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## Digitalization and legal regulation of public and private transactions in the digital environment: Concepts and development prospects

# **Цифровізація та правове регулювання публічних і приватних транзакцій у** цифровому середовищі: концепції та перспективи розвитку

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### **Abstract**

Digitalization of social life, which has recently gained significant momentum, leads to an acceleration of the pace of development of all related areas that meet the needs of such a society. Information technology and private and public transactions were touched upon in the article. At the same time, currently, neither Ukraine nor any other state can claim a perfect normatively established settlement of issues of public and private transactions in the digital environment, which can include the prospect of introducing future innovations, since the daily rapid development of information technologies makes any the existing legislation is partially outdated and irrelevant. In turn, the analysis of essence and features of electronic transactions, and the comparison of the regulation of their use in different countries will allow to development of a basis for a quick response to digitalization changes taking place, in particular, in the field of financial services. The method of analysis and synthesis, the method of theoretical generalization, and systematization serve as the methodological

#### Анотація

Діджиталізація суспільного життя, шо останнім часом набрала значних обертів, призводить до пришвидшення темпу розвитку всіх супутніх сфер, які забезпечують потреби такого суспільства. Торкнулись інформаційні технології і приватних та державних транзакцій. Разом з тим, наразі ні Україна, ні будь-яка інша держава не може заявити про досконале нормативно закріплене врегулювання питань державних та приватних транзакцій у цифровому середовищі, що може перспективу запровадження майбутніх інновацій, оскільки щоденний стрімкий розвиток інформаційних технологій робить будь-яке існуюче законодавство частково застарілим та неактуальним. В свою чергу, аналіз особливостей сутності та транзакцій, порівняння електронних врегулювання їх застосування у різних країнах дозволить напрацювати базу для швидкого реагування на цифровізаційні зміни, що відбуваються, зокрема, в сфері фінансових послуг. Саме тому тема даного дослідження  $\epsilon$ актуальною.

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foundation of this study. The result of this study is the identification of problematic issues of regulation of public and private transactions in the digital environment in the conditions of digitalization, as well as the determination of the vector for future research on this topic and the introduction of changes to the regulatory and legal framework of Ukraine. A conclusion was made about the need to take digitalization into account in order to build an effective competitive digital economy with the appropriate tools to protect the rights of subjects of economic legal relations.

**Keywords:** digitalization, electronic transactions, information technologies, digital economy, cryptocurrency.

## Introduction

The life of modern society is closely related to the use of information technologies. Almost any human activity, in particular with regard to the performance of work, the provision and receipt of certain services, the purchase and sale of goods, i.e. those spheres of life that have an economic nature and are characterized by payment, currently gravitates towards the digitalization of the accompanying processes, including through the use and popularization of electronic transactions that exist due to the World Wide Web.

Electronic transactions are a convenient way to achieve the final goal because when using them, time and effort are minimal. In this regard, taking into account the realities of modern life, electronic transactions are predicted to find their manifestation in everyday life more and more often. Thus, the application of elements of electronic interaction within the scope of providing financial services acquired a new and more thorough meaning due to the spread of coronavirus diseases, which led to the stagnation of the trend of contactless communications between subjects of legal relations. Regarding Ukraine, a new impetus for the development and introduction of innovations in the field of electronic financial services should be a fullscale invasion of the territory of Ukraine, since in such conditions, namely in the conditions of martial law, the organization, speed, and mobility of transactions play a decisive role in ensuring

Метою роботи аналіз особливостей  $\epsilon$ державних та приватних транзакцій цифровому середовищі та ïx правове регулювання умовах діджиталізації. Результатом даного дослідження виокремлення проблемних питань регулювання державних та приватних транзакцій у цифровому середовищі в умовах діджиталізації, а також визначення вектору для майбутніх досліджень даної теми та внесення змін у нормативно-правову базу України. Зроблено необхідність висновок про врахування діджиталізації для побудови ефективної конкурентноспроможної цифрової економіки з належним інструментарієм для захисту прав суб'єктів економічних правовідносин.

