

Law and legal relations in the digital age

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Abstract. This article explores law and legal relations in the digital age, considers bills of various data in the development of the digital environment in legal relations and legislative systems of public administration. The article analyzes such concepts as “digitalization of legal relations” and “digital form of law”. The topic of this article is relevant, because the digital form of law is currently being integrated into all branches of management and human activity, and the study of this phenomenon is a priority issue in modern jurisdiction. It also touches upon the program of artificial intelligence, considered as a full-fledged subject of legal relations. In the course of the study, general scientific research methods in jurisprudence were used.

1 Introduction

The need to conduct a study is due to the fact that digitalization has been taking place on a global scale in recent years, it refers to the introduction of digital technologies in various spheres of life to improve its quality and develop the economy. On a global scale, digitalization is seen as a process of transition to a digital economy, in which the key development factor is the processing and analysis of digital data and the using of its results to improve the efficiency of business processes. High competition in business makes it one of the most advanced areas in terms of the use of digital technologies.

As it is known, one of the main forms of regulation of social relations in each of the spheres of public life is a law. For digital relations that arise in connection with the digitalization of activities, a new digital form of law is also necessary. The phenomenon of digital law appears in world practice as a result of digitalization, primarily on the economic sphere of society. “The digital economy, as an innovative type of economy, sets the main directions and trends in the development of all spheres of public life. The sphere of management, one of the main elements of which is law, acts as a management system of a new generation based on digital technologies” [1]. Nevertheless, in this case, the question arises: does the legal system change with the transition to digital format, or is there only a change in terminology?

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The first and most common point of view on this issue, reflected in scientific publications, is that the authors believe that the essence of digital law lies in the legal provision and regulation of legal relations arising from the use of digital technologies.

2 Methods

In this study, in jurisprudence such general scientific methods and research as logical, systematic and systemic-structural methods will be used.

3 Results

3.1 The digital legal relations

Building digital legal relations without a clear understanding of the entity of digital law will lead to instability of the entire legal system. Particular attention should be paid to the development of the content of the category “digital law”. A law, as a tool for regulating relations in society, covers the relationship between each element of the legal system. This means that it must manage and regulate relations between subjects of law regarding legal objects on the basis of legal means in special legal conditions in order to achieve a result that does not go beyond legal boundaries. All this should not lose its meaning in the transition to digital legal relations.

Therefore, digital law should include such a concept as a “digital subject”. Regarding the traditional definition of the subject of law, we can say that it is well-established in the scientific and legal literature and as it is meant a social subject entering into legal relations (legal person or individual). However, a new type of subject appears in the digital legal space, which in some publications is equated with the status of a social subject, and in a number of works this provision is considered illegal.

Any information product in the digital society can acquire the status of a commodity. Another thing is that information is able to change the carrier. Even change if we are talking about material carriers, and not about ideal ones, from this its content won't be changed.

In this case, another link in the discussion chain of digital law appears. The subject of contradictions is precisely the information as an object of law. Studying this issue, N. S. Aleksandrova notes that the very definition of the object of law is initially controversial [2]. On the one hand, services, things and other types of goods are considered objects of civil law. On the other hand, only actions or things can be the object of law. As you can see, the information as an object of law is not an element or type of goods.

In the era of digitalization, the problem of artificial intelligence, considered as a full-fledged (if not now, then in the near future) subject of legal relations, seems to be relatively self-sufficient. The last problem, although it seems far-fetched in a sense, is based on serious socio-philosophical ideas that have been actively promoted, including in popular culture for many decades. It must be admitted that today humanity has accumulated a significant array of socio-philosophical ideas and ideas about the right of robots to human life and the absence of fundamental differences between human and artificial intelligence.

“Recognizing the fact that, ideally a legal science should have a ready-made or at least a preliminary general theoretical set of possible solutions even for the least likely scenarios in the near future, one should still remain within the traditional methodological framework and not replace legal science with fantasies about the global digital apocalypse” [3]. In this regard, it is very important to place correctly the appropriate priorities and emphasis. At the level of legal consciousness and thinking, the theory and practice of legal regulation of not digital technologies as things in themselves, but the legal regulation of social relations using digital

technologies, should be formed. As for the actively spread rumors about digital slavery, total digital surveillance, inconspicuous chipping, which will suddenly get out of control of the human mind and become independent, self-sufficient and essentially uncontrolled, we should focus more on improving the legal regulation of the sphere of natural intelligence carriers (with the development of an institution of appropriate legal responsibility) in the design and development of artificial intelligence.

