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Aims & Scope

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Quarterly scientific and analytical magazine named **Works on Intellectual Property** (https://tis.hse.ru/index.php/tis/) was founded in 1999 by the UNESCO Chair on Copyright, Neighboring, Cultural and Information Rights. Its origins were such prominent jurists as Illaria Bachilo, Yuriy Baturin, Mikhail Boguslavsky, Adolf Ditz (Germany), Viktor Dozortsev, Mikhail Fedotov, Mihaly Ficsor (Hungary), Eduard Gavrilov, Peter Maggs (USA), Kaarle Nordenstreng (Finland), Alexander Sergeev, etc.

The journal publishes scientific articles and analytics, book reviews, and expert opinions on a wide range of IP problems and the modern information ecosystem. Among the topics that attract the attention of the authors and readers of the journal are topical issues of copyright and related rights, intellectual property rights in the context of digitalization, and cultural and information rights in the context of UNESCO conventions and recommendations. The list embraces human rights in the digital age, legal regulation of cyberspace, mass communications, digital platforms and ecosystems, AI technologies, and transhumanism.

The journal is published based on the Agreement between UNESCO and the National Research University Higher School of Economics (HSE University). The latest issue and archive of the journal are on the web page: URL: https://tis.hse.ru/index.php/tis/. Contacts of the UNESCO Chair at HSE University: URL: https://www.hse.ru/en/unesco/; Email: tis@hse.ru.

Dear colleagues!

Since our Digest is published in December, we suppose it is appropriate to congratulate you with the New Year in advance and wish you all the best.

Happy New Year of 2025!

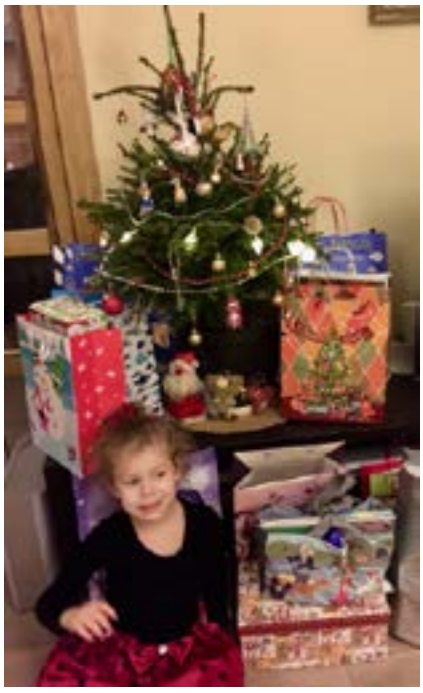

Photo by M. Fedotov

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THE RIGHT TO REFUSE TO USE DIGITAL TECHNOLOGIES: RESULTS OF AN EXPERT SURVEY

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Abstract. The article continues a series of publications based on the results of traditional expert surveys conducted by the UNESCO Chair on Copyright, Neighbouring, Cultural and Information Rights of the National Research University Higher School of Economics together with the law firm Nextons among participants in annual scholarly and practical conferences on media law and intellectual property law. The article summarizes and analyzes the results of an expert survey conducted in the fall of 2023 and dedicated to the human right to choose when to use digital technologies. The thesis about the right to choice as a new generation of human rights is put forward and discussed.

As part of the survey, respondents were asked questions based on real examples of the implementation of

digital technologies in various spheres of life in modern Russian society. Questions related to unmanned vehicles, the use of artificial intelligence for personnel selection, the use of voice assistants and chatbots for communication with the population, the integration of video surveillance and photographic recording systems into smart city projects, etc.

The results of the study showed that in most cases, respondents chose those answer options that provided individuals with the opportunity to refuse to use a particular technology. In general, the results obtained do not contradict the results of surveys conducted on similar topics in other jurisdictions.

The results substantiate the necessity to introduce in the very near future industry-specific legislation embodying the obligation to inform citizens about the use of certain digital technologies (for example, artificial intelligence technologies) and to create non-discriminatory conditions in the field of digitalization, where for persons who do not have the knowledge and/or ability to use them, there is always an alternative non-digital interaction provided.

Keywords: lartificial intelligence, driverless vehicles, recruitment, voice assistant, government and municipal services, smart city

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Modern society gravitates towards artificiality and shies away from spontaneity

Cyril N. Parkinson

Having left the secret world, I soared like a falcon.
How I rejoiced at the freedom of strong wings!
Alas! No one shared my delight.
And I went down again to where I was before.

Omar Khayyam

INTRODUCTION

This article continues a series of publications based on the results of traditional expert surveys [1, 2, 3] conducted by the UNESCO Chair on Copyright, Neighbouring, Cultural and Information Rights of the National Research University Higher School of Economics together with the law firm Nextons among the participants of the annual scientific and practical conferences on media law and intellectual property law. The topics of these surveys are the key issues arising at the intersection of digital technologies and law, computer science and jurisprudence. Since these issues inevitably affect the interests of a wide range of people, it is appropriate to seek valuable information for the reflection and the development of recommendations that may be in demand when making future management decisions through applied sociological research. Their results are intended to become food for discussion not only by jurists, but also by specialists in the field of sociology, economics, psychology and, of course, computer science. As a result, the authors expect to contribute to the formation of a system of optimal social regulators, including rules of law, ethics, technical regulation and algorithmic programming, designed to make the digital sphere of human habitation the most comfortable for life and constructive creation.

The methodology of the expert survey was first implemented by the authors in spring of 2023 during the study "Artificial Intelligence and Intellectual Property", which coincided with the organization and conduction of the III International Scientific and Practical Conference "AUTHOR/AUTHOR-2023" (Moscow, April 27–28, 2023). The survey results were presented at the con-

ference, after which they became the basis for scientific synthesis and publication in the journal "Works on Intellectual Property" [1].

This article summarizes the results of the next, second in a row expert survey. This time, the topic of the survey and the socio-legal research conducted on its basis was the right of a human to choose when using digital technologies. The XXXII International Scientific and Practical Conference "MEDIA LAW — 2023" (Moscow, December 7–8, 2023) was chosen as the platform for conducting the survey and presenting its results. For three months, while the pre-registration of participants continued on the HSE UNESCO Chair website, site visitors had the opportunity to take part in an expert survey. Among the respondents there were practicing lawyers, business representatives, state and municipal employees, teachers, students, graduate students, etc. Of course, the authors do not claim the sample to be representative, but the fact that more than half of the conference speakers and listeners took part in the survey, meaning people who are at least familiar with the issues of using digital technologies, in particular in the field of mass communications, speaks for itself [2].

The respondents were asked questions based on real examples of the implementation of digital technologies in various spheres of life of modern Russian society. The authors aimed to formulate the questions in such a way as not to only identify the respondents' attitude to the legal and ethical problems arising in connection with the use of digital technologies, but also to check to what extent the authors' ideas about the relevance of these problems, which until recently seemed to belong to the distant future, are shared by the participants of the expert survey. Taking into consideration the high response from the audience (more than two hundred conference participants took part in the survey) the authors believe that the goal was at least partially achieved.

THE RIGHT TO CHOOSE IN A NEW GENERATION OF HUMAN RIGHTS

Before we begin to present the results of our research, let us pay attention to the recently formed debate in domestic legal science regarding the right to refuse to use digital technologies, which should be considered in the context of the formation of the concept of a new generation of human rights. The origins of the idea of "refusing to use digital" can be found in the public actions of the social movement "For the Right to Live Without INN (individual number of a tax payer), Personal Codes and Microchips," which arose in the early 2000s and united "clergy, monastics and Orthodox believers who do not want to participate in implementation of atheistic global projects leading to the dismantling of the state and the suppression of the God-given freedom of every individual." [4]. Fears that spread in certain circles that "the INN is the seal of the Antichrist", "the apocalyptic number 666 is present in the INN and in electronic identification documents", and a Christian "loses his name by accepting the INN", forced the state to make changes in 2006 to the Tax Code of Russian Federation, allowing individuals who were not individual entrepreneurs not to indicate the INN in tax returns and other documents submitted to the tax authorities, limiting themselves to their personal data (clause 7 of Article 84). Thus, it can be stated that the legislative recognition of the human right to refuse to receive and use an INN was the first step towards the formation of a holistic legal institution — the right to refuse to use digital technologies.

The idea of forming such an institution was formulated several years ago, when, in order to increase the level of trust in communications in the rapidly developing digital world, a model of a constitutional norm was proposed to provide citizens with the right to refuse to use digital space and technologies while preserving for them the traditional system of human and civil rights and freedoms and a guarantee of the opportunity not to use new technologies [5]. The appearance of such a proposal was due to the widespread penetration of digital technologies into public life, especially artificial intelligence technologies, which indeed, unlike tax identification numbers, can pose threats to the rights and freedoms of citizens.

The emerging social fashion for artificial intelligence (let's call it advertising of artificial intelligence as well as propaganda of the values associated with it), the undeniable convenience and effect of its use in a number of areas, including speech and video image recognition, analysis of voluminous texts, and the advertising triumph of generative technologies have created a situation, when in the field of digital communications the use of bots, automated assistants, the use of artificial intelligence technologies in computer games and the so-called metaverses no longer becomes a mean of using the fruits of the technical process, but an end in itself in public life. At the same time, the massive distribution of deepfakes and human-generated but unverified content is turning, alas, into the norm.

Thus, social relations in which subjects — individuals, voluntarily or involuntarily, interact with computer programs operating on the basis of non-deterministic algorithms; become a reality for the information society. In these conditions, it is appropriate to appeal to the authority of A.A. Pilenko, who advised extreme caution more than a hundred years ago regarding the cultural and ethical impact of inventions. He warned that "mere improve-

ment in material well-being does not serve as proof of a concomitant increase in the general cultural level. The material well-being of modern Europe is immeasurably higher than the well-being of ancient Greece, but meanwhile the Greek culture is still an enviable example for us to follow." [6].

Taking into account the above, it seems to us reasonable, fair and promising to provide a person with bigger opportunities for choice and ensure "the conscious and trusted participation of a person and a citizen in legal relations in the digital space with the possibility to refuse from using the implemented complex technologies that are not fully understood by him" [7].

May we recall the words of Academician D.S. Likhachev addressed to the younger generation that "ethics, simple in previous centuries, will become infinitely more complicated in the age of science. A man will have the most difficult and complex task of being... a person of science, a person morally responsible for everything that happens in the age of machines and robots." [8].

How reliable are the technical means that are imposed on us; do they function in accordance with the requirements established by social regulators to ensure the rights and interests of human and citizen; and, finally, does a person have the necessary set of knowledge on how to use them and what risks may occur here? This is just not a complete list of fundamental questions to which neither legal doctrines, nor legislation, nor natural, nor exact, nor even computer sciences seem to provide an answer.

It is obvious that forcing a person to use digital technologies to solve certain routine tasks (for example, paying for housing and communal services, receiving various state and municipal services), prohibiting him from acting in accordance with behavioral habits developed over decades, is an irrational choice for humanity. It is necessary to purposefully build trust in digital technologies in society, without trying to impose them or introduce them into law. Trust should not be the result of forcing by the state, but a respectful, comfortable solution to a number of tasks for a person. These include, for example, the tasks of identifying and authenticating subjects and objects in the digital world, achieving media and information literacy by the "average consumer," ensuring a qualified level of knowledge of technologies and skills in using them, creating a holistic system of guarantees of respect for the rights and legitimate interests of people, including determination of legal liability [9].

The right to refuse to use digital technologies is also related to the issue of providing a person with the opportunity to be reliably informed concerning with whom or what he is interacting with when trying to actualize his legitimate interests using communications: to get information about a bus schedule, to make an appointment with a doctor, etc. It seems fundamentally important to secure a person's right to communicate with a human, and not with a chatbot or voice assistant, which in many cases turns out to be extremely incomprehensible and therefore useless for a person. Similar situations occur in many areas — from receiving state and municipal services to banking services.

It seems that the right to refuse to use digital technologies should serve as a tool for achieving a balance of citizens' rights and public interests [10]. The corresponding logic is reflected in the report "Digital Transformation and Protection of Citizens' Rights in the Digital Space" [11], presented by the Council under the President of Russian Federation for the Development of Civil Society and Human Rights at the end of 2021. The document fairly raises issues related to total digitalization, which can, under certain circumstances, become a challenge to the values of human dignity, human and civil rights and freedoms.

The report states that in many cases, the natural human right not to use digital technologies is being violated. In this regard, the conclusion is made that "a citizen has the right to refuse to interact with the state and society in electronic form — without the need to explain to anyone the reasons for such a decision" [12]. The document points to an alternative to total "digital" development, proposing to abandon strict technological determinism and demanding to be guided by the presumption of "the immutability of the basic principles of rights, morality and human nature, based on the fact that no "technological revolutions" and "new technological structures" can change human nature, moral values, essence of social relations, basic human rights." [13].

How society will develop under these conditions, what goals and objectives it will set for itself, how clearly it will understand its own priorities and manage the system of social regulators — these questions are extremely important. Extremeness is already haunting us, and the diversity of management decisions is obvious. For example, in October 2023, in such a socially significant area as education, for the first time, the possibility of refusing to use digital technologies was normatively provided for. From 09/01/2024, the following rule will be applied: if there is a student's application to refuse to using e-learning, the educational organization is obliged to provide teaching without the use of appropriate technologies [14]. On the contrary, in December 2023 it was announced that the entire Russian healthcare system would switch to electronic medical records in 2024, and this caused a major public response.

No less outcry among patients and medical workers was caused by Clause 1 of the Recommendations

for Outpatient Appointments and the Algorithm for Conducting Appointments in Medical Organizations of the Moscow Public Health System that Provide Primary Health Care to Adults and Children, approved by the Moscow authorities at the end of 2023. [16]. Regardless the statements of the Moscow Department of Health that the audio recording of the appointment is impersonal and confidential [17], in our opinion, the risks of violating legally protected medical confidentiality (due to identification of a person by voice or time of reception, or due to hacking of a computer on which audio recordings are stored) significantly exceed the possible benefits from the implementation of this initiative. A month after the Order was issued, the Department made significant changes to it, by excluding the patient identification procedure and adding to the Regulations a clause about the need for anonymized storage of audio recordings without linking data to specific patients, their medical records or doctors [18].

Threats of violation of the rights and freedoms of citizens caused by the rapid digitalization of state planning and management processes were voiced during the meeting of the President of Russian Federation V.V. Putin with the Council under the President of Russian Federation for the Development of Civil Society and Human Rights in December 2020. [19]. Following the results of this meeting, the head of state instructed the Government of Russian Federation, together with the Council, to develop a draft concept for ensuring the protection of human and civil rights and freedoms in the digital space of Russian Federation and a draft action plan (road map) for its implementation, including measures to increase the digital literacy of citizens of Russia and their information security and "digital hygiene" skills education [20]. Such a document was developed by a specially formed interdepartmental working group in 2022, but has not yet received official approval as a federal strategic planning document.

The draft Concept, in particular, contains an indication of the risks associated with the promotion in the public consciousness of destructive ideas about man, his dignity, rights and freedoms as historically transitory values that are losing their relevance in the conditions of the new technological order, about the admissibility and expediency of total control of private and public life of citizens, about the historical lack of alternative to the increasing dependence of individuals, society and the state on the digital environment. The draft Concept, among the priority directions for improving legislation in the field of ensuring the protection of human and civil rights and freedoms in the digital space of Russian Federation, indicates, in particular, the need to ensure a parity level of implementation of the rights and freedoms of citizens who use and who do not use the information technologies, regardless of the reasons they are guided by (the text of the draft concept was published in [21]).

Such provisions often cause criticism from business entities involved in the development of information technologies, as well as individual representatives of public authorities. It is stated, in particular, that any restrictions related to the need of protecting human and civil rights and freedoms in the digital space of Russian Federation, will slow down the development of the Russian digital economy and reduce the competitiveness of domestic business. Citizens supposedly for the most part agree to restrictions on their rights and freedoms in exchange for the conveniences that modern digital technologies provide them. These statements could be confirmed or denied by the results of a socio-legal study.

Transport without a pilot or without a choice

It has become trivial to say that driverless vehicles are increasingly penetrating in our everyday life. More and more cities around the world are switching to driverless vehicles, and legislators in different countries are implementing different regulatory scenarios. The first group of countries demonstrates an innovative approach, providing the gradual experimental introduction of driverless vehicles, which gives manufacturers time to adapt new technologies to real life. We are talking, in particular, about the United States, as well as the countries of the "global South": China, UAE, Singapore, Japan, etc. Let's notice that in the United States one can observe competition between experimental legal regimes between states (primarily between California, Michigan and Florida) for the most attractive conditions for technology companies developing driverless vehicle technologies (for more information about foreign regulatory experience, see [22]).

The second group of countries, which includes the states of the European Union, takes a conservative approach because these countries are bound by the wording of the Vienna Convention on Road Safety dated 1968. So, part 1 of Article 8 of the Convention provides that every vehicle or combination of vehicles in motion must have a driver, and part 3 of Article 8 suggests that the driver must have the necessary mental and physical qualities to drive. In 2014, at the 68th session of the Working Group on Road Safety of the UN Inland Transport Committee, an amendment to the Vienna Convention was approved, complementing it with Clause 5-bis of Article 8, which "legalized" the use of autonomous vehicle control systems. This amendment came into force for our country and other countries-parties of the Convention on March 23, 2016, but, as researchers note, since one of the pre-

requisites for using autonomous systems is the ability to turn them off by the driver at any time, it is still premature to talk about the complete legalization of autonomous transport [23].

In our opinion, the wording of the Vienna Convention does not exclude the interpretation that, when using an autonomous driving system, a driver with the necessary qualities may not be present in the vehicle, for example, but rather in the control center, monitoring the movement of driverless vehicles. This approach allows our country to take steps in the field of national legal regulation aimed to implement an innovative approach. In accordance with the Federal Law dated July 31, 2020 #258-FZ "On Experimental Legal Regimes in the Field of Digital Innovation in Russian Federation", in 2018–2022 the Government of Russian Federation has implemented the first legal experiment on the operation of highly automated vehicles on public roads [24]. Initially, it was carried out in Moscow and in the Republic of Tatarstan by the Yandex.Test company and the KamAZ automobile plant, but subsequently the Vladimir, Leningrad, Moscow, Nizhny Novgorod, Novgorod and Samara regions, the Chuvash Republic, the Khanty-Mansi and Yamalo-Nenetsky Autonomous Districts, the Krasnodar Region and the City of St. Petersburg joined the experiment (for more details on the progress of the first experiment, see [25]).

