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INFORMATION ENVIRONMENT AS THE BASIS (PLATFORM) FOR THE PROVISION OF DIGITAL SERVICES

Ambiente de informações como a base (plataforma) para o fornecimento de serviços digitais

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ABSTRACT

The article aims to examine the concept, content, role, and significance of the information environment as a foundation for delivering digital services. The research emphasizes the importance of digitalization in improving public administration and highlights the need for well-defined legal frameworks. The primary research method applied is the deductive method, which allows for an analysis of the legal and social nature of digital service provision in the context of the transformation of forms and methods of interaction between the state (through authorized government bodies) and civil society institutions. Additionally, the inductive method, systematic scientific analysis, comparative legal, and historical methods were employed. The core approach in addressing this issue is the comparative legal study of digitalization processes in law and legislation. The study concludes that, given the absence of explicit provisions in the civil legislation of the Russian Federation regarding user agreements as a specific civil-law form of digital service provision, the regulation of user agreement content operates at two levels: a) through social (corporate) norms, and b) through civil-law norms applied by analogy, regulating similar legal relationships in service provision. The article also examines the role and position of the state in the digital reality and the digitalization of social relations.

Keywords: Digital service, Digital environment, Digitalization, Civil society, Public administration, Legal regulation, Security, Privacy

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AMBIENTE DE INFORMAÇÕES COMO A BASE (PLATAFORMA) PARA O FORNECIMENTO DE SERVIÇOS DIGITAIS

Information environment as the basis (platform) for the provision of digital services

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RESUMO

O artigo tem como objetivo examinar o conceito, o conteúdo, a função e a importância do ambiente de informações como base para a prestação de serviços digitais. A pesquisa enfatiza a importância da digitalização no aprimoramento da administração pública e destaca a necessidade de estruturas jurídicas bem definidas. O principal método de pesquisa aplicado é o método dedutivo, que permite uma análise da natureza jurídica e social da prestação de serviços digitais no contexto da transformação das formas e dos métodos de interação entre o Estado (por meio de órgãos governamentais autorizados) e as instituições da sociedade civil. Além disso, foram empregados o método indutivo, a análise científica sistemática, o direito comparado e os métodos históricos. A abordagem central para tratar dessa questão é o estudo jurídico comparativo dos processos de digitalização no direito e na legislação. O estudo conclui que, dada a ausência de disposições explícitas na legislação civil da Federação Russa em relação aos contratos de usuário como uma forma específica de direito civil de prestação de serviços digitais, a regulamentação do conteúdo do contrato de usuário opera em dois níveis: a) por meio de normas sociais (corporativas), e b) por meio de normas de direito civil aplicadas por analogia, regulando relações jurídicas semelhantes na prestação de serviços. O artigo também examina o papel e a posição do Estado na realidade digital e na digitalização das relações sociais.

Palavras-chave: Serviço digital, Ambiente digital, Digitalização, Sociedade civil, Administração pública, Regulamentação legal, Segurança, Privacidade

INTRODUCTION

The greater the degree of digitalization and automation in various spheres of society, the state, and individuals' lives, the stronger the need for civil-law regulation of "digital" relations and the adaptation of law (primarily civil law) to these technological innovations. The very existence, development, complexity, and demand for digital technologies and the information environment (as the primary platform and space for their implementation) confirm the presence of stakeholders interested in such development.

On the one hand, the advancement of digital technologies is driven by the interest of various actors who create and provide services using digital tools. On the other hand, digital technologies themselves attract an increasing number of participants, whose involvement in emerging civil-law relations complicates the system, continuously altering its legal nature and expanding its technical functionality.

A crucial aspect of studying the information environment as the foundation for digital service provision is the category and concept of "management", which is essential for processes occurring within the information environment. The elements that constitute this environment interact with one another and function as manageable components of a complex and self-regulating system (Gurieva, 2013).

Management refers to the conscious and purposeful informational influence aimed at transitioning a managed object from one state to another. In general terms, this involves the process of developing and implementing control actions (Gurieva, Dzhioev, 2013). The complexity of decision-making necessitates the creation and organization of a comprehensive management system (using the example of an enterprise), which consists of a controlling entity and a controlled object.

The essence of an enterprise's management system lies in its management mechanism, which integrates principles, functions, methods, and leadership styles. However, any content must take a specific form. In the case of a management system, this form is its organizational structure, which includes:

- Departments and units classified by management levels;
- Heads of these units;
- Management tools;
- Information sources for decision-making processes.

1 METHODOLOGICAL FRAMEWORK

One of the key aspects of digital interaction is the creation of feedback platforms, which enable citizens to actively participate in discussing and addressing socially significant issues. Such platforms contribute to the development of a more open and inclusive society, where every citizen can play a role in the country's progress. Successful examples of digital technology integration in public administration can be observed in various countries, where the implementation of e-government and online services has significantly simplified access to public services and improved their efficiency.