3.2 The threats of digitalization in a legal society

Initially, it is necessary to clearly separate the relevant problems. The first problem is the danger that with the development of digital technologies, citizens will finally lose their minimum set of rights to inviolability in the sphere of personal life, which will end in the establishment of a anti-utopian type of society (a society of absolute and universal control over the individual), perhaps even a nationless and stateless. At the same time, it is important to share the goals of building such a society: an authoritarian society, a totalitarian society, a democratic society, a society of general welfare, a consumer society, or conversely, a society of a special highly spiritual and highly moral organization (we deliberately use different bases for classification). The second problem is an artificial intelligence, which was originally designed to optimize and ennoble, including the legal sphere of public relations, but at a certain point got out of control of its conditional creators.

Modern science is also actively discussing the loss of its dominant position in the sphere of regulation of social relations, the reduction of the regulatory functions of law, and the tangible narrowing of the very sphere of legal regulation, which is expected in the near future. We are talking not only about the fact that digital technologies optimize access to sources of legal information, but also about the fact that law, which is not ideal in its essence, will cease to be such in its classical sense in the process of digital optimization. The conditional “digital code” that replaced it, performing at the initial stages an exclusively auxiliary function, will subsequently replace the law itself and traditional law formation procedures.

“The nature of digital rights, the specifics of their emergence and turnover is limited by the “procrustean lodge” of investment relations. A huge layer of digitalization of economic, political, social life, among other things, based on the block-chain phenomenon, for formal reasons cannot be attributed to digital rights and falls out of the scope of the legal regulation under consideration” [4].

“The emergence of digital rights as a new object of civil rights has led to changes in the sphere of contractual relations, the purpose of which is to simplify the process of concluding transactions on the Internet and using various electronic and other technical means. The changes made to the Civil Code of the Russian Federation in terms of electronic negotiations (contracts) reflect the rules that have actually long been included in the law enforcement practice of courts when considering disputes in the field of electronic commerce” [5].

It must be said that even now reference and information systems similar to “ConsultantPlus”, which is widely used in the Russian Federation, due to a complex system of direct cross-interactive links, allow us to get a slightly different perception of the surrounding legal reality than the classic appeal to the text of a legal act.

Block-chain technology is a universal tool for building various databases — a continuous sequential chain of blocks containing information built according to certain rules. Block-chain technology — a system of distributed registries — is used both in the field of financial services (micropayments, banking operations) and in other sectors of the economy (logistics, law, medicine).

“In some cases, access rights can be transferred from one employee to another. For example, an employee of a company who had to execute an order in the information system

delegates the execution of this order to another employee who needs to gain access to the information system” [6].

The access control policy evaluation that decides whether a requested access to a resource can be granted is performed by a party that is trusted by the owner of that resource, but cannot be trusted by the subject of the request, who would instead like to be guaranteed against unreasonable denial of access. For example, the access control system may run directly on the resource owner's server. The party that actually evaluates the policy and enforces the result on the resource can maliciously cause the system to deny access to the subject when the policy would grant it. Therefore, in this case, “it is necessary that the subjects have a mean to check which policy was applied when they performed an access request that was denied” [7].

3.3 The bills on digitalization in Azerbaijan

The digitization opens up unprecedented new opportunities for increasing management to a new quality level at all levels. “A focus on digital rights encourages policymakers to develop the technological and legal frameworks to ensure individuals enjoy the same rights online as when offline” [8]. To create and develop an adequate digital environment for the dynamically developing national economy in Azerbaijan, a number of important documents have been adopted that define the strategic and conceptual framework.

The main goals of the policy established by Heydar Aliyev in the field of communications and information technologies are the creation of a legal framework in the field of ICT, the development of the human factor, the expansion of the rights of citizens to receive, distribute and use information, electronic government and commerce, economic, social and intellectual potential, such fundamental issues like strengthening and building a competitive economy based on information and knowledge.

Speaking at the World ICT Summit in Geneva in December 2003, President Ilham Aliyev said that information and communication technologies should be a priority after oil in Azerbaijan. In his speeches, the President of Azerbaijan always emphasizes that the time has come to turn "black gold into human gold" and master information technologies and modern knowledge. “This transformation is based on the formation of a powerful intellectual base, a new type of economic system based on modern knowledge, the goal of reducing the dependence of the national economy on the oil factor in Azerbaijan” [9].