The second legal experiment started in 2022 and will continue for three years on the territory of 38 regions of Russian Federation, The companies "Basetrack Rus", "Gazpromneft-Snabzhenie", "StarLine", "Sberavtotech" and "Yandex.Testing" are taking part in its implementation [26]. In our opinion, expanding the geography of the experimental legal regime will allow developers to accumulate amounts of information about the operation of driverless vehicles in different climate zones and various road conditions. Besides, such rapid development indicates the high level of security achieved by the developers: according to monitoring of publications in media and social networks, in all cases of road accidents involving driverless vehicles, the causers are other road users. In general, in our opinion, the regime of legal experiment is more suitable for solving the problem of regulating the development of driverless vehicles, rather than targeted changes to dozens of federal laws that would otherwise have to be made. Similar legal experiments are being carried out abroad, in many countries (for more details, see [27]).

As part of this expert survey, the following question was devoted to the topic of using driverless vehicles: "Do you agree that a citizen should have a right to choose in the matter of using driverless vehicles, protected by law?" The question is partly provocative by its nature, because at the moment the introduction of automated transport (especially public transport) is happening in such a way that, in principle, the possibility of choice is not provided for passengers. The more interesting look the survey results presented in Diagram 1: the absolute majority of respondents (72%) voted for the option that a person should have a legally guaranteed right to choose whether to use or not driverless vehicles. Only 22% of respondents chose the alternative option, in which the choice of transport should not be provided. This option sounded like this: "No, this is unnecessary: the widespread penetration of driverless vehicles will reduce the accident rate and improve the quality of service." As part of the survey, some respondents also expressed the opinion that in general it is necessary to start not from the real choice of passengers, but from safety considerations: safety must be ensured in transport for all passengers, and the ways in which this goal will be achieved in this case are secondary.

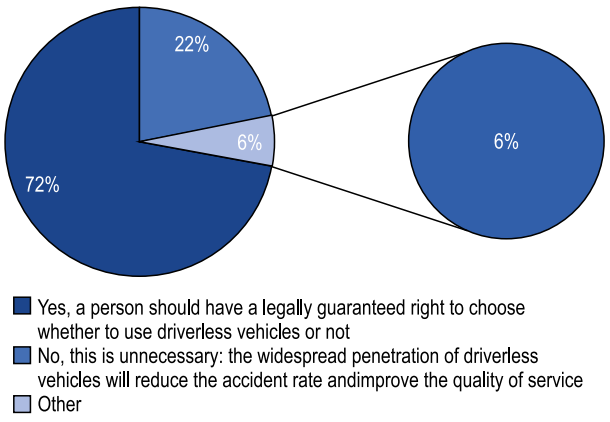

Diagram 1

Digital HR: Pros and Cons

Another area of application of digital technologies (more specifically, artificial intelligence) is a personnel selection. Already, many employers are using recruitment systems based on neural networks to analyze candidates' CV's and filter out irrelevant applications. However, both those who use such systems and those who develop them and provide machine learning obviously haven't read the world bestseller by Cyril N. Parkinson "Parkinson's Laws" [28], in which the author, in his usual manner of brilliant sarcasm, analyzes the strengths and weaknesses of various methods of personnel selection.

The so-called old British method was based on "a personal conversation in which the applicant must explain who he is. The middle-aged gentlemen sitting around the cabinetry table ask him his first and last name. ... The

commission will not face difficulties until it has to choose between the third son of a baronet and the second, albeit bastard, son of a viscount."

In contrast, the so-called old-type Chinese method was limited to written tests: "During the Ming Dynasty, the exam for the most capable was held every three years, and it included three three-day sessions. In the first session, the applicant wrote three essays and a poem in eight quatrains. In the second, he wrote five essays on long time ago established topics. In the third, he wrote five essays on the art of management. Those who passed everything successfully (two percent) were allowed to take part in the final exam, which took place in the capital. It lasted one day and included one essay on a topic of current politics. Those who passed this exam successfully could become officials, and the higher the mark was, the higher the place was."

Describing mid-twentieth century recruiting techniques, Cyril N. Parkinson notes that they all "come down to mental testing and psychological conversation. The disadvantage of the above test is that the winners know absolutely nothing. They spend so much time studying for the test that they don't have time to learn anything else. … With this method, out of five hundred people, they choose the one who in a few weeks will turn out to be completely unsuitable."

The main conclusion of Cyril N. Parkinson is this: modern methods are bad because there are plenty of applicants. "Of course," he writes, "there are simple ways to reduce their number. Now this formula is used widely: "No older than fifty, no younger than twenty, and no Irish," which somewhat reduces the number of applicants. But there are still many of them left. ...There is no need to attract such a mass of people. But no one knows about it, and the job advertisements are designed in such a way that they will inevitably attract thousands."

Cyril N. Parkinson's idea is when writing a description of a position "to balance the risk with the monetary gain so that no more than one applicant appears." But if two or three do come who have all the necessary qualities, then "a simple check should be carried out. We ask some girl (typist or secretary): "Which one do you like best?" She answers immediately and the question is solved. They will object to us that we are relying here on pure chance, as if tossing a coin. This is wrong. We simply introduced a new quality — male attractiveness." [28].

Automated HR systems operating on the basis of artificial intelligence technology are based on the exactly opposite principles. Designed to work with big data, they usually a) use the initial data obtained from a machine and (or) a person to form a virtual environment; b) generalize their perception, automatically or manually processing it into models; c) extract results from these models with human help or automatically in the form of recommendations, forecasts and decisions. in the Recommendation of the Council of Europe Commissioner for Human Rights "Unlocking Artificial Intelligence: 10 Steps to Protect Human Rights", dated May 2019, an artificial intelligence system is defined as: "a machine system that makes recommendations, makes predictions and makes decisions for a given set of goals" [29]. Modern artificial intelligence algorithms can not only recognize faces, but also more accurately than a human can determine the level of intelligence from a photograph (64% for an algorithm versus 57% for a person) [30], as well as various personal qualities [31].

Here it is necessary to recall the so-called Conway's law, according to which organizations, when designing complex artificial systems, unintentionally copy the communication structure in their own organization [32]. Melvin Conway has proved that the design of systems, in the broadest sense of the word, reflects the values and stereotypes of human who created them. It follows that the algorithms of an automated HR system will be as ethical, tolerant, and law-abiding to the extent that these qualities are inherent in the people who created them. What kind of big data the machine learning will be based on this is how the HR robot will make a choice? For example, if for deep learning an array of CVs of over the last few decades is used, then "in his subsequent autonomous work he will give preference to men rather than women, reproducing the old practice" [33]. In addition, an employer or third party company to which it entrusts HR work may intentionally use artificial intelligence technologies for discriminatory purposes — for example, in order to get rid of candidates with a low level of intelligence, inappropriate political or sexual orientation, or women planning to give a birth in the near future. In this case, it will be a commission by a group of persons by prior conspiracy of a crime under Article 145 of the Criminal Code of Russian Federation.

Understanding the danger of such consequences, the authors of this study posed the following question to respondents: "Is it necessary to legislate a candidate's separate right to demand that his candidacy be considered by a human HR specialist, and not by an automated HR system?" At the same time, we took into consideration that Article 16 of the Federal Law dated July 27, 2006 #152-FZ "On Personal Data" (as amended on 02/06/2023) prohibits the adoption of legally significant decisions regarding the subject of personal data based solely on automated processing of his personal data, since such decisions give rise to legal consequences or otherwise affect the rights and legitimate interests of the subject of personal data. Exceptions are provided only for cases where we have a written consent of the subject of personal data

"or in cases provided for by federal laws that also establish measures to ensure compliance with the rights and legitimate interests of the subject of personal data" (clause 2 of article 16).

The personal data operator, meaning the employer in this case, is obliged to explain to the subject of personal data the procedure for making a decision based solely on automated processing of his personal data and the possible legal consequences of such a decision, provide an opportunity to make an objection to such a decision, as well as to explain the procedure for the protection by the subject of personal data of his rights and legitimate interests. If a candidate for a vacant position takes his right to file an objection to a HR decision made in relation to him, the operator is obliged to consider it within 30 days.

Similar rules are also set in the legislative acts of other countries and interstate entities. A good example is the *GDPR* [34], *California Privacy Rights Act ("CPRA")* [35] and other regulatory legal acts. The meaning of all such rules is obvious — to ensure the protection of the rights and legitimate interests of individuals with a corresponding limitation of the rights of employing companies, which are subject to additional obligations.

However, the vagueness of the wording of the Federal Law "On Personal Data" on this issue and the lack of a guaranteed right for the subject of personal data to demand that a decision on his employment will be made without the use of an automated HR system, predetermined the need to pose the question in such a categorical form within the framework of our research. The distribution of answers to the posed question is shown in Diagram 2.

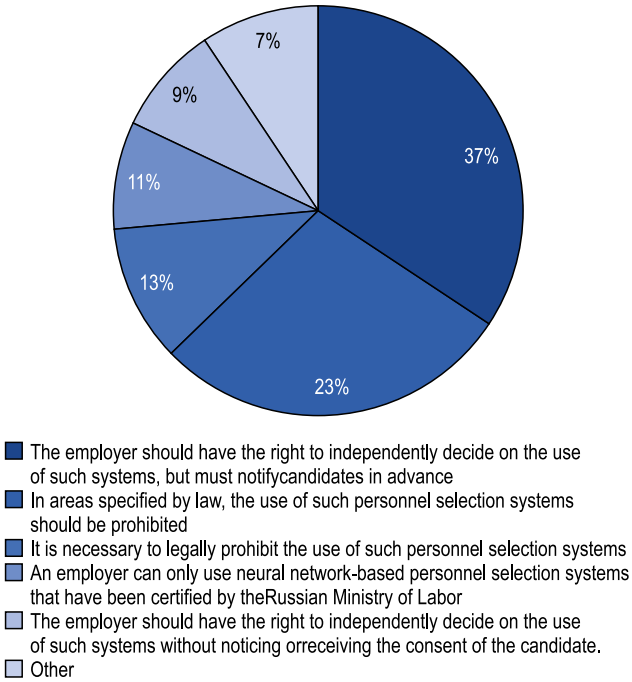

Diagram 2

As we see, the vast majority of respondents showed loyalty to automated HR systems that employers can use in the recruiting process. To one degree or another, 87% of respondents are ready to put up with this. Only 13% of respondents decided that it was necessary to legally prohibit the use of such personnel selection systems.

The most popular answer (37%) was that the employer can independently decide on the use of such systems, but is obliged to notify candidates about this in advance. In other words, here it is proposed to use the sequence of legally significant actions that is given in Article 16 of the Federal Law "On Personal Data".

Approximately the same number of respondents spoke in favor of some clarification of the existing legal mechanism. Thus, 23% of respondents believed that the use of such personnel selection systems should be prohibited in areas specified by law. According to the opinion of 11% of respondents, an employer can only use personnel selection systems based on artificial intelligence technology that have been certified by the Russian Ministry of Labor. Let's note that currently such certification is not provided for by law. However, if we assume that the purpose of establishing such a procedure will be the real protection of the labor rights of the employee, who is always the weaker party in legal relations with the employer, then this idea should be recognized as worthy of discussion.Nine percent of respondents turned out to be radical supporters of automated HR systems. They agreed that the employer should have a right to decide independently whether to use such systems without the notice or consent of the candidate. It is natural to assume that this answer was chosen primarily by those respondents who themselves are employers. Our hypothesis about the existence of a correlation between the respondent's preference and his real position in labor relations was fully confirmed. The answers of those who indicated in the questionnaire that they work in business were divided between the following options: "The employer should have the right to decide independently on the use of such systems without notice or consent of the candidate" and "The employer should have the right to decide independently on the use of such systems, but is obliged to notify candidates about this in advance". The fact that in this group of respondents, of the two listed, some predominance was found in the second option, can be explained by the fact that the answer "I work in business" could equally be given by both entrepreneurs and their employees.

«His name was Robert»

This was the name of the Soviet science-fiction comedy produced by the "Lenfilm" film company (directed by Ilya Olshvanger), released in 1967 and dedicated to the adventures

of an android robot named Robert, which was designed by the young scientist Sergei in his own image and likeness. Naturally, both roles were played by the same actor, Oleg Strizhenov. The plot of the popular film was based on the fact that the programmed similarities of the characters became the cause of many funny misunderstandings.

We remembered this film while exploring the topic of self-identification of android robots and understanding that similarity with a person can be expressed not only in appearance, but also, in particular, in voice. In the film, by the way, the robot is always introduces himself as Robert, but never as a robot. And to the advice of his creator Sergei, "Learn to think, and not just to calculate," he answered: "I don't have time to think."

In fact, the filmmakers showed, apparently without realizing it, how the Turing test works, the essence of which, in the most reduced way, can be formulated as the task assigned to the tester (judge), within the framework of verbal communication with a person and a computer, to determine with whom exactly his communication is taking place at the moment (see for more details, for example, [36].) In our study, we asked respondents to think whether a citizen should pass the Turing test every time he encounters the work of artificial intelligence when receiving information or services remotely, for example, by telephone.

Raising the question of the need for obligatory self-identification of robots, we formulated it as follows: "When you make a phone call to an organization, you can't always identify whether you're talking to a human or a robot voice assistant. Is it necessary to regulate such situations by law?" The respondents' opinions were divided almost in half between the two answers: 45% of respondents chose the option "yes, it is enough to legislate that it is mandatory to identify with whom (what) a citizen who contacts an organization communicates", Forty-two percent chose the option "yes, detailed rules for communication between a person and a robot should be established, since a person may find himself in the role of a "weak party." Only 12% of respondents decided that such regulation was unnecessary. The distribution of answers is shown in Diagram 3.

It should be noted that legislative innovations that require mandatory self-identification of systems operating on the basis of artificial intelligence technology are already found in various jurisdictions. For example, California (USA) has passed a law called *Bolstering Online Transparency Act* (abbreviated «*The B.O.T.*»). Under this law, individuals or legal entities are prohibited to use a chatbot to communicate or interact online with California residents for the purpose of promoting a sale or transaction of goods or services, or to influence voting in an election, without disclosing that the communication is held with the use of a chatbot [37].

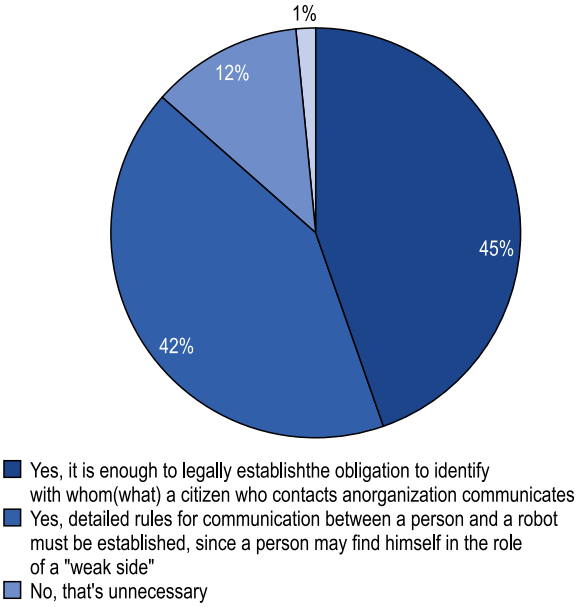

Diagram 3

Moreover, currently being actively discussed the project is «*AI Disclosure Act*». According to this bill, any content generated by artificial intelligence must contain a *DISCLAIMER: this output has been generated by artificial intelligence* [38]. Controversy erupted over the contents of the bill, as many predictably considered such a requirement to be unnecessarily burdensome.

Let us recall that in the framework of the previous expert survey conducted in April 2023, the authors of this article asked respondents, when creating intellectual property objects, it is necessary to disclose information about the technology with which they were created. The vast majority of respondents agreed with such a need [1]. As we see, on the question of the need for self-identification of artificial intelligence, there is a high level of unanimity among respondents (87%).

Indispensable Operator

In development of the topic of human communication with robots, whether chatbots or voice assistants, in the framework of the expert survey, respondents were asked to express their opinion if the law should establish the possibility of transferring a telephone call to a human specialist when communicating with an organization that uses automated voice assistants.

Noticing that since the first voice assistant Siri (2011) appeared at the market, which is "software with embedded artificial intelligence that constantly learns, improves and improves itself" [39], this direction of digital technologies development has already advanced quite far, although it has retained the basic principles of its construction. Communication with the voice assis-

tant, as before, occurs through user speech recognition, which can now ask a question to a computer connected to cloud services on the Internet, without picking up a keyboard, tablet or smartphone. The answer to the question is obtained in the form of either text on the display or synthesized "speech" of the voice assistant.

At the moment, according to E.S. Egorova, D.A. Bykov and D.A. Vyunov [39], about 30 voice assistants are present on the market. Some of them are being used in the work of government organizations and private companies for communication with interested citizens via voice (telephone) communications. Thus, among the computer programs registered with Rospatent, there are a number of options for voice assistants for government bodies: "Interactive voice assistant" module of the unified information system for the provision of state and municipal services in the Moscow region", "Client-server application with the voice assistant "Voice of the City" for regions of Russian Federation", etc.

As experts note, for successful communication between a person and a voice assistant, the so-called principle of politeness is of fundamental importance, which, according to the English linguist J. Leach, includes six maxims: tact, generosity, approval, modesty, agreement, and sympathy. A study conducted by P.V. Dorozhkina and E.O. Moiseeva [40], has shown that "voice assistants are generally characterized by consistency with the user's words, however, the principle of politeness is violated relatively often. Much of this is due to a retreat from the maxim of modesty. It is worth noting, however, that the bots often gave irrelevant answers or ones in which it was difficult to guess the intention given the general correspondence of the meaning of the message to the request. Moreover, in some cases, answers were not regularly given at all."

The fact that the voice assistant's answers often turn out to be irrelevant to the question or are not given at all makes us ask a question of the need to provide an interested citizen with the opportunity to communicate with a human operator as an alternative to communicating with a robot. In our study, the vast majority of respondents (82%) believed that such an opportunity should always exist. Other answer options attracted significantly fewer respondents. Thus, 9% of experts believed that the ability to transfer a call to a human operator should not be in all cases, but only in cases provided for by law, and 6% decided that this opportunity is required for communication only with government organizations, but not with commercial ones. For 3% of respondents, the possibility of contact with a human operator was not needed at all (see Diagram 4).

No doubt that legislative establishment of a rule according to which the use of a voice assistant for communication with citizens must include the ability to switch the conversation to a human operator will be burdensome for organizations using such technology, since it will force them to spend money on creating additional jobs and paying employees. While the ability to use exclusively voice assistants to communicate with citizens can significantly reduce company costs, primarily on paying employees, and also sharply increase the number of calls processed.

