

A New Turn of Digitalization from the Perspectives of FinTech and LegalTech

Aleksey Annenkov

Department of State and Administrative Law
Institute of Law and Management
Tula State University
Tula, Russia
E-mail: lex97531@mail.ru

Tatiana Bondarenko

Department of Financial Management
Plekhanov Russian University of Economics
Moscow, Russia
E-mail: t.g.bondarenko@gmail.com

Abstract—The article is devoted to the issues of constructing digital space through FinTech and LegalTech development with regard to regulating the mechanism of creating and developing the legislative framework for the processes of digitization of economy, social activity and current space. Constructing a new virtual, digital environment contributes to the development of the innovation processes in digital economy due to conferring relevant jurisdiction. The article describes the most important development priorities and the existing problems in the financial and legal space and provides the landscape of digital space development from the financial, organizational and legal points of view. The paper proves that being socially oriented; digitalization of space and society implies creating a new global financial and legal ecosystem and requires certain changes to the existing infrastructure as well as elaboration of the corresponding regulatory legal acts.

Keywords—FinTech; LegalTech; digitalization; digital economy; financial and legal space; financial technologies

I. INTRODUCTION

The need to revise and develop traditional rules of economics, education and legislation within the digital economy is dramatically changing the established approaches to management systems. These changes refer to managing the world, country, company, human resources, customers, products and services, and require developing new infrastructure and introducing the technologies of revised thinking. The current state of global digital community is represented in "Fig. 1".

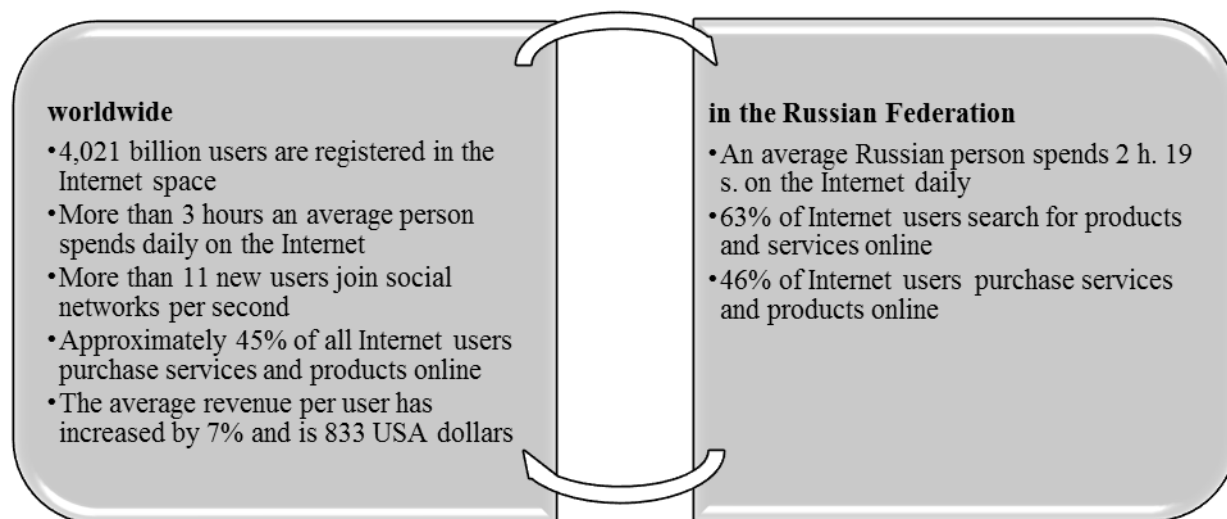


Fig. 1. Digitalization worldwide and in the Russian Federation [1].

It should be mentioned that digital economy does not mean total informatization of the space (the algorithm of making traditional actions digital), but a qualitative breakthrough in society development, which necessitates a new regulatory technology.

There is a government program, the implementation of which required establishing a special organization "Data Economy" and introducing about 50 bills [2]. On the one hand, it indicates the understanding of the development speed of building digital society and the need to form its legal grounds, but only in the catching-up mode. But on the

other hand, the emergence and rapid development of FinTech in the conditions of constructing digital economy changes the direction of development in the sphere of financial services production. These services develop in the process of customer-seller contact, often without an established legislative framework. Undoubtedly, it questions security and legitimacy and, finally, economic efficiency of all operations.

