operations with digital rubles have been approved. [electronic resource]. URL: <https://cbr.ru/press/event/?id=1698> (Date of reference: 13.10.2023).

5. Accounting of the digital ruble: explains the Ministry of Finance. [electronic resource]. URL: https://nalog-nalog.ru/buhgalterskij_uchet/vedenie_buhgalterskogo_ucheta/buhuchet-operacij-s-cifrovym-rublem-razyasnyaet-minfin/ (Date of circulation: 13.10.2023).

6. Laws on the digital ruble have been adopted. [electronic resource]. URL: https://nalog-nalog.ru/spravochnaya_informaciya/prinyaty-zakony-o-cifrovom-ruble/ (Accessed: 13.10.2023).