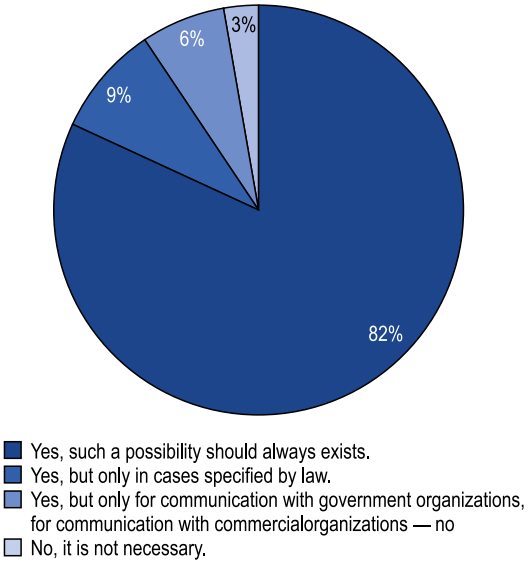

Diagram 4

Despite the significant savings that the use of voice assistants provides, the question of the need to regulate this process is being raised in scholarly and public discussion more and more insistently. Thus, the draft law "*AI Bill of Rights: Making Automated Systems Work for the American People,*" published by the Office of Science and Technology Policy of the US Presidential Administration in October 2022, contains proposals, which require that people, where it is necessary, should have an access to a human operator who can quickly examine and correct problems. In addition, a person should be able to refuse from using automated systems in favor of obtaining the required service from a human operator if he needs it [41].

THE RIGHT TO CHOOSE THE FORM OF COMMUNICATION WITH A STATE

A person's communication with certain organizations through the use of a voice assistant or chatbot are just special cases of a more general problem, specifically receiving services in digital form remotely. If for commercial structures this issue relates to the sphere of choosing the optimal business strategy, then for state and municipal bodies it relates to the sphere of implementing the constitutional principles of functioning of public authorities.

According to the Constitution of Russian Federation, "recognition, observance and protection of human and civil rights and freedoms is the duty of the state" (Article 2), and these rights and freedoms themselves "determine the meaning, content and application of laws, the activities of the legislative and executive authorities, local self-government and are ensured by justice." At the same time, the constitutional rights and freedoms of man and citizen in the area of our interest include the right to become familiar with documents and materials that directly affect his rights and freedoms (part two of Article 24), the right to information (part four of Article 29), the right to apply personally, as well as to send individual and collective appeals to state bodies and local governments (Article 33).

All these rights can currently be implemented by citizens both remotely in digital form and in more traditional forms, through personal visits to certain institutions, sending and receiving paper documents, etc. For citizens who have already fully mastered the skills of digital communication with public authorities, the first option, one might assume, will be preferable. But it would be a mistake to ignore the fact that there is a significant part of the population that has not mastered these skills for one reason or another.

It is generally accepted that among opponents of the use of information and communication technologies in this area, elderly people predominate. There are other categories of citizens for whom receiving state and municipal services in the "old fashioned way" is not only a familiar stereotype, but also a fundamental choice and who can be classified as "digital skeptics."[1] Consequently, a total and non-alternative transition to exclusively digital communication between public authorities and the population will, on the one hand, result in large savings due to the release of a significant number of office workers, and on the other hand, will lead to the infringement of the rights of certain categories of citizens.

Based on these considerations, the authors suggested to the participants of the expert survey to think if the state and municipal bodies should provide citizens with the opportunity to choose the form of interaction with them — face-to-face or remote, digital. As shown in Diagram 5, the majority of respondents (77%) said that such an opportunity should be provided in all cases, and free of charge. Another 16% of respondents believe that such an opportunity should be provided only for the list of cases of such interaction established by law. 5% of respondents still supported the idea that a citizen should not be given the opportunity to choose the form of interaction with public authorities, but a government program is needed to ensure universal digital literacy, especially among the elderly people. Separately, some of the respondents noted that the state in any case needs to solve the problem of digital inequality between people who are fluent in digital technologies and do not experience difficulties while using them, and those for whom digital products may be an obstacle to accessing state and municipal services.

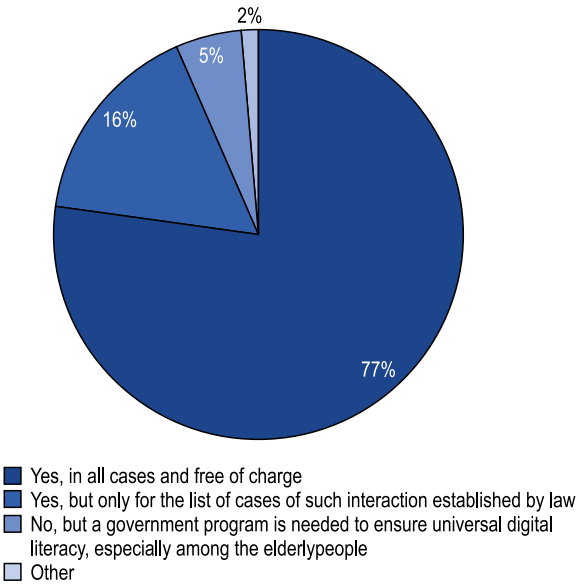

Diagram 5

Let us draw attention to the obvious correlation in the answers to the question about forms of communication between citizens and public authorities and to the previous question about the mandatory participation of a human operator when organizations use voice assistants and chatbots to communicate with the public. In the first case, 82% of respondents voted for preserving alternative options, in the second case — 77%. To test the stability of the position according to which the introduction of digital technologies should be accompanied by the preservation of previous, more familiar communication channels, respondents were asked a question designed to generalize the special cases described above: "Should a citizen's right to refuse to use digital technologies be enshrined in laws?" As shown in Diagram 6, the vast majority of respondents (85%) believe that such a right should be enshrined in law. At the same time, 54% of respondents believe that such a norm should be introduced into legislation now, and 31% — that this rule should appear later, as the digitalization of public life progresses: for now it seems to them premature.

[1] The authors believe that the neologism "digital skeptics", which has recently appeared, is very successful, constructed by analogy with the commonly used term "Eurosceptics", which is widely used both in specialized literature and in the mass media to designate people who are skeptical about the current state and prospects of the European Union. See, for example, [42].

An absolute minority of respondents (12%) are convinced that there is no need to legislate the human right to refuse to use digital technologies. At the same time, in their comments, some supporters of the latter position indicated that there is no point in enshrining such a rule, since it is impossible to prevent digitalization.

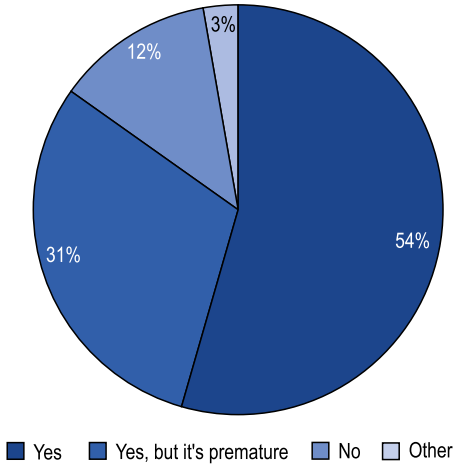

Diagram 6

It seems ethically incorrect to keep silent about the fact that the authors of this article are the supporters of the legislative recognition of the human right to refuse to use digital technologies. Moreover, we believe that the time to establish such a norm has already come. The longer the legislator delays its introduction, the more difficult it will be to relieve social tension caused by its absence. In our opinion, enshrining at the legislative level the right of a citizen to refuse from using digital technologies should not be considered as an obstacle to technological development. Rather, it is necessary in order to balance the rapidly developing "technological evolution" and with the help of special social support measures, primarily in the field of media, information and computer literacy, allow people who, for certain reasons, cannot keep up with the speed of technology development, adapt to the new digital reality.

It is obvious to us that these people should be able to feel like full-fledged members of modern society. Therefore, it seems ethically unacceptable when commercial companies (for example, banks) cancel the possibility of resolving a particular issue through an office visit, transferring everything to an online format. This approach, driven by the desire to minimize operating costs, openly infringes on the rights of that part of society that has not yet adapted to digital technologies.

In fact, this approach only deepens the electronic-digital divide, which was mentioned in the Okinawa Charter for the Global Information Society of 2000, which declared that "every person should be able to access information and communication networks. … A key component of our strategy must be continued progress towards universal access for all," including the need to "pay special attention to the needs and opportunities of people with less social protection, people with limited working capacity, as well as older citizens, and actively implement measures aimed at providing them with easier access" [43]. This problem becomes especially important when it comes to solving everyday problems that affect every person (for example, paying taxes or housing and communal services).

Blinders for the "Watchful Eye"

As a part of the study, the respondents were asked to express their opinions on such integral elements of the smart city system as video surveillance and photographic fixation. In 2014, the Government of Russian Federation approved the Concept for the Construction and Development of the "Safe City" Hardware and Software Complex [44], and in 2018 the Government of Moscow has approved the regional Concept «Moscow. Smart City 2030» [45]. The requirements for mandatory equipping of public places with video surveillance systems are also set for the retail facilities (markets, shops, etc.), hotels, cultural institutions, etc. [46].

Among the functions of the "Safe City" complex, aimed at ensuring law and order and preventing crime, sub. "b" of clause 1 of section IV of the Federal Concept points out the "Identification and Face Recognition." As for the metropolitan system, according to information from the Moscow Department of Information Technologies, in 2022 there were more than 225 thousand video surveillance cameras in Moscow, thanks to which it was possible during the year to solve more than 9.4 thousand crimes, including especially serious ones [47]. However, neither in these concepts nor in the preliminary national standard [48] an algorithm for implementing this function hasn't yet been described. In this regard, the question arises of recognizing the right of a law-abiding citizen not to be identified and recognized using such systems, which can be called a logical continuation of the presumption of innocence.

In this regard, within the framework of our expert survey, the question was formulated as follows: «Do you agree that the law should not have territorial restrictions on "covering" the city with video surveillance systems for automated analysis of the situation in real time, in other words, there should be no "blind spots" in the city?» As a result, as shown in Diagram 7, 42% of respondents believed that security considerations should be a primary consideration and chose the option according to which automated monitoring of the situation should be carried

out only in those places where there are real threats to the safety of citizens.

Slightly fewer respondents (37%) preferred to rely on the contrast between private and public spaces and believed that "blind spots" in the city are acceptable only if they are private areas. At the same time, 14% of respondents decided that, in principle, there should be no "blind spots", and 5%, on the contrary, expressed the opinion that automated real-time monitoring should be prohibited.

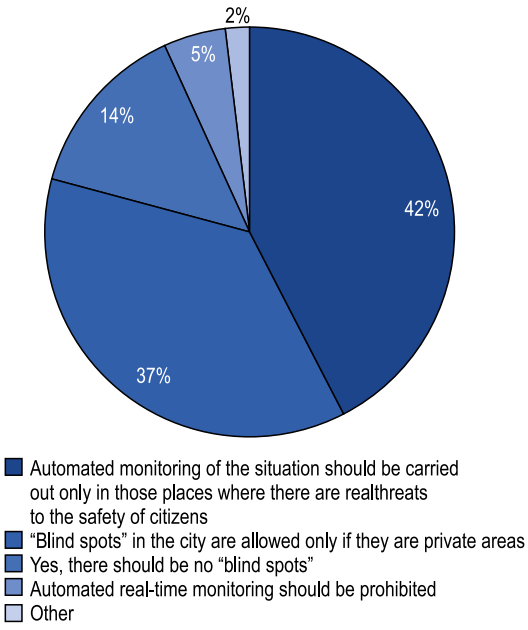

Diagram 7

SOME CONCLUSIONS

As a general trend based on the survey results, it can be noted that in most cases respondents chose those answer options that provided individuals with the opportunity to refuse from using a one technology or another. This conclusion is thought-provoking, since in practice the technologies are introduced into our lives without any opportunity to influence this process or to refuse to be a participant in it. One can even assume that if the world follows the path of "imposing" digitalization, this could lead to severe denial on the part of society and, hypothetically, to an "anti-technology" revolution. Taking into consideration the fact that at the moment the idea of introducing the right to refuse to use digital technologies is not widely discussed in the public space, the authors of this article call for a discussion about the possibility of introducing such a right at the legislative level.

As mentioned above, this is not the first expert survey conducted by the UNESCO Chair of the Higher School of Economics in collaboration with the Nextons company [1]. Based on the results of two surveys, it can be concluded that the responses of respondents show a tendency towards a lack of unambiguous trust in technology in general and a consistent choice in favor of humans when it comes to the opposition between "the man and the machine". On the one hand, such results can be explained by the fact that respondents primarily see themselves as users of technology, and not as developers. On the other hand, the target audience of surveys is always people who are interested in the topic of innovation, including those who deal with technologies (including their regulation) on a professional basis. In addition, more than half of the respondents in both expert surveys are young people and middle-aged people, that is, that part of society that for basically is fluent in technology and does not experience any particular difficulties in the digitalization process.

It seems that among older people the level of trust in information technology will be, on average, even lower. At the same time, many respondents are ready to use the technologies and introduce it into everyday life, given that this process is transparent. In general, our results do not contradict the results of surveys conducted on similar topics in other jurisdictions. Thus, *the Pew Research Center* published the results of a study that showed that 52% of Americans say they are more concerned than excited about the expanding use of artificial intelligence [49]. A global study conducted jointly by *the University of Queensland* and *KPMG* found that three in five respondents (61%) were either ambivalent about the use of artificial intelligence or unwilling to trust it [50]. Finally, the results of a study published on *the World Economic Forum* web site which was conducted for the World Economic Forum, showed that only half of the respondents equally trust companies that use artificial intelligence and those that do not use it [51].

Summarizing the above, we note that, in our opinion, in the near future it will be necessary to introduce obligations in legislation in specific areas to inform citizens about the use of certain technologies (for example, artificial intelligence technologies) and to create non-discriminatory conditions in the field of digitalization, where for individuals without knowledge and/or the ability to use it, there will always be an alternative possibility of non-digital interaction.

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INTERNET CONTENT REGULATION IN THE CONTEXT OF LEGAL AND EXTRA-LEGAL GLOBAL TRENDS

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Abstract. The article examines the regulation of Internet content from the perspective of an impartial observer, drawing on facts, legislation, case law, and legal research insights. It begins by comparing 19th-century censorship with Internet content restrictions and concludes that the goal of the state in both cases is to protect its citizens. Then it analyses the global growth of laws blocking false information and the risks associated with this trend, including the high degree of vagueness in the definitions of basic concepts. The section on the necessity of balancing human rights when introducing content restrictions focuses on freedom of expression and a potential conflict between information freedoms and copyright law. The article concludes by considering the global factors that, in the author's opinion, determine the reasons and the way of how we regulate Internet content. The author reflects on a precautionary principle based regulation of new technologies, changes in the ways of consuming information and in attitudes towards its content, as well as global value divergence, which gives rise to mistrust and isolationist trend.

Keywords: content regulation, human rights, intellectual property, chilling effect, traditional values, user generated content

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INTRODUCTION

In 2024, the Works on Intellectual Property Journal (hereafter referred to as "WIP") will mark its 25th Anniversary. This is a significant milestone for both the journal and its audience, as well as for me personally. I had the privilege of being one of its dedicated readers from the early editions, later became one of its authors, and eventually, after earning my doctorate, was invited to be part of the Editorial Board.

A quarter century has passed since its foundation in 1999 and the carefully selected papers reprinted in this Digest WIP showcase its development and achievements. Since its inception WIP has been the only Russian law journal focused on interdisciplinary research encompassing intellectual property and information law, two broad bodies of law that were historically viewed by legal doctrine as separate and self-sufficient. The policy of overcoming fragmentation of the different branches of law as well as promoting free debate and fresh ideas was first introduced by M.A. Fedotov, WIP founder and irreplaceable Editor-in-Chief, and later on passionately preserved by the Editorial Team and the Board. The latest innovation is the annual Digest WIP itself as there has been no special annual issue before.

I chose Internet content regulation as a subject matter of my paper for Digest WIP because it fits the main already mentioned WIP features. Content regulation can be found in different branches of law and questioning it from the perspective of comparative legal analysis and global trends is a hot issue deserving to be addressed by WIP as a forum for differing opinions.

THE RECENT DEVELOPMENTS IN INTERNET CONTENT REGULATION ACROSS COUNTRIES

The term "censorship" is, in fact, an overused buzzword. Nevertheless, considering its historical use and meaning,

the concept probably deserves more attention. Besides, even if the term «content regulation» is more common in the legal field, it has lately become equally common [1, 2, 3, 4] to use the term «censorship» to describe rules that restrict access to and dissemination of information on the Internet. An essential principle behind abolition of censorship is that it should not be the state's role to decide what is read, written, and communicated. But our current Internet content regulation does the exact opposite. If we look at the main reasons justifying such regulation it is not that difficult to find some degree of similarity with laws and regulations concerning censorship.

For instance, during the discussion of a new Russian Press Regulation intended to abolish censorship in 1905, a former head of the Chief Administration for Press Affairs, N.V. Shakhovskoy, argued in defense of rigid control over publishing activities that "the Russian people, with their low literacy and their unconditional trust in the printed text, which they always consider to be allowed by authorities, must be protected from the influence of political propaganda and attempts to forcibly change their worldview by means of the press" [5].

There was no Internet with its global connectivity at that time but, taken generally, the current content regulation does not conflict with the above quote: by introducing new content restrictions countries from different parts of the world prioritize the protection of their citizens, albeit the understanding of what counts as legitimate or harmful content varies a lot. The same as censors checked books and papers before their publishing and in case of repeated violations could close a particular editing house, Internet service providers are entitled by the state to do both, moderate content, and block infringers. Sometimes the state decides to act on its own.

In May 2024 as a new development of its package of sanctions the EU banned another four Russian media channels (Voice of Europe, RIA Novosti, Izvestia, Rossiyskaya Gazeta) [6] in addition to ones blocked in 2022 (Russia Today, Sputnik, RTR Planeta, Russia 24, TV Centre International) [7, 8]. Before 2024 Russia banned only Facebook* and Instagram*[1] but no one European media. After the EU Council decision the Russian Federation answered by "countermeasures" and limited access to 81 European media outlets [11]. The accusations of both sides concerned false information: the EU Council mentioned in its Regulation "media manipulation and distortion of facts" [8, p. 8] and Russian authority claimed a systemic spread of "false information about the special military operation" [11].

Another prominent example illustrates a different reason to introduce content restrictions, namely national security. As early as 2009-2010 China blocked access to most of the US big tech companies such as Google, YouTube, Twitter, and Facebook* in 2009–2010 [12, p. 28] and The New York Times in 2012 for harming its national cyber security and sovereignty [13]. In the same vein the United States passed a special act in the 2024 according to which ByteDance owned applications would be banned unless the company would have to divest within the set time limit [14]. According to the report accompanying the Bill "This Act addresses the immediate national security risks posed by TikTok and establishes a framework for the Executive Branch to protect Americans from future foreign adversary controlled applications" [15, p. 2].

The given examples are singular and difficult to generalize as they reflect the current state of relations between specific countries. What could be qualified as a trend in the development of content regulation is a dramatic increase in laws addressing misinformation, disinformation, and mal-information (MDM).