The study of different models of state-civil society interaction in the context of digitalization allows for the identification of best practices and the development of recommendations for their adaptation in other countries. This, in turn, helps strengthen democratic institutions and increase trust between the state and civil society. However, the implementation of digital technologies also raises concerns related to data protection and cybersecurity.

With the rapid growth of digitalization, robust information security mechanisms must be developed to ensure the safety of both governmental and public data. This requires not only technical solutions but also legislative initiatives aimed at regulating the use of digital technologies in the public sphere.

Thus, digital technologies serve as a powerful tool for the development of civil society, but their use must be accompanied by security and data protection measures. This will not only enhance the efficiency of interactions between the state and civil society but also strengthen citizens' trust in government institutions.

2 RESULTS

One of the main challenges in protecting copyright infringed within information networks is proving the fact of unauthorized distribution of intellectual property objects. Currently, in Russian legal doctrine and law enforcement practice, there are multiple perspectives on what evidence should be presented in court to confirm copyright infringement on the Internet.

Unless otherwise stipulated by a contract for paid services, the provider is required to deliver the services personally. However, in the case of services rendered through electronic technologies, this norm cannot be fully applied, as digital service provision relies on common algorithms and electronic solutions that deliver standardized services to users (clients). As a result, the "personal" provision of services may not occur in every specific case and often does not take place at all.

For example, in smart contract execution, the personal provision of services is not required. Instead, legal relationships between the parties arise through the use of algorithms and templates, implemented via AI-powered programs designed for specific processes. According to the researcher, such processes should not be equated with the activity of a human service provider.

By its legal nature, a contract for paid services is consensual, bilateral, and compensated. The parties to the contract are the service provider (contractor) and the service recipient (customer).

In electronic documents of any type—including digital copies of photographs, images, and textual information—electronic watermarks are used. These special markers are embedded in digital content to protect copyright and ensure the integrity of the document. Such watermarks serve to prevent unauthorized alterations of a digital file without the author's consent. If a copyrighted object is illegally modified, the electronic watermark changes, providing evidence of tampering.

There are two types of electronic watermarks:

1. Visible watermarks – These include the author's signature and/or logo, explicitly indicating ownership of a specific work. However, such marks can be easily removed or altered.
2. Invisible watermarks – These are embedded within digital files and are not visible to the naked eye, making them more resistant to unauthorized modifications.

3 DISCUSSION

Currently, there is no clear mechanism that allows for the monetization of all musical works on social networks. Anyone can listen to music for free without making any payment.

For example, in the United States, to combat plagiarism and counterfeit content in cyberspace, major Internet service providers (ISPs) introduced a special program in 2011 called the Copyright Alert System (CAS). This private system was designed to notify, educate, and penalize Internet subscribers of certain ISPs for copyright violations (Demidova, 2009).

This program is not applied to all internet service providers (ISPs) but only to those that participate in it. The system operates as follows: when a monitoring service, acting on behalf of participating copyright holders, detects a suspected violation online, it notifies the ISP. The ISP then sends a series of electronic warnings to the user, informing them of a possible copyright infringement.

If copyright violations continue after a certain number of warnings, stricter measures are imposed, such as reducing the user's internet speed. This program not only monitors the presence of counterfeit content on the internet but also prevents users from downloading such material.

Building on the successful experience of the United States in combating plagiarism and counterfeit content, it is proposed to implement a similar private system in the Russian Federation for copyright protection on the internet. This system would focus on monitoring violations and preventing copyright infringement, while also taking into account national specifics in its implementation (Konstantinov, 2012). Thus, the Internet offers vast opportunities for the unauthorized distribution of copyrighted works and, more broadly, intellectual property in the digital space.

To address this issue, legal measures must be implemented promptly. Consequently, there is a growing need for the adoption of a legal document dedicated entirely to the protection of intellectual property rights, including

copyrights in the digital environment. Such a document should regulate problematic aspects of this field at the international level. The emergence of such an international legal framework would contribute to the development of corresponding regulations and the adoption of a national-level legal document focused on copyright protection and intellectual property rights on the Internet. In turn, this would enable harmonized regulation of intellectual property protection in the digital sphere.

The civil-law regulation of services provided through digital technologies lags behind the real and rapidly evolving online interactions. The provisions of the Civil Code of the Russian Federation (State Duma of the Federal Assembly of the Russian Federation, 1994) are no longer fully capable of regulating the complex legal relationships that take place online through digital technologies.

These legal gaps allow digital service providers—as key actors in the digital services sector—to independently develop contractual frameworks based on existing civil law. These contractual structures, though not yet explicitly recognized in the Civil Code of the Russian Federation, are essential for the proper civil-law regulation of new forms of digital service provision.