The above-mentioned tasks should be solved through to gradual implementation of the concept of change management. Meanwhile, it is important to understand that certain segments of digital technologies require unified national and international regulatory standards to be developed. This condition is imperative for positive trends to be observed when digitization program increases economic productivity. Special attention should be paid to the issues of “internal components” of the digitalization program. They include, first of all, the synergy of financial technologies, leading to improved productivity performance of the economy, the emergence of new markets, business models and services, and secondly, the synergy of corporate standards, legal issues, and technologies. Not only can these technologies increase the legitimacy and quality of services, but they will also contribute to reducing the prices for services through fierce and transparent competition.

Thus, the solution to the task of developing and implementing digital economy in Russia presupposes complete and simultaneous change of legislation, that will take into account the growing role of artificial intelligence, and it is exactly introducing the concept of change management that can help to handle this task.

For the companies, government and individuals, digital transformation is a complex project, just for the reason of globalization of FinTech and LegalTech mutual mergers and acquisitions. As a result, it is a project characterized by a

great range of various IT solutions. FinTech is an industry comprising the companies that use technology and innovations to compete with traditional financial institutions (e.g. banks and intermediaries in the financial services market). Nowadays, both technological start-ups and large and successful organizations that try to improve and optimize the provided financial services consider themselves to be FinTech. LegalTech is a business sector specializing in information and technology services for professional legal activities and providing legal services to the customers using these technologies. The latter case may include online mediation between the law firm and the customer, or the provision of legal self-service tools that save them the trouble of contacting professional lawyers. In addition, the legal tech movement is worth mentioning, as its goal is to revise the traditional views on dealing with legal issues by introducing modern information technologies in the field of legal services.

Therefore, from this point of view digital transformation is not only the acquisition of new technologies, but also the replacement of the old ones.

II. THE ANALYSIS OF THE PROBLEMS AND TRENDS OF DIGITAL TRANSFORMATION DEVELOPMENT

By now, the algorithms for providing financial services in digital space are clear and relevant; however they do require up-to-date digital law development. Currently, it is based on the “decentralized information system” [3]. Despite technologies development, the legal framework remains at its original design level. It results in terminological discussions and technological limitations of FinTech development in the legislative framework. The vectors and priorities for digital society development are presented in “Table I”.

TABLE I. TOP PRIORITIES FOR THE DEVELOPMENT OF FINANCIAL AND LEGAL SPACE IN THE FACE OF DIGITAL ECONOMY CHALLENGES

FinTech	LegalTech
Empowering the use of analytical data	Empowering the use of analytical data
New technologies of doing business	Personalization of the legal framework for economic actions
Development of new products and services	Development of quantum law
Development of new channels of products and services delivery	Increasing property rights
Entry into new markets	

It cannot be said that traditional financial organizations and traditional channels of providing financial services will disappear in a few years, but the changes are inevitable. They will affect the drivers for the financial technologies development, their functional presence in the Russian Federation market and the corresponding infrastructure (“Fig.

2”). Because of financial services digitalization, credit organizations will lose their monopoly both because of the increasing role of non-financial organizations in the financial market and general adjusting the business model to customer needs.