In just 11 years, from 2011 to 2022, 78 countries around the globe passed 105 laws to combat MDM, according to a study by the Center for International Media Assistance (CIMA) [16, p. 4–6]. The upsurge in legislative activity was firstly observed in 2020 when 36 laws were adopted during the Covid-19 pandemic (see [17, p. 2636], [18, p. 67,41], [19, p. 154]). Besides uncovering the dynamic of lawmaking CIMA analysis highlights a visible trend towards the criminalization of false information. More 60% of laws analyzed by the researchers contained provisions concerning both administrative and criminal liability. Within the same period of 11 years the number of journalists imprisoned on false information charges increased sharply, from 22 between 2011 and 2015 up to 228 between 2016 and 2022 [20]. Of particular concern is the scarcity of definitions of the basic concepts, such as "disinformation" or "misinformation". The CIMA report indicated that the MDM laws adopted between 2011–2021 "lacked definitional specificity" which could lead to over enforcement.

The European Regulators Group for Audiovisual Media Services (ERGA issued a regional report on the same issue and with similar findings [21]. According to the report, there are few examples of legislation in EU countries that contains definitional elements for disinformation. The key elements to define disinformation can be found outside legislation in official documents issued by state authorities, guidelines, and courts' decisions. In this regard the report highlights that criminal law with vague definitions "creates risks of even more serious interferences with freedom of expression" [21, p. 84]. The shortcomings of the legislation relevant to European

[1] Both media were banned in Match 2022. The Prosecutor General's Office of the Russian Federation sued Meta Platforms for extremist activity and the indictment was confirmed by courts in two instances. See [9, 10].

countries are also applicable to many other countries, both developed and developing countries.

HUMAN RIGHTS APPROACH TO INTERNET CONTENT REGULATION

The United Nations instruments and documents provide a human rights framework to determine whether content restrictions are legitimate and justified. UN Special Rapporteur on the right to freedom of opinion addressed content regulation issues in several reports on disinformation, user-generated content and more generally contemporary challenges to freedom of expression. Specifically in relation to the moderation of user-generated content the Special Rapporteur argued that the restrictions introduced by states, even if they are caused by legitimate concerns, carry risks to freedom of expression. The laws and provisions should comply with the requirements of legality implied by the article 19 (3) of the International Covenant on Civil and Political Rights. One of key requirements is a clear wording, since "a norm, to be characterized as a "law", must be formulated with sufficient precision to enable an individual to regulate his or her conduct accordingly" [22, para. 25]. In addition, the legality of law in force should normally be subject to judicial control [23, para. 7]. The laws on "fake news" often have "the vague and overly broad nature" that gives governments and executive authorities "unfettered discretion" leading to power abuses, and is particularly "problematic" when it comes to criminal law [24, para. 52–55]. This assertion rests on the premise that flaws in Internet content regulation are equally prevalent across nations with diverse legal and political frameworks. The best intentions and legitimate grounds of enacting particular restrictions (such as state security or public interests) do not preclude the negative and sometimes detrimental impact on the basic freedoms related to information.

Content regulation focuses heavily on disinformation, at least to some extent, to the prejudice of other types of content. It is understandable because the attacks against journalists and the human rights defenders based on the disinformation allegations are widely reported and the assurance of the freedom of media is one of the pillars of modern democracies. It is most likely wrong, however, to view user generated content as secondary. User generated content comprises all aspects of social communication, including sharing of ideas, mutual learning, cooperation, and creative expression. And healthy online communication driven by free access to information and cultural diversity is one of the main tools enabling critical thinking.

John Stuart Mill believed in "the necessity to the mental well-being of mankind (on which all their other well-being depends) of freedom of opinion, and freedom of the expression of opinion" [25, p. 118]. It is because the pursuit of truth in at the heart of the progress of any human society. Whenever there are persons who disagree with the unanimous majority, "even if the world is in the right, it is always probable that dissentients have something worth hearing to say for themselves, and that truth would lose something by their silence" [25, p. 114]. That means that a progress of any society depends on intellectual endeavors competing to discover or create something valuable and the effective functioning of an "innovation engine" as well as political system directly depends on the variety of ideas it produces. Freedom of speech is also of great importance in the case of user generated content where censorship can be carried out by different means, including copyright law.

In this context two points stated by UN reports concerning Internet content and freedom of expression deserve attention.

The *first* one is the emphasis on a chilling effect on information freedoms caused by Internet content regulation. The growing Internet surveillance carried out by both states and private actors was considered in the report as capable to produce "a chilling effect on the online expression of ordinary citizens, who may self-censor for fear of being constantly tracked" [26, para. 52–55]. The use of "broad and ambiguous laws" to control content dissemination was also referred to as one of sources of "a broader "chilling effect" on the right to freedom of opinion and expression" [27, para. 26].

The term chilling effect originates from the case law of the United States Supreme Court. Justice Brannan in his dissenting opinion in Walker v. City of Birmingham described the judicial application of the chilling effect doctrine as the court's "overriding duty to insulate all individuals from the "chilling effect" upon exercise of First Amendment freedoms generated by vagueness, over breadth and unbridled discretion to limit their exercise" [28].

Later, the term acquired popularity and has been used far beyond judicial practice and unrelated to geographical area. It has also been widely criticized put on sufficient empirical evidence. Recent comprehensive research by Jonathon Penney not only provides an empirical proof but also offers a sound interdisciplinary framework intended to deeply understand the phenomenon of the shilling effects [29, 30, 31]. Among other things drawing upon the findings of social psychology the research analyses why some kind of ill formulated laws produce chilling effects. A "theory of chilling effects as social conformity", according to the author, provides a most effective explanation of surveillance practices. As surveillance is inherently ambiguous, "being uncertain about the legality of an act may lead a person to over comply

with law in order to avoid breaking a social norm, awareness that you are being watched increases the risk that your norm breaking could be seen or captured by others, increasing the likelihood of conformance and compliance" [29, p. 1508].

The *second* important point concerns copyright law in the context of freedom of expression. The UN Special Rapporteur referred to prior restraints included in copyright laws that threaten creative endeavors and a preventive upload scanning of music and video for copyright infringement that results in over blocking [23, para. 17, 32]. The reference to copyright law is notable since all previous reports dealing specifically with intellectual property were only produced with respect to cultural rights [32, 33, 34], the right to food [35 and 36, para. 30, 45] and the right to health [37]. The potential conflict of copyright with free speech was previously identified only with regard to disconnection of users from Internet access as a sanction for violation of intellectual property rights [27, para. 49–50, 78–79].

Considering copyright law from the perspective of freedom of expression is especially important in the case of Internet content regulation. The interconnection and potential conflict between these rights remains up till now a blind spot in the Russian IP law and jurisprudence. It has also been a difficult issue for European law. Bernt Hugenholtz explains the recognition of the collision between free speech and copyright by "the seemingly unstoppable growth of copyrights". The protection of right to freedom of expression and information in this context was perceived as the tool to limit "overbroad protection" [38, p. 343].

With the recent development of legislation and case law on the issue the argument that the basic principle of idea/expression dichotomy together with statutory exceptions is sufficient to prevent or solve potential conflict between copyright and freedom of expression becomes ever less convincing.

Kantian philosophy is one of relatively recent justifications for applying freedom of expression as a remedy in intellectual property cases [39, 40, 41]. In his short essay "On the Wrongfulness of Unauthorized Publication of Books" of 1798 Kant instead of considering copyright from the perspective of a Lockean property theory described the book as a tool or a "silent instrument" (by analogy to trumpet). that the author uses to deliver his public speech. According to Abraham Drassinower a book is not a thing but a "communicative act". "In the world of copyright, an author is no sovereign despot in an inverted world of commodities. She is rather a citizen among others in the great Republic of Letters" [42, p. 226]. This implies that copyright law main task is to provide conditions for an effective dialogue between the author and the public. It is appealing to justify the overall reasons why we should limit copyright protection based on Kant's philosophical endeavor into what is to be an author. Even more inspiring, to my mind, would be to address the Kantian distinction between innate and acquired human rights where the innate right is only one and it is freedom.[2]

Another more pragmatic way to justify balancing of freedom of expression and copyright is to find a common denominator by a closer look at the concepts which are already widely used within and beyond the law. In the digital age, it is becoming increasingly difficult to draw a line between factual information and data, on the one hand, and copyrighted materials, on the other. A major shift occurred when the Internet gradually became a mass consumption technology with billions of users generating and sharing all kind of information. This development was accompanied by a noteworthy conceptual divergence which is still in place. While users and Internet intermediaries operate with the term «content», applying it equally to published e-books, e-mail messages, as well as to all other information on the Internet, legal professionals continue to employ a strategy of careful delimitation and demarcation of Internet content into segments relevant to a particular branch of law. Perhaps a regular understanding of Internet content as an umbrella term embracing the whole data flow is a revealing one, showing a common sense-bearing nature of everything we are sharing between each other.[3]

Professor Mikhail Fedotov suggests in his general theory of authorship that subject matters of intellectual property rights should be understood as "immaterial informational entities" [43, p. 52]. Given the informational nature of all that counts as intellectual property he proposes the following definition: "…It is proposed to define the concept of an intellectual property subject matter as an ideal, mental result of the author's creativity, objectified in a textual, pictorial, sound, audiovisual or other sign that performs the functions of accumulating information or individualizing persons, goods, services, or enterprises. In turn, from this basic definition, it is possible to further build definitions of such derivative concepts as "work", "invention", "trademark", etc." [43, p. 59].

A fine example to illustrate a negative trend in the legislation development is the Article 17 of the EU Direc-

[2] Kant introduced this distinction in his book "Die Metaphysik der Sitten" (Metaphysics of Morals) first published in 1797.

[3] This kind of conceptual framework change of is nothing new, especially in the field of science and philosophy. Think about the turn from nineteenth century "social physics" to today's sociology as independent science. Or about logical positivism idealizing facts and striving to work out an ideal language for science, replaced later on by scholars who equated facts and interpretations.

tive on Copyright in the Digital Single Market [44]. The UN Special Rapporteur meant the proposal of that very article when he criticized a preventive upload scanning of music and video [23, para. 32]. The article caused serious human rights concerns by introducing a direct liability of online content sharing service providers for the content uploaded by their users. The risk of direct liability stimulates providers to overblock user generated content thus threatening the users' right to freedom of expression and information [45, 46].

In a Russian landmark case, which concerned database maker neighboring rights[4], the plaintiff, social media platform VKontakte, claimed the exclusive rights on the database containing the publicly accessible data like "first and last name", "city of birth" and "education" the users of social media upload on their personal pages, and sued a small company DABL for scrapping those data by means of its own independently developed specialized search engine. The Russian Court on Intellectual Rights remanded the case for retrial but confirmed in its ruling that the data of the users from a "database" within the meaning of Article 1334 (1) of the Civil Code of the Russian Federation [48]. The almost five year trial ended in the same court by a settlement agreement and provoked an intense scholarly debate witch helped to deepen the understanding of some difficult questions like the protection of big data mining, the "spin-off theory" and the range of rights that should be conferred to social media users, including the constitutional right to access and disseminate information. Unfortunately, without legislative amendments and pertinent case law these doctrinal disputes have little impact. In a similar case ruled in 2021 [49] the Court of the European Union weighted and balanced the legitimate interest the maker of database against the interests of users and competitors "in having access to the information contained in those databases and the possibility of creating innovative products based on that information". While the judgment is progressive and even ground-breaking, opening a new page in the European sui generis database right "saga", it is too narrow, limited to only one innovative product, namely a specialized meta search engine.

THE KEY DETERMINANTS OF INTERNET CONTENT RESTRICTIONS

There are multiple reasons why countries introduce more and more Internet content restrictions. One of explicit reasons is to stop harmful content and activities such as terrorism, extremism, violence, human trafficking, and drug trade and so on. Such blocking no doubt serves both security and the public interests. The problem as usual lies in the details, like an expanding range of content that is blocked and grounds on which it is blocked, vagueness of pertinent legislation and worrisome developments in take-down procedures. The ongoing debate about pros and cons of Internet censorship has already shown that the list of arguments is unlimited. But I would like to address a less researched and debated question about why Internet content regulation is now a global phenomenon and countries with different political regimes, legal systems and cultures enact similar laws and regulations.

The mere fact that something is global does not imply that it is necessarily good and indispensable, or the opposite, that it is bad and destructive. That is why before making any conclusion or looking for a viable solution to content regulation problems, it is useful to look at some other global factors that I think could be decisive for further development of Internet content regulation.

The first factor concerns the way how new technologies are regulated. The essence of this problem is best illustrated by the Collingridge dilemma. When a technology is first developed, its harmful social effects cannot be predicted with sufficient certainty to justify the introduction of control, but "by the time a technology is sufficiently well developed and diffused for its unwanted social consequences to become apparent, it is no longer easily controlled" [50, p. 17–18]. At the heart of the dilemma is the belief that we have a poor understanding of how society and technology interact. At the same time, the states are often proactive in taking control over new technology and draft their laws based on the precautionary principle. The Internet and artificial intelligence are both perfect examples of how it happens.

What Collingridge did not identify and analyzed is the extent to which regulation of technology could impact the behavior of people. Lawrence Lessig in his article of 1997 introduced a distinction between direct and indirect regulation and prophetically suggested a coming shift in a regulatory strategy: "Instead, government will shift to a different regulatory technique. Rather than reg-

[4] The provisions about the maker of a database neighbouring rights, included in part 4 of The Civil Code of the Russian Federation (para.5, chapter 71), were drafted on the model of the European sui generis database right. The decision about the transplantation of sui generis right was made considering Russian Federation commitments under the Agreement on partnership and cooperation establishing a partnership between the European Communities and their Member States, of one part, and the Russian Federation, of the other part (signed at Corfu on 24 June 1994 and entered in force on 1 December 1997). Article 55(1) of the agreement reads as follows: "The Parties recognize that an important condition for strengthening the economic links between Russia and the Community is the approximation of legislation. Russia shall endeavor to ensure that its legislation will be gradually made compatible with that of the Community". This fact from the history of Russian IP legislation is stated by A. L. Makovsky, one of the drafters of part 4 of the Civil Code. See [47, p.324].

ulating behavior directly, government will regulate indirectly. Rather than making rules that apply to constrain individuals directly, government will make rules that require a change in code, so that code regulates differently. Code will become the government's tool. Law will regulate code, so that code constrains as government wants." [51, p. 184]. Albeit it was said when discussing the United States laws, after the 27 years the warning becomes reality.

The second factor relates to a shift in how people use digital technologies. Thanks to advancements in digital technologies, large amounts of information can now be swiftly copied or generated, processed, and disseminated. This has led to a transformation in communication patterns, as evidenced by the changes in information consumption habits and attitudes towards its content.

An excellent example are drastic changes in the consumption of news. According to the 2024 Digital News Report by the Reuters Institute at Oxford University accounted a "strong shift" towards video-based networks, in the first place to YouTube (31%), WhatsApp (21%) and Tiktok (13%). Another finding is that there is a growing focus on partisan commentators, influencers, and young news creators on TikTok (57%), Instagram* (53%) and YouTube (46%). These trends were speeded up by a shift in news policy of traditional social media. Social networks like Facebook* have substantially reduced the amount of current and political news due to regulatory concerns about disinformation and changing preferences of their users [52]. There was also the rise in passive news consumption (from 42% in 2018 to 47% in 2023) and a substantial fall in active participation by posting and commenting (from 33% to 22% within the same period) [53]. No less important is the outflows of users from open social platforms to encrypted messengers. As the Economist put it: "Platforms that began as places for friends to interact and share their own content are turning into television-like feeds of entertainment, for passive consumption. At the same time, users are moving their conversations and arguments off the open networks and into closed, private groups on platforms like WhatsApp and Telegram" [54].

When combined these facts give us a picture of the state rapidly losing control over its citizens. In the past governments knew what kind of news and books people read and what TV programs they watched, what they liked or disliked. Now they are much less aware and much more concerned. It suffices to say that about a third of the world's population uses WhatsApp that offers end-to-end encryption [55]. A vast majority of countries already have some kind of restriction on encryption but only a handful of them, primarily in China, set enough limitations to guarantee in full state access to encrypted data [56]. It is no wonder that the debate over further strengthening encryption regulation [57, 58] or keeping it as is to protect human rights and avoid a new "digital panopticon" (see, for example, [59] and [60]).

Finally, **the third factor relates to the divergence of values**. The latest World Values Survey published in 2023 [61] shows that the initially expected progress towards global values convergence failed to materialize. While in advanced economies values have been changing relatively fast in the direction of individual self-expression and scientific thinking, other countries have shown no value change or taken the opposite path praising more traditional and religious values. There is no flawless methodology to measure human values but, given the ongoing political and armed conflicts, the conclusion looks quite convincing (see, for instance, [62] and [63]). It is remarkable that 24 years ago Ronald Inglehart, the founder of the World Values Survey, affirmed that "the trend toward modern values is not irreversible" [64, p. 41] and that traditional value systems "exhibit remarkable durability and resilience" [64, p. 49].

The traditional values are increasingly used in politics and find their place in national and international law. The adoption of UN Resolution "Promoting human rights and fundamental freedoms through a better understanding of traditional values of humankind: best practices" [65] in 2012 shows that at least the first signs of polarization were seen already then. The resolution was promoted by Russia and China[5] and adopted by a vote of 25 to 15, with 7 states abstaining. The distribution of voices reflects a split between the West and the Global South but it is not a black and white picture. Among those that opposed resolution were, besides the United States and old European countries, Hungary, Mexico, Poland, Romania, Czech Republic, Botswana, and Costa Rica. The abstained countries included Benin, Chile, Guatemala, Nigeria, Peru, Republic of Moldova, and Uruguay. The subsequent Summary of information from States Members and other relevant stakeholder [68] has demonstrated respect and commitment of a large number of contributors to their national traditions but at the same time confirmed the main concerns of the Advisory Committee [69]. As there was no definition of the term 'traditional values shared by all humanity" the contributions varied substantially in their understanding of a new

[5] Both countries incorporated traditional values in their legislation, including national constitutions. In the Russian Federation the main regulation on the issue is a Decree of the President of Russian Federation of November 9, 2022 No. 809 "On approval of the Fundamentals of state policy for the preservation and strengthening of traditional Russian spiritual and moral values" that is based on the Constitution of Russian Federation substantially amended in 2020. In the People's Republic of China made traditional values a reference point in its laws and regulations much earlier. See [66], [67, p. 11–12].

concept and many of them pointed to particular harmful traditions that should be abolished.

The growing political, ideological, and cultural divide full of misunderstanding, refutation and long forgotten Nietzschean "resentment" could but reinforce the global crisis. Given mutual hostility and a shared desire to stop an adversary influence no wonder that different countries are developing and adopting similar laws, including those regarding Internet content. This similarity is so striking that the question suggests itself: how is copying from whom?[6] In any way that is a grim prospect for everybody if we erect new iron walls to protect the citizens from outside disturbance and build new transparent glass buildings (resembling those described in Yevgeny Zamyatin's novel "We"[7]) to protect them even better.

