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Инновационные технологии искусственного интеллекта и гражданско-правовые отношения

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Аннотация. Целью является изучение феномена асимметрии динамики технологий искусственного интеллекта и цифровых институтов права и этики, и обоснование роли самоорганизации пользователя на основе цифрового этикета. Методологическую основу исследования составляют аналитические методы сравнительного анализа и системного анализа. Выявлены причины асимметрии динамики технологий искусственного интеллекта и цифровых институтов права и этики. Они заключаются в неопределенности ситуации, связанной с широким употреблением термина «искусственный интеллект» на фоне признания тезиса о том, что подобный уровень технологий еще не создан. Под искусственным интеллектом понимаются компьютерные программы, которые согласно тесту А. Тьюринга, способны адекватно отвечать на поставленные им вопросы. Признается, что эти компьютерные программы относятся к уровню слабого искусственного интеллекта. Но поскольку применение этих программ приобрело широкий спектр в об-

ласти экономики (маркетинга, менеджмента, логистики, промышленного интернета) в условиях перехода на цифровые платформы безбарьерной среды, то были обнаружены риски цифровизации. Также констатировано отставание цифрового права от технологической динамики. Вследствие этого в условиях переходного периода все большая роль отводится институту самоорганизации пользователей сети.

Ключевые слова: асимметрия, цифровое право, гражданско-правовые отношения, искусственный интеллект, цифровая антропология.

Innovative technologies of artificial intelligence and civil relations

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Annotation. To study the phenomenon of asymmetry in the dynamics of artificial intelligence technologies and digital institutions of law and ethics and substantiate the role of user self-organization based on digital etiquette. The methodological basis of the study consists of analytical methods of comparative analysis and system analysis. The reasons for the asymmetry in the dynamics of artificial intelligence technologies and digital institutions of law and ethics have been identified. They lie in the uncertainty of the situation associated with the widespread use of the term “artificial intelligence” against the backdrop of recognition of the thesis that a similar level of technology has not yet been created. Artificial intelligence refers to computer programs that, according to A. Turing’s test, are capable of adequately answering questions posed to them. It is recognized that these computer programs belong to the level of weak artificial intelligence. But since the use of these programs has acquired a wide range in the field of economics (marketing, management, logistics, industrial Internet) in the context of the transition to digital platforms of a barrier-free environment, the risks of digitalization were discovered. It was also noted that digital law lags behind technological dynamics. As a result, during the transition period, an increasingly important role is given to the institution of self-organization of network users.

Keywords: asymmetry, digital law, civil law relations, artificial intelligence, digital anthropology.

Introduction. Many authors write about the asymmetry in the dynamics of the development of digital technologies and the institution of civil law relations. Asymmetry is emphasized even at the stage of forecasting the development of new technologies. It is understood that new digital technologies with their characteristic components will create a subject field of civil law relations [1]. And this is true, since many questions arise for users due to the desire to have guarantees of order fulfillment through digital technologies [2]. The transformation was accelerated by the pandemic [3].

Results. Applied consequences of the asymmetry of digital technologies and legal regulation of social networking institutions.

First of all, questions arise regarding sites and applications, since they are intermediaries between providers of services and goods and users. We are talking about business aggregators and whether they should bear legal responsibility for the quality of services and goods, as well as for the guarantee of their provision. In some national legislations,

arbitration courts take the position that business aggregators do not provide services, but are only intermediaries in providing information about services. Consequently, they are not responsible for the quality of the services and goods provided. Courts of general jurisdiction, on the contrary, tend to recognize the legal responsibility of business aggregators for the quality of services and goods provided through them.

Users of social networks are faced with the phenomenon of electronic agreements. This is a digital transaction. An electronic agreement presupposes conclusive actions. In the case of using an electronic digital signature, the rule on simple written form applies.

Social media is closely tied to transactions. They are carried out in the forms of classical national currencies and are associated with verification procedures through a password and login. This is the most vulnerable point in the transaction, since it is directly related to confidential information [4]. Therefore, passwords and logins are the main goal of social engineering, which uses psychological practices that meet the age characteristics of different generations of people [5]. Vishing and phishing have become widespread [6].

Issues related to the legal regulation of the crypto currency space have also become relevant [7]. In some states, crypto currencies are recognized as virtual property, in other states they are given the status of a means of payment, as well as the status of uncertificated securities [8].

The problem of insecurity of the rights of crypto currency buyers is relevant. It is formed by the practices of freezing and seizing tokens. There is also information asymmetry between developers and buyers [9]. There is a lack of legal responsibility for platform developers [10]. Smart contracts can play an important role in contractual practice. The question has arisen about considering the online platform through the categorical structures of civil law. The issue of taking into account copyrights using digital technologies has also become relevant, since the functioning of the crypto currency market has not only a functional component, but also a design component that requires copyright protection.