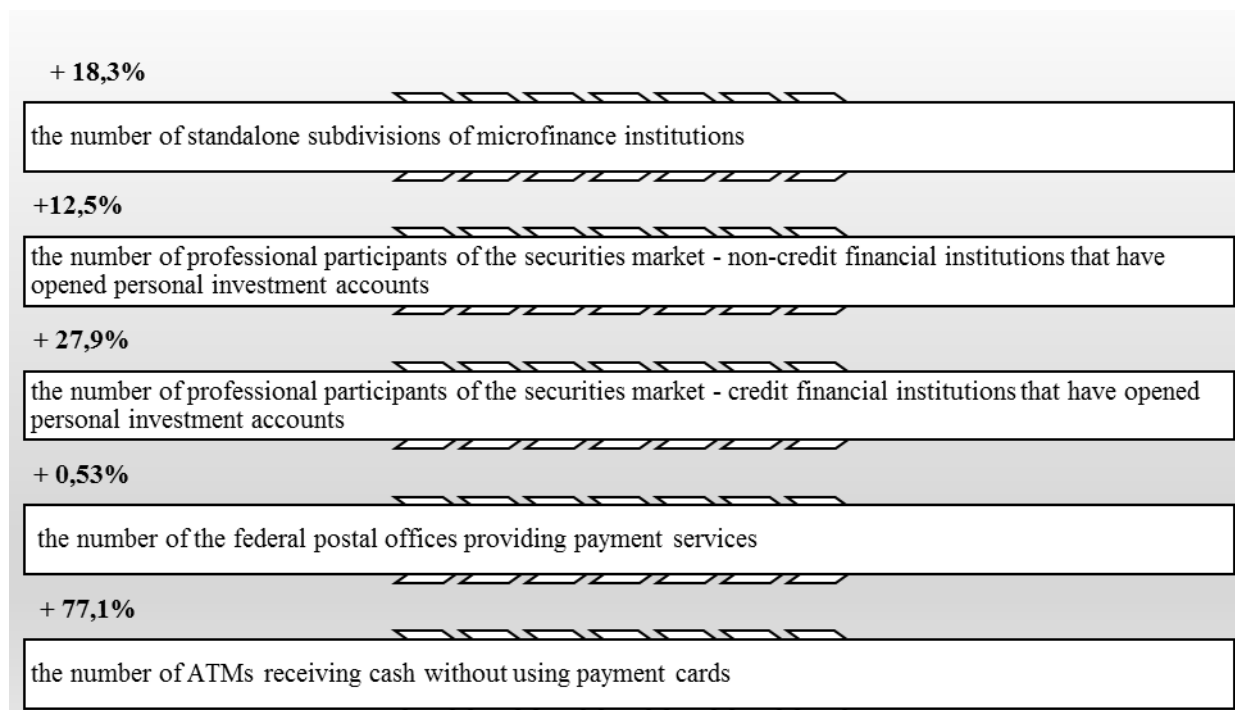


Fig. 2. The indicators of the financial services infrastructure development for 2018 Compiled by the authors, based on the research data [4].

The development of artificial intelligence, distributed ledger technology, Big Data, the Internet of things, crowdlanding platforms — that is exactly the infrastructure which is a precondition for landscape development in the situation of financial services digitalization. This situation is impossible without aspiration to build partnerships between financial companies and start-ups or technology companies.

Meanwhile, it is worth noting that the digitalization of the economy is progressing rather unevenly and requires

removing barriers to the availability of financial technologies in modern society ("Fig. 3"). It is primarily stated by the business community, since the goal of FinTech is to increase the efficiency of business processes by means of modern technologies. These benefits will also be appreciated by legal entities, individuals, and the state, since these services create the situations of electronic interaction for the listed subjects. It allows them to transmit, store and use vast amounts of information.