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LEGAL FOUNDATIONS FOR PROTECTING HUMAN RIGHTS IN THE CONTEXT OF DIGITALISATION (THE EXPERIENCE OF UZBEKISTAN)

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Abstract. The article addresses legal issues related to the protection of human rights amid the transition to a digital economy. It provides an overview of regulations introduced into the legal framework, considering the impact of digitalisation on social relations. The author examines new provisions in the Constitution, various codes, and other normative legal acts. Special attention is given to the review of Uzbekistan's development concepts and strategies up to 2030, particularly their provisions concerning digital technologies. The author notes that Uzbekistan's legislation is evolving in line with global trends, including the rapid development of digital technologies. It is crucial to continue improving human rights legislation, taking digitalisation into account, and to ensure strong guarantees for protecting human rights within a digital economy.

Keywords: digitalisation, digital technologies, electronic litigation, remote work, distance learning, right to information, information security.

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The Republic of Uzbekistan is a party to more than 70 international human rights treaties and consistently takes measures to ensure these commitments, including those related to digital technologies. A legal foundation for digital transformation is currently being established, with the adoption of the "Digital Uzbekistan — 2030" Strategy[1]. President Shavkat Mirziyoyev has repeatedly highlighted the importance of positioning Uzbekistan as a regional IT hub.

Moreover, according to international standards, the country's digitalisation processes should be grounded in a human rights-based approach. This focus is evident in various strategies across different sectors, where the adoption and extensive use of digital technologies are prioritised.

The Ministry of Health of Uzbekistan has developed the E-Health-2025[2]. Strategy for the digitalisation of the healthcare system from 2021 to 2025. Additionally, the concept for the development of higher education in Uzbekistan up to 2030[3] outlines steps for integrating digital technologies into the educational process.

It is notable that the new version of Uzbekistan's Constitution incorporates contemporary trends in ensuring and protecting human rights in the digital era. Article 33 of the Constitution of the Republic of Uzbekistan[4] states, "The State shall create conditions for providing access to the worldwide information network Internet". Article 53 further guarantees, "Everyone shall be guaranteed the free-

[1] The text of the document is available on the website of the National Database of Legislation of the Republic of Uzbekistan // https://lex.uz/docs/5031048
[2] https://lex.uz/ru/docs/5434367
[3] https://lex.uz/ru/docs/4545887
[4] https://lex.uz/ru/docs/6445147

dom of scientific research, engineering work and artistic creativity, as well as the right to enjoy cultural benefits".

The National Human Rights Strategy of the Republic of Uzbekistan places significant emphasis on the adoption of information and communication technologies[5]. It includes provisions for developing a draft Information Code aimed at systematising access to information, recognising it as a vital factor for developing a civil and information society, protecting human rights in the digital space, ensuring cybersecurity, and promoting media literacy and online safety.

In 2022, the Law of the Republic of Uzbekistan No.764 "On Cybersecurity" was enacted[6], along with other laws such as "On Guarantees and Freedom of Access to Information", «On the Protection of Personal Data,» and «On the Protection of Children from Information Detrimental to Health.» The revised law «On Appeals by Individuals and Legal Entities» now includes provisions for electronic appeals, facilitating the submission process in digital form.

A significant milestone was the adoption of the Law "On Personal Data" in 2019[7]. This law guarantees the protection of personal data by the state. Data owners, operators, and third parties are required to implement legal, organisational, and technical measures to protect personal data, ensuring:

firstly, protecting the subject's right against intrusion into private life;

secondly, data integrity and security;

thirdly, maintaining the confidentiality of personal data;

fourthly, preventing unlawful data processing.

According to this Law, the confidentiality of personal data is a requirement that must be observed by the owner and/or operator or other person who has gained access to personal data, on the inadmissibility of their disclosure and distribution without the consent of the subject or the presence of other legal grounds. The owner and/or operator and other persons who have access to personal data are obliged not to disclose or distribute personal data without the consent of the subject.

A significant development in recent times is the adoption of the Law of the Republic of Uzbekistan "On the Protection of Children from Information Harmful to Their Health.[8]" This law outlines the following key directions of state policy in this area:

Firstly, the creation of legal, socio-economic, organizational and technical conditions that ensure the protection of children from information that is harmful to their health, as well as the development of scientific and applied research in this area;

secondly, the prevention of illegal information and psychological influence on the consciousness of children, manipulation of them, the dissemination of information products that provoke children to antisocial actions, as well as the prevention of offenses in this area;

thirdly, support for the activities of citizens' self-government bodies, non-governmental non-profit organizations, other civil society institutions, individuals and legal entities in the area of protecting children from information harmful to their health;

fourthly, the development and improvement of criteria, mechanisms and methods for classifying information harmful to children's health, the introduction of hardware, software and technical means to ensure children's information security.

Further development of legislation in the area of protection from cyberbullying is essential, with initial steps already taken, especially in protecting women from violence. The Law of the Republic of Uzbekistan "On the Protection of Women from Harassment and Violence"[9] defines stalking as actions carried out against a victim's will, even after two or more objections or warnings, including contacting them through telecommunications networks, such as the Internet, or visiting their workplace or residence, causing the victim to fear for their safety.

The Code of the Republic of Uzbekistan on administrative responsibility contains Article 46^2 (Violation of legislation on personal data)[10]. According to the article, illegal collection, systematization, storage, modification, addition, use, provision, distribution, transfer, depersonalization and destruction of personal data, as well as failure to comply with the requirements for the collection, systematization and storage of personal data on technical means physically located on the territory of the Republic of Uzbekistan, and in personal data bases registered in the established manner in the State Register of Personal Data Bases, when processing personal data of citizens of the Republic of Uzbekistan using information technologies, including the global information network Internet, shall entail the imposition of a fine on citizens in the amount of seven, and on officials — fifty basic calculation units.

Also, Article 202^2 (Dissemination of false information) is enshrined in this code. According to the article "Dissemination of false information, including in the me-

[5] https://lex.uz/ru/docs/4872357

[6] The text of the document is available on https://lex.uz/ru/docs/5960609

[7] The text of the document is available on https://lex.uz/docs/4396428

[8] The text of the document is available on https://lex.uz/docs/3333805

[9] The text of the document is available on https://lex.uz/docs/4494712

[10] https://lex.uz/acts/97661

dia, telecommunications networks or the global information network Internet, leading to the humiliation of an individual's dignity or discrediting of an individual, shall entail the imposition of a fine in the amount of fifty basic calculation units".

Amendments have also been made to the Criminal Code of the Republic of Uzbekistan[11]. Thus, according to Article 139, "Defamation in printed or otherwise reproduced form, including that posted in the mass media, telecommunications networks or the world information network Internet, shall be punishable by a fine of two hundred to four hundred basic calculation units or compulsory community service of three hundred to three hundred and sixty hours or correctional labor of two to three years or restriction of liberty for up to one year.

Article 141[2] of the Criminal Code establishes responsibility for violation of legislation on personal data. According to the article, "illegal collection, systematization, storage, modification, addition, use, provision, distribution, transfer, depersonalization and destruction of personal data, as well as failure to comply with the requirements for the collection, systematization and storage of personal data on technical means physically located on the territory of the Republic of Uzbekistan and in personal data bases registered in the established manner in the State Register of Personal Data Bases, committed after the application of an administrative penalty for the same actions, shall be punishable by a fine of one hundred to one hundred and fifty basic calculation units or deprivation of a certain right for up to three years or correctional labor for up to two years."

Article 141[3] provides for responsibility for disclosure of information that infringes on the honor and dignity of an individual and reflects the intimate aspects of a person's life. According to the article, dissemination of information containing photographs and/or video images of a person's naked body and/or genitals without his/her consent, including dissemination in the media, telecommunications networks or the Internet, or the threat of dissemination of such information shall be punishable by a fine of four hundred to six hundred basic calculation units or compulsory community service for up to three hundred and sixty hours or correctional labor for up to three years. The same actions committed repeatedly or by a dangerous recidivist; by prior conspiracy by a group of persons; in relation to a person who is known to the perpetrator to be under eighteen years of age, shall be punishable by compulsory community service from three hundred sixty to four hundred eighty hours or restriction of liberty from one year to three years or imprisonment for up to three years.

According to Article 244[6] of the Criminal Code (Dissemination of false information), dissemination of false information, including in the media, telecommunications networks or the Internet, leading to the humiliation of an individual's dignity or discrediting an individual, committed after the application of an administrative penalty for the same actions, is punishable by a fine of up to one hundred and fifty basic calculation units or mandatory community service for up to two hundred and forty hours or correctional labor for up to two years or restriction of freedom for up to two years. Dissemination of false information, including in the media, in telecommunications networks, the global information network Internet, containing a threat to public order or security, in the absence of elements of a crime provided for in Article 244[1] of this Code, committed after the application of an administrative penalty for the same actions, shall be punishable by a fine of up to two hundred basic calculation units or compulsory community service of up to three hundred hours or correctional labor for up to two years or restriction of freedom for up to two years.

Changes in connection with digitalization have also been made to the Labor Code of the Republic of Uzbekistan[12]. Thus, Articles 452-464 of the Labor Code are devoted to the specifics of regulating remote work. According to Article 452, remote work is the performance of a work function specified in an employment contract outside the location of the employer, a separate division of the organization (including those located in another locality), outside a stationary workplace, territory or facility directly or indirectly under the control of the employer, provided that information and telecommunications networks, including global information network Internet, are used to perform this work function and to interact between the employer and the employee on issues related to its performance.

According to Article 456, in addition to the conditions, the following conditions are also included in the employment contract with a remote worker:

the first condition, the remote work schedule — the number and frequency of providing working days and working hours to the employee in the remote work mode;

the second condition, methods of exchanging information between the parties on production tasks and their implementation;

the third condition, the periods of work at a stationary workplace and remote work, as well as the order of their alternation when a combined remote work regime is established;

[11] https://www.lex.uz/acts/111457

[12] https://lex.uz/ru/docs/6257291?ONDATE2=30.04.2023&action=compare

the fourth condition, outlines the process for providing necessary equipment and office technology if required, unless the worker uses their own or rented equipment as agreed;

the fifth condition, the employer's obligations to carry out repairs of equipment and (or) office equipment transferred to the remote employee for the performance of the work function stipulated by the employment contract;

the sixth condition is providing the employee with the necessary means of communication for regular interaction with the employer, including access to the Internet;

seventh condition, conditions for compensation by the employee for damage caused to the employer through his fault, related to damage to equipment and (or) office equipment transferred by the employer to the remote employee;

the eighth condition, the procedure for conducting an inventory of equipment, office equipment, software and hardware, communications equipment, information security equipment and other means transferred for use to a remote employee;

the ninth condition, the procedure and conditions for reimbursement of expenses to a remote employee in the event that he uses his own equipment and (or) office equipment to perform work duties;

the tenth condition, procedure and conditions for reimbursement to a remote employee of expenses in connection with his use of communication facilities to perform work duties;

eleventh condition, the procedure for interaction between a remote employee and an employer through the exchange of electronic documents;

the twelfth condition, the obligation of the remote employee to notify the employer in the event of the impossibility of performing the work stipulated by the production assignment within the timeframe established by the employment contract, indicating the reason preventing its completion in time;

the thirteenth condition, sets out the responsibilities of both parties in adhering to safety regulations and maintaining suitable working conditions.

According to Article 462 of the Labour Code, the annual leave for remote workers must be at least 21 calendar days, unless a longer period is specified by labour laws or the employment contract. The procedure for granting annual leave and other types of leave to remote workers is defined in the remote work agreement in accordance with the Labour Code and other relevant regulations.

Remote workers are compensated based on their work time under a time-based pay system or according to the volume of work completed under a piecework pay system. The rates and output standards are set by mutual agreement based on normal working hours, as defined by labour legislation. The pay for remote workers should be comparable to that of on-site employees and must not fall below the legally established minimum wage, provided they meet the required work standards. If a regional wage coefficient is applied in the worker's area, their compensation must reflect this adjustment.

Changes have also been made to education legislation. Article 16 of the Law of the Republic of Uzbekistan defines remote education as a form of learning that enables students to acquire knowledge, skills, and abilities remotely through information and communication technologies and the internet. Article 27 of the Law stipulates that the activities of educational organisations must be open and transparent, with information about their operations made available through official websites on the internet.

Digitalisation is also a priority in the judicial sector. The Presidential Decree "On Measures for the Digitalisation of Judicial Authorities" dated 3 September 2020, plays a significant role in outlining tasks to enhance the efficiency of the judicial system and ensure its openness and transparency. The digital transformation of the judicial system aims to strengthen the protection of human rights. The extensive adoption of modern information and communication technologies in courts, along with the expansion of interactive services for the public and businesses, improves the efficiency of case management and expedites the judicial process.

Digitalization allows courts to automate many processes related to the consideration of cases. Judges can now send subpoenas and documents electronically, saving significant time and effort. Electronic queues for the consideration of cases have also been introduced, which allows a more even distribution of the workload among judges. One of the main advantages of digitalization is the possibility of holding online court hearings. Now participants in the process can attend the meeting while being in different cities or even countries. This significantly simplifies access to justice and makes the court system more open and transparent. In addition, digitalization allows courts to more effectively monitor the execution of court decisions. The system automatically tracks the status of the executions of decisions and reminds about the need to execute them. This helps to prevent abuses and increases trust in the court system. In general, the digitalization of the judicial system of Uzbekistan is an important step in the development of the country's legal sphere. It allows for increased efficiency in the work of courts, faster and fairer consideration of cases, and also makes the judicial system more accessible and transparent for citizens.[13]

[13] Kayumov B. The Future of the Digital Judicial System of Uzbekistan: New Challenges and Prospects. 4.07.2023// https://uztrend.uz/wordpress/archives/3661

In the context of digitalization, the role of legislation in the field of information, informatization and media is increasing. Law of the Republic of Uzbekistan «On the Principles and Guarantees of Freedom of Information»[14] consolidates the concept of «Information Security». According to the law, information security is the state of protection of the interests of the individual, society and the state in the information sphere. Also, according to the Law, the state protects the right of everyone to search, receive, research, distribute, use and store the information. Restrictions on the right to information based on gender, race, nationality, language, religion, social origin, beliefs, personal and social status are not permitted. This right is one of the key ones in the conditions of the information society and digital transformation.

According to this law, state authorities and administration bodies, citizens' self-government bodies, public associations and other non-governmental non-profit organizations and officials are obliged, in accordance with the procedure established by law, to provide everyone with the opportunity to become familiar with information affecting their rights, freedoms and legitimate interests, to create accessible information resources, to carry out mass information support for users on issues of the rights, freedoms and obligations of citizens, their safety and other issues of public interest.

Article 12 of the Law provides that state policy in the field of information provision security is aimed to regulate public relations in the information sphere and defines the main tasks and areas of activity of state authorities and administration, as well as the place and role of self-government bodies of citizens, public associations and other non-governmental non-profit organizations, citizens in the field of ensuring information security of the individual, society and the state. Article 13 is of particular importance, according to which "Information security of the individual is ensured by creating the necessary conditions and guarantees of free access to information, protecting privacy, and protecting against illegal information and psychological influences. Information about personal data of individuals is related to the category of confidential information». The law stipulates that the collection, storage, processing, distribution and use of information about private life, as well as information that violates the privacy of private life, the privacy of correspondence, telephone conversations, postal, telegraph and other communications of an individual without his consent, except in cases established by law, is not allowed. It is prohibited to use information about individuals for the purpose of causing them material damage and moral harm, as well as obstruction of the exercise of their rights, freedoms and legitimate interests. Legal entities and individuals who receive, own and use information about citizens bear legal liability for violating the procedure for using this information. Mass media do not have the right to disclose the source of information or the author who signed with a pseudonym without their consent. The source of information or the name of the author may be disclosed only by the court decision. These legislative provisions are important for the protection of personal data.

Among the measures adopted in Uzbekistan, the following are particularly noteworthy:

firstly, the creation of websites for all government agencies and departments, which expands access to information;

secondly, the creation of www.regulation.gov.uz platform, where draft normative legal acts are posted, regarding which the public can express its opinion;

thirdly, the creation of the website "Mening fikrim" (My opinion), where citizens can put forward their initiatives to improve legislation or state policy;

fourthly, the creation of an electronic justice system (E-sud) for appeals to courts, which helps save time and financial costs for citizens in the event of the need to appeal to the court to protect their rights;

fifthly, expansion of free legal aid services, the legal information system "Advice.uz" has been enhanced, alongside support for the non-governmental organisation "Madad," which offers free legal consultations to citizens.

Special attention is also given to training and building skills in using digital technologies. These measures contribute to ensuring and protection of human rights in the digital age.

In addition to addressing digital inequality on a global scale, it is crucial to take steps to bridge the digital divide at the national level. As former UN High Commissioner for Human Rights Michelle Bachelet emphasised, "we need to work together — human rights lawyers, computer scientists and engineers, representatives of businesses and governmental and inter-governmental bodies — to develop human rights impact assessment methodologies, and other systems for analysis and guidance, which can address the specific requirements of digital systems... Above all, the duty to protect human rights need to be an explicit priority for all stakeholders — States, developers, scientists, investors, business and civil society"[15].

Thus, digitalisation laws must evolve with a human rights focus, while human rights legislation should con-

[14] https://lex.uz/docs/52709

[15] Speech by UN High Commissioner for Human Rights Michelle Bachelet at the University of Geneva, 14 November 2018. Retrieved from https://www.ohchr.org/RU/NewsEvents/Pages/DisplayNews.aspx?NewsID=23874&LangID=R

sider the impact and potential of digital technologies. From the above, it is evident that Uzbekistan's legislation is developing in alignment with global trends, including the rapid advancement of digital technologies. It is crucial to continue efforts to improve human rights legislation with an emphasis on digitalisation and to ensure reliable guarantees for human rights protection in the digital economy.

Original article
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ON THE STATE OF RUSSIAN INTELLECTUAL PROPERTY LEGISLATION AND POSSIBLE WAYS OF ITS DEVELOPMENT

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Abstract. The author of the article shares his thoughts on the state of domestic legislation on intellectual property and possible ways of its further development. First, the process of developing and adopting Part Four of the Civil Code of Russian Federation is briefly described and an assessment of this event is given; then the conceptual shortcomings of the current state of intellectual property law are listed; and, finally, some ideas are presented regarding the prospects for the development of intellectual property legislation.

Keywords: draft Part Four of the Civil Code of Russian Federation; exclusive right; intellectual property code; system of intellectual property courts

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I

In December 2006, Part Four of the Civil Code of Russian Federation was adopted, and it came into force on January 1, 2008. The process of developing the draft and adopting Part Four of the Civil Code of Russian Federation is surrounded by various myths, some of which were deliberately created to mislead the public, and some of which appeared on the basis of rumors due to the public lack of objective information.

I will not dwell on by whom and how, in the period from 1994 to 2006, the work was carried out on several drafts on those rules on intellectual property that were proposed to be included in the Civil Code of Russian Federation. I will only note that there were several drafts and they were conceptually different from each other. Those who want to get familiar with them in more detail can find them in the Collection of documents dedicated to the history of the codification of Russian legislation on intellectual property [1] (see also [10]). There are also many other interesting materials related to discussions of the draft Part Four of the Civil Code of Russian Federation, reviews of the draft, expert opinions, etc.

