Chapter 4
Transformation of Law and Legislation in the Context of Digitalization: Intellectual Property Protection

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Abstract One of the primary problems faced by lawyers in Russia and abroad is the lack of a uniform conceptual framework related to the so-called digitalization of law. Russian bylaws as a basis for a future offensive against legal regulation in the civil law environment. Directions of digitalization intrusion into the civil law space: scope of civil law; principles of civil law; breaking ideas about the subject of law; breaking ideas about responsibility in law. Digitalization will not change civil law dramatically until it changes the very person who stands at the center of the civil law environment. Many provisions defining the conceptual framework of this process are reflected in economic terms, which guarantees their stability, since freedom of choice of behavior is assumed, which cannot be said about the legal field.

4.1 Introduction

Without any exaggeration, the twenty-first century can be called the century of the rapidly developing process of digitalization of the social life of the modern family of peoples, in which Russia occupies its rightful place.

Many scientific articles and even several monographs have already been written about the benefits of digitalization, the types and methods of its implementation in specific sectors of the social sphere, both in our country [1] and abroad [7]. Among them, we can note the works within the stated title of the article here and further in the text.

At the same time, at scientific forums, in the speeches of government officials and representatives of the business community, it is noted with concern that the solution of an increasing number of practical issues of digitalization is faced with the lack of its proper legal support both at the internal and domestic, and at the international levels.

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4.2 Methodology

The work used the method of comparative legal analysis, which led to a legal understanding, which began in connection with the widespread introduction of the latest digital information technologies, which is called the fourth industrial revolution, thus becoming one of the main tasks of today's agenda, since the law, by virtue of its very purpose, to regulate social relations that arise in real life, is simply obliged not only "to keep up with changes in these relations, but also to respond to emerging new relations and changing traditional ones."

4.3 Results

Logically, another question arises and is very alarming: will "reacting" lead to hacking the very structure of law and changing the achievements and principles it has developed over the millennia of its history? After all, law, especially civil law, was originally built and perceived in society as the art of good and justice [ius est boni at aequi].

Isn't it dangerous to pass this sacred idea from a human being even to a very advanced artificial intelligence?

The threat of changing and even breaking the basic principles and established civil institutions is felt by every lawyer dealing with the problem of digitalization in law.

A generalized legal analysis of this threat to civil law, and law in general, has not yet been conducted either in our country or abroad. At least, we have not found any relevant publications on this subject, although there are quite a lot of critical and even arguable statements against digitalization of a political and socio-moral nature both in our country and abroad.

However, even more, we can say that there are already too many enthusiastic assessments of digitalization in the banking sector, in transport, in medicine, in the tax service, in street security, and in other areas of modern society.

Meanwhile, taking into account the latter, to crack the law, in our opinion, digitalization still will not succeed. At least as long as it is embedded in the daily life of people, it does not change the person from the inside.

We can name several reasons that objectively prevent digitalization at the present time to radically change modern civil law. Here are some of them, so far, of a general theoretical and methodological nature rather than of an institutional and normative nature.

1. To radically change the law, it is necessary to create new legal categories. Meanwhile, in legal science, there is still no official definition of the concept of digitalization itself, which entails the use of this term everywhere and without proper understanding.

Some lawyers generally consider digitalization to be a technology, shifting this concept toward economic rather than legal categories. Digitalization of various spheres of activity—Prof. A. A. Kartskhiya concludes on the basis of his analysis—implies not so much modern forms and methods of collecting, storing, processing, and transmitting any information in digital format, as methods, techniques, and forms, in other words, technologies of digital regulation of life cycle processes in the economy, politics, law, and in commercial and entrepreneurial relations.

2. It is noteworthy that in the hands of digitalization researchers, not to mention legislators and government managers, there is no such important tool of scientific analysis as "number" and the concept of "numerization" derived from it. Their place, both here and in the West, was taken by "digitalization".

Perhaps this is due to the less extensive statement of individual English words and expressions compared to the richness of meanings of words and expressions in other language cultures. In fact, such variants of "numerical" economics as "numbers economics" would sound clumsy in English. It is more euphonious to put a dead number as a basis and spin the whole civilized world around it, rushing to an "electronic paradise".

Only France initially called the economy of the future "numerical", but then, under the influence of the European Union and pressure from global IT corporations, abandoned this name, allowing the use of the Americanized term "digital" in its regulatory documents.