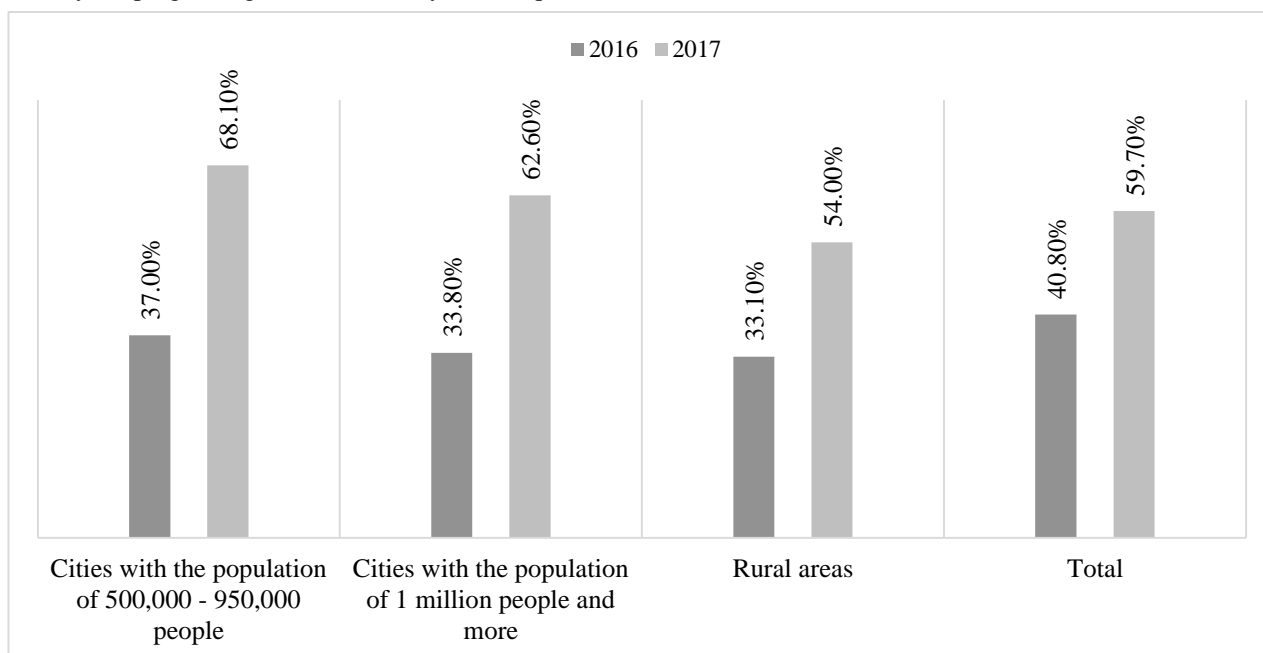


Fig. 3. The indicators of the availability of financial technologies for 2018 Compiled by the authors, based on the research data [4].

As it can be seen from “Fig. 3”, in general, the indicators grew considerably. On average, the level of instant access availability (without contacting the office or a specialist) increased by 18.9% and the growth affected each position on the report (for all types of settlements, except Moscow and St. Petersburg, whose growth rates reached the top already the in the previous reporting periods).

Another evidence of uneven progress of FinTech is the indicator of the impossibility to perform cash operations remotely within 15 minutes. Among all types of settlements, the lowest rate of this indicator belongs to rural areas (31.4%).

Thus, it can be said that digital transformation has not yet reached its highest rates of development; it is to be actively formed in the next two to three years and will cover all the sectors. It will result in new innovative products and services, new channels of distributing and receiving services, and new models of internal development of business processes and doing business in general. That is, digital transformation is aimed primarily at new customer relations in the following areas: customer service for the inside / outside / blending channel instead of forming a pool of dedicated customers, and maximum services support to meet customers' preferences instead of direct customer service providing ready-made products or services. In fact, this is the transition to moderating the sale of inter-business services and products.

III. THE TRENDS IN FINTECH AND LEGALTECH DEVELOPMENT

On the one hand, this process is creating a positive trend — the most customer-oriented activity in any sector of the market that eventually allows reducing both risks and the

internal operational costs of businesses (due to the synergy effect). On the other hand, there also may be a negative trend, which is growing economic cybercrimes. Therefore, the increase in the number of crimes and attacks of this very type is associated both with widespread technology development all over the world and the Russian Federation, in particular, and with pilot FinTech projects, the regulatory framework for which is only being formed.

The basic directions of FinTech and LegalTech development include developing adaptive rules and laws (regulatory controls), training professionals with relevant skills through the education system, building research competencies and technical groundwork and creating information infrastructure and information security.

The Russian segment of LegalTech, as well as the legal services market on the whole, cannot yet be named among the world leaders in the field. Moreover, many products that appear in Russia do not immediately take root and it may take a long time for consumers to become accustomed to new solutions. Nevertheless, Russian LegalTech is becoming increasingly attractive for venture funds and core business sites. LegalTech investors are primarily interested in projects related to artificial intelligence technologies that can spare the lawyers the time of doing routine work. In addition, the great potential for both FinTech and LegalTech today is the use of chat bots, solutions for transferring paper documents in electronic form and analyzing the data received, as well as the distributed ledger technology, which in future will be able to replace the traditional notary system, in particular.

According to Juniper Research and PwC research data, digitalization of economy has a number of negative characteristics, which can be found in “Fig. 4”.