Ключові слова: цифровізація, електронні транзакції, інформаційні технології. діджиталізація, цифрова економіка, криптовалюта.

the normal functioning of both the business sphere and the client's consumer sphere.

At the same time, the electronic form of a financial service, which at first glance seems to be a quick one-time action, includes a multifaceted mechanism of interaction in the communication environment between the service provider and a significant number of clients, which must necessarily be accompanied by the availability of information about such a financial service regardless of such factors as the client's location and time of day, as well as being characterized the globality bv personalization of services, the ability to quickly make decisions in the process of such interaction between the system and users. That is why, in order to avoid possible foreseeable failures in such a system of relations and to restore the normal situation as soon as possible in the event of their occurrence, it is necessary to regulate the issue of electronic transactions at the state level. In addition to the problematic issues that already accompany the provision of certain types of financial services, electronic transactions are burdened with other risks associated with their form. Thus, when using electronic transactions, there is a high probability of abuse of the capabilities of the digital environment: illegal transfer of personal and other data, and unauthorized interference in the work of the relationship system. Such abuses can cause significant damage to both private and public interests, which will have consequences in the

form of, in particular, financial losses of individuals and businesses, deterioration of the reputation of banking institutions, and undermining of general trust in the authorities.

Thus, the official regulation of electronic transactions should become a priority direction for the development of an effective mechanism for regulating the modern economy taking into account the needs of society in digitalization.

At the same time, it is worth understanding that the state regulation of electronic transactions, given their multifaceted nature, cannot be simple and one-syllable. Firstly, the nature of electronic transactions is currently not sufficiently studied at the theoretical level, and the practice of their recognition and application is not stable, which in turn leads to disputes regarding the classification of these transactions in the sphere of regulation of certain legal relations. In particular, electronic transactions can be used as a category of civil law, and financial law. Thus, even if a separate normative-legal act, regulating the implementation of electronic transactions is adopted, there will be a number of normativelegal acts that must be brought into line with the requirements for the use of such transactions.

Secondly, since electronic transactions are directly related to the achievements of digital technologies, their development is unreasonably fast, which does not allow the legislator to quickly respond to changes in the field of electronic transactions, and accordingly to update existing or adopt new legislation on this issue. The ideas about new resources and new types of services that are provided with the help of information technologies appear almost every day, and the lists of entities that actively implement innovative technologies in their activities are replenished.

Taking into account the above, realizing the prospect of the further introduction of digitalization of public and private transactions in the digital environment, in order to prepare the ground for the state regulation of relations in the field of electronic transactions, it is necessary to study the features of such transactions, in particular within the limits of foreign regulatory experience.

## Theoretical Framework or Literature Review

A significant contribution to the disclosure of the concept of "digitalization" was made by H. Zhosan (2020), who analyzed in detail, in particular, the state policy of Ukraine within the

scope of this issue. Her works include a detailed breakdown of digital transformation into components: external communications, business models, project processes, lean manufacturing, working with data, internal communications, and relationships. The scholar studied individual aspects of the spheres and directions of development of digitalization, namely the digitalization of banks, the market, the financial market, production, the economy as a whole, business, education, professions, and the entire society in general. According to the result of the researcher's work, the global unification of the digital and physical world became obvious.

The efforts of S. Leonova and Babich (2022) made a significant contribution to the study of the main trends in the introduction and development of digital technologies in the banking sector of the economy. The research is built around the factors of the impact of digitalization on the marketing perspective of a commercial bank for potential customers. Thus, the conclusion of the research was, in particular, a recognition of the fact that the use of modern technologies by banking institutions makes such an institution more attractive both for the client and for investors and potential partners. At the same time, the researchers also paid attention to the barriers to the use of innovations by banks.

Yu. Romanovska and Skladanyuk (2022) focused on the study of digitalization of the banking sector in the conditions of a pandemic, namely mass diseases due to COVID-19. The scholars emphasized the advantages popularizing the digitalization of the banking sector, in particular, the most relevant innovations that have found a place in the activities of banking institutions (blockchain, sharing). They also insisted on the need for close cooperation between banks and other financial institutions using all possible and available innovative digitized technologies, because only under such conditions the active and effective development of the banking sector becomes possible.