But the figure cannot embrace and is not intended to describe and express objective reality. "Number" can and is intended for this purpose. It can describe a complex object. A "digit" is an elementary particle. A number is a complex unit filled with energy, an object that can color, reflect, and even transform reality.

"Everything is a number. The number is the measure of everything"—said the great philosopher and outstanding ancient arithmetic Pythagoras (570–490 BC).

The school he created in its own way convincingly proved that the primary in the world is the nature of numbers, which contains and permeates absolutely everything: people, the earth, and the cosmos.

Pythagoras claimed that with the help of a number, you can logically express all the diversity of what surrounds us. Well versed in number and numbers, he considered a number, not a number, to be the origin of the world.

Pythagoras proposed the idea of doubling numbers: even–odd, yin–yang, good–evil, man–woman, etc., rather than discrete manipulations with zero and one.

The main number in the teaching of Pythagoras is one. He did not recognize the number 0 as a reference point, considering it empty, which our world and cosmos are not. The unit corresponds to a point in space through which countless lines can be drawn. Euclid called it the first of the axioms.

The number 2 corresponds to two points through which only one straight line can be invented. Three points, if they are connected, correspond to a plane. Four points—a sphere in which there are four elements: water, air, earth, fire—the interaction of which gives rise to an infinite variety of objects, images, and things.

In our opinion, the term “digit” is legitimate to use only to “digitize” the objects of the external world around us, but not to the inner world of a person, and even more so not to identify and transform the social relations regulated by law.

“Digitization” has no legal content because it means the process of transferring information from physical media to electronic, that is, digital.

This process does not change the quality characteristics and content of the information itself, but makes it more accessible and convenient for further use.

“Digitalization” (more correctly, “numerization”) means the creation of a new product in electronic form, which can have new functions. Its goal is to digitize all material and information resources, including the person himself, and to form network interaction platforms based on the obtained data, which represent new business models [2].

3. In addition to the above, it should be pointed out that there is no clear, time-tested, other conceptual and legal apparatus, with the help of which it is only possible to reveal the essence of the process being studied in law (in this case, digitalization).

At the same time, it should be taken into account that “in accordance with the requirements of the theory of law, it is necessary that as the volume side of the concept, that is, the set of objects conceivable in the concept, be adequately represented.”

The term “transformation”, widely used by both foreign and Russian scientists, does not meet these criteria in the study of digitalization in law and economics. An example of this use is the following expressions that are most commonly found in scientific reports, research, and regulatory documents, such as.

- "the introduction of digital technologies leads to the transformation of all spheres of society, including the economy and social relations.”
- "the concept of … digital civil turnover in the context of the transformation of law under the influence of digital technologies” is formulated.
- Transformation of Legal Reality in the Digital age—the title of the collection of scientific works of the Institute of Legislation and Comparative Law under the Government of the Russian Federation.
- "Law in the conditions of digital transformation”: materials of the Republican scientific and practical conference.
- Modern technologies challenges and transformation of legal regulation.
- Digital transformation of law [6].

What is the fallacy of using this term in relation to the digitalization process? Transformation is the transition of a substance, energy, or structure to another state, in which the former state ceases to exist.

For example, alternating electric current is transformed into direct current, the heat of the engine is transformed into the movement of the car, feudal relations are transformed into capitalist ones, the energy of wind or water supply is transformed into electrical energy, the industry is transformed into a digital (correctly speaking, numerical) platform by means of so-called disruptive technologies, capturing and crushing the former market, etc.

In the case of digitalization, this does not happen. The norms of civil law remain the same. By giving digitalization the quality of a transformer, we are leading the

science of civil law to a dead end. But it will also be able to destroy its integral civilistic structure, which has been honed for thousands of years, with the right methodological approach to the analysis of these social phenomena. Not yet, anyway.

However, a certain destructive impact of digitalization on the law is still possible, and the task of lawyers of various profiles today is to find a balance between such effects and preserving the best that is in the law [3].

4. Earlier it was noted that a number of scientists, including lawyers, consider digitalization to be a technology of digital regulation. However, most legal scholars tend to believe that digitalization is a legal category and that is why it transforms all law, including civil law. But is this really the case? From the point of view of the theory of law, a category can be defined as a well-established form of expression of legal thought that has reached understanding within the framework of the structure of the relevant branch of law, reproducing in a generalized form the real legal reality and/or the deep processes that accompany it.

Digitalization does not fit this definition. This is rather an information and organizational process, which tends not to the law, but to the economy of the post-industrial period. That is why it is called the fourth Industrial Revolution [4].

