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Features of the Functioning of the Legal System in the Context of Digitalization Processes

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Abstract

Using a documentary-based methodology, the aim of the study was to identify the key features of the functioning of the legal system in the context of digitization processes. The rapid growth of information volumes, the formation of information sets

and databases, the intensive development of digital technologies, their widespread introduction in various spheres of public life, their mediation in a growing number of areas and types of social interaction, the activities of state and public institutions are a significant factor in the development of modern society, forming a "digital" reality. It is concluded that, in the conditions of the new reality, the law becomes not only a means, a tool ensuring digitalization of economy, management and other segments of social life, but also, an object of influence of "digitalization", by virtue of which it undergoes changes in its form, content, system, structure, mechanism of action and shows tendency to intensify emerging transformations. As a result of the study, the current trends and prerequisites for the characteristics of the functioning of the legal system in the context of digitization processes were investigated.

Keywords: legal system; legislative support; jurisprudence; digital sphere; legal digitization.



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Características del funcionamiento del sistema jurídico en el contexto de los procesos de digitalización

Resumen

Mediante una metodología de base documental, el objetivo del estudio fue identificar las características clave del funcionamiento del sistema legal en el contexto de los procesos de digitalización. El rápido crecimiento de los volúmenes de información, la formación de conjuntos y bases de datos de información, el desarrollo intensivo de las tecnologías digitales, su introducción generalizada en diversas esferas de la vida pública, su mediación en un número creciente de áreas y tipos de interacción social, las actividades de las instituciones estatales y públicas son un factor significativo en el desarrollo de la sociedad moderna, formando una realidad "digital". Se concluve que, en las condiciones de la nueva realidad, el derecho se convierte no solo en un medio, una herramienta que asegura la digitalización de la economía, la gestión y otros segmentos de la vida social, sino también, en un objeto de influencia de la "digitalización", en virtud de la cual se sufre cambios en su forma, contenido, sistema, estructura, mecanismo de acción y muestra tendencia a intensificar las transformaciones emergentes. Como resultado del estudio, se investigaron las tendencias actuales y los requisitos previos para las características del funcionamiento del sistema legal en el contexto de los procesos de digitalización.

Palabras clave: ordenamiento jurídico; soporte legislativo; jurisprudencia; ámbito digital; digitalización jurídica.

Introduction

Modern conditions for the development of digitalization form fundamentally new technologies for the work of the state and municipal service. The inconsistency of the moment of realizing the practical possibilities of introducing digital technologies lies in the fact that there may be duplication in the work of state bodies.

The main task of digitalization is to create conditions for an efficient, mobile, flexible system of work that improves the quality of services and reduces unreasonable government intervention, which would be significant for external beneficiaries - citizens, businesses, non-profit organizations, etc. and increase the effectiveness and efficiency of public administration. This may lead to a change in the mechanisms and tools of management, stages of the management cycle. We believe that e-government is the key to high-quality public administration.

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The main requirements for the digital transformation of state and municipal services are:

- 1. expectation of the introduction of breakthrough technologies (for example, a registry model for the provision of services, proactivity in their provision);
- 2. the development of primary digital technologies (the principle of multi-channel and extraterritoriality in the provision of public services).

In the context of the modern development of technologies such as blockchain, there is an urgent need to study the features of social relations, complicated by information, communication and digital elements. The definition of these features is important from the point of view of the formation of legal regulation of such economic and technical phenomena as cryptocurrency, smart contracts, tokens. At present, the existing legal regulation does not fully allow to effectively regulate new forms of economic turnover due to the lack of appropriate legal terminology, the lack of development of optimal legal regimes for mediating public relations, the lack of a systematic approach that takes into account the economic, social, political, technological consequences of legal impact on the newest spheres. public life. Thus, the currently emerging digital reality is de facto not included in the scope of legal regulation.

1. Materials and methods

For a more detailed study of the features of the functioning of the legal system in the context of digitalization processes, the following methods were used: induction and deduction, comparison and systematization; synthesis and analysis; abstract-logical - for theoretical generalizations and conclusions of the study.

To more accurately reflect the main features of the functioning of the legal system in the context of digitalization processes, we used the IDEFo functional modeling method.

2. Literature review

Based on the results of the theoretical analysis, we will reveal the content of the basic categories of our study (Catterwell, 2020; Kryshtanovych *et al.*, 2021).

The digital economy is an economic activity in which the key production factor is information in digital form and the result of collecting, storing, analyzing, and exchanging such information, aimed at maximizing the satisfaction of the needs of all its participants. In the digital economy, the most significant is the provision of services, including social and public ones.