I would like to dispel one of the myths regarding the development and adoption of Part Four of the Civil Code of Russian Federation, which is still being replicated and which many people believe. Such a myth is the official version that the draft Part Four of the Civil Code

of Russian Federation was the result of the hard work of a large scientific team, which had been carried out over the past 10–15 years. However, this is not true, since Part Four of the Civil Code of Russian Federation has little in common with those drafts of codified legislation on intellectual property that were prepared in previous years, and its developers are mainly not the same persons who worked on the drafts earlier.

In order to verify the truth of the first of the stated theses, it is enough to simply compare previously prepared drafts with what has eventually become Part Four of the Civil Code of Russian Federation. Since comparing them would take up a lot of space, I will note only one fundamental point: all previous drafts proceeded from the fact that, along with the consolidation of provisions on intellectual property in the Civil Code of Russian Federation, the special laws should be preserved — on copyright, on patent, on trademarks, etc.

The statement that work on the draft has lasted for 10–15 years is also not true. On the contrary, the draft of Part Four of the Civil Code of Russian Federation was prepared in a very short time. I cannot name this exact time period, but presumably it is unlikely to be more than a year. Making this conclusion, I proceed from the fact that until September 2005, the Ministry of Press of Russian Federation[1], and then the Ministry of Education of Russian Federation, attempted to pass through the State Duma of Russian Federation a draft which consolidated only general provisions on intellectual property in the Civil Code of Russian Federation. Let me remind you that this draft was approved by the Council for the Codification and Improvement of Civil Legislation under the President of Russian Federation in December 2003, and already in February 2006, the draft Part Four of the Civil Code of Russian Federation containing the detailed provisions on intellectual property, replacing all the special laws was first made public.

At the same time, while previous drafts had been brought to the attention of specialists and rightholders, and in the 90s they were even published in press [10], then the draft Part Four of the Civil Code of Russian Federation was prepared in the strictest secrecy by a fairly narrow group of the development team. In any case, until February 2006, when the draft Part Four of the Civil Code of Russian Federation was sent for approval to ministries and departments, none of the specialists even knew that intensive work on a new draft Part Four of the Civil Code of Russian Federation was underway.

The draft Part Four of the Civil Code of Russian Federation was prepared not only at an accelerated pace, but also in accordance with the well-known principle "It is not the gods who burn the pots." The working group included only three scholars with serious achievements in the field of intellectual property — L.A. Trakhtengerts, E.A. Pavlova and V.O. Kalyatin[2]. The other members of the working group, as far as I know, have never been involved in scholarly research in this area[3]. The exclusion of specialists from working on the draft Part Four of the Civil Code of Russian Federation was a completely deliberate step, since, presumably, the developers knew from the very beginning that the idea of complete codification of intellectual property legislation as part of the Civil Code of Russian Federation and the construction of a unified exclusive right would not receive the support of professionals.

And the developers were not mistaken in this. As soon as the draft Part Four of the Civil Code of Russian Federation became public knowledge, almost everyone who in one way or another dealt with the intellectual property (scholars, practicing lawyers, representatives of copyright holders, creative unions, entrepreneurs), not only criticized it, but also spoke out against its adoption and proposed to limit the enshrining in the Civil Code of Russian Federation to only general provisions on intellectual property. The most unexpected was the reaction to the draft from the ministries and departments to which the draft was sent for consideration. Although the Chairman of the Government of Russian Federation D.A. Medvedev, who presented the project, directly stated, that the draft, in his opinion, was wonderful and that it would be accepted at any cost in the nearest future, almost all ministries and departments gave negative opinions on the draft (by the way, they are included in the above Collection [1]).

A natural question arises: why, in conditions when the draft Part Four of the Civil Code of Russian Federation was perceived, to put it mildly, critically by the overwhelming majority of interested parties, did it still become law? The answer to this question is simple and banal: in our country, those in power can push through the obedient legislators any, even the most odious, laws, regardless of the opinion of experts and the public. In this case, the "pusher" was D.A. Medvedev, whom the developers of the draft Part Four of the Civil Code of Russian Federation managed to, as far as I can guess, by flattery and appealing to him as a famous lawyer, recruit him to

[1] The author means the Ministry of the Russian Federation for Press, Television and Radio Broadcasting and Mass Communications. — the editor's note.

[2] Formally, this group was headed by V.F. Yakovlev, but in fact all the work was led by A.L. Makovsky.

[3] Professor V.A. Dozortsev, under whose leadership several previous projects were prepared, died in early 2003.

their team and make him their main lobbyist. Thus, D.A. Medvedev was noted in the history of our country not only for those inappropriate actions and statements that are on everyone's lips, but also for the fact that thanks to his support Part Four of the Civil Code of Russian Federation was adopted.

As for the developers of the draft Part Four of the Civil Code of Russian Federation, in my opinion, they were guided to a greater extent not by the interests of the matter, in which they did not understand much, but above all, their personal ambitions, in particular desiring to bring the work on the complete codification of civil legislation to its logical conclusion.

I admit at the same time, that some members of the working group sincerely believed and continue to believe in the correctness of those conceptual ideas that were the basis for the draft Part Four of the Civil Code of Russian Federation. This, in particular, is evidenced by their conviction as to the truth of the concept of a unified exclusive right, which is of a purely property nature. At the same time, as A.L. Makovsky wrote they relied on the works of G.F. Shershenevich and A.A. Pilenko, who allegedly developed "*the theory of exclusive rights as a strictly scientific explanation of the legal nature of subjective rights to the results of intellectual activity and to the means of individualization of subjects and objects of trade*" [2, p. 452]. However, this is clearly a stretch, since the works of G.F. Shershenevich [3, p. 61–69; 4, p. 366–370] and A.A. Pilenko [5] contained only a criticism of the concept of "intellectual property" as a special type of property and proposed its replacement with the concept of "exclusive rights". They did not develop any theoretical provisions that would justify the existence of a unified exclusive right. On the contrary, they always wrote about exclusive rights in the plural. In addition, without in any way belittling the merits of these outstanding scholars, I cannot help but point out the serious mistake of these classics of domestic civil law in that they considered only the property rights to be exclusive and to be in need of legal protection. This is clearly visible in the works of G.F. Shershenevich, who considered copyright a purely property institution and reduced it to the right to distribute material carriers of literary works [3, p. 62]. As for the author's personal rights, they, according to G.F. Shershenevich, "is not subject to copyright protection," "are protected not by copyright, but by the personal right of freedom and press" [3, p. 64]. Meanwhile, it is quite obvious and recognized by most experts that the personal rights of the author have the attribute of exclusivity to a much greater extent than property rights.

The fixation of the creators of Part Four of the Civil Code of Russian Federation on the fact that only the property rights need legal protection was one of the reasons why the intellectual property objects protected by Part Four of the Civil Code of Russian Federation did not include such traditional results of intellectual activity for domestic law as scientific discoveries and rationalization proposals. The opinion of experts who proposed maintaining their legal protection was rejected, in particular, on the grounds that in relation to these objects it is impossible to ensure a monopoly on its use and to make them the subject of civil commerce. And the fact that the creative activity of scientists and people involved in production needs not only material encouragement, but also recognition of their merits and personal non-property rights was not at all of interest to the drafters of Part Four of the Civil Code of Russian Federation, because the legal protection of these objects did not fit into the commercial scheme they came up with[4].

The story of the vicissitudes related to the development and adoption of the draft Part Four of the Civil Code of Russian Federation could be continued, filling it in with a number of details[5], but, without wishing to abuse the attention of readers, I shall move to a brief assessment of the current state of Russian legislation on intellectual property.

II

Assessing the current state of Russian legislation in the field of intellectual property, it can be stated that in general it complies with international standards, which are set, in particular, by the TRIPS Agreement, i.e. the Agreement on Trade-Related Aspects of Intellectual Property Rights. The Russian Federation participates in all major international conventions in this area, which confirms this conclusion. The centuries-old backwardness (this is not an artistic exaggeration, but a statement of fact) of Russian legislation in the field of intellectual property from the Western European legislation was overcome in the first half of the 90s as a result of the adoption of special laws on the main institutions of intellectual property law.

The replacement of these laws with Part Four of the Civil Code of Russian Federation did not have much impact on the level of protection of intellectual rights in

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[4] The developers of the draft Part Four of the Civil Code of Russian Federation themselves wrote that the personal non-property rights of the authors were moved to the "background" (see, for example, [2, p. 590]).

[5] Additional information about this is contained in the article: Sergeev A.P. On the History of the Latest Codification of Intellectual Property Legislation in Russian Federation (1996–2006) in [1]. The discussions that took place around the draft Part Four of the Civil Code of Russian Federation sometimes went "off scale", a clear proof of which is the article by A.L. Makovsky "American History" (Bulletin of Civil Law. 2007. No. 1 P. 165–196), written in the spirit of 1937.

our country. In the original edition, although partially improved under the influence of criticism during the discussion of the draft, Part Four of the Civil Code of Russian Federation contained many gaps and quite obvious shortcomings. This clearly follows from the fact that over 15 years, from 2008 to 2023, changes and additions were made to Part Four of the Civil Code of Russian Federation more than 40 times, and several times very significant changes. Now Part Four of the Civil Code of Russian Federation looks much better, although there is still work to be done. The point, however, is not in the particular gaps and shortcomings that exist in any law, but in those erroneous conceptual provisions that form the basis of Part Four of the Civil Code of Russian Federation. Let's point out the main ones.

One of the main disadvantages of Part Four of the Civil Code of Russian Federation is the construction of a unified exclusive right, which covers most of the property rights, is indivisible and can only be alienated in its entirety. Such a design, contrary to the claims of the developers, does not promote, but on the contrary, impedes the turnover of rights to intellectual property, and also narrows the freedom of action of copyright holders.

It is obvious that if any of the property rights is recognized as an independent subjective right, as is customary throughout the world, this is much more convenient for turnover, and theoretically more justified. In other words, invented at one time by Professor V.A. Dozortsev [6] and taken up by the developers of the draft Part Four of the Civil Code of Russian Federation, the construction of a unified exclusive right is artificial and harmful to commerce.

It is fundamentally incorrect to recognize as intellectual property the very results of intellectual activity and equivalent means of individualization of legal entities, goods, works, services and enterprises which are provided with legal protection (Clause 1 of Article 1225 of the Civil Code of Russian Federation). This not only contradicts paragraph VIII of Art. 2 of the Convention establishing the World Intellectual Property Organization (WIPO), dated July 14, 1967, which states that intellectual property includes rights relating to literary, artistic and scientific works, inventions, trademarks and other objects, but is also theoretically untenable. After all, this is equal to recognition the things themselves as a property, but not as the right to them.

Only lazy people did not write about the defectiveness of dividing intellectual rights into three types, i.e., the exclusive right, personal non-property rights and other rights. The absence of a unified criterion for division, as well as the impossibility of distinguishing the powers included in the exclusive right from other property rights of the copyright holder, make the division of intellectual rights artificial and theoretically untenable. As well as the very concept of "intellectual rights" seems far-fetched, since it turns out to be unclaimed in Part Four of the Civil Code of Russian Federation, in each of the chapters of which it is replaced by the more familiar concepts of copyright, neighbouring rights, patent rights and other rights.

A serious drawback is also the establishment in Part Four of the Civil Code of Russian Federation of an exhaustive list of results of intellectual activity and means which are provided with legal protection. This decision led to the fact that many results of creative activity and means of individualization turned out to be in limbo: on the one hand, they exist, and in relation to some of them an exclusive right is directly establish by the law [11, clause 1.1 of Art. 4]; and on the other hand, the exclusive right to them cannot be protected using the means provided for by Part Four of the Civil Code of Russian Federation.

Under these conditions, it would be reasonable to extend the rules of Part Four of the Civil Code of Russian Federation, by analogy with the law, to the protection of at least those results of intellectual activity and means of individualization that, in essence, differ little from the objects of intellectual property provided for by Part Four of the Civil Code of Russian Federation. A clear example is the naming of a non-profit organization, to which the trade name regime is quite applicable. However, the Supreme Court of Russian Federation, whose decisions are the integral part of Russian law, did not dare to take this step, preferring to state that Part Four of the Civil Code of Russian Federation protects only those results of intellectual activity and means of individualization which are provided by it; as for all other objects of intellectual property, they must be protected on the basis of the general provisions of civil law and legislation on the protection of competition [12, paragraph 33].

Further, in their struggle with the concept of "intellectual property" accepted throughout the world, the developers of the draft Part Four of the Civil Code of Russian Federation went so far as to achieve enshrinement in Art. 1227 of the Civil Code of Russian Federation with a special indication that the provisions of Sec. II, dedicated to property rights and other real rights, are not applicable to intellectual property relations. In my opinion, this is also a serious mistake, because there are no objective reasons for enshrining such a ban in law. Russian legislation has always distinguished quite clearly between the right to the result of creative activity as an intangible benefit and the right of ownership to the material carrier in which this result is embodied. Therefore, there was no danger that the rules of Sec. II of the Civil Code of Russian Federation will be applied to the regulation of relations related to intellectual property.

However, it was fundamentally incorrect to build a "Chinese wall" between Sec. II and Sec. VII of the Civil Code of Russian Federation in the form of a special ban on the application of rules on property rights to intellectual rights. Property law as a sub-branch of civil law has a time-tested arsenal of legal means of protecting property rights. On the contrary, intellectual property law is the youngest sub-branch of civil law, which, moreover, developed for most of its history as a special type of property law. These sub-branches are connected with each other not only genetically, but also meaningfully, since in both cases the central place in them is occupied by the right, which is absolute and exclusive in its nature.

The prohibition provided in Art. 1227 of the Civil Code of Russian Federation, which, according to some experts [7, 8] and according to the practice of the Intellectual Property Rights Court [13, 14], applies to the application of the rules of Sec. II to intellectual property relations even by analogy of law, does not correspond to the general approach in the legal regulation of relations related to the subject of civil law and private law in general. Moreover, these relations cannot be denied legal regulation on the grounds that there is no rule of law specifically designed for them, since in this case, by analogy with the law, the norm regulating similar relations is applied to them (clause 1 of article 6 of the Civil Code of Russian Federation).

Courts are often faced with situations in which it is discovered that in Part Four of the Civil Code of Russian Federation there are no rules that allow the dispute to be resolved, but it can be resolved through the application of the relevant rules contained in Sec. II Civil Code of Russian Federation. An example would be disputes between co-copyright holders, which are very similar to disputes between co-owners. In my opinion, in this and similar cases it is quite acceptable and even necessary to use the analogy of the law (see [9]).

A brief review of the serious shortcomings of Part Four of the Civil Code of Russian Federation can be continued[6]. However, the last thing that is necessary to be said is the mistake of including all intellectual property legislation in the Civil Code while simultaneously abandoning special laws. What negative consequences did it lead to? Here is just a short list of them.

First, the inclusion of all rules on intellectual property in the Civil Code of Russian Federation put Russia in a special position, since throughout the world intellectual property legislation is represented by special laws or intellectual property codes. Of course, any country is free to choose the forms and ways of developing its legislation, but experimenting in an area that has always been Russia's Achilles heel is hardly justified. In addition, this circumstance prevents the unification of the legislation on intellectual property of the countries that are members of the EAEU, since in all these countries special laws have been preserved, and none has adopted the codification experience of Russian Federation.

Secondly, the inclusion in the Civil Code of Russian Federation of a large number of norms of an administrative nature significantly undermines its significance as a fundamental act of a civil law nature. Strictly speaking, such a decision directly contradicts paragraph 1 of Art. 2 of the Civil Code of Russian Federation, according to which "civil legislation regulates property and personal non-property relations based on equality, autonomy of will and property independence of participants". The presence of administrative norms is natural in complex regulations, such as special laws, but it is hardly appropriate in the Civil Code of Russian Federation.

Thirdly, this decision undermines confidence in the Civil Code of Russian Federation as a law, which, by definition, should have greater stability compared to ordinary laws. Currently, part four of the Civil Code of Russian Federation is more than three times larger in volume than the section devoted to property rights and other real rights. This happened due to the fact that it included many insignificant, sometimes purely technical norms that are appropriate in a special law, but which should not be included in the Civil Code. Therefore, it is no coincidence that over 15 years, changes and additions have been made to Part Four of the Civil Code of Russian Federation more than 40 times.

With this, let me conclude the second part of the article and move on to its final part, in which I want to share some thoughts on possible ways to improve Russian intellectual property legislation.

III

I'll make one disclaimer at the beginning. The prospects for the legal regulation of intellectual property not only in our country, but throughout the world are very vague. The Internet, artificial intelligence, total digitalization, blockchain technology and other similar phenomena create such problems in this area that traditional intellectual property law clearly cannot cope with. Therefore, it can be expected that fundamentally different mechanisms of legal regulation in the area under consideration. Intellectual property law in its current understanding will

[6] These include, in particular, the almost complete disregard for the interests of the state in relation to intellectual property objects created at the expense of public funds; neglecting of personal non-property rights of authors and inventors; depriving the patent office of any rule-making powers; impossibility of collecting compensation for violation of rights to some intellectual property objects, etc.

also remain, but the scope of relations regulated by it will be significantly reduced. This issue requires independent research and is not the subject of this article, which will talk about the ways of improving Russian legislation by eliminating the shortcomings mentioned above.

Three possible paths can be outlined. The first way is to further improve Part Four of the Civil Code of Russian Federation, correct individual errors, eliminate gaps, cancel some odious articles, that is, introduce targeted changes throughout the text of Part Four of the Civil Code of Russian Federation. This path is less expensive than the second and the third, but it does not relieve Part Four of the Civil Code of Russian Federation of its main shortcomings, since eliminating the latter will destroy the entire structure of Part Four of the Civil Code of Russian Federation.

The second possible option is to repeal Part Four of the Civil Code of Russian Federation and replace it with general provisions on intellectual property rights, which should correct conceptual errors made during the codification. Based on general provisions, separate laws should be re-adopted, dealing respectively with copyright, patent law, trademark protection, etc.

Finally, the third option is to repeal Part Four of the Civil Code of Russian Federation with the simultaneous addition of the Civil Code of Russian Federation with a number of rules connecting the general provisions of the Civil Code of Russian Federation with a new comprehensive regulatory act to be adopted, namely an Intellectual Property Code. This code could include not only general provisions (general part), but also chapters devoted to individual institutions (copyright, patent law, etc.), which would replace special laws in the area under consideration. The Intellectual Property Code could correct not only conceptual, but also many particular errors that are still present in Part Four of the Civil Code of Russian Federation and could also implement at least part of the solutions to the new problems that new technologies pose to the society.

When creating an Intellectual Property Code, the model of an Intellectual Property Code adopted by the Interparliamentary Assembly of the CIS countries in 2010 could be taken as a basis [15].