The result of the joint work of such scholars as O. Khamidov et al., (2021) was the disclosure of the peculiarities of the development of the financial market of Ukraine, in particular through the prism of the introduction of digital technologies. A lot of attention has been paid to the place in the system of the digital economy of e-commerce, manifested through e-marketing, e-flow of capital, e-data exchange, e-banking, and e-commerce.



The cumulative work of S. Volosovich and A. Vasilenko (2019) is aimed at determining the place of Regtech in the ecosystem of financial technologies. The term Regtech refers to a set of technologies that optimize the control system over the fulfillment of regulated requirements. These technologies are aimed at facilitating and automating the submission of various types of reports, and data accumulation, but they are not devoid of many risks. The mentioned authors proved that the digitalization of relations between subjects of the economic sphere contributes to the digitization of those internal processes that take place locally in the institution. No less productive is the collaboration of scientists M. Korol and S. Parlag (2020), who studied the impact of digitalization on the banking sphere. In their works, the issues of implementation of programs for the development of the banking sector of the economy, implementation of electronic payments and electronic document flow in the banking institution, the emergence, problems, and further development of the Fintech market, and the provision of cyber protection were manifested in their works.

- O. Stashchuk and R. Martyniuk (2021) studied the processes of introducing innovations in the banking sphere, considering the need to improve the tools for ensuring financial security.
- S. Reverchuk and O. Tvoridlo (2022) also studied the peculiarities of the development and state regulation of banking services in Ukraine in the conditions of digitalization. The authors considered the cryptocurrency market, the prospect of the creation and further functioning of neo-banks, and the activities of banks using digital technologies in general. The result of the research was, in particular, the consolidation of the position that cryptocurrency creates many inconveniences for the existing economic system, which are connected, in particular, with the impossibility of controlling and monitoring the emission and circulation of cryptocurrency at the state level.

The modernization of modern payment systems is analyzed by O. Dzyublyuk (2020). It can be seen from their content that electronic money is the latest financial instrument that will eventually replace traditional forms of monetary relations. The theoretician-economist was also engaged in the analysis of the place and role of electronic money in the digital economy, its further formation and functioning in ensuring the movement of goods, services, and works, the need to implement monetary policy in order to ensure the financial stability of modern society.

In the writings of O. Malakhova (2019), her own vision of approaches to the implementation of a system for the development and implementation of digital services for transactions is revealed. The scientist determined, in particular, the necessary degree of involvement in the implementation of digital technologies in the banking sphere of relevant specialist developers with the aim of adaptive transformation of the banking industry into a digital ecosystem.

The basic theoretical foundation for the further study of digitalization in the sphere of economic relations was created by lawyer K. Nekit (2022), who treated digitalization from a legal point of view. The scientist paid a lot of attention to determining the legal status of cryptocurrency both in Ukraine and abroad, namely in such countries as the USA (or separate states), China, Canada, Great Britain, Germany, Austria, Estonia, Singapore, Portugal, Qatar, Bangladesh, Brazil, Colombia, Ecuador, and Bolivia. The works of K. Nekit prove that leaving cryptoassets outside the legal field contributes to their use in illegal activities and deprives the state of significant revenues of their proper taxation. Thus, it is necessary to establish the legal regulation of the circulation of crypto-assets.

The articles of V. Logoida (2021) are also devoted to the study of foreign experience in the perception of digital assets using the example of cryptocurrencies. The scientist's detailed comparative analysis included the countries of Latin America: El Salvador, Mexico, Brazil. Argentina, Cuba, Chile, Colombia, Costa Rica, Ecuador, Dominican Republic, Venezuela, Uruguay, Panama, Paraguay, and Bolivia. The author researched the current legislative acts of the countries of the region and the main existing legislative proposals regarding the status and circulation of cryptocurrencies, in particular bitcoin, as well as administrative and, in part, judicial practice in matters of qualification of cryptocurrency as an object of civil rights.

Qin et al., (2021) took a closer look at decentralized finance, debuting as an ecosystem offering transparency and control, partly due to the integrity-protected underlying blockchain, as well as the current higher returns on financial assets.