Other actors in this sphere, such as supporting (service-providing) entities, play a crucial role in maintaining and ensuring the functionality of the digital information market (e.g., internet service providers and other digital infrastructure players). These entities facilitate the operation of digitalization processes, without which digital service provision would not be possible. Key figures in this sector include providers, programmers, system administrators, and other specialists responsible for network maintenance, website and platform functionality, bug fixes, and the optimization of the digital space necessary for the application of digital technologies.

One of the most illustrative examples of existing legal relationships in digital law—particularly in the digital services sector—is the regulation of copyright protection on the Internet. Another important area involves determining the liability of information intermediaries (internet service providers) for digital content within the online environment (Malinenko, 2022).

For example, a company promptly responds to any copyright infringement claims. In practice, contacting social media users regarding such claims is complicated by the fact that social networks allow users to remain anonymous or use pseudonyms instead of their real names. As a result, site administrators are primarily focused on identifying infringers based on rights holder requests and are willing to provide all necessary information, including IP addresses.

Civil legislation recognizes several types of intellectual property rights, including exclusive rights, personal non-property rights (such as the right of authorship, the right to a name, and the right to the integrity of a work), and other rights. The mediation procedure can be used to protect any intellectual property rights holders, including both authors and other rights holders who have acquired rights under law or contract. Intellectual property disputes do not require mandatory mediation, making voluntariness and equality of parties fundamental principles in the mediation process.

Mediation in intellectual property disputes is particularly flexible due to the broad range of protective measures available to parties. Rights holders can freely choose both the method of legal protection (e.g., claiming damages or seeking compensation for intellectual property violations) and the amount of compensation (such as moral damages or compensation for the infringement of exclusive rights).

The subject composition of mediation relations must take into account the specific nature of intellectual property disputes. For example, patent disputes require the involvement of a patent attorney, a legal specialist with a unique status. A patent attorney may act as a representative for one of the parties in the mediation process, but cannot serve as a mediator. This is because both Russian and international law establish a general requirement for mediators to be impartial and independent. Specifically, a mediator must not have a personal interest in the dispute and must consider any circumstances that could create a conflict of interest. If such circumstances arise, the mediator is required to withdraw from the case before the mediation process begins.

The participation of Eurasian patent attorneys in mediation is explicitly regulated by the Mediation Procedure Guidelines of the Eurasian Patent Office, which specify that patent attorneys may act only as representatives of the parties but not as mediators (Eurasian Patent Office, 2022).

Similarly, the issue should be addressed concerning organizations that manage copyright and related rights collectively. These organizations have the right, on behalf of rights holders or in their own name, to file claims in court, enter into licensing agreements with users, collect royalties for the use of copyrighted and related works, and

perform other legal actions necessary to protect the rights entrusted to them for collective management. However, since a mediator is defined as an independent individual engaged by the parties to facilitate dispute resolution, these organizations cannot act as mediators either (Belov et al., 2014; Shelepina, 2015).

CONCLUSION

Given the absence of explicit provisions in the civil legislation of the Russian Federation regarding user agreements as a distinct civil-law form of service provision using digital technologies, it can be stated that their regulation occurs at two levels:

a) Social (corporate) norms;

b) Civil-law norms applied by analogy, regulating similar legal relationships in service provision based on their legal nature and characteristics.

The current issues surrounding the protection and enforcement of copyright in the online space, as well as holding individuals accountable for the illegal use of intellectual property, are largely due to gaps in civil legislation.

At the legislative level, the issue of information intermediary liability has been largely addressed, with an expanded scope of responsibility that now includes copyright and related rights as a whole. However, it may be necessary to establish a separate legal framework for protecting copyright in photographic works and related rights.

The authors conclude that the main areas for the future development of civil legislation in Russia regarding digital service provision should include:

1. The development and adoption of a separate article in the Civil Code of the Russian Federation, introducing the concept of the "Internet of Things", regulating the rights and obligations of participants in digital services.

2. The development and adoption of a separate article in the Civil Code, introducing the concept of "Big Data", defining and regulating its legal circulation, and determining the legal status of both subjects and objects in digital service provision.

3. The revision and expansion of existing articles in the Civil Code and other legal acts to introduce the concepts of "Machine Learning", "Artificial Intelligence", and the roles of operators, users, and other participants in the digital service sphere. Additionally, there should be legal restrictions (including ethical and moral considerations) regarding the spread of AI and the regulation of its applications and consequences.

Mediation, regardless of its field of application, is based on four key principles: voluntariness, confidentiality, cooperation and equality of the parties, impartiality, and independence (Article 3 of the Law on Mediation). These principles can also be categorized based on their function:

1. Organizational principles define the structure of the mediation process and the role of participants (e.g., voluntariness and mediator neutrality).