Digitalization is the process of introducing and using innovative technologies and principles of the digital economy in the socio-economic spheres of society, accompanied by total automation, robotization and the introduction of artificial intelligence (Sylkin *et al.*, 2021).

In the field of public administration, digitalization also means the development and application of new technologies and management tools that influence the formation of digital public administration in order to increase the effectiveness of management decisions and public services provided to the population (Kazanchian, 2020).

The digital economy and the process of digital transformations in the sectors of the economy and social spheres are new factors in the development of the state, and therefore the conceptual apparatus has not been formed and is not fully detailed. The definitions of the basic categories of research are constantly supplemented and adjusted in direct proportion to the intensive development of innovations in the modern world (Howe Vial, 2019).

Digitalization is a global phenomenon with transformational potential. Accordingly, law, being the regulator of relations, experiences its influence. Modern jurisprudence does not stand still, and is actively developing in the period of informatization. Also, such a concept as Legal Tech is becoming more and more common.

It includes various legal bases, programs, technologies with which lawyers can perform their professional activities. For example, thanks to legal databases, one can not only see a selection of jurisprudence, publications on a specific topic, but also to make a contract. Another developing term is Law Tech, which includes not only access to programs, solutions, tools (for example, the calculation of the state fee) of consumers of legal services, but also provides an opportunity to receive various kinds of legal advice (Kryshtanovych *et al.*, 2022).

Of particular importance in modern conditions is the need to identify trends in the field of law, manifested under the influence of digitalization, to develop forecasts for the further development of law, the socio-economic sphere, and the public administration system. The main role in the development of these phenomena is assigned to the law, which is being transformed in the formation of digital technologies, renews its regulatory potential, enhances its effectiveness and social orientation.

3. Research Results and Discussions

The rapid development of revolutionary transformations has led to a new technological order based on digital technologies (digital revolution), which consistently forms a new social, economic, political and legal reality, which is based on the so-called «digitalization» of production and social processes in general. Digital technologies create a new reality, different from the physical world in which we live. Often the gap between the real and digital world prevents us from using all the available information produced by the multitude of smart devices around the world.

Digital technologies, together with advanced data and process analytics, serve as technological drivers of digital innovations that determine the global transformations of the modern world, form the vector of the main technological, economic and social development in the modern era. The digital space is becoming not only an information field for the exchange and receipt of information on the Internet, but also turns into a tool for regulating the economy and law, public administration. We can talk about the "digitalization of law", i.e. the use of new technologies in order to optimize processes and legal relations using digital technologies, as well as the creation of a new digital reality, which also requires legal regulation or the presence of a state-authorized regulator (Sylkin *et al.*, 2021).

The current stage of the development of human civilization is significantly different from all previous stages. Starting with the creation of the first tools and ending with the post-industrial era, human progress was based on the development of the material world: natural resources were developed, new physical laws were discovered and used, new production technologies and ways of moving people and goods were created.

The apogee of this trend, from the point of view, was the creation of orbital technologies and the first flight of man into space. At the same time, it should be noted that at all the mentioned stages of human development, the technologies for regulating social relations remained quite conservative, since from the time of the invention of writing until today, the main instrument of such regulation is a written legal act containing a list of rules of behavior (Droniv, 2018).

The digitalization of legal reality implies the need to immerse in the virtual legal place of numerous state functions, areas of activity of city bodies, the electronic role of people in lawmaking and the examination of draft regulatory legal acts (Gomes, 2018).

The public need for the digitalization of public administration has increased on the basis of the formation of algorithms for public decisions both at the state and regional levels. With digitalization, the sphere of law should be assessed as the basis for the emergence of a modern form Iryna Khomyshyn, Ivan Dragan, Oleksii Sidelkovskyi, Pylyp Yepryntsev y Olena Fatkhutdinova
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of relations between state power and civil society in accordance with the moral principles of public life management. Of particular importance is the reform of the system of state control in the field of security of the individual and society, in the fight against manifestations of corruption, as well as control of processes occurring in cyberspace, based on the use of all modern information technologies (Bloshchynskyi, 2022).

The objective processes of legal digitalization give rise to the need to improve regulations in the field of civil, administrative, labor, criminal and other branches of law, as well as to transform regulatory complexes in the field of information, medicine, and education. In the modernization of law, the adoption of separate regulatory orders, which determine the possibility of realizing the most significant interests and needs of society, their implementation in existing regulatory complexes, as well as the reorientation of the legislative system towards the implementation of social programs, acquires importance.