The analysis of the works of the abovementioned authors makes it possible to state that the issues of digitalization of the financial sphere

are still relevant for study since there are still a number of problems that need urgent solutions for the proper functioning of digital economic processes.

## Methodology

The research was carried out using both general scientific and special methods, with the help of which relevant conclusions were made, which are important for further study of this topic, i.e. creating a theoretical foundation for the regulation of the processes of digitalization of the financial sphere.

In particular, the dialectical method served a deeper understanding of digitalization in the field of finance and those relations that arise and progress in connection with its implementation. The specified method made it possible to single out and investigate the general properties, connections, and regularities characteristic of the implementation of information technologies.

The analysis method made it possible to consider digital transactions as a single system, a working mechanism, which is a set of relationships between each element of the studied system.

Complex comprehensive consideration and further use in research of such concepts as digitalization, information technology, digital economy, digital environment, state transactions, and private transactions became possible through the use of the system-structural method. In this way, the close relationship between the mentioned concepts and their dependence on each other within the digitalization processes was traced.

The result of the research was also achieved due to the use of the epistemological method, which contributed to the study of the manifestation of digitalization in the field of finance through the prism of comparing the visions of such processes set forth in scientific works and regulatory legal acts.

The basis for clarifying the main purpose of electronic public and private transactions, as well as the digitalization of the financial sphere as a whole, is the functional method.

Due to the axiological method, a conclusion appeared regarding the global value of those social processes that led to the digitalization of spheres of social life, and vice versa - the value of digitalization affecting society. It was this method that gave an understanding that

information technologies, the implementation of which is the basis of digitalization, is the driving force for accelerating many processes of everyday life, in particular those that are carried out within the banking business.

The method of systematization made it possible to unify general principles about the subject of research, which allowed us to create our own idea about the digitalization of the financial sphere, in particular, about the legal regulation of public and private transactions in the digital economy.

The comparative legal method made it possible to distinguish the attitude of the countries of the world to individual assets of digitalization using the example of cryptocurrency. So, the abovementioned method helped to work out the experience of cryptocurrency adoption by such countries as Ukraine, China, Thailand, Great Britain, Canada, El Salvador, and Mexico. Thus, the specified method made it possible to conclude that the lack of equal treatment of cryptocurrency inhibits the development of the global digital economy.

With the help of the method of generalization, a general picture of the problems of the researched topic was formed, which in turn made it possible to outline the vectors of theory and practice development for its further solution.

The specifics of the logical-legal method made it possible to formulate a number of proposals for the facilitation and effectiveness of the introduction of digital technologies in the field of financial services, in particular, regarding the normative regulation of the introduction and use of innovations in the banking sector, the implementation of a preliminary adequate assessment of the benefits and risks of using the assets of digitalization and taking measures to minimize negative consequences of the implementation of digitalization, the need for a careful selection of the approach to the implementation of the system of development and introduction of digital services for carrying out transactions, the need for international determination of the legal status of digital assets.

## **Results and Discussion**

For a more fundamental understanding of the specifics of digitalization and legal regulation of digitized public and private transactions, it is worth paying attention to the concept and content of digitalization.



Regarding the interpretation of the concept of digitalization, there is no universally accepted vision of such a concept, but any of the are related to information definitions technologies and their use to facilitate daily life. Thus, H. Zhosan positions digitalization as a qualitatively new type of information and telecommunication technology that cover and change all spheres of modern industrial and social life, and although it is in the process of formation, it is already a powerful potential that provides a chance for companies and countries to achieve the leading positions in key areas of socio-economic development (Zhosan, 2020).

For the state as a whole, digitalization is an opportunity to accelerate the development of the increase the attractiveness of economy. cooperation between business owners and state structures, and simplify this procedure. For citizens, it means new opportunities, saving time, and promising professions and jobs (especially for people with disabilities). For business, it means improving work, optimizing resources, reducing costs, etc. (Romanovska & Skladanyuk, 2022)

It is difficult to disagree with the fact that digitalization is a progressive direction of development of all spheres of social life, as it is aimed at meeting the needs of a demanding mobile modern society. The introduction of digitalization to the financial sphere will provide society with convenience, and this convenience will be manifested both within the scope of administration/management of processes (submission of various types of reports), and convenience in receiving financial services themselves, speed (you can receive certain services without leaving home) and a kind of safety (minimization of forced interpersonal contact).

