

REVIEWS

REVIEW OF THE MONOGRAPH “LAW OF THE DIGITAL ENVIRONMENT” (TIKHON PODSHIVALOV ET AL. (EDS.), 2022)

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In the era of digitalization, a rapid development of technologies takes place in various spheres of human activity. The pace of introduction of these digital technologies is so high that a gap has emerged, and is constantly growing, between the capabilities of digitalization products and the legal regulation of their application and the consequences to which their erroneous or intended use may lead. The applied aspect of regulation of legal relations within the digital environment, caused by the need to operatively react to the rapidly developing digital technologies, is currently to a certain extent outrunning the theoretical one, entailing a number of legal collisions, as only fundamental scientific substantiation of introduction of certain legal norms may guarantee their consistency and legality. Most of the works in this sphere are, undoubtedly, fundamental, but they mainly refer to individual aspects of legal regulation or theoretical substantiation of the large-scale problem under consideration. In this regard, it is acutely necessary to systematize the current experience in substantiating various approaches to the legal regulation of public relations in the digital environment, which would comprise fundamental positions of researchers from different countries. This task was posed by the multi-national collective of the monograph “Law of the Digital Environment,” the first large-scale research synthesizing theoretical and practical studies in the sphere of legal substantiation and support of events, phenomena and processes taking place in the digital era. Such work can undoubtedly be called a discovery in the sphere of digital law and an “encyclopedia” of the legal field under study.

Keywords: digital technologies; digital industry; digital law; digital environment; regulation; administration of law; liability; digitalization; artificial intelligence.

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Introduction

Technological progress produces a large effect on many spheres of social and economic life. While this effect is largely positive, bringing new solutions to increase comfort, one should not forget that innovative technologies entail the emergence of new spheres not covered by relevant legal acts. Such situation often occurs due to the lack of adequate legal tools which could be applied. Such issues are most often solved by adequate application of the existing legal acts and formation of new statutes solving the problem.

However, today it is necessary not only to optimize the existing legal frameworks with regard to the emerging new digital subjects of legal relations, but also to boost the development of new legislative approaches in the sphere. This objective can be efficiently and rapidly achieved only if the existing theoretical and practical experience of legal scientists is taken as the basis and further developed. In this regard, the book “Law of the Digital Environment” seems fundamental, and presents the ideas and concepts of authors from Russia, Belarus, Brazil, India, Italy, Slovenia, Malaysia.

1. Authors' Approach to Researching the Theory of the Law of Digital Environment

The authors of the first section of the monograph thoroughly consider the prerequisites of the digital environment development. As the "initial" platform of this branch of law, they state the "emergence and formation of information-communication ecosystems of the internet- and cyberspaces, the Internet as the environment for information circulation." Further, with the emergence of new mechanisms and ecosystems, a need to elaborate and introduce new legal tools arose.

Evaluating the features of development of the legal digital environment, the authors come to the conclusion that the nature of digital environment is complex to define the frameworks of its legal regulation, as the current legislation cannot always be applied to certain legal relations, for example, those implemented in cyberspace.

Considering the object matter of the law of digital environment and the general factors of its development, the authors mark that it is necessary to establish two issues: to define the categories of the law of digital environment from the standpoint of its current state and to form general conceptions of the law of digital environment as a phenomenon of innovative format.

Considering the methodology of law of the digital environment, the authors distinguish a number of typical provisions against the background of analysis of the "methodological features of non-standard forms and instrumental mechanisms in the sphere of legal influence." The researchers come to the conclusion that

deregulation, co-regulation, information technologies in regulation, new virtual-information means of consolidation and mediation of the processes and links challenge the possibility of formal, solid-legal regulation mechanism and bring to the forefront the methods of non-formalized, soft-legal regulation, based on flexible and broad legal means, associated, inter alia, with the development of digital technologies in regulation.

Considering the issue of the subjects of digital environment, the authors highlight the fact of changing the traditional system of legal subjects, as new subjects appear. As an important aspect, they state that the modern development of robotics and artificial intelligence systems has led to discussing a problem of legal subjectivity and legal status of the "electronic persons" as agents (mediators) endowed with the functions previously performed by humans. However, the legal status of such a person, within which it could be liable for its actions, is still not defined.

2. Correlation Between Digital Reality and Fundamentals of Constitutional Law

The authors introduce the notion of “electronic democracy,” which allows implementing the ideas of direct democracy with modern technologies, balances the opportunities of all citizens-Internet users, leaving the field of self-implementation to the most active, and allows the citizens to implement their basic rights in the digital environment.

