Legal Issues of Big Data Application in the Russian Federation

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Abstract The relevance of the analyzed issues is due to the incompleteness of legal regulation by the domestic legislator of both Big Data and the conditions for its use. One of the goals of the study is to define the concept of Big Data in an extremely wide range of approaches: from the non-recognition of Big Data as a legal term to their characterization as a complex property complex. The author's definition of Big Data is suggested. The features of Big Data and their common features with other modern objects of information law are revealed. An attempt is made to distinguish information and Big Data. The problem of ensuring the state's public and private interests in the process of using Big Data is considered: from national security to the protection of personal data. The article discusses the need to reward Internet users who generate large amounts of information, the indicators of which are second only to the amount of information received from the Internet of things (IoT). This article may be useful for specialists in the field of law and economics.

Keywords Big data · Information · Information systems · Legal regime · Objects of information law

1 Introduction

The digitalization of all aspects of modern society led to the globalization of relations in economics, politics, social and other spheres. The latest information technologies contributed to the formation of huge flows of constantly changing information about society as a whole, as well as about individual citizens and organizations. Informatization contributes to the increasing transparency of economic and social processes, despite the inertia of public consciousness and the direct resistance of certain groups of the population to this. The pace of digitalization of social, technical and technological processes is becoming crucial for the security and defense capabilities of countries.

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The rapidly accelerating growth in the volumes and variety of information flows, the increasing competition for the possession of them not only between companies, but also between states, the active development of technologies and their increasingly rapid implementation determine the increasing relevance of the use of Big Data in various spheres of human life. At the same time, there is no legal definition of Big Data in the Russian Federation, and, in general, their legal regime remains largely uncertain, which prevents the monetization of their use in Russia. The scientific development of the issues of legal regulation of Big Data as the latest objects of digital law is of increasing relevance.

2   Methodology

In the course of the study, the following methods were used: system analysis, comparative analysis, formal legal analysis, synthesis, generalization, which allow us to comprehensively consider Big Data as an object of information law. The research methodology included an analysis of the scientific literature on the problem under consideration, which allowed to reflect different approaches to the study of the nature and composition of Big Data, the regulatory basis for their application; conclusions were formed, and the publication was prepared.

Currently, consideration of the issues of legal regulation of information relations is impossible without considering the latest results of the accelerating digital revolution [1], and the nature of the new and constantly changing products—Big Data. When considering issues related to Big Data, it is necessary to take into account their interdisciplinary nature, which allows using the results of research both in law and in other fields [2]. When analyzing Big Data, it is necessary to revise and soften the boldest statements about this category in order to ensure a synergistic fusion of Big Data with general theory and create a new scientific paradigm; to take into account the non-linearity, non-locality and hyper-dimensionality of this and other phenomena of the digital world [3].

It is important to consider the conditionality and mobility of the boundary between information and Big Data. Researchers can use different approaches to understand the signs of new objects of digitalization of the economy. The "positive" definition of Big Data, which reflects the essence, technological nature of Big Data and its structure, is the best and most effective one.

If the desired result is not achieved, you can use a less effective "from the opposite" approach, that is, defining Big Data by distinguishing it from other information and technologies that are not Big Data. The second approach does not achieve the necessary clarity and completeness of the definition of the concept of Big Data, and most importantly-such a definition does not express the nature of Big Data.

The greatest opportunities are seen in the combination of both approaches for a comprehensive study of Big Data. In the process of studying them, a higher level of complexity of Big Data, as well as a number of other objects of the digital economy, is established in comparison with previously known and well-studied ("classical")

objects of property relations, which makes it necessary to apply other regulatory techniques and methods to them.

3 Results

The foundations of the legal regulation of Big Data initially began to form with varying degrees of intensity in the legislation, business and judicial practice of advanced countries in the field of digitalization of the economy. Based on the experience of legal regulation of the use of Big Data at the national level, the norms of the relevant institute of international information law are gradually being formed. The main role in the international legal regulation of Big Data is played primarily by the principles relating to the legal means of protecting the interests of consumers—users of services and data in the field of information and communication technologies.

The risks of negative consequences of improper use of information by entrepreneurs make it necessary to develop criteria for assessing the benefits and risks of accumulating and analyzing Big Data at the national and international levels [4]. Big Data is characterized by both common features of digital economy objects and features that distinguish this object from others. The properties of the Big Data market that combine them into a group of objects of the digital economy include high dynamism, steady growth, increasing competition between corporations and even states, the rapidly expanding scope of their application, and others.

Being an integral part of the digital economy, both national and global, the turnover of "Big Data" fully reflected its essential characteristics. The digital economy is characterized by steady growth, dynamism, the continuous emergence of new services, the concentration of markets characterized by a dominant position of participants, and the growing inequality between large companies, on the one hand, and small, medium—sized companies and consumers, on the other.

4 Discussion

Foreign practice of legal regulation of relations connected to Big Data shows that there is no unified approach to determining the legal regime of Big Data in different states. Moreover, there is a lack of uniformity in understanding the basic terms, including Big Data itself. The significance and optimal limits of the state's influence on the participants of the Big Data turnover were not determined, and the balance of interests of developers, entrepreneurs and the state itself in the use of Big Data was not found. Effective legal regulation of Big Data and its application is impossible without defining its nature and main features. The definition of the concept of Big Data is the initial and most controversial issue of the topic under consideration. In comparison with some other objects of information legal relations, a lot of studies

are devoted to Big Data. At the same time, no national legal system has yet provided a clear and unambiguous legal definition of Big Data.