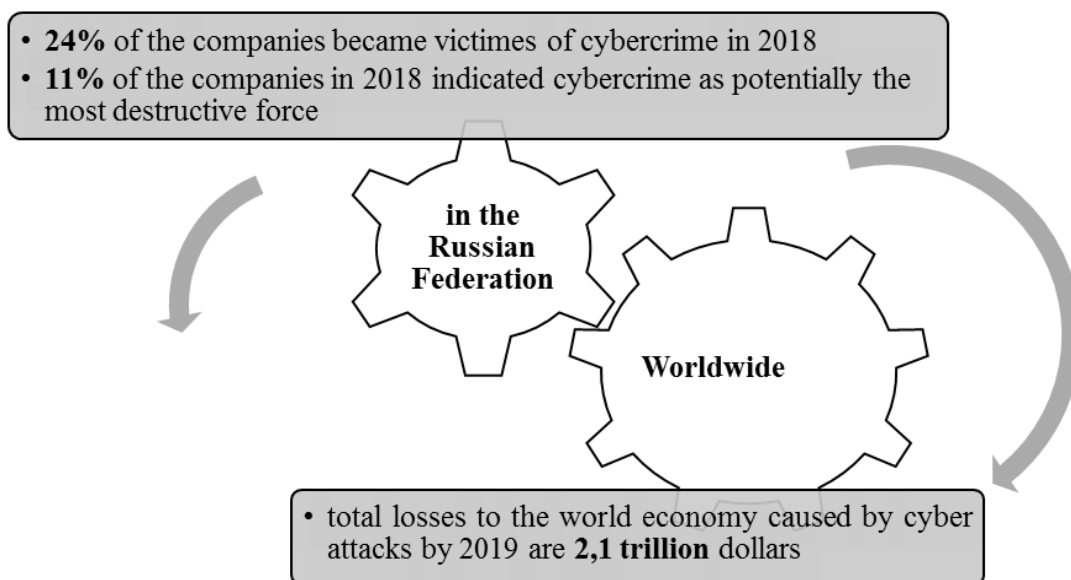


Fig. 4. The negative trend in FinTech development [5], [6].

Hence, the development of FinTech is creating a new business environment that requires maximum dynamism, efficiency and flexibility from all the participants. The key

element there is technologies, including security technologies, as they have a major role in business processes.

Consider the anticipated main directions for FinTech development ("Fig. 5"). Of course, this is likely to result in the classic model of providing financial products and services to wither away, the growth of intersegmental and strengthening of high-quality intrasegmental competition,

changes in the model of customer behavior (below) and the megaregulator (above). At the same time, the processes of activity transformation will be observed in the companies themselves, as the problem of social skills will become transparent.