Researching the issues of digital constitutionalism and the problems of lawfulness of behavior in the Internet, the authors point out that

the impact of digitalization as the most powerful and all-encompassing process on the society and state requires revealing and systematizing the risks associated with the introduction of relevant information technologies into the sphere of the citizens’ participation in state governance. Using the information technologies transforms the institutes of direct democracy, conferring new qualities to them. The influence of modern information technologies on the legal and political reality is diverse and leads to correcting the content of the existing constitutional rights and freedoms.

Also, the monograph considers the correlation between constitutional public initiatives and digital constitutional rights. Researching this issue, with a view of creating constitutional certainty, the authors propose

to adopt a special Federal Constitutional Law on the forms of constituent power in Russia, stipulating the guarantees of implementing the digital constitutional rights in the sphere of constitutional formation and declaration of will of the citizens.

3. Innovations, Investments and Digital Platforms in the Aspect of Legal Regulation Under Modern Conditions

In this section, the authors consider the so-called models of regulatory sandboxes in the sphere of digital innovations. Their advantage is implementation which allows business subjects to test innovations in a safe environment and minimize the probable harm for consumers, and control bodies – to examine the “functioning” of new technologies “from the outside,” in the low-risk environment. The said mechanism is an example of rejection of traditional regulatory approaches for a more flexible regulation.¹

¹ Elizaveta Gromova & Tjaša Ivanc, *Regulatory Sandboxes (Experimental Legal Regimes) for Digital Innovations in BRICS*, 7(2) BRICS L.J. 10 (2020); Elizaveta A. Gromova et al., *Preferential and Experimental Regimes in the Sphere of Creation of Biomedical Innovations*, S2 Hum. Sport Med. 161 (2021).

The section also illuminates the legal mechanisms of overcoming administrative barriers in the sphere of digital experimental innovations. The legal solutions, proposed by the authors, are the feasibility of legal experiments pursuant to the “maintenance of the balance of interests of various subjects and ensuring their guaranteed rights and freedoms under modification of the specific legislation.”²

Considering the current legal conditions of the platform economy, the researchers point out that

the topical problem today is to elaborate a balanced legal regulation of the activity of digital platforms, providing, with the account of common principles of civil law, their independent functioning, also stipulating liability of their owners to users for the security of the transmitted personal data, proper identification of a user personality, and exclusion of placing unlawful content by users and restriction of their abuse of rights in the sphere of activity of digital platforms.

4. Financial Tools and Legal Realities of Their Application

Discussing the financial tools application, the authors point out that “the modern innovative development stimulates the development of financial technologies, first of all, in relation to the currently existing financial services, among which are various payments and transfers via mobile banking, contactless payments, online services of crediting, insurance, management of assets, financial planning and accruing, algorithmic stock exchange trade, systems of client identification based on biometric data, etc.

The authors discuss the development of normative-legal base of financial tools’ digitalization and come to the conclusion that there are certain contradictions in the legislation on this issue, which determines the need to improve normative acts.

Despite the high value of the material presented in this section, the holistic perception of the work is complicated, as the text in sub clauses is not always structured and the stated issues are not clearly highlighted for convenient systematization.

5. Civil-Legal Branch in the Era of Digital Transformation

In this section, the authors highlight the notion of a digital asset. They state that

a digital asset, linked to an item with not only juridical but also physical links, becomes a phenomenon, with regard to which the subjects start

² Elizaveta A. Gromova et al., *Legal Barriers to the Implementation of Digital Industry (Industry 4.0) Components and Ways to Overcome Them*, 25(1) J. World Intellect. Prop. 186 (2022).

entering public relation, at which their behavior is aimed, or what is thought by the subjects as the object of their behavior. That is why a digital asset, represented as a record in the blockchain ledger, unlike a record of real estate in a cadastre, can be qualified as an independent object of civil rights.

The notion of digital rights is also introduced, which are interpreted as “the object of rights (independent juridical phenomenon) and a juridical construct providing a legal link between the subject and the digital goods as an object of right.” Digital law, in the researchers’ opinion, must act “as a juridical mechanism consolidating the relations of possessing, using and disposing of digital assets as independent and separate from the subject’s personality production means.”

Considering the features of including digital assets and digital rights of citizens into civil circulation, the researchers substantiate their differences from other rights and consider the features of their implementation under modern conditions.³

Also, the authors consider the place of a smart contract in the pandect system of the Russian civil law and point out that under the forming digital economy such basic digital institutions as smart contract and digital rights must be properly statutorized; otherwise they can hardly be broadly applied. In practical terms, smart contracts require special knowledge and skills, and their actual use is only possible after a profound analysis of technical aspects, legal and economic risks.

6. Digital Technologies in the Contemporary Criminal Law and Process

One of the aspects considered in this section is the analysis of digital crimes against property. The researchers come to the conclusion that

utilitarian digital rights, digital financial assets and the digital rights (in case of their further legal regulation by a special law) must be considered an object of crimes stipulated by Chapter 21 of the Russian Criminal Code, as their unlawful acquisition entails immediate infringement of direct property harm to the owner.