The last path seems to be the most preferable and promising, since it corresponds to the global trend of codification of intellectual property legislation.

It seems that not only the legislation on intellectual property, but also the judicial system needs to be reformed, since currently the quality of justice in disputes related to intellectual rights is not high. Ten years ago, in 2013, the Intellectual Property Rights Court (hereinafter referred to as the IPRC) was created, which was an unexpected but very positive event. As you know, the IPRC was created as a specialized commercial court and continues to remain in this capacity at the present time. The activities of this court are assessed positively by the majority of specialists. This is largely due to its chair, Professor L.A. Novoselova.

The IPRC considers eight categories of cases as a court of first instance and also acts as a cassation instance in cases considered by itself in the first instance and cases on the protection of intellectual rights considered by arbitration courts of the regions of Russian Federation in the first instance and arbitration courts of appeal.

In my opinion, there is an urgent need to build an independent system of courts for intellectual property rights in our country. It is obvious that the decision to create the IPRC in the system of arbitration courts was a half-hearted, compromise solution. Yes, the jurisdiction of the IPRC as a court of first instance included the most complex cases, primarily in challenging decisions of the patent office, Rospatent. But this positive aspect also has a downside, which is the large overload of this court. In addition, due to the fact that the IPRC is part of the system of commercial courts, it can only consider disputes between business entities. This means that authors, inventors and other individuals can seek protection of their violated rights only in courts of general jurisdiction, which, it should be directly recognized, are not ready to provide quality justice in disputes related to intellectual rights.

Further, at the present time there is no appellate body in the IPRC, which also seems to be a result of a compromise reached at the stage of creating this court. Meanwhile, it would be useful in this case. Finally, it is hardly correct to have the only specialized court for intellectual rights located in Moscow, in such a large country as Russia. It would be advisable to create similar courts in all federal districts: in St. Petersburg for the North-West, in Khabarovsk for Eastern Siberia and the Far East, in Rostov-on-Don for the southern regions of Russia, etc.

The question of what powers should these courts have requires additional study by proceduralists. However, the goals of their creation are obvious: first is to ensure the access to quality justice for all categories of rightholders; the second is to facilitate the actual possibility of applying for protection of violated intellectual rights, since the consideration of disputes in Moscow results in large time and financial costs for applicants from the regions.

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INTERNATIONAL LAW ON SUSTAINABLE DEVELOPMENT: MEDIA LAW ASPECTS

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Abstract. The fragmentary nature of international law together with the pursue of vital national interests and along with the conflicting international political blocks has already minimized the effectiveness of law at the international level, added complexities for the future of sustainable development of the world countries and deepened the chain of inequalities among the nations. These difficulties led international scholars to propose to review the very nature of the current bureaucratic international law institutions and to initiate the examination of the new legal field — international sustainable development law in order to stand against all harmful challenges and with the purpose to draw the path for the development of all legal areas. Although the normative basis of international sustainable development law is mostly comprised of non-systemized "soft law" norms, we have UN 2030 Agenda, New Delhi Principles and the activity reports of the UN International Law Commission where there are direct highlights about the role of media law, rights of journalists, freedom of expression and information, Internet freedom and access to the Internet. Yet, there are no enough academic works on the importance of media law regulations for the sustainable development goals and there is a significant need to look to the international sustainable development law from the angle of media law rules.

Keywords: information law, freedom of expression, sustainable development, international law, human rights, media law, information cycle, digital society, intermediary liability, legal coordination, information cycle, Internet law.

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INTRODUCTION

The primary weaknesses of international law such as decentralization of law-making procedure, collision of national interests pursued by powerful countries, fragmentary nature of international law areas, lack of certainty and unclear system of obligations may be noticed in every and each area of international legal mechanism. The current state of international law is characterized by scholars as a fragmentary legal plane what is supported by us as a logic conclusion of unpunished grave international law violations.[6; p.328] Indeed, one may consider that modern international law has already lost its traditional-historical perspectives and purposes. International law of nowadays is much broader in meaning and scope than it was in 20th century. This enlargement did not only widen the subject matter of international law, but also added lots of administrative, bureaucratic, financial challenges undermining the belief of developing countries and nations for future sustainable development. In general, all legal spheres are now complex and it is hard to resolve on time any of legal violations what is against the very cornerstone of sustainable development. Law as a type of regulation of social relations should preserve its primary functions such as accountability, regulation, prevention, etc. We may claim that international law of current period is not effective in neither the regulation of international public relations nor in prevention or punishment of international law violations. Thus, we do need a relatively new area of international law — the international sustainable development law in order to mix and combine all the traditional spheres of public and private international law with the purpose to re-design their subject matters, methodology and interrelations.

International law on sustainable development currently has no a unified convention or treaty as its legal source, but there are plenty of customary international law norms as well as general principles along with the case law and scholarly writing what may assist us for the academic study. It is particularly interesting that there are no many scientific works on the links of media law with sustainable development programs, but almost all international soft law documents on international sustainable development law covers wide range of journalistic activities. A very prominent one of them is the New Delhi Principles of the International Law Association [5]. In the light of the above-mentioned considerations, the academic purpose of the current study is primarily reflected by the multidisciplinary approaches to the links between international sustainable development law and media law. From the historical point of view, legal-conceptual ideas about sustainable development law and media law had been heard long before the formation of UN Agenda 2030. Nevertheless, putting development to the sustainable path was a long-standing problem in front of international law and interstate organization. Together with the outcomes of the Rio Declaration and New Delhi Principles, the UN 2030 Agenda later puts a demand to define the roles of media actors, their obligations and duties in the framework of international sustainable development programs as well as leading concepts of Human Rights-Based Approach. In this regard, the international individual and collective right to development enshrined within the 1986 UN Declaration on the Right to Development also includes the standards of public awareness, knowledge share, equality in the access to information what makes us look to media law from a different angle.

MEDIA AND SUSTAINABLE DEVELOPMENT

It is without doubts that the media is extremely important to people's daily lives. The most crucial instrument for communication, which is available in a variety of formats, is the mainstream media, which has been vital in influencing public opinion and raising awareness of sustainable development law. Advertising and media agencies as well as mass media corporations use a range of strategies to spread scientific knowledge among the general public. Print, electronic, internet, radio, and a variety of new media are mostly included. The role of media for sustainable development can be examined from various economic, social, political and even cultural aspects. Communication that is introduced by media platforms is vital for people to hear and to be heard what is the cornerstone principle and pre-condition for good governance. In this respect, media actors implement their civil society obligations while linking the state and non-state actors with the ordinary people. With the help media people raise

their critical voices about their concerns, problems while power-holders listen to them and try to find resolvements.[8; p.4]

The majority of media consumed today is electronic or digital (or at least, has a website or blog), which successfully primes a group for message reinforcement and the introduction of innovations. With the assistance of governmental representatives, environmental activists, scientists, business people, and broadcasters, mass media is rapidly and effectively spreading knowledge about the SDGs and have jointly established the agenda for raising awareness concerning today. It is without doubts that sustainable development is crucial for achieving economic and social long-standing success. Taking into account the role of free media's importance in sustainable development, the UN Secretary-General Ban Ki-moon noted that the freedom of expression, independent media and universal access to knowledge will strengthen the efforts for people and the planet. [7] Over the past few decades, the rapid advancements in communication technology have made it more accessible to the masses. This, coupled with increasing economic pressures, has led to significant changes in the roles, operations, and practices of new media and news professionals. The digital age has witnessed numerous successful social campaigns in print and visual media on a global scale. Audio-visual media has played a major role in addressing sustainability issues such as climate change, poverty, ecosystem, environmental protection, inequality, education and economic development, with a lot of governmental and non-governmental support and initiatives. As mass media, electronic media has a huge appeal to the common person as well. News, features, documentaries, and development campaigns regarding SDGs are created in a way that generates interest in the minds of the viewers. In this regard, some scholars propose a new type of media for sustainable development under the title "development media". [1;p.181] The content is made contemporary to attract people of all ages and classes and is successfully capable of influencing people to take part in development programs.

The media has a clear role in promoting preventive measures to reduce violations of child rights and eradicate diseases through education and science, as well as curative approaches such as counseling on daily health and programs like on TV. Correctional approaches, such as addressing the need for education and eliminating poverty and hunger, are also important. The media can also provide information about NGOs that are making a positive impact on society. By taking efforts to promote socio-economic, environmental, and cultural development, the media can help to achieve the SDGs and raise awareness about them. Scientific content, such as articles, films, shows, and advertisements, should be used to create awareness and provide information about the SDGs at the grassroots level. Effective popularization in both print and audio-visual media requires a special kind of discourse that not only simplifies messages but also has its own characteristics, values, and difficulties. The media's role in achieving the SDGs through innovative ideas and tricks that consider the positive receptivity of the public is significant.

SUSTAINABILITY AND MEDIA LAW AS ELEMENTS OF INFORMATION LAW

The application of global ICT systems in the world has brought about significant changes in the economic activity of states and international economic blocks. Currently, these changes are not only evident in the economy, but also in the realm of human rights and other aspects of the SDGs. The importance of ICT in economic, social, political, and other development programs was recognized in 2010 under the UN Millennium Development Goals. However, the impact of ICT on the SDGs and its effects on the process are relatively new scientific and practical challenges. Additionally, the relationship between human rights and the SDGs in terms of ICT has not been thoroughly analyzed. The UN High Commissioner for Human Rights has established a communication system between the SDGs and human rights, but it does not adequately address the potential role of ICT in integrating human rights and the relevant SDGs. In our view, it is worth considering the potential issues that may arise from implementing ICT in the SDGs and human rights within the context of the right to information. This the same right to information what is the cornerstone for media law area. The relationship between the SDGs and human rights is closely intertwined with other emerging areas of law, such as criminal law, civil law, administrative law, and the emerging field of information law. The question of how the SDGs relates to the field of information law and information rights can be answered based on these concepts. We believe that the interaction between the SDGs and the field of information law can begin with the exchange of information. Logically, the establishment of the field of information law is linked to society's transition to the next stage of development, which involves accelerating its progress. The legal regulation of ICT, which is the main focus of information law, is also a consequence of development in all spheres of society.

The Sustainable Development Goals (SDGs) and the 2030 Agenda, in contrast, are the outcome of a comprehensive and integrated development process. This process encompasses various aspects such as ICT, information rights, and the 2030 Agenda, which collectively contribute to the formation of an "information society"

and a "knowledge society". The analogy of computer programs can effectively illustrate this form of interaction. Matters like the legal framework for computer programs, safeguarding personal information's confidentiality and security, and analyzing pertinent legal norms primarily fall under the purview of information law.

Simultaneously, ensuring the proper and secure utilization of these computer programs aligns with the objectives of multiple entities, including the governmental organs, innovative approaches, effective technology utilization, purposeful energy resource management, enhanced food security, advancements in healthcare, and more. Consequently, the field of information law not only examines relevant human rights but also investigates the impact of ICT across both public and private domains, along with its various applications. The criteria for legally regulating ICT are duly considered during the implementation of the Sustainable Development Goals.

It is important to consider that one of the objectives of information law is to examine freedom of information as a subjective entitlement. Additionally, certain Sustainable Development Goals encompass aspects of freedom of information within the 2030 Goals. For instance, the 2030 Agenda strives to promote a healthy lifestyle and overall well-being. Freedom of information encompasses the utilization of digital technologies in healthcare, safeguarding medical information through new technologies, analyzing electronic databases, and informing the public about these matters. It also entails timely dissemination of information to the public regarding obstacles that impede the enhancement of public welfare, as well as the right to digital development. Conversely, the 2030 Agenda highlights gender equality and women's involvement in public life as issues that require attention. Information law norms also mandate that women have unrestricted access to technology and participate in the exchange of information between the public and private sectors without any form of discrimination.

The 2030 Agenda is committed to fostering industrialization and embracing a forward-thinking strategy. This innovative and technological approach guarantees unrestricted Internet access and the unhindered utilization of digital information. Simultaneously, the Sustainable Development Goal framework encompasses the provision of inclusive and sustainable housing. It is inconceivable to envision secure and stable cities and settlements without the freedom to access information. Furthermore, the 2030 Agenda strives to cultivate a harmonious and all-encompassing society, ensuring justice for all and establishing effective, accountable, and inclusive institutions at every level. To achieve these objectives, the agenda emphasizes the importance of public access to information, transparent governance, and the fight against corruption.

The notion of sustainable development in the context of information law encompasses various aspects such as the information society, the shift towards the next phase of development, the knowledge society, and the utilization of ICT for sustainable development. These concepts can be comprehended through asceticism. The realm of human rights, as a whole, provides a solid scientific foundation for studying SDGs and the fundamentals of sustainable development. Consequently, education in this field can be structured to cover topics like the right to sustainable development and progress, social welfare and sustainable development, environmental rights and sustainable development, labor rights and sustainable development, and so on.

Furthermore, the endeavors in the realms of education, science, and innovation, which are encompassed within the framework of the Sustainable Development Goal, foster an environment that allows for a fresh outlook on resolving and coordinating various matters within the information society. It is imperative to recognize that contemporary education is a dynamic process, and thus, we must not perceive the education system as a mere mechanism solely focused on imparting or acquiring knowledge. The establishment of sustainable development conditions in the field of media law necessitates a collaborative approach involving both governmental and non-governmental entities. In this sense, many European universities offer different subjects and curricula for studying SDGs.[3;p.1]

In our perspective, the educational process encompasses more than just the fulfillment of the right to education; it also involves the exchange of information. From a human rights standpoint, the educational process encompasses nearly all information rights and freedoms. This is because during education, new ideas are conveyed, ideas are critiqued, judgments are challenged, scientific research is conducted, and new theories are formulated, among other things. Simultaneously, education is not solely about utopian concepts, but rather about disseminating real and factual information to society, as well as transmitting, transforming, and comprehending that information. In this regard, the educational process and the right to education fall within the purview of information law, representing a new level of utilizing information rights. From another perspective, education is a system that fosters the conditions for personal and social development of individuals. This perspective highlights the close relationship between the right to education and the right to collective development. The inclusion of education as a distinct goal in the Sustainable Development Goals further supports our viewpoint. Although education is viewed in the 2030 Agenda not only as a subjective right but also as a prerequisite for sustainable devel-

opment, ultimately, education remains an information exchange and advocacy mechanism that is crucial for all SDGs. This is why education plays an exceptional role in shaping a sustainable information society.

MEDIA LAW AND SUSTAINABILITY OF INFORMATION SOCIETY

The concept of the information society holds significant importance in the field of information law. The overall progress of the information society is closely tied to advancements in information and communication technology, making the analysis of the Sustainable Development Goals in this context a crucial matter. The information society and the SDGs intersect in various aspects. Key characteristics of the information society include the growth of the non-manufacturing sector, the reliance of the social and public sectors on information infrastructure, and more. By comparing these features with the core principles outlined in the 2030 Agenda for the SDGs, we can identify several similarities. However, it can be argued that the primary connection between the information society and the international law on sustainable development lies in information security.

The protection of individual information or personal data along with cyber security can be considered as fundamental human rights. If an individual has the right to physical safety and security, it is only logical to extend this right to the security of their personal information. In terms of information security, there is also a collective right to information security. This aligns with the monitoring function of non-state mechanisms. While there are numerous laws governing cybersecurity in various countries, they are insufficient. Experts stress the importance of creating international agreements and global governance to coordinate efforts in cyberspace. Many international organizations have the responsibility of ensuring information security, but the diverse forms of information flow hinder the achievement of this goal. Each organization establishes its own information security standards based on their activities. The lack of a unified global information security strategy can be attributed to the vast differences in local conditions across regions and countries.

Different stages can be identified in the historical formation and progression of societies worldwide. Initially, societies took the form of primitive communities such as tribes, clans, and other small associations, representing a collective way of life. During this time, the exchange of information among individuals occurred through rudimentary methods. Subsequently, the development of spoken and written language, culture, and the advent of printing and electronic mechanisms complicated the process of information exchange. Consequently, the concept of the information society can be approached both narrowly and broadly. In a broader sense, the information society has evolved from the initial stages of information exchange among people to encompass artificial intelligence, digital rights, and other contemporary advancements. This evolution spans thousands of years of history. In a narrow context, the information society can be defined by a distinct rise in the significance of information in recent decades, accompanied by the rapid advancement of information technology. The emergence of the information society, seen as a new phase of development both nationally and internationally, has given rise to several crucial concerns. Consequently, the role of information security and national security within this concept has become one of the key challenges faced by contemporary society. Numerous approaches to information security have been proposed, with one potential approach being the consideration of human rights. Human rights play a vital role in fostering an efficient information society and should serve as the foundation for information security. Moreover, a human rights-based approach can also be applied to address cyber security issues. Human rights have various implications for information security, and currently, the right to information is recognized as a distinct area of law, allowing for exploration of the relationship between human rights and information security within this domain. Researchers and scientists have expressed the legal framework for ensuring information security using different terms, such as "information security," "cyber security," and "Internet security."

The concept of "digital security" encompasses a wider scope that goes beyond just information security. It involves ensuring the security of even the smallest digital details, including elements that are not typically considered as information. Security can be viewed as a system of measures and opportunities aimed at protecting something from potential threats. In the context of information security, this means safeguarding all elements of an information nature. The role of human rights in this process is multifaceted, with many human rights being intertwined with the flow of information that directly or indirectly affects information security. Cybersecurity issues also have a significant impact on human rights, particularly in terms of privacy, freedom of expression, and the free flow of information. When it comes to information, the emphasis should be on freedom of expression and information. It is worth noting that information security breaches are not always considered human rights violations, even though they can interfere with freedom of thought and expression. However, we tend to focus on interference in the information space and overlook the relevant human rights. Freedom of expression and infor-

mation is not the only concept linking information security to human rights.

Ensuring equal information security for everyone encompasses the traditional principle of equality. Safeguarding personal information from external interference can be viewed as a contemporary aspect of the right to personal freedom and inviolability. The protection against unlawful interference also encompasses the legal safeguarding of information rights. The modern interpretation of property rights by international organizations may also encompass the ownership of websites and information products. Conversely, the right to enhance information security, the right to engage in cultural activities, the right to foster creativity, and so forth can also be linked to this concept. These instances demonstrate that various human rights organizations embrace the notion of information security from civil, political, social, and cultural standpoints.

However, the human rights system encompasses more than just information security. The digital landscape also presents opportunities for activities that infringe upon information rights. These instances serve as a clear indication that an excessive amount of freedom in accessing information can lead to significant security issues. It is important to acknowledge that encountering such difficulties is both inevitable and logical. This is primarily due to the fact that, during the process of integration on a regional and global scale, the concept of complete national information spaces can only be understood relatively. This relativity is further compounded by the vast and diverse nature of the information space itself. The same holds true for the Internet, where individuals can easily connect with organizations and citizens from different countries. Consequently, certain countries utilize platforms like Facebook* and Instagram*, which boast a large number of social media and internet users. While social media transcends geographical boundaries, it also makes it challenging to identify and address various violations. The Internet plays a significant role in individual development and contributes to the overall intellectual growth of society. Therefore, it is crucial to not curtail internet freedom solely based on information security concerns, but rather to establish appropriate control mechanisms. This notion of control and regulation should encompass not only the rights applicable to the internet during active usage, but also the rights that extend beyond the digital realm and into real life.

