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Global Challenges and Prospects of the Modern Economic Development

DIGITAL TRANSFORMATION OF THE JUDICIARY

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Abstract

A purpose of digital justice is to simplify the interaction between the state, citizens, business and professional lawyers who defend the rights of participants in disputed legal relations. The economic approach to law sets the need to achieve results with minimal cost. A state model is attractive if it protects human rights and simplifies administrative matters. The right must be stable, understandable, it must not set excessive standards and unnecessary burden on the business in order to attract entrepreneurs. Nowadays in Russia there is a geopolitical situation that raises a need to create a comfortable legal environment for large business and large capital. Today, such a legal environment cannot be created without the use of modern technologies, the use of artificial intelligence, automation and robotics. The issue of the future awaiting digital courts in Russia and the world, is one of the most pressing issues, which lawyers, both theorists and practitioners, from all countries are fighting today to solve. The results of the analysis of foreign experience show that most of the existing acts aim at creating the most favorable conditions for innovation and research. Russia cannot directly borrow existing legal solutions to specific problems or copy the rules of law of other states. Specific regulatory rules need to be developed in account with the peculiarities of the national legal system, using the existing positive experience in the development and implementation of tools for supporting and developing robotics in other countries.

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1. Introduction

The legal system is stripped of its purpose if it is not a part of the socio-political structure of the country. The protection of human rights through simplified administrative procedures, based on stable, understandable legal norms are the goals of modern justice. The economic goal of litigation is to reduce its costs. Digitalization covers even the most conservative industries. Examples of digital justice development include:

- creating databases with easy and adaptive search;
- creation of investor search platforms for financing lawsuits of various companies;
- development of programs for automatically filling out documents for appeal to the judiciary;
- interaction with lawyers through various applications and messengers;
- development of automated systems to perform routine work.

New services allow to remove outdated communication archaisms that bothered both lawyers and business from the process of interaction between them, especially such archaisms as the need to independently study a huge amount of legal literature, and also corruption. New services also provide an opportunity to speed up the work of some government bodies. Currently almost all countries of the world are actively “digitalizing” the judicial system. Digital transformations that take place in the field of justice raise many problems for the solution of which some researchers propose building a conceptual model of the successful e-justice system (Jneid et al., 2019). Other authors analyze the actions of the European Union aimed at the use of artificial intelligence in the field of justice in all its potential (de Abreu, 2019). A comprehensive assessment of e-justice is being developed based on representing justice in the broad sense, e.g. not just as a set of services, but as a set of public values (Lupo, 2019). As a result of the analysis of foreign experience, we can conclude that most of the existing acts are aimed at creating the most favorable conditions for innovation and research (Lepore et al., 2019).

In today's realities, it is no longer possible to deny the effectiveness of using either mathematical models in law (Quattrocolo et al., 2020) or use of predictive analytics (Shapiro, 2019). The most recent assertion about the impossibility of using analytical methods of mathematical modeling in the social sciences is refuted by the use of such a high-quality modeling method in law, which is also used, in the framework of complex forecasting, as the scenario method (Sidelnikov, 1990). Theoretical studies examine approaches to making legally relevant decisions based on the prediction of results (Branting et al., 2019). Undoubtedly, digital courts have their own future. The future not so distant and very promising. Considering Russia in the context of this issue makes no sense. There is a worldwide trend towards “digitalization” of all spheres of life, and jurisprudence, and in particular the judicial system, is on the crest of a wave. In Russia, as in many countries of the world, it is necessary to create a digital infrastructure and various electronic services that help to administer justice. Much is already done. For example, the “Justice” system has been created, which allows submitting documents to the court in electronic form, receiving information on the progress of the consideration of cases and decisions taken on them. At the same time, a full-fledged transition into the “digital era” will require a lot of time and effort. This calls to a whole range of measures, including technical and software development and adoption of relevant regulatory legal acts.

2. Problem Statement

The most promising way of optimizing the judicial system today is blockchain technology (Kurcz & Paizis, 2019). It is a technology for creating highly secure databases. Big-data technologies can already be used in intellectual property cases related to the determination of similarity (degree of confusion). It has algorithms that allow you to compile solutions using parallel computing (including finding errors in the data or false data, analyze and correct them). So far only parts of the e-justice system are created in Russia. The system should combine legal information databases (legal acts, judicial practice, resolutions of plenums), electronic document management and algorithms of “intellectual” search and preparation of solutions. The system should provide the opportunity for full participation of interested parties in litigation using various digital services.

If we talk about databases of legal information, then they are quite well developed (indexed, relevant and full-bodied), but are intended for the user-person, and not for using them in the search and preparation of solutions by machines. In addition, the electronic document management system (EDMS) issue without normal functioning of which it is impossible to talk about e-justice, causes a lot of complaints. The paradox is that with its introduction paperwork has not decreased but has grown. This is obvious in the interdepartmental workflow. Despite the fact that most authorities (including courts) use their own EDMS, and almost all documents are created and registered in them documents are not exchanged only in electronic form. Documents are created in electronic form and then translated into paper form, so they acquire resolutions and signatures sent by mail. Then they are scanned (with loss of quality) and are again entered into the EDMS. As a result of all these manipulations, errors accumulate in the system.