The authors also examine the features of the criminological model of crimes committed using digital technologies. In their opinion, based on typical elements

³ Tikhon P. Podshivalov, *Improving Implementation of the Blockchain Technology in Real Estate Registration*, 33(2) J. High Technol. Mgmt. Res. 100440 (2022); Maria Bazhina, *Disputable Questions of the Use of Digital Technologies in Transportation*, 1(1) Int'l J. L. in Changing World 33 (2022); Elena Ofman & Mikhail Sagandykov, *Electronic Monitoring for Employees: Employer Rights in the XXI Century*, 23(1) J. Leg. Ethical Regul. Issues (2020) (Jan. 16, 2023), available at <https://www.abacademies.org/articles/electronic-monitoring-for-employees-employer-rights-in-the-xxi-century-9605.html>.

of criminal activity and taking into account their correlation dependence, one may distinguish the following “elements of a typical criminal model of crimes committed using digital technologies: the object of criminal infringement; the means of committing a crime; the situation of committing a crime; the personality of a criminal.”

The monograph raises the question of digitalization of criminal sentencing and the fundamental approaches to digitalization of social systems (to which criminal legal relations refer). Based on various approaches, the authors distinguish the following “prospective directions of programming the procedure of criminal sentencing: method of hierarchies analysis; scoring system of assessment and building relations between the criteria which the law accepts as a basis for just criminal sentencing (found in the behavior of the guilty) and the types and scope of punishment stipulated by Articles of the Russian Criminal Code, via mathematical formulas.”

The authors also discuss digitalization in the criminal procedure. In particular, there are the features of digitalization of investigation activities.⁴ Considering this issue, the authors note the following:

The process of investigative activities during investigation of a crime involving electronic (digital) carries of information, must be optimized and simplified with reduction of expenses for its implementation, even reject, to a certain extent, the formal rules of the traditional form of criminal procedure. That is why these problems require posthaste legislative solution.

7. Innovations Based on Digitalization in Procedural Legal Relations

One of the issues considered by the authors in this section is the role and place of electronic justice in the Russian civil process.⁵ The authors note that, in general, the electronic technologies applied in dispute resolution are just a tool, while the related changes in procedural legislation only refer to the external form of procedural relations, without changing their essence or creating additional obligations for the participating persons.

Special attention should be paid to the issues of correlation between justice and mediation in digital reality. Highlighting the advantages of this phenomenon, the authors say that further development of electronic justice in Russia implies the

⁴ Galina Rusman & Elizaveta Popova, *Development of the Software for Examination of the Crime Scene by Using Virtual Reality, Based on Spherical Panoramic Shot and 3D-Scanning*, in 2020 Global Smart Industry Conference (GloSIC) 297 (2020); Galina S. Rusman & Yulia A. Morozova, *Measures to Ensure Cybersecurity of Industrial Enterprises: A Legal Perspective*, 20(4) IEEE Secur. Priv. 23 (2022).

⁵ Tikhon Podshivalov, *Models of Actio Negatoria in the Law of Russia and European Countries*, 7(2) Russian L.J. 128 (2019); Tikhon P. Podshivalov, *Property Legitimate Expectation as a Basis for the Application of Real Action*, 4 L.J. Higher Sch. Econ. 102 (2021).

need to solve a number of issues, still unresolved at the legislative level and arousing discussions in the scientific community. It is necessary to ensure such fundamental principles of judicial procedure as the principle of visibility and the principle of directness, as well as to protect against unsanctioned access to the court session or its recording. For that, it is feasible to use the blockchain technology.

8. Relevant Experience of Foreign Countries in the Sphere of Law Transformation Under Digital Realities

This section considers such issues as procedural law and judicial procedure under digital environment, as well as digitalization of law in certain types of public relations. This section of the monograph is written in English attracting larger readership. The authors of the chapter pursued the goal to demonstrate the complexity of developing digital platforms in the sphere of modern digital environment and to show how these problems are being solved in worldwide. Applying the foreign experience to the Russian legal theory and practice is, undoubtedly, very useful and may broaden the scope of legal awareness of the need to improve the legislative base in various aspects of development of the digital environment.

Conclusion

The book embraced various aspects of digitalization in various branches of law. Besides, the monograph provisions are of important applied significance, as it lists the probable legal risks related to the development of digital industry.

Especially noteworthy is the thorough analysis of legal acts and judicial practice, with recommendations formulated to improve the national legislation. The contribution of this monograph into the legal science is beyond doubt, as it provides the opportunity to consider the trends of using digital technologies in solving legal issues.

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