E-commerce, which includes e-marketing, eflow of capital, e-data exchange, e-banking, and e-trade, occupies an important place in the formation of the digitalized financial market (Khamidov et al., 2021).

Thus, today, the process of selling banking products is being transformed from a standard set of ordinary and additional conveniences for customers to a strategic sales management tool that, through digitalization (automation of banking processes), improves relations with the target audience (Leonova & Babych, 2022).

Regarding the security of public and private electronic transactions, it is worth noting that

such security should be considered both from the side of strengthening and from the side of omission. Thus, the digitalization of economic processes carries risks, in particular, the leakage of personal data due to unauthorized intervention in the operation of the system, which in turn threatens the security of the subject of such economic relations. On the other hand, the use of digital technologies can ensure personalization of electronic payments at a high level.

For example, payments using PayPal or Internet banking are associated with tokenization and blockchain technologies. It is thanks to tokenization that the safety of electronic payment operations is possible, which arises as a result of the use of a special data encryption system. So, at the time when it is necessary to use information about the client's payment card (number, CVV code) to carry out the corresponding operation, tokenization ensures the replacement of such data with a random, onetime selection of numbers and letters, which in themselves have no binding to a specific onetime transaction has no value. In this way, the possibility of data leakage, which could get to criminals and have negative consequences for the owner of the payment card, is minimized. It is worth noting that the currently popular contactless payment methods Google Pay and Apple Pay are based on the principle of tokenization.

Security measures that can be used exclusively within digital banking operations include remote blocking of a lost smartphone, encryption of access to personal files and access to applications, unique encryption of document circulation, and customer identification by fingerprint or Face-ID (Stashchuk & Martyniuk, 2021).

The advantages of digitalization of the economic sphere include:

- increase in labor productivity;
- increasing the competitiveness of business entities;
- reduction of production costs;
- a creation of new jobs;
- overcoming poverty and social inequality.

At the same time, the transition to digitalized transactions had some significant drawbacks, including:



- high level of cyber threats, in particular regarding the unauthorized distribution of personal data;
- impact on behavioral reactions within the limits of economic and financial literacy of a large number of people;
- the risk of spreading unemployment in the category of certain professions, the activities of which are replaced by acquisitions of the use of information technologies;
- discredit on the basis of the "digital divide" between the level and conditions of access to the digital environment in the same country or in different countries.

Market risk in the form of negative consequences from a significant change in market conditions is also likely; the technological risk associated with disruption of the uninterrupted provision of services due to failures or errors in the operation of the service; legal risks arising from insufficient legal regulation of the digital economy, therefore, result, in particular, in consumer insecurity (Volosovych & Vasylenko, 2019).

Thus, the set of potential shortcomings of the digital sphere can develop and worsen to a significant degree of influence on the efficiency of the functioning of the financial system as a whole, therefore, the introduction of total digitalization of economic processes must be evaluated from various sides.

However, it is not worth giving up digitalization because of possible negative consequences, since such a refusal will entail a decrease in the level of customer orientation, the decline of the service sector, the financial sector, and the management sector, and the inhibition of the development of business and the state as a whole. The competitive advantages of using the assets of digitalization technologies are flexibility, mobility, reducing the cost of services and payments, using innovative sources of income, facilitating the entry of business entities into the global market, and increasing the degree of availability of goods and services in any country in the world.

Among the assets of the digitalization of the economic sphere, we can also single out the introduction of Bank ID, the creation of conditions for the provision of non-bank financial services online, the introduction of electronic signatures in the banking system, the creation of conditions for the transition of banks to Paperless, and others (Korol & Parlag, 2020).

Recently, taking into account the possibilities of information technologies, the so-called digital assets have become widely used. Among them are transactions in the financial sphere using cryptocurrency.