5. Special attention should be paid to the analysis of the directions of digitalization intrusion into the civil legal space. In our previous publications within the framework of the RFBR project, we drew attention to a number of them. Here and further on, we will focus on other areas of such an invasion. This is primarily the very scope of civil law, that is, the living environment in which social relations arise, in which civil law is called upon to regulate through its norms. Scientists call this invasion "digital formalization of law", believing that in this case digitalization acquires the qualities of a double of law and the quality of a source of law. In our opinion, this point of view is very doubtful. The source of law is a form of objectification of either an already existing or assumed form of human behavior (a rule of law) in connection with this and that. Digitalization does not fit into this design. Acquiring the quality of a double of law, it does not become an independent source of law, orienting people in their social environment.

6. In the countries of the European Union and in the West as a whole, the problem outlined in the title of this article has been discussed for several years. Attention is focused on the fact that the development of the Internet and other digital (or rather numerical) technologies has an impact, and not always positively, on the evolution of some state and public institutions and through their public administration and law in general, including the classical theory of law itself. And this applies not only to the law of the European Union but also to other legal systems.

The military terms "strike on the headquarters" can describe the efforts of those proponents and developers of the invasion of digitalization in law, who propose to introduce such new subjects of law as "robots" or "electronic persons", which in reality should replace a person, endowing virtual personalities with the right of ownership, endowing personal data with the quality of an object of civil law, which, like all objects of classical civil law, can be alienated, introduced into civil circulation, etc.

This idea is already partially included in the program “digital economy of the Russian Federation”.

Finally, another direction that strikes at the classical concept of civil law is the transformation (in this case, the use of this term is quite logical) of the very concept of civil liability in law [5].

Who should be held responsible? To solve this problem, the European Parliament offers electronic persons (robots, in particular) an individual number, recorded in a special register accessible to users.

In cases where the robot makes a decision independently and at the same time the counterparty (the party to the transaction or even a third party) is harmed, the owner, the program developer, the insurance company, or even the user of the robot’s services may be responsible for the robot’s actions. Then where is the classical understanding of guilt or innocent responsibility? And according to some European scientists, private stories, and the very direction of such short stories can lead to the destruction of classical civil law, how wide is the line between mechanical construction and non-human, which is godlike and contradicts the very nature of man as a living being.

4.4 Conclusion

Summing up the above, it is permissible to draw the following conclusions:

1. Objectively taking place in all spheres of the social life of modern society, the process of digitalization (correct—numerization) of law, its features civil law which remains the citadel that keeps the world from lawlessness. This is the sacred power of the system of law as such. The kingdom of lawlessness is already in operation, “the Apostle Paul warned almost 2000 years ago,” but it does not require that until the environment is so restraining, the law is able to restrain the objectively existing and necessary process of digitalization for the development of society from sliding into the abyss.
2. Modern civil law, its category, principles, and institutions are under enormous pressure under the onslaught of justified and often unfounded demands for their transformation, that is, essentially drastic changes.
3. A generalized analytical analysis of this threat to the law has not yet been conducted either in Russia or in the West, although many lawyers who study the process of “digitalization” feel alarmed about this.
4. For a fundamental change in the law, it is necessary to create a new categorical conceptual apparatus and, above all, the term digitalization itself, which is used everywhere and everywhere without proper understanding.

   Digitalization is not a legal category, since it does not meet the requirements of this concept. The very term “digitalization” is not a good one; it is more correct to call this “numerization” because not a digit, but a number is a measure of everything.

5. In relation to the process of digitalization in documents, scientific research, and even in civil law, the use of the term “transformation” is unjustifiably widespread; it is a mistake because we lead the science of civil law to a dead end.

   “Transformation” means the transition of a substance, energy, or structure to another state in which the former existence ceases to exist. “Digitalization” cannot and should not destroy rights by replacing them, i.e. transforming them into something else.
6. Scientists should pay special attention to the analysis of the directions of the digital transformation and the civil–legal space:
   - scope of law, the appearance of its digital counterparts that cannot be identified as new sources of law;
   - distortions of the concept of “subject of law”, giving robots and electronic persons the qualities inherent in classical subjects of civil law;
   - giving virtual personalities ownership rights;
   - endowing personal data with the quality of civil law objects;
   - transformation of the very concept of civil liability into law.
7. All the “pro and contra” set out above convince the author that you will still not be able to crack civil law, as long as it is introduced into the daily life of people, and does not change the person himself.

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