New forms of investment in the conditions of Industry 4.0. (crowdfunding, crowdinvesting)

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Abstract. The paper examines crowdfunding, crowdinvesting as modern forms of investing in various projects in the context of the emergence of the "fourth industrial revolution", taking into account the priorities of the international integration of the Russian Federation (BRICS, EAEU). The author assesses the traditional system of exercising the rights and legitimate interests of participants in modern forms of investment for compliance with new needs under the introduction of innovative management technologies. The gaps in the legal regulation of the institution of crowdfunding in Russia, including: legal uncertainty in the qualification of an agreement concluded on an investment platform; lack of fixed legal guarantees for participants in investment projects, etc., have been identified. Given the processes of transformation of public relations under Industry 4.0, the author identifies ways to eliminate gaps both in legal regulation and in theoretical and legal aspects. According to the author, such changes are intended to prevent violations of the rights of business entities in the context of Industry 4.0. and reflect the domestic legal policy in relation to alternative forms of financing innovative projects based on digital technologies by business entities of the countries participating in integration associations with the participation of the Russian Federation.

1 Introduction

The rapid development of scientific and technological progress leads to a digital revolution in all spheres of social relations, primarily in the economic one. The digitization of economic processes at all levels is an integral element of the transition to Industry 4.0, in the process of which new and existing social relations are emerging and transforming.

Moreover, the spread of the coronavirus infection COVID-19 in early 2020, which swept the whole world, has shown the urgent need for the urgent implementation of digital technologies, reorientation of business processes, and served as a powerful catalyst for the transition to the Industry 4.0 economy.

The breadth and depth of the changes brought about by the "fourth industrial revolution" herald the transformation of entire systems of production, management, and leadership. From a technological point of view, the concept of Industry 4.0 is reduced

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mainly to digitalization and automation [1]. Digitization processes predetermine the transformation of public relations, modern business models, and the introduction of key technologies by companies: modeling, horizontal and vertical system integration, cybersecurity, cloud technologies, additive 3D technologies, augmented reality, etc. [2] The introduction of new technologies is aimed at improving production processes [3, 4] and requires large amounts of investment.

In turn, the widespread development of information technology and the Internet leads to the emergence of new investment models in various spheres of public life (institutions of crowdfunding, crowdinvesting, etc.) [5, 6].

2 Materials and methods

Many researchers emphasize the presence of gaps in the legal regulation of the institution of crowdfunding, including crowdinvesting, in Russia [7, 8], the elimination of which, on the one hand, should provide a guarantee of protection against fraudulent activities, on the other, should increase the availability of their use and simplicity for investors and companies.

The regulatory and legal basis of the study is the legislation of the Russian Federation that regulates forms of investment based on the use of the latest digital technologies (crowdfunding, crowdinvesting).

The methodological basis of the work consists of: the method of scientific analysis, the dialectical method, the method of logical analysis.

3 Results and discussion

3.1 Crowdfunding, crowdinvesting as New Forms of Investment

Currently, the crowd economy, in which the role of the individual is significant, is actively developing, and this concept is understood in this case as an individual and a certain small association of people created in order to satisfy their goals.

The ongoing processes have led to the creation of an innovative form of financing, which attracts crowd investments.

In Russia, crowdfunding is at an early stage of development. Now, there are more than ten crowdfunding platforms in various directions, for example, Taplend, Zaimudeneg.ru, Planeta.ru, Boomstarter, the latter being especially popular [9].

Crowdfunding is an activity aimed at attracting financial resources, in which people who want to sell their products using an Internet platform participate.

The crowdfunding platforms—websites that provide services through the crowdfunding platform and allow financial pledges—are most commonly used by startups.

There are many types of crowdfunding; especially popular is the type of crowdfunding, such as tender one, which was formed due to the growing demand for the institution of procurement of goods (works, services) for State and municipal needs. The Penenza crowdfunding platform provides an opportunity to choose the purpose of loans. The kickstarter.com project is especially popular on the world market; in Russia, there are planeta.ru, Starttrack, and Alpha Stream.