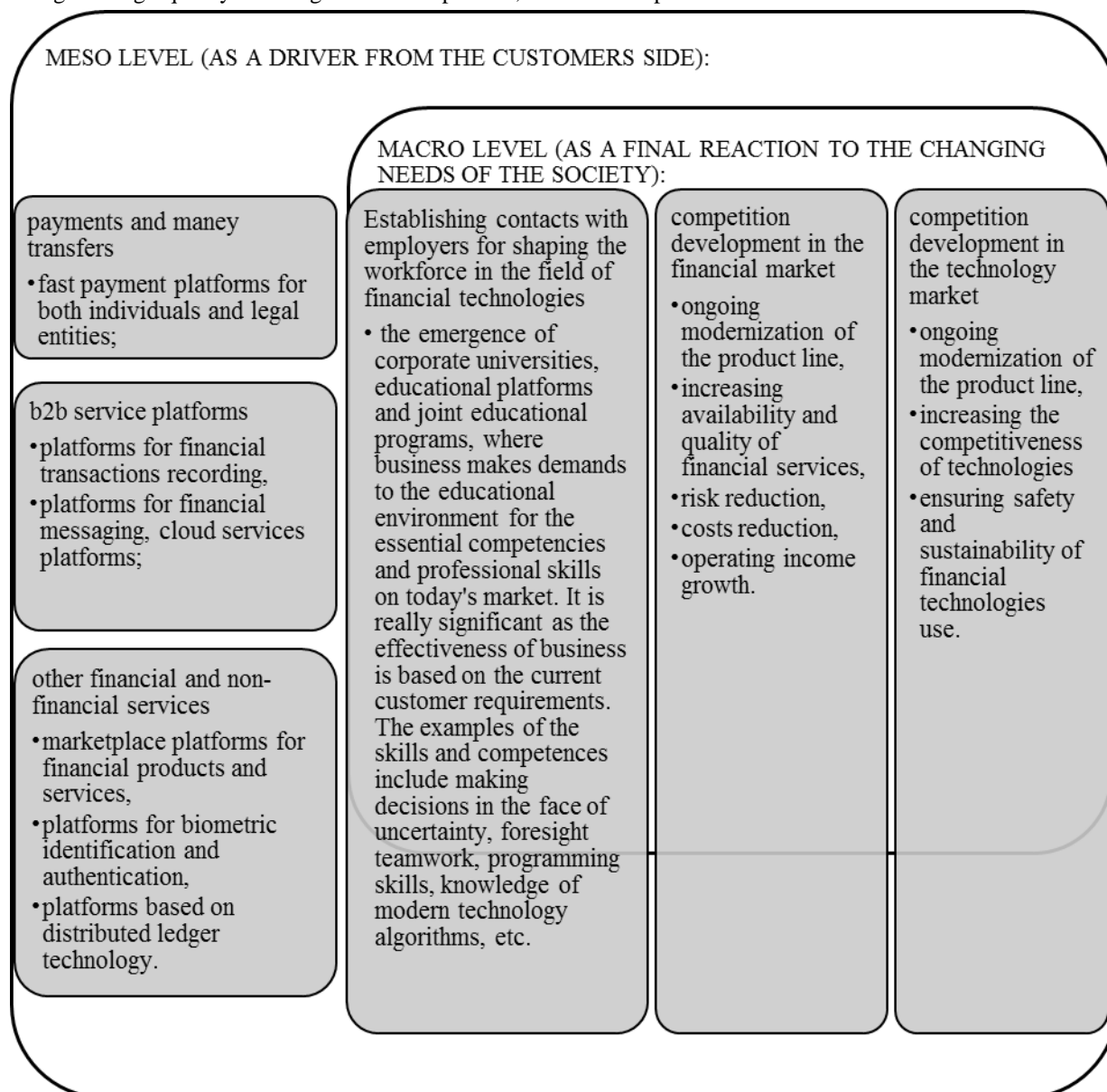


Fig. 5. FinTech landscape development from the financial point of view.

The issue of developing the regulatory landscape of FinTech as the main tool for lawyers, legislators and, as a result, the overall judicial system is equally acute. The current dynamics of FinTech development through legislation is trying to develop the judicial system, but at the same time, it slows down the legal entities sector economically. The reason is that the neighboring rights are not presented in the conditions of social digitalization. For

instance, it can be traced in the intellectual property right, in the issues of ownership of the created objects, etc. Worldwide, LegalTech has the following characteristics: over 4 billion attracted investments in LegalTech firms, 16 billion dollars from LegalTech firms' transactions. [7] The details on the relevance of LegalTech implementation and the algorithm for changing the legal thinking are presented in "Fig. 6".