The relatively new cryptocurrency market is a subject of significant research interest in the current environment of financial innovation in payment services. At the same time, the existence and development of such a market create a challenge for the financial system of Ukraine, since the National Bank of Ukraine and other state regulators cannot control the emission of cryptocurrencies and their circulation (Reverchuk & Tvorydlo, 2022). The same situation has developed in the world in general.

Absence of a single emission center, and therefore control over the issue; lack of safe storage of currencies in electronic wallets and guarantees regarding the return of sums in case of theft; high energy costs of cryptocurrency mining; limited possibilities of their use as means of circulation and payment; the unstable value of cryptocurrencies, expressed in traditional currencies are currently problematic issues of the economies of many countries that still need an urgent solution (Dzyublyuk, 2020).

In the opinion of the author, the global problem of digital assets in general, and cryptocurrency in particular, is the lack of a generally recognized attitude towards such assets and legal regulation of their use. Within the scope of this issue, it is advisable to consider the approaches of various states (both progressive in terms of economic development and "middle-class") to the consolidation of the implementation of digital assets.

A significant omission, in the author's opinion, is that currently no international regulatory act clearly regulates the use of digital assets. Neither the International Forum of Retail Payments, the World Bank, the Committee on Payments and Market Infrastructure, the Bank for International Settlements, nor the European Central Bank could properly influence the need to settle this

Thus, some states of the world have made efforts to transfer the use of digital assets into the legal sphere, but the lack of a general approach at the international level to the recognition of digital assets as independent payment units leads to the inhibition of foreign trade with the help of such transactions.



For example, China, being one of the most economically developed countries, prohibits the use of cryptocurrency. China does not recognize cryptocurrencies as legal tender, and China's banking system does not accept cryptocurrencies and does not provide relevant services (Nekit, 2022).

However, the state still recognizes the need for digitalization of the financial sphere, as indicated by the conclusion of at least eight secure assetbacked agreements using blockchain in 2019 (7 transactions were conducted in the private sector and one by a state financial institution – the Bank of Communications) (The Financial Crimes Enforcement Network, 2019).

Canada treats cryptocurrency as a commodity at the legislative level. Income from transactions involving cryptocurrency is generally treated as business income or capital gains, as the case may be. When cryptocurrency is used to pay for goods or services, the CRA treats it as a barter transaction for income tax purposes (Government of Canada, 2021).

A similar situation is developing in Mexico. Thus, in a relatively recent conversation with journalists, the head of the Bank of Mexico, Alejandro Díaz de Leon, noted that the use of cryptocurrency has the characteristics of a barter agreement and not the circulation of advanced fiat money, and Bitcoin itself is an analog of precious metal and not a means for daily calculations, and therefore Mexico has no plans to recognize cryptocurrency as a parallel legal tender in the near future.

It is worth noting that not all Latin American countries adhere to this position. Thus, El Salvador was almost not the first on the continent implement legislative legalization adopted cryptocurrency, having corresponding law "On Bitcoin", which entered into force on September 7, 2021. Although only one type of cryptocurrency has achieved recognition - bitcoin, which is recognized as an official means of payment, which must be accepted indefinitely by all legal entities and individuals in payment of any type of monetary obligations, however, the adoption of this legislative act created a solid foundation for further regulation of the use of other types of digital assets (Logoida, 2021).

Thailand has not remained aloof from the digitalization process, where the Royal Decree on the Business of Digital Assets defines cryptocurrency as an electronic block of data

built on an electronic system or network, which is created to be a medium of exchange for the purchase of goods, services or other rights, including an exchange between digital assets (Oin et al., 2021).

The UK is also on the path to defining its own position on the use of digital assets, as the Government has expressed its intention to legislate certain stablecoins (a type of asset used as a means of payment) into the regulatory perimeter (HM Treasury, 2021)

Ukraine went even further in regulating the issue of the use of digital assets, adopting the Law of Ukraine "On Virtual Assets" on February 17, 2022. The specified legislative act clearly regulates the existence of virtual assets in the economic and legal field, determining the status such assets, and their classification, establishes the features of acquisition and realization of ownership rights to them, adapts recommendations for financial monitoring of the virtual assets market; determines the list of professional service providers of virtual assets and their registration; determines the market regulator (Law No. 2074-IX, 2022).