CONLUDING REMARKS

In the era of economic globalization and digitalized world the harmonization of the ideas of international sustainable development law, UN SDGs and national media law regulations introduces a number of challenges. These challenges put obstables on the efficient realization of the information rights requirements set out in the UN 2030 Agenda. International sustainable development law requires a more complex type of integration and peaceful co-existence of the world countries. One may claim that the clashes between national political, economic and social goals interests significantly minimzes the comprehensive implementation of the Sustainable Development Goals. As a result, rich and powerful countries implements the SDGs more fruitfully, while poor countries performs more weakly due to the lack of needed resources. Even more, there is a different understanding of the concept of sustainable development between rich and poor governments. Richer governments highlights international law on sustainable development from the angles of environmental sustainability, fight against climate change and better realization of soft investment strategies with the help of big international business companies — transnational corporations. On the other side of the coin, poor and developing states pay more attention to the nationalization of economies, better protection of human rights, digitalization frameworks and information society. This difference of the theoretical approaches harms the ideas of equality among regions. We think that such a conclusion significantly increases the importance and special weight of cooperation in the area of media law, information law, human rights education and research in addressing the difficulties associated with the SDGs. The above-mentioned considerations let us introduce new group of needs standing in front of sustainability concept of media law:

a) To initiate a more complex and multidisciplinary academic investigation in order to define the role of media law rules for the better implementation of the international legal principles of sustainable development;

b) To attempt to produce a new and more detailed guidelines for developing and poor countries on their way to sustainable development achievements;

c) To introduce an updated program of actions to reform the fragmentary and vogue nature of international law norms on sustainable development;

d) To elaborate the system of information rights and freedoms linking them with the sustainable development goals;

e) To elaborate the system of obligations and duties of state and non-state actors in terms of transparency of information databases, good governance of information society and media law actors as well;

f) To introduce new legal techniques to developing and poor countries for renewing their legal system, since the traditional approach of vast majority of legal system to international sustainable development law leaces minor space to hope a bright future;

g) To re-arrange again education programs relevant to the role of mass media in the realization of sustainable development strategies.

It should be mentioned that in the implementation of the SDGs, along with traditional entities such as the state and international organizations, civil society organizations, especially scientific institutions, have serious responsibilities.[4;64] Media law actors are mostly private sector participants and the private sector obligations are usually more economic in nature. Yet, new look to the international law of sustainable development demands the mix of obligations for the better realization of information rights and freedoms.

As it is for the other development programs, the UN 2030 Agenda and the overal principles of the international law on sustainable development can only be realized if knowledge and technology are shared effectively. [2; p. 266] Therefore, international law on sustainable development and its media law links should be studied within individual academic programs and cources at the bachelor, master and doctoral levels of education. We think that the inclusion of relevant subjects and master education curriculum may be established at the academic institutions of the Republic of Azerbaijan too. The new academic approach to the international sustainable development law is quite useful for a number of legal areas. Thus, separate topics on UN SDGs are of criminal law, civil law, constitutional law, business law, tax law nature. Yet, we consider human rights, information law and media law as the most relevant areas for the legal analysis of the SDGs as these areas may apply a Human Rights-Based Approach.

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STUDY ON CHINA'S EXPERIENCE IN PROTECTING INTELLECTUAL PROPERTY RIGHTS ON LIVE STREAMING E-COMMERCE PLATFORMS[1]

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Abstract. This article investigates China's experience in protecting intellectual property rights on live streaming e-commerce platforms. The growing popularity of e-commerce and the increasing importance of digital content create new challenges in the field of intellectual property protection. China, as one of the leading economic powers, has significant experience and features in this area. This article examines the laws and regulations provided by China to ensure the protection of intellectual property rights on live streaming e-commerce platforms. The application of measures such as the platform's obligations to control content, monitor infringement, remove infringing content and cooperate with rightholders is analyzed. Particular attention is paid to the effectiveness of the measures taken and their impact on reducing infringement of intellectual property rights. It examines the jurisprudence and court decisions related to intellectual property infringement on live streaming e-commerce platforms in China. The article describes the case of Saishi Trading (Shanghai) Co., Ltd. (Saishi) v. Hongyu and Bytedance. The intellectual property laws and regulations relating to live broadcasting, the legal status of live broadcasting e-commerce, and IP protection mechanisms are analyzed.

The results of the study allow us to draw conclusions about the positive and negative aspects of China's experience in protecting intellectual property rights on live streaming e-commerce platforms. This provides perspectives and recommendations for other countries facing similar challenges and seeking to develop effective measures to protect intellectual property rights in e-commerce.

Keywords: e-commerce, use of live streaming, e-commerce platform operators, infringement of intellectual property rights

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INTRODUCTION

Live streaming e-commerce is becoming increasingly popular and important in the business world. However, along with its growth come the challenges of protecting intellectual property (IP) rights on such platforms. China is of particular interest in this context, as it is one of the leading countries in the field of e-commerce and at the same time is actively working to improve its IP enforcement system [1].

The study of China's experience in the field of IP enforcement on live streaming e-commerce platforms is of a great importance for understanding effective regulatory mechanisms and solving problems related to IP infringement in this sphere. China is a terrific example of a country that actively takes measures to protect IP rights on e-commerce platforms, including live streaming.

The study will examine the characteristics of China's IP enforcement system, such as laws and regulations, judicial practices, intellectual rights in e-commerce and measures taken by platforms to combat IP infringement. Moreover, it will help to identify successful approaches and draw conclusions on which ones can be applied in other countries or regions for effective IP enforcement on live streaming e-commerce platforms.

Examining China's experience with IP enforcement on live streaming e-commerce platforms is an important area of research that can bring practical benefits and help strengthen IP enforcement at the international level. The study of China's experience in IPR enforcement on live streaming e-commerce platforms will also analyze the main challenges faced by rightholders and platforms in this field. The article will consider such problems as the lack of effective mechanisms for detection and suppression of IP rights violations, the ability to promptly respond to complaints and requests of rightholders, bringing infringers to justice.

The Chinese experience also demonstrates the importance of active cooperation between rightholders and platforms in combating IP infringement on live streaming e-commerce platforms. Interaction between the parties, based on voluntary cooperation and information exchange, can significantly improve the effectiveness of IP rights protection and promote fair competition in the market.

The study also includes an examination of measures taken by China to raise awareness and education on IP enforcement. The development of professional educational programs for rightholders, platforms and e-commerce users can significantly improve the understanding and enforcement of intellectual property rights.

Exploring China's experience with IP enforcement on live streaming e-commerce platforms has practical relevance for countries wishing to develop and improve their IP enforcement system. Acquiring knowledge of China's best practices and adapting them to their own conditions and needs can contribute to the development of innovation, protection of rightholders and creation of competitive live streaming e-commerce.

Thus, researching China's experience in this area will not only help to develop recommendations and practices for other countries, but also promote knowledge sharing and improve international cooperation on IP enforcement on live streaming e-commerce platforms. This is an important step in ensuring fairness, innovation and sustainable development in the global e-commerce industry.

LITERATURE REVIEW

The research topic is of great importance for the development of e-commerce globally. This literature review discusses the main aspects of the study and also presents the methodology used to conduct the study.

E-commerce has become an integral part of our daily life. However, the problem of IP rights protection on live streaming e-commerce platforms is one of the main obstacles to the further development of this industry. China's experience is a country of particular interest in this area, and its experience can serve as a valuable source of knowledge for other countries.

The most significant sources of information and opinions on the topic under study are monografies, scientific articles and publications in specialized journals. The authors who have studied the problem have presented a variety of viewpoints and approaches to IP rights protection on live streaming e-commerce platforms. Studies conducted in China and other countries were analyzed, and a comprehensive approach was applied to identify the main trends and challenges in this area.

One of the key challenges identified in the literature review is the need to develop effective mechanisms to protect IP rights on e-commerce platforms. The authors of the studies note that China has made significant efforts in this direction, adopting laws and introducing new technologies. However, there are certain problems and imperfections in the legal system that require further study and improvement.

A crucial aspect of understanding the effectiveness of IP enforcement on live streaming e-commerce platforms in China is to examine the current legal and regulatory framework. Wang and Zhang (2019) examine China's evolving legal system, particularly intellectual property laws and their impact on the protection of digital content on streaming e-commerce platforms. They highlight significant changes to the Copyright Law and the Anti-Unfair Competition Law, which have strengthened the legal framework for IP rights protection.

Effective enforcement mechanisms and remedies are another significant aspect of IP rights protection. Li and Liu (Li and Liu, 2018) investigate the enforcement actions taken by Chinese authorities against copyright infringement on streaming platforms. They examine the role of administrative enforcement agencies, such as the National Copyright Administration and the Internet Copyright Office, in combating intellectual property infringement in the digital sphere, analyze the effectiveness of these enforcement actions, and suggest ways to improve enforcement strategies.

The emergence of new technologies has created both challenges and opportunities for IP enforcement on live streaming e-commerce platforms. Chen et al. (Chen et al., 2020) examine the role of artificial intelligence (AI) and blockchain technology in solving copyright infringement problems. They propose AI-based content recognition systems to detect and flag unauthorized use of copyrighted materials during live broadcasts. In addition, they discuss the potential of blockchain technology to create transparent and immutable records of ownership and transactions, thereby enhancing IP protection.

Raising public awareness of the importance of IPR enforcement is crucial for effective IP enforcement. Xu and Wang (Xu and Wang, 2017) investigate the role of public education campaigns and industry association campaigns in changing people's behavior towards pirated content consumption. They analyze the impact of these campaigns on public attitudes toward piracy and consumption patterns, shedding light on the importance of proactive educational strategies to prevent IP infringement.

In today's interconnected world, international cooperation plays a vital role in protecting IP rights on e-commerce streaming video platforms. Zhang and Wu (Zhang and Wu, 2018) explore China's participation in global intellectual property governance and the role of bilateral and multilateral agreements in facilitating cross-border cooperation. They highlight China's participation in initiatives such as the World Intellectual Property Organization (WIPO) and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) in shaping a favorable global environment for IP enforcement.

The literature shows that China has made significant progress in protecting IP rights on live streaming e-commerce platforms. Through legislative revisions, enforcement measures, technological solutions, public awareness campaigns and international cooperation, China has strengthened its IP enforcement ecosystem. Nevertheless, there is still room for improvement, especially in addressing new challenges posed by rapidly evolving technologies and cross-border infringements. Further research and cooperation are needed to ensure effective and comprehensive IP enforcement in the digital economy.

RESEARCH METHODOLOGY

The research methodology is based on a systematic analysis of a variety of literary sources, including scientific articles, reports, analytical reviews and legislative acts. This approach allows us to get a comprehensive view of the current state of the problem under study, as well as to identify the most significant aspects for further study.

In order to investigate China's experience with IP enforcement on live streaming e-commerce platforms, a combined methodology including several stages was used.

1. Review and analysis of current academic literature.

Studies published in scientific journals, conference proceedings, and specialized publications were studied. Works devoted to political and legal aspects of IP rights protection in China were analyzed.

2. Analyzed laws and regulations.

The laws and regulations governing the protection of IP rights on live streaming e-commerce platforms in China were analyzed. This allowed us to evaluate the effectiveness of the current protection system.

3. Studied the practice of researching court decisions.

Court practice and decisions related to IP rights infringement on live streaming e-commerce platforms were analyzed. This made it possible to evaluate the effectiveness of legal measures and their impact on the resolution of specific legal cases.

4. Summarizing and drawing conclusions.

Based on the collected data and analysis, conclusions and recommendations for improving the system of IP rights protection on live streaming e-commerce platforms were formulated.

The research methodology applied in this article allows us to achieve objectivity and accuracy of the re-

sults obtained, as well as to provide a complete picture of China's experience in the field of IPR protection on live streaming e-commerce platforms.

The study of China's experience in IPR enforcement on live streaming e-commerce platforms is an important step towards understanding and solving the problem of enforcement in the digital world. The results of this study can be used to develop effective IP enforcement mechanisms in other countries, solve existing problems and promote the development of e-commerce in general.

ANALYSIS OF EXISTING LEGAL INSTRUMENTS

In China, the protection of intellectual property rights in live streaming e-commerce is based on several pieces of legislation. One of the key documents is the Copyright Law of China [2], adopted in 1990 and its subsequent amendments and supplements. This law defines the legal status of authors and other right holders, as well as establishes the basic principles of copyright protection, including the rights to audiovisual works that can be presented in the form of live broadcasts in e-commerce.

Also worth mentioning are the laws regulating e-commerce directly, such as China's E-Commerce Law [3], which came into force in 2004, and the Consumer Protection Law, enacted in 2013. Both of these laws contain provisions regarding the liability of e-commerce platforms and sellers for IP infringement.

Chinese law provides for the liability of e-commerce platforms and sellers for IP infringement [4]. Platforms are responsible for providing the conditions and means for infringement of IP rights, as well as the need to take action to stop such infringements.

China's Copyright Law requires e-commerce platforms to establish effective measures to prevent and stop copyright infringement [5]. If a platform receives a notice from a copyright holder that its rights have been infringed, it must take immediate action, including removing or blocking access to the infringing material. If it fails to do so, the platform may be found jointly liable for copyright infringement [6].

There are provisions regarding the liability of sellers on e-commerce platforms. The E-Commerce Law establishes requirements for sellers, including the duty not to infringe the intellectual property rights of others when selling goods [4]. Sellers are liable for infringement of IP rights when infringement by IP rights holders is established.

The validity and effectiveness of legal tools in China in protecting IP rights in live streaming e-commerce is a matter of debate [7]. In recent years, China has made significant efforts to improve its IP rights protection system, but there are still challenges and problems.

One of the main challenges is to detect and stop IP infringement on live streaming e-commerce platforms. The Internet space is constantly evolving and infringers are becoming more and more resourceful in their methods of circumventing defenses. This requires improved technologies and methods to detect infringements and prevent their spread.

It is also a challenge to respond promptly to complaints and requests from rightsholders [8]. It is important that live streaming e-commerce platforms are ready to promptly address and resolve such complaints and provide effective communication with rightsholders.

To assess the effectiveness of legal tools, it is also important to consider the prevention and punishment of infringers [9]. Despite the existence of laws and regulations, it is not always possible to prosecute or sanction infringers, so there is a need to improve mechanisms for litigation and government control of IP rights.

In general, China has made significant efforts to protect IP rights in live streaming e-commerce. However, the further development and improvement of legal tools, as well as the strengthening of cooperation between rightholders and platforms, require more effective enforcement of IP rights in this area.

ANALYZING PRACTICAL EXPERIENCE

Examining the experience of successful IPR infringement on Chinese live streaming e-commerce platforms

Chinese live-streaming e-commerce platforms such as Alibaba Group and JD.com have faced serious IP infringement problems. To cope with these problems, they have developed various strategies and measures that have proven successful.

One of the key strategies is to actively cooperate with rightsholders. E-commerce platforms have established close working relationships with various companies, trademark registrants and copyright owners to effectively counter infringements [7]. They have enabled rightholders to register their trademarks and copyrights on the platforms, which enabled them to easily monitor and stop infringements. In addition, they created mechanisms to respond quickly to complaints from rightholders and to remove infringing content immediately.

Another important strategy was to raise users' awareness of the harms of IP infringement. E-commerce platforms conducted awareness campaigns to educate users to respect the rights of others and to warn about the consequences of infringement. They also provided educational materials and guides for rightholders to help them understand the process of protecting their rights.

It is also worth noting that e-commerce platforms cooperate with law enforcement agencies to combat IP infringement and bring infringers to justice.

Analyzing the contractual relationships between platforms and rightholders to support their cooperation in the enforcement of intellectual property rights

Contractual relationships between e-commerce platforms and rightholders play an important role in achieving cooperation and protecting IP rights. These relationships define the mutual obligations and rights of the parties [10].

One of the key elements in the contractual relationship is the establishment of mechanisms for the registration of intellectual property rights on e-commerce platforms. Rightholders can register their trademarks and copyrights, and platforms undertake to provide them with appropriate tools and opportunities to effectively control and protect their rights.

The contractual relationship also defines the obligations of the platform to respond quickly to complaints from rightholders [11]. Platforms commit to promptly address complaints, investigate and remove infringing content if found. This allows rightsholders to effectively combat infringements and protect their IP rights.

Contractual arrangements may also include compensation mechanisms for rightholders if their IP rights have been infringed on the platform. Platforms may undertake to pay compensation or provide an opportunity to recover damages in case of confirmed infringements. This helps to attract more rightholders to cooperate with platforms and increase the effectiveness of IP enforcement.

Identification of key success factors and problematic issues in utilizing these practices

Key success factors in utilizing IPR infringement practices on Chinese live streaming e-commerce platforms include [6]:

- Active cooperation with rightholders, which allows for the effective detection and suppression of infringements. Regular communication, data transfer and training help platforms to effectively provide IP enforcement services;
- The adoption by e-commerce platforms of various technologies, such as machine learning and artificial intelligence, to automatically detect and remove infringing content. This reduces the likelihood of human error and increases the effectiveness of IP infringement enforcement;
- E-commerce platforms actively cooperate with law enforcement agencies to more effectively combat infringement. Joint operations and information sharing help to detect and stop IP infringement.

Some problematic issues faced by e-commerce platforms are:

1) *Volume of infringing content.* The sheer volume of product offerings and content hosted on platforms creates difficulties in detecting and removing infringing content. Despite the implementation of technological mechanisms, it remains a challenge to completely eliminate infringement;

2) *Infringement detection.* It is sometimes difficult to accurately determine whether content infringes IP rights. Determining copyright and trademark infringement may require expert judgment, making it difficult to quickly defend the copyright holder;

3) *Fraud and counterfeiting.* There is a risk of fraud and counterfeiting when unserious sellers use the names and designs of well-known brands. This creates problems for both the rightholders and the platform and requires additional efforts to combat such cases.

Despite the challenges, various e-commerce platforms in China continue to actively develop and improve practices and mechanisms to protect intellectual property right and create a fair and just environment for all participants.

COMPARATIVE ANALYSIS WITH INTERNATIONAL EXPERIENCE

Protecting intellectual property rights on live streaming e-commerce platforms is an important challenge for many countries. Legislative approaches to this issue vary from country to country and their effectiveness may vary. Somewhere, strict measures are taken to ensure that IP rights on e-commerce platforms are protected [12]. In such cases, the legislation includes obligations on the platform to review and monitor the content uploaded by the user and to remove infringing content as soon as possible. These approaches are based on the principle of "liability on signal" and aim to prevent the distribution of counterfeit goods and copyright infringement