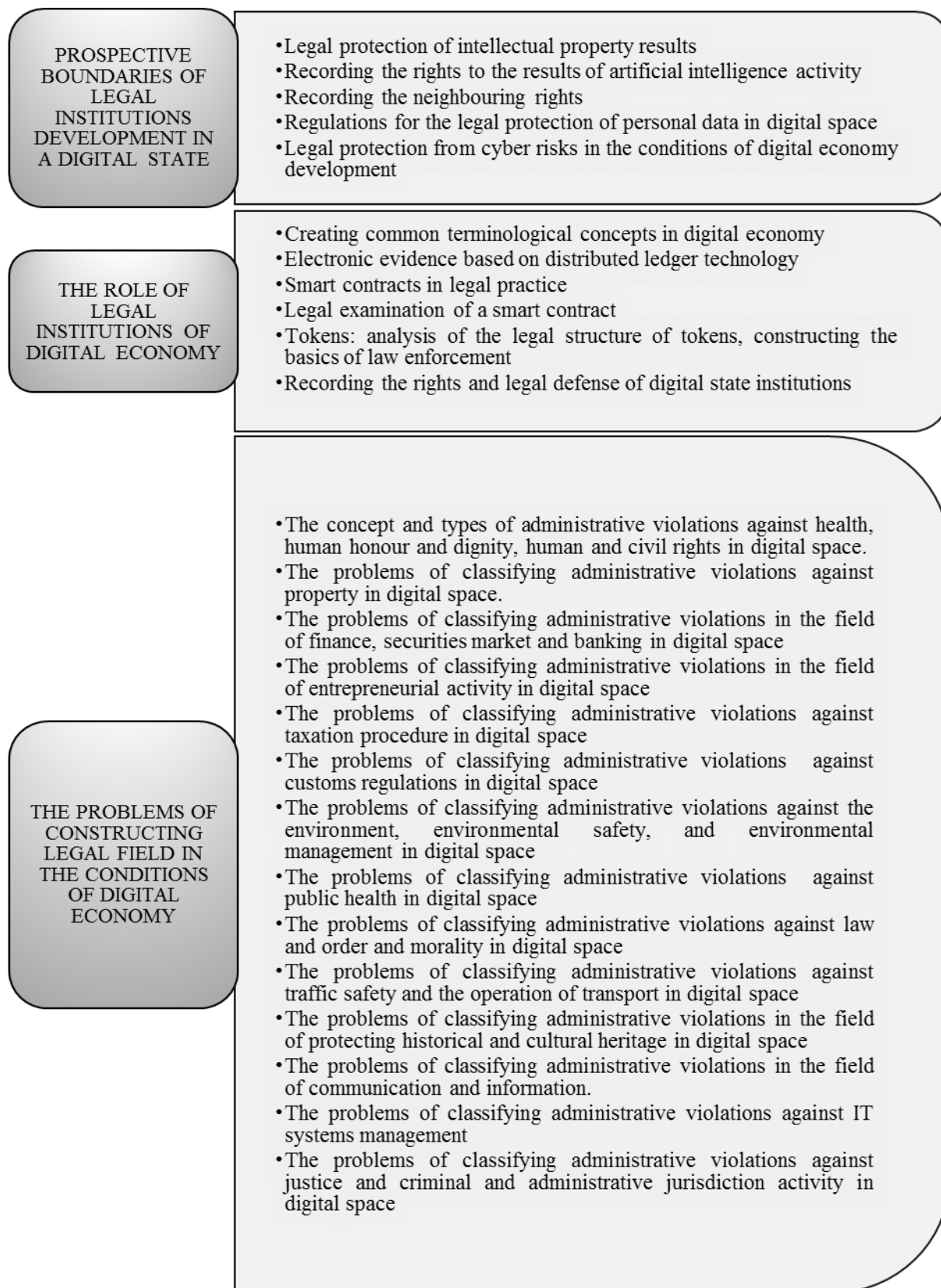


Fig. 6. FinTech landscape development from the institutional and legal points of view.

Thus, it can be said that the development of digital space in the Russian Federation will allow its economy to follow

the global trend of innovation and creating knowledge economy, as well as increase its competitiveness in global

markets, in general, and the quality and standard of living of the population, in particular.

IV. CONCLUSION

Building digital space will inevitably lead to the establishment of new institutions of digital economy due to the development of FinTech, and LegalTech in terms of regulating the mechanism of building and developing the regulatory framework for digitalization processes. Building a new digital environment should eliminate the difficulties of shaping the digital economy processes for Russian business and citizens by means of the relevant jurisdictions provision. One of the important aspects of building a digital economy is ensuring the information and economic security of the state and business, protecting Russian citizens' personal data and privacy in digital space. The article analyzed the development of this landscape from the financial, organizational and legal points of view.

Being socially oriented, which means improving the life of all social groups of the population, digitalization of space and society implies building a new global financial and legal ecosystem, requires changes in the existing infrastructure and elaboration of the necessary regulatory legal acts.

Despite the fact that the project of the digitalization program in the Russian Federation is national and already has clear development up to 2024, the issues of digitalization are especially relevant for the provinces, as in the state and municipal sector digitalization means abandonment of paper documents, both inside and outside the system. The issues of conformity of the infrastructure with the digital economy are also acute. To ensure it certain organizational and legal norms have to be developed, introduced or changed, so that any object will infrastructurally suit the FinTech and LegalTech technologies.

REFERENCES

- [1] Internet 2017–2018 in the world and in Russia: statistics and trends in 2018. Available at: <https://www.web-canape.ru/business/internet-2017-2018-v-mire-i-v-rossii-statistika-i-trendy/>
- [2] News. Moscow. 2018. Available at: <http://duma.gov.ru/news/26174/>
- [3] Comments on the draft Federal Law 424632-7 “On Amendments to Parts One, Two and Four of the Civil Code of the Russian Federation” (2018). Available at: https://zakon.ru/blog/2018/03/29/cifrovye_prava__eto_chto_eschyo_zazver#comment_460620
- [4] Review of the state of financial availability in the Russian Federation in 2017. (2018). Available at: http://www.cbr.ru/Content/Document/File/47451/rev_fin_20180828.pdf
- [5] Global losses caused by cybercrime will amount to 2.1 trillion dollars by 2019. Available at: <http://www.securitylab.ru/news/472924.php>.
- [6] Review of Russian economic crimes in 2018. Available at: <https://www.pwc.ru/ru/publications/recs-2018.html>
- [7] Exploring the global LegalTech ecosystem (2018). Available at: <https://disruptservices.io/global-legaltech-ecosystem-2/>