Having analyzed the legal regulation of digital assets in various states, it is worth noting that Ukraine, in its desire to meet the modern hightech challenges of society, occupies not the last position in the world ranking, as it is trying to follow the path of digitalization, in which it is already making appropriate progress.

The emergence and development of digital technologies, particular electronic in transactions, have had a significant impact on the banking sector as well.

The banking sector is almost the first to develop a mechanism for rapid adaptation to the needs of customers related to the introduction of information technologies. In this regard, such approaches to the implementation of the development system and introduction of digital services for transactions as the creation of a proprietary development system and the creation of a digital industry ecosystem based on the consolidation of efforts are popular among banks today.

The first model is characterized by the introduction of special digital services, which takes place under the condition of the involvement of the company developer of such services and/or independent development and promotion. This approach to the digitalization of the banking sector is successful, but it also has a number of significant disadvantages, including the lack of the client's ability to independently choose an urgent need, since the developer (founder) of the proprietary system himself determines what the client wants, and the hyperfast dynamism of the relationship between the client and the bank, since at the end of the development and implementation of a certain project, customer orientation may change its subject direction, in connection with which the created product may lose its relevance.

The principle of creating an ecosystem of the digital industry based on the consolidation of efforts, in the author's opinion, is less resource-intensive compared to the previous approach and consists in combining the efforts of the community of developers of digital technologies and applications, enterprises of the industry, as well as other interested parties. (Malakhova, 2019) Thus, the bank can achieve the desired result faster within the scope of digitalization of the provision of financial services but may lose some advantage to the competitor in the field of introducing its own innovations.

In any case, the consolidation of the positions of digital technologies in all spheres of social life, as well as their rapid development, pose new challenges to both businesses, banks, and legislators, since all the named subjects must integrate into the new realities of life, manage to bring compliance with the new challenges of modernity, internal processes and mechanisms that regulate their activities and ensure the realization of consumer needs.

## Conclusions

The result of the study of issues of digitalization and legal regulation of public and private transactions in the digital environment was the following conclusions:

- The reformation processes of modern society are connected, in particular, with the rapid formation and development of information technologies of various kinds. Changes in society lead to inevitable changes in all spheres of activity that meet the needs of such a society. Thus, the digitalization of transactions in the digital environment is a consequence of the rapid, but natural and expected, pace of digitalization of public needs.
- Digitalization of transactions is a vivid example of the people-centered policy of both the state and relevant financial

- institutions. It allows, in particular, banking institutions to carry out their activities on the basis of customer orientation, mobility, convenience, accessibility, and openness to providing and receiving financial services. Thus, the introduction and use of Internet banking, tokenization, and blockchain technologies have brought the interaction between the client and the bank to a qualitatively new level.
- 3. Despite significant advantages, the total digitization of the banking services sector has its drawbacks, including a high risk of cyber threats, and unauthorized distribution of personal data. Thus, when introducing digital technologies into the field of transactions, it is necessary to develop the concept of implementation of the system of development and introduction of digital services for transactions as much as possible.
- 4. The partial transition of the financial sphere to the digital environment led to the spread of the use of digital assets. The main problem of such use is the lack of a generally recognized national and international vision of their essence and meaning. Thus, the analysis of legislative initiatives of selected states on different continents confirms the presence of a colossal difference in the perception of digital assets, using the example of cryptocurrencies: from the ban on their use in China to the complete recognition as a means of payment in El Salvador.
- 5. Digitalization of society leads to the need to regulate at the legal level the peculiarities of mutual relations, which are accompanied by the use of information technologies. At the same time, such regulation must be of high quality and timely, because it is under the condition of compliance with certain indicators that the regulation of digitalization will be effective and will allow it to satisfy the requirements of the client, business, and the state.

Thus, the study of the features of the implementation of information technologies in the financial sector of public life is a promising direction of scientific research, the result of which will be the development of a significant theoretical base for the further legal regulation of digitalization processes that are taking place in the realities of today and will take place in the future.



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