This new entrepreneurship finance scheme supports firms that do not have pledged asset and financial history to access traditional funding sources. In particular, crowdinvesting is aimed at financing new innovative enterprises, high-tech enterprises and knowledge-based firms. Thus, crowdinvesting is a legal and viable alternative funding tool for founders. Many young, innovative businesses have amassed a capital on crowdinvesting platforms. Expert estimates show that most of the early-stage capital comes from online platforms.

3.2 Regulatory issues and development prospects of crowdfunding, crowdinvesting

For the efficient functioning of investment instruments, a thoroughly developed legal and regulatory framework is a prerequisite.

The lack of legal certainty does not allow the full use of progressive forms of investment. So, for this reason, the financial technology of syndicated lending in Russia has not been developed, while in international practice, it has been used for a long time and successfully. Significant gaps and contradictions with the current civil legislation and international practice are revealed. Despite this circumstance, the adoption of a special regulatory act on the regulation of syndicated lending in Russia (Federal Law of the Russian Federation *On Syndicated Credit (Loan)*) is an important stage in the formation of a national market for syndicated lending in Russia [10].

Despite the fact that crowdfunding is actually already functioning in Russia, a special law on commercial crowdfunding was adopted more recently—the Federal Law No. 259-FZ dated August 2, 2019, *On Investment Promotion Using Investment Platforms and on Amending Certain Legislative Acts of the Russian Federation* (hereinafter referred to as the "Investment Promotion Law").

According to the Investment Promotion Law, there are several investment options using investment platforms. In this case, an investment platform is understood as an information system on the Internet, with the help of which investment agreements are concluded, while the investment platform operator has access to such agreements.

Note that the text of the Investment Promotion Law contains an indication that the meaning of the concept of "information system" in this context should be understood similarly to the definition of this concept given in the Federal Law dated July 27, 2006, No. 149-FZ *On Information, Information Technologies, and the Protection of Information* (hereinafter referred to as the "Law on Information"), in which the concept of "information system" is defined as follows: "the totality of the information contained in databases and information technologies and technical means ensuring its processing" (Art. 2).

Due to the fact that the right is clearly defined in this system, it becomes possible to simplify the legitimation of the owner of the right, the procedure for its transfer, and the level of trust in the records also increases. In turn, the object of law acquires a new quality, which entails certain legal consequences. Since the information system is designed to store and to issue certain information, the data contained in it directly have an impact on the legal regime of the information system.

As the analysis of the Law on Information shows, the concept of an information system contained in it does not fully correspond to the task of forming the concept of digital rights through it. The text of the law refers to "information", not "information rights". Accordingly, it is necessary to develop a broader interpretation of the concept of an information system, as well as the criteria by which the boundaries between information and information rights can be drawn.

An important problem is credit risks and obligations, which the investment platform does not undertake, and all loans are issued by lenders. Certain guarantees of the reliability of the service are as follows: scoring of loan debtors, collection of past-due indebtedness, as well as a guarantee service for loans, if the lender is not sure of their repayment.

Moreover, the qualification of such an agreement is not clearly defined in the law. Considering this problem, some researchers conclude that in this case, it is advisable to talk about security for loan [4].

Let us turn to a court practice. Thus, by the decision of the Moscow Arbitration Court dated September 12, 2019, No. A40-133905/19-182-1157, the debt was collected in favor of Action Collection, LLC. In this case, there was an assignment of the right of claim under the concluded contracts.

The decision of the Moscow Arbitration Court dated July 5, 2019, in case No. A40-134032/19-55-1051 states that between the Lenders and the Bank, the Loan Debtor and the Bank, in fact, there were agenting legal relations, where the Bank acted as the Agent of the Lenders and the Loan Debtor in implementation of legal actions under the conclusion and execution of loan agreements through the online service.

Analyzing the judicial practice, we see that when deciding on cases of debt collection under an agreement concluded on electronic platforms, the court is guided by the norms of the current legislation on electronic signatures, the general provisions of the Civil Code of the Russian Federation on obligations under the agreement. Thus, by the decision of the Moscow Arbitration Court dated March 13, 2020, in case No. A40-287818/18-87-1688, the claim of Reconza, LLC, against Intellectstroy, LLC, for the collection of debt under loan agreements concluded in the electronic form of the Penenza.ru credit platform was satisfied. Further, the court refers to the civil law on contractual obligations. Having considered all the evidence in the case, the court has concluded that the stated claims of the complainant party were to be satisfied and has collected the debt from the defendant in the prescribed amount.