It is too early to speak about a full-fledged subsystem for the preparation of rulings in Russia, unlike China, where almost everything is ready for the use of artificial intelligence in making court rulings. So, in China, a mobile court is already active, available through a chat bot in the country's largest messenger. By now artificial intelligence technology of the chat bot has reviewed more than 3 million civil cases. It seems interesting and promising to use online settlement as an alternative way to resolve disputes. The mediation procedure, which is so attractive for business in other countries has not found a proper response in Russia today. For example, in New York mediators consider 80-90% of disputes. In Russia, only now an understanding arises that mediation is a powerful segment of alternative dispute resolution. The task of the mediator is not to resolve the dispute but to give the parties the opportunity to talk with each other and work out a solution in an unexpected way. They can make concessions not even within the framework of the dispute but in their other relations. The task of the mediator is not to be a judge but to help the parties speak to each other. Mediation allows you to resolve the dispute at a lower cost. One of the reasons for the low popularity of the mediation institution in Russia is the low cost of going to court. Due to the relatively low cost of litigation, the parties have no incentive to contact a mediator to resolve the dispute. Nevertheless, it seems that the main reason is the low awareness of citizens and business participants about the possibility of using the mediation procedure.

Alternative dispute resolution methods are attractive in being able to reduce the burden on them. The use of new technologies will allow us to move to the so-called online dispute resolution, which is regarded as the equivalent of alternative dispute resolution, only the one on the Internet. Today, there are many online conflicts - fraud, illegal transactions - when the use of digital justice is necessary - such

disputes are small enough for the courts to consider, but the total number does not allow to ignore them. The development of electronic commerce leads to an increase in the number of disputes that can be resolved with the help of artificial intelligence. An appropriate technology platform could allow the parties of the dispute reach a solution by using algorithms. In this case, the algorithm. Yet the algorithm should not be configured so as to produce a solution that is beneficial for one of the parties. However, the use of such systems raises a number of issues. For example, should the state control such systems, issue licenses to their developers - or should they respond directly to complaints received about their work. The potential of these tools is very high, primarily for protecting consumer rights and for their convenience. But for entrepreneurs, there is a number of obvious advantages - in the first place, it is a reduction in the costs of dispute management. Summing up, we can conclude that the automation of the legal function is necessary and possible. The speed and degree of automation depends on many things. Only the full implementation of all components of the system will allow the implementation of the digitalization of justice program.

3. Research Questions

To implement the program of digitalization of the economy in social sphere of Russia by 2024, it is necessary to develop and implement a set of measures, including the development of legislation on digital technologies, the modernization of digital infrastructure, the introduction of digital practices in all economic and state spheres, and the training of relevant personnel. Foreign experience has shown that most of the existing acts aim at creating the most favorable conditions for innovation and research. The main regulatory acts are strategies and state development programs in the form of laws or detailed roadmaps, depending on the legal system. Often they contain norms of direct action. There are also examples of point regulation of specific types of robots (unmanned vehicles, smart robots, service robots). In several dozen countries around the world, primary regulation of robots and artificial intelligence already exists. In some countries, it began to take shape in the period from 2008, and most acts have been adopted in the past few years. As a result, a peculiar “right of robots” is formed.

Russia cannot directly borrow existing legal solutions to specific problems or copy the rules of law of other states. Specific regulatory rules need to be developed that consider specific traits of the national legal system. Russia can borrow existing positive experience in the development and implementation of tools to support and develop robotics. Such tools constitute a significant layer of regulation, have approbation of the results and have proven their effectiveness. South Korea, Japan, China, the EU, France, and Great Britain are named as countries for whose regulatory experience special attention should be paid. For the successful development of domestic justice, it is necessary to use the accumulated experience of other countries on the highly efficient use of data in the judicial system, which can reduce the burden on the relevant personnel, increase the efficiency of case handling, the quality of court proceedings and promote the fair execution of decisions (Wang et al., 2019).

4. Purpose of the Study

The implementation of new technologies is often impeded by imperfect laws. For the successful implementation of high-tech tools, such as artificial intelligence and robotics in public relations it is

necessary to create a regulatory framework to ensure that the balance between the interests of the maximum development of the industry and the minimum necessary restrictions to ensure security must be maintained. The adoption of any regulatory legal acts should contribute to the development of robotics and cyberphysical systems. It seems necessary to develop a federal law containing basic regulation in the field of robotics and artificial intelligence technologies. Provisions may include basic concepts, key principles of development, regulations on participants relevant to such legal relations, their rights and obligations, the powers of public authorities and responsibilities.