When considering the dynamics of civil and legal relations in the economy of digital platforms, the topic of a philosophical component arose. It is due to the fact that the considered specific aspects of the functioning of electronic transaction market technologies revealed the evolution of the economy of digital platforms to a situation of changing its basic paradigm.

The economy of digital platforms in the space of social networks began based on the paradigm of cyber libertarianism [11]. The Californian creators of this paradigm viewed social networks as the embodiment of the ideals of freedom and democracy. They also emphasized the position of the majority of social network users [12]. It reflected the opportunity for users to escape the control of government agencies. Digital technologies were interpreted as a means of promoting individual and decentralized initiatives.

Connective intelligence is not identical to collective intelligence, since it is a decentralized actor-network structure [13]. But with the growing presence of geopolitical factors in the information war on social networks, connective intelligence began to give way to collective intelligence. It should be understood as psychological technologies for reducing many individual intellects to a certain assessment of the geopolitical situation in the categories of confrontation between Western democracy and states with an authoritarian model of the political regime. This is a situation of crisis in the globalization paradigm, in which there is a return to the concepts of sovereignty, national information

space, and national regulator. The topic of ecology sounds new [14]. This trend determines the emphasis in the development of various forms of law.

Geopolitical transformations coincided with deep technological transformations and required turning to the fundamental foundations of certain branches of philosophy. Digital anthropology is in demand [15].

Digital anthropology studies how people interact with digital devices [16]. How they behave in the context of technology and how they use technology to interact [17]. Methods include sentiment analysis, netnography, and empathy research [18].

As a result, the subject of digital anthropology has become new digital technologies, virtual communities created by technology, and the impact of technology on everyday culture – language, communication, social structures and cultural identity. Collectively, they are social digital ecosystems [19].

Conclusions. A steady trend of convergence between artificial intelligence technologies, law and philosophical anthropology has been discovered. This research trend of their interdisciplinary fusion is due to four reasons. The first reason was created by experimental design techno science. It is dominated by the development of neural interfaces to help people suffering from coordination, vision, and hearing impairments. These technologies inevitably create a cyborg – an individual with special cognitive devices (artifacts) complementing his physicality.

The first reason has an emphasis that also applies to physically healthy people. It is due to the fact that cognitive artifacts have become part of the psychological world of modern man. This psychological world has a decentralized basis. Some of the functions of storing data, information, knowledge, skills, and memory are delegated to mobile technical devices, despite the fact that by such actions an individual leaves digital traces and a digital shadow. User digital traces have become the subject of study in digital anthropology, digital visual anthropology, and digital ethnography. The convergence of the human body with cognitive artifacts has created the phenomenon of human body expansion.

The second reason was created by the philosophy of consciousness, in the space of which the strategy of expanding the human brain is implemented through its convergence with artificial intelligence technologies. But there is a barrier here, which is designated as a difficult problem of consciousness. This barrier insures against the risks associated with the technological singularity.

The third reason is created by the peculiarities of the market economy of a mass consumer society. In this context, the use of information technology is closely linked to the most complete knowledge of the behavioral characteristics of a potential buyer. This emphasis has created the phenomenon of behavioral economics and neural marketing [20].

Norms do not have time to be established against the backdrop of technological breakthroughs.

As a result, the topic of cyber security is a pressing one, one of the key areas of which is the improvement of verification technologies in the digital communication space. This applies to transactions, confidentiality, and access to corporate networks. A special role is given to the functions of protecting the national information space in the historical era of global turbulence and the crisis of the globalization paradigm.

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Разработка элементов технологической системы для повышения эффективности обработки профиля колесных пар железнодорожных составов

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Аннотация. В статье представлена разработанная конструкция дисковой фрезы со сменными многогранными пластинами, позволяющая улучшить процесс обработки профиля колесных пар железнодорожных составов. По сравнению с традиционными методами обработки профилей колесных пар с использованием токарных резцов и сборных фасонных фрез, предлагаемая методика обработки на основе дисковых фрез со сменными многогранными пластинами обладает рядом преимуществ, связанных с повышением производительности, качества, надежности обработки и удобства эксплуатации.

Ключевые слова: дисковая фреза, сборный режущий инструмент, ремонт железнодорожных колесных пар, фрезерование, восстановление колесных пар.

Development of components of a technological system to enhance the efficiency of processing the profile of railroad wheelsets

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Annotation. The paper presents the developed design of a disc milling cutter equipped with indexable cutting inserts, which allows to improve the process of machining the