In 2010, the President of the Azerbaijan Republic signed a Decree approving the State Program for the Development of Communications and Information Technologies in the Azerbaijan Republic for 2010-2012. Within the framework of this program, by the No. 2095 order of the President of the Azerbaijan Republic dated March 15, 2012, the “State Fund for the Development of Information Technologies” was established, which operated under the Ministry of Communications and High Technologies of the Azerbaijan Republic until 2018. This fund was a state institution that provided financial support for the digitalization of the state. The fund carried out its activities in cooperation with state bodies and local governments, legal entities operating in the field of information and communication technologies, credit, financial and insurance organizations, public associations that support the development of entrepreneurship, non-governmental organizations and international organizations.

Currently, this fund is called the "Innovation Agency" under the Ministry of Transport, Communications and High Technologies of the Azerbaijan Republic.

Including on the basis of the Decree of the President of the Azerbaijan Republic dated December 6, 2016, a strategic roadmap for the development of telecommunications and information technologies has been developed. The Decree of the President of the Azerbaijan Republic dated January 10, 2019 and the adoption of other normative acts to ensure

coordination in the field of innovative development in the Azerbaijan Republic created a reliable legal basis for raising the work to a new qualitative level.

“On improving management in the field of digital transformation”, signed by the President of the Azerbaijan Republic in order to effectively coordinate the work on managing modern telecommunications and digital architecture in the country, as well as developing a platform for digital services and solutions in various fields, the decree became a logical continuation of the successful reforms carried out in this area in recent years.

Currently, the processes taking place in the Internet information space, their growing influence on all aspects of human life, update regulation, especially issues of legal regulation. The role of the Internet is growing and expanding as an indispensable space in terms of communication, business activity, participation in public administration, which has become one of the dynamic and flexible sources of knowledge for people, sometimes even the first.

Already on the agenda is the formation of a new approach to regulating activities in the Internet space, a reassessment of the subject and mechanisms of legal regulation. Practical changes in this area, preceding the theory, necessitate the adoption of prompt measures to strengthen the regulatory framework. Assessing the limits and possibilities of state regulation in the national segment of the Internet is a complex task in itself. The acquisition of new shades of the concept of borders in the virtual space significantly complicates the harmonization of national legislation and international practice. “Currently, various countries and international organizations are actively working to improve the Internet regulation system and develop new mechanisms. At the same time, issues of jurisdiction, storage and protection of personal data, management of the domain name system, as well as the legal liability of providers as topical problems of Internet regulation are brought to discussion. Of course, special attention should be paid to ensuring cyber security in the digital environment, effective fight against cybercrime” [10].

4 Conclusion

Summing up, it can be noted that at the level of legal awareness and legal thinking, the theory and practice of legal regulation of social relations using digital technologies should be formed.

In this sphere, it is necessary to be more involved in improving the legal regulation of the sphere of carriers of natural intelligence in the design and development of artificial intelligence.

In a legal society digitalization is an indicator of the integration of virtual space into public administration and other vital areas of humanity as a whole.

At present, the processes taking place in the Internet information space, their growing influence on all aspects of human life actualize regulation, especially issues of legal regulation in the Republic of Azerbaijan. Issues of jurisdiction, storage and protection of personal data, management of the domain name system, as well as the legal liability of providers as topical problems of Internet regulation are brought to the fore in the space under discussion.

References

1. I. Treushnikov, E. Gryaznova, LSP BNNAMIAR **2** (54) (2021)
2. N. Aleksandrova, LP **19** (1), (2020)
3. P. Baranov, Methodological problems of legal consciousness in the era of legal digitalization, HSR **4** (2020)
4. A. Aryamov, E. Rueva, A. Chigak, Justice **5** (20), (2020)

5. O. Makarova, A. Makarov, *APEL* **15** (1), (2021)
6. I. Voloshin, *ISR* **3-4**(27-28), (2017)
7. I. Voloshin, E. Sorokina, *ISR* **3**(20), (2015)
8. L. Pangrazio, J. Sefton-Green, *JNAER* **10**(1), (2021)
9. Azerbaijan becomes a regional center in the field of information technology - Anl.AZ
<http://anl.az/down/meqale/azerbaycan/2010/avqust/130644.htm>
10. R. Azizov, *Legal regulation in the Internet space: history, theory, comparativeism*, Baku: ESI, (2020)