2. Procedural principles regulate the mediation process itself (e.g., confidentiality, independence, cooperation, and equality of parties). These principles serve as guiding standards for conducting mediation as a reconciliation procedure.

Mediation presents several advantages over court litigation:

- It has a broad scope and can apply to a wide range of legal and interpersonal conflicts, including those not explicitly covered by the law.
- It helps reveal the true intentions of the parties, preserves business and personal relationships, smooths contradictions, overcomes differences, and considers mutual interests.
- It ensures confidentiality.
- The process is informal, flexible, private, and focused on mutual agreement.
- It saves resources (time, money, and emotional strain), with minimal costs for the parties.
- There is an option to withdraw from mediation at any stage.
- Because the parties themselves agree on a mutually beneficial resolution, compliance is significantly higher than in court decisions.
- A mediation agreement has legal force and is binding, just like a court ruling

The monetization of the internet space is progressing at a rapid pace, leading to the emergence of new copyright objects, primarily characterized by their electronic format. For instance, domain and email owners seek

to secure their right to use an original "address" without having to transfer it to corporations holding trademark rights to the same commercial name (Malinenko, 2018). Owners of internet media specializing in app and video game development often lose tens of thousands of dollars invested in their digital products due to unauthorized copying and distribution of their content on other platforms. Disputes also arise regarding the liability of internet service providers for the illegal activities of users, as well as the broader issue of internet anonymity.

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REFERENCES

Belov, O.A., Valeev, A.T., Sofiychuk, N.V., Shelepina, E.A. (2014). Teoretiko-pravovyye osnovy realizatsii protsedury mediatsii v Rossiyskoy Federatsii po otdel'nym kategoriyam pravovykh sporov [The theoretical and legal basis for the implementation of the mediation procedure in the Russian Federation for certain categories of legal disputes]: Monograph. Vologda: North-Western Institute (branch), Kutafin Moscow State Law University (MSAL), p. 47.

Demidova, M.I. (2009). Tsifrovyye vodyanyye znaki, kak sposob zashchity proizvedeniy mul'timedia [Digital watermarks as a way to protect multimedia works]. Bulletin of the Volga University named after V.N. Tatishchev, 70, 137-143.

Eurasian Patent Office. (2022). Mediation Procedure Guidelines approved by the order of the Eurasian Patent Office of December 29, 2022, No. 79. https://www.eapo.org/documents/voprosy-pravovoj-ohrany-promyshlennyh-obrazczov/poryadok-provedeniya-proczedury-mediaczii/ (accessed on June 15, 2023).

Gurieva, L.K. (2013). Sinergeticheskiye effekty klasternoy organizatsii promyshlennykh predpriyatiy [Synergistic effects of cluster organization of industrial enterprises]. *Economic systems management: Electronic scientific journal*, 12(60), 125.

Gurieva, L.K., Dzhioev, A.V. (2013). Problemy i perspektivy razvitiya ekonomiki znaniy v Rossii [Problems and prospects of economy knowledge development in Russia]. Bulletin of the North Ossetian State University named after K.L. Khetagurov, 3, 146-151.

Konstantinov, K.B. (2012). Sovremennyye tendentsii regulirovaniya avtorskikh prav v seti Internet na primere zarubezhnykh stran [Modern trends in copyright regulation on the Internet using the example of foreign countries]. Criminalist, 1(10), 121-125.

Malinenko, E.V. (2018). Konstitutsii i ustavy kak dogovory naseleniya i vlasti v sub"yektakh Rossiyskoy Federatsii [Constitutions and statutes as treaties of the population and power in the constituent entities of the Russian Federation]. Law and State: Theory and Practice, 5(161), 61-62.

Malinenko, E.V. (2022). Tsifrovizatsiya konstitutsiy i ustavov sub"yektov RF v informatsionnom prostranstve [Digitalization of the constitutions and charters of the constituent entities of the Russian Federation in the information space]. In Gosudarstvennoye upravleniye i razvitiye Rossii: proyektirovaniye budushchego. Sbornik statey mezhdunarodnoy konferents-sessii [Public administration and development of Russia: Designing the future. Collection of articles of the international conference session] (pp. 720-721). Moscow: Izdatel'skiy dom "Nauchnaya biblioteka".

Shelepina, E.A. (2015). Osobennosti primeneniya mediatsii k sporam, voznikayushchim iz grazhdanskikh pravootnosheniy [Specific features of the use of mediation in the disputes arising from civil law relations]. Actual Problems of Russian Law, 8(57), 103-109.

State Duma of the Federal Assembly of the Russian Federation. (1994). Civil Code of the Russian Federation of November 30, 1994, No. 51-FZ. http://www.kremlin.ru/acts/bank/7279