It is required to develop and adopt a number of legal acts' changes in the near future in terms of regulation of the possible use of artificial intelligence, robotics, automation in the financial sector, in public administration, legislative activity, administration of justice. At the stage of identification, analysis and controversy are key legal issues related to the development of robots and artificial intelligence, such as concepts and classification, security in all aspects, including information security, consumer safety, the environment, responsibility. A potential problem is the legal personality of robots, intellectual property rights, data rights (Singh & Vipra, 2019).

5. Research Methods

The digital transformation of public administration is a complex process affecting all industries. Decision-making requires systemic knowledge and a synergistic approach. Scientific knowledge allows for problem analysis and planning. Conducted in a participatory manner. This approach provided a framework for the study. The general scientific methods used in the work have revealed the most acute problems. Functional and structural approaches, both formal and comparative, have made it possible to uncover all aspects of the complex process taking place in public administration, which affects the digitization of the judiciary.

6. Findings

As is the case with most of the phenomena of the digital economy, the legal nature of artificial intelligence is not obvious. At the same time, the use of technology extends its influence to almost all spheres of public life: medicine, transport, economy, education, etc. The development of artificial intelligence dictates the need to search for new solutions for the legal regulation of technology.

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Since July 1, Russia has been conducting a five-year experiment to introduce artificial intelligence technologies in Moscow as part of the National Program "Digital Economy of the Russian Federation" (Federal Law of 24 April 2020 N 123-FZ).

Law regulates the conditions for the development and implementation of artificial intelligence technologies, as well as the possibility of subsequent use of the results of its application. He established an experimental legal regime for the next five years. At the same time, similar legal regimes are planned to be introduced in other constituent entities of the Russian Federation.

The concept of "artificial intelligence" in the Act is understood as a set of technological solutions that allow the simulation of cognitive functions of a person and the production of results comparable at least to the results of intellectual activity of a person. It is separately noted that simulation involves self-learning and finding solutions without a predefined algorithm. It is important to note that the definition fully covers the currently available forms of artificial intelligence in a broad sense: artificial intelligence based on predefined tasks (available knowledge) and artificial intelligence, working autonomously, that is, a technology that has the potential to completely replace human beings for the performance of tasks.

The definition introduced was too broad and technically controversial. First, the notion of "imitation of cognitive functions" of a person allows for different interpretations. Second, given the machine's ability to learn and solve "without algorithms" problems, as the definition suggests, many nuances must be taken into account in order for the term to have a clear meaning. For example, whether self-learning is uncontrollable or not. A classic example of uncontrolled self-learning is the neural network, which is already capable of providing accurate predictions, for example, on market quotes. Does this market trading program make artificial intelligence? Or do artificial intelligence still need the properties of substance and the ability to perceive? Thirdly, the very definition of "self-learning" as a separate concept is absent in Russian law, which also makes it difficult to fully understand the definition of "artificial intelligence". This definition is modelled to cover the largest possible range of activities for the future development of artificial intelligence, rather than providing a clear and concise explanation of the basic concept from a technical point of view.

The introduction of artificial intelligence in all circumstances raises a number of legal problems.

Among the hot topics of legal regulation arising from the use of artificial intelligence technology are:

- confidentiality of data;
- security and responsibility;
- operation of "big data" technology;
- intellectual property;
- ethics.

The main component of artificial intelligence is data, and it is the large number of data that enables the system to learn, develop and learn to make decisions independently.

The legal regulation of intellectual property created with the use of artificial intelligence occupies a special place in the list of legal problems. These include the legal personality of artificial intelligence and the legal status of objects generated by artificial intelligence. For the moment, the problem of intellectual property cannot be solved at the level of state bodies of the Russian Federation. The main problem is the lack of a common approach to the regulation of intellectual property in the sphere of artificial intelligence, not only in the Russian Federation but in foreign countries.

7. Conclusion

Russia cannot directly borrow existing legal solutions to specific problems or copy the rules of law of other states. Specific regulatory rules need to be developed that consider specific traits of the national legal system. Russia can borrow existing positive experience in the development and implementation of tools to support and develop robotics. Such tools constitute a significant layer of regulation, have approbation of the results and have proven their effectiveness. The implementation of new technologies is often impeded by imperfect laws. For the successful implementation of high-tech tools, such as artificial intelligence and robotics in public relations it is necessary to create a regulatory framework to ensure that the balance between the interests of the maximum development of the industry and the minimum necessary restrictions to ensure security must be maintained. Further research can be carried out in order to identify the shortcomings of the legal regulation of the issue under study and develop proposals for their elimination. To implement the program of digitalization of the economy in social sphere of Russia by 2024, it is necessary to develop and implement a set of measures, including the development of legislation on digital technologies, the modernization of digital infrastructure, the introduction of digital practices in all economic and state spheres, and the training of relevant personnel.

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