By the decision of the Moscow Arbitration Court dated September 21, 2020, in case No. A40-111869/20-98-810, the claim of MCC Simplefinance, LLC, against StaticaMSK, LLC, for the collection of debt under the loan agreement dated October 20, 2019, concluded within the framework of the SimplyFi electronic platform was satisfied. The court has found that this agreement was concluded in accordance with the established requirements. As indicated in the court decision, "The P2P-platform "SimplyFi" is a platform through which investors provide loans to legal entities and sole proprietors who have been registered in the prescribed manner, in accordance with the legislation of the Russian Federation.

By the decision of the Moscow Arbitration Court dated June 3, 2020, in case No. A40-46978/19-87-296, the claims of Reconza, LLC, against Stroimontazhproekt-22, LLC, on debt collection under agreements concluded on the Penenza.ru business credit platform were satisfied, in accordance with its established Operating Regulations. The court has established that contracts concluded in electronic form are valid and bilaterally signed between the Parties using electronic signatures. Thus, based on the current legislation, the court has collected the debt from the defendant.

By the decision of the Moscow Arbitration Court dated September 24, 2019, in case No. A40-106845/19-31-893, the court did not collect interest from the defendant, the penalty, collecting only the principal debt under the contract. As indicated in the decision, the claims of the complainant party in this part do not meet the requirements of the law and they are not documented, in particular, the complainant party did not submit primary documents (extracts from current accounts) that would allow the court to check the correctness of the calculation of interest for the use of the loan and the correctness of the calculation of the penalty. It is not clear from the materials of the case when and in what amounts the loan was repaid and in what periods there were delays in payments.

According to experts, in the context of crowdinvesting, it is appropriate to conclude an agreement on the division of profits, due to the fact that the recipient of the investment

assumes an obligation upon the occurrence of the circumstances provided for in the agreement to pay the investor funds.

A number of other issues, not resolved by law, also require a solution. Thus, it is unclear who, from the legal point of view, are the donors of investment projects consumers of financial services or investors. The answer to this question is of fundamental importance, since it determines the legal status of a participant in the legal relationship under consideration—a consumer or an investor.

4 Conclusions

In a market economy, the development of Industry 4.0, an increase in the movement of financial flows both within the country and abroad, caused by various factors (a pandemic, an increase in demand for innovations, etc.), it becomes necessary to find an optimal tool aimed at increasing the pace of socioeconomic development of our country. The transformation of modern business models, the introduction of new digital technologies by companies in the field of foreign trade leads to the search for new investment models that are gaining popularity both abroad and in the Russian Federation.

New platforms have a number of advantages, help investors make investment decisions by providing information about the founders and their teams, about the markets in which the promoted enterprises participate, as well as guarantee the reality of new investments, do not contain fraud. As a result of the study, the problems of legal regulation of the institution of crowdfunding, crowdinvesting have been identified.

1. Referring to the court practice of applying the norms of domestic legislation when considering claims of the Parties to collect debts under agreements concluded using P2P lending platforms, it can be concluded that, despite the adoption of a special law on commercial crowdfunding, the problem of legal uncertainties in the problem of qualifying the agreement concluded on the investment platform. This situation does not allow the full use of progressive forms of investment.

2. An important direction for improving the legislation governing the protection of the rights of participants in foreign trade turnover using digital technologies in the field of new forms of investment is the elimination of credit risks that the investment platform does not assume by fixing certain guarantees of service reliability in the text of the law. This step will fully protect the rights and legitimate interests of the subjects of investment relations.

3. Furthermore, it is necessary to develop an interpretation of the concept of "information system" and the criteria by which it is possible to draw the boundaries between information and information rights, since at present the concept of an information system contained in the Federal Law dated July 27, 2006, No. 149-FZ *On Information, Information Technologies, and the Protection of Information*", does not fully take into account the specifics of digital rights.

Thus, the proposed changes reflect the priority directions of the domestic legal policy in relation to the rapidly gaining popularity of alternative forms of financing innovative projects based on digital technologies by business entities of the countries participating in integration associations with the participation of the Russian Federation.

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