In Fig.1. the main obstacles to the process of digitalization of the legal system are shown

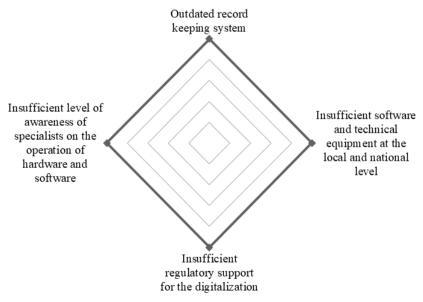


Fig.1. The main obstacles to the process of digitalization of the legal system. Source: own elaboration.

Modern situation is increasingly switching to digital methods of management in the form of "electronic government" under the influence of the need to reduce administrative costs and improve the efficiency of programs being implemented, as well as due to the increasing demands of citizens for the quality and availability of public services in cooperation with government agencies through Internet technologies as easy as with banks or online stores (Barry and Wissenburg, 2011).

The leaders of e-government (Great Britain, Singapore) are currently moving to the next stage of the transformation of the public service delivery system - to the so-called «digital government» stage, which implies the complete transfer of services to digital format from applying for these services to their execution and achieving such a position case where departmental processes rely primarily on data rather than documents (Castanho *et al.*, 2021).

Using the methodology of functional modeling IDEFo, we have formed a model for stimulating the process of digitalization of the legal system (Fig.2).

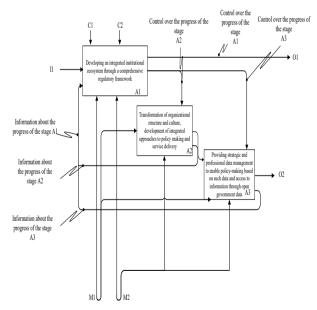


Fig.2. A model for stimulating the process of digitalization of the legal system. Source: own elaboration.

The forecast for the development of the legal system in the context of

digitalization affects its various aspects. The following areas of development of the legal system under the influence of digitalization, the introduction of artificial intelligence and other modern scientific technologies seem to be the most relevant for scientific and practical analysis (Serhieiev *et al.*, 2022).

- in the context of changing the essence of law, it is necessary to assess the threats to the transformation of the law of humanism into the law of transhumanism and to find ways to counter these threats;
- from the point of view of the development of the system and structure of law, it is important to pay attention to the emergence of branches of law and branches of legislation of a new generation, in particular, to the separation of digital law from information law as an independent branch of law;
- in the structure of legal regulators, it is important to decide on the recognition of such new tools as an algorithm, program code, operating system, etc., and to understand the limits of their convergence with the classical regulators of law - principles and norms;
- when identifying a trend towards expanding the list of objects of legal regulation, it is important to assess the emergence of a fundamentally new object of legal regulation the relationship between a person and a machine endowed with artificial intelligence;
- it is necessary to determine the boundaries of the expansion of subjects of law under the influence of digitalization and artificial intelligence processes;
- it is necessary to determine the legal status of artificial intelligence, which is introduced into the system of public relations and performs political, economic, social, spiritual, cultural, environmental and other functions, the responsibility for which lies with the state, public authorities, individuals and legal entities, people and other traditional subjects' rights.

The possibilities of digitalization also find their expression in the areas of private law, civil circulation, lawmaking and law enforcement. There are opportunities to use artificial intelligence in conducting forensic examinations, in the process of obtaining electronic evidence, organizing court activities using electronic document management. New opportunities for the implementation of electronic litigation are opening up. But we must not forget that the main guideline in this area should be constitutional principles and norms.

Conclusions

Thus, the formation of the newest rules of law requires a rethinking of the actions of their implementation in law enforcement practice, within which legal qualifications, interpretation of the rules of law, overcoming legal gaps, and resolving legal conflicts are of particular importance. Digitalization determines the processes of formation of the content of law, which is undergoing significant changes, as new social relations are being formed that arise between digital virtual entities.

These processes contribute to the development of international legal relations, the unification and standardization of law, as well as the formation of domestic legal standards that meet the specifics of the national legal system. Digitalization includes the processes of emergence, change, termination of legal relations that arise in the modern virtual space, the implementation of subjective rights and legal obligations of subjects of legal relations.

The digitalization of law can be manifested both in the adaptation of existing legal norms to emerging new types of social relations, and in the development of a fundamentally new concept of a regulator of social relations based on a virtual digital environment (machine-readable law).

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