Moreover, when assessing the legal nature of Big Data, an opinion was expressed that denies the recognition of Big Data as a legal term, and defines it only as a description of a phenomenon that entails numerous and diverse consequences in the economic, technical, legal and social sciences. The latter are widely represented by current studies of the ethical implications of Big Data [5].

The concept of "Big Data" has not yet received a generally accepted definition, not only in legal studies, but even in works devoted to information technologies, which seem to us not only important, but even fundamental for solving the problems of the legal regime of this object of information law.

Thus, not all researchers consider Big Data technologies as an independent object or direction of the digital economy; some authors consider Big Data to be a term that includes a large number of technologies that are actively used in various spheres of human life, including those that are not even innovations [6]. Initially, Big Data was understood primarily as a collection of diverse information that can be combined into vast arrays, stored and analyzed.

At the same time, the criterion for distinguishing between data and Big Data was the volume of processed information. If it exceeded the sizes of the databases that existed at that time in terms of the available capabilities of the owners of information to collect, store, manage and analyze data, then the array of information was classified as Big Data, and if not, it was not recognized as a special object of information law.

In further studies, when defining Big Data and discussing the issues of ordering its use, the importance of the totality of its components was taken into account. Not being able to define Big Data by describing its essence and legal nature, researchers most often define such a complex object by listing all or its main components. Researchers of digital technologies often see Big Data primarily and even mainly as techniques and technologies through which new meanings are extracted from unstructured information [7].

The approach to the definition of Big Data seems original. Lapteva, according to which, Big Data is a property complex, which includes objects that have different legal nature, but are united in the totality by their common purpose [8]**.** Indeed, it is the unity of the purpose of using Big Data components that forms such a complex into a new independent object of civil legal relations, which, like information in general, has the property of turnover and needs special ways to protect the rights and legally protected interests of its right holder.

As mandatory elements of Big Data, the author suggests considering:

- unprocessed data, which is information consisting primarily of unprocessed (so-called "raw") data and the results of processing this data (which may be in a materialized form);
- property rights, including exclusive rights to the results of intellectual activity, including programs for electronic computers and databases [9, 10].

While agreeing in general with the definition of the legal nature of Big Data proposed by the author, we consider it insufficiently justified to include in their

composition (as a property complex) the results of processing the initial array of information. This new information is the result of the application of Big Data technologies and forms a new complex of information as an independent object of information law, which by itself or in combination with other information arrays can be used to apply Big Data technologies (already as part of another property complex) to obtain new data, and so on.

At the same time, the peculiarity of Big Data as a property complex is their constant change in both the volume of information and its types. And the results of the analysis of such data obtained online are constantly changing, for example, information about the functioning of "smart things". The very idea of Big Data as a property complex seems reasonable and very interesting, requiring further research.

5   Conclusion

Big Data as an object of information legal relations, regulated simultaneously by the norms of public and private law, is becoming increasingly valuable as a factor of social production, figuratively called "new oil". The importance of Big Data in the field of national security and national defense is rapidly increasing, taking into account the threat of possible introduction of hybrid and cyber warfare by states.

A special feature of Big Data technologies is their universal nature, which makes it possible to use both the information flows and the corresponding technologies in various spheres of society. Big Data technologies and the information obtained with the help of such technologies are increasingly used by organizations that have a large customer base and carry out a variety of operational activities.

Such technologies and data sets, including personal data, are increasingly used in the activities of banks and other credit institutions, insurance organizations, professional participants in stock, currency and commodity exchanges (brokers and traders), in the field of retail and e-commerce. In fact, Big Data has an infinite potential for application in the fields of science, medicine and pharmaceuticals, in the social sphere, in the activities of state authorities and management [11], in the prevention and stopping the offenses and criminal activity, and in many other areas of society. The value of Big Data in the world has grown to such heights that it has become an essential asset and even the main goal of acquiring control over a number of large (including unprofitable) companies that have large amounts (and especially streams) of relevant information. It seems that this trend will increase.

At the same time, companies with huge amounts of constantly changing information are interested in developing and / or acquiring and applying Big Data technologies to obtain new valuable information, use it, and / or sell it. When comparing rapidly developing objects of digital law, it is necessary to take into account their relation. Almost all new objects are connected with the use of information and, at the same time, they contribute to a rapid increase in its volumes and diversity (Big Data and blockchain technologies, digital medicine and robotics, etc.). Due to the name "Big Data", their composition cannot be limited only by technologies, excluding the data

itself from their structure as a mandatory component. Based on the above, it seems appropriate to understand Big Data as a set of constantly updated heterogeneous and other large-volume data from various sources, as well as special technologies (tools and methods) of their processing. The author conducted a comparative analysis of two similar objects of information law that have the same number and name of components: Big Data and information systems. When comparing the volume and nature of information in information systems and Big Data, it can be concluded that in most cases, the volume of Big Data is already many times higher than the volume of information in the compared databases of information systems. It seems that the gap in the number and variety of information in the compared objects of information law will only increase. The data volume of all information systems is always limited by the purposes of their creation and use. The amount of information in Big Data is almost infinite. Nowadays, the Russian state's regulatory function in relation to Big Data is clearly insufficient, including the localization of data processing centers on the territory of our country, which even creates a threat to national security. It is necessary to state the complete absence of special legal regulation of Big Data, including its legal definition, while at the same time increasing the influence of the state on high-tech participants. The uncertainty of the legal regime of Big Data has a double negative impact on the turnover of information: the relevant state bodies do not have clearly defined powers, and the participants of information relations do not have the necessary rights and guarantees for long-term investment in the formation and use of Big Data, in financing the accelerated development of new technologies in the field of data turnover. In the context of the obvious compression of the innovation cycle, the lack of optimal regulation of the use of Big Data and other new objects of information law threatens us with a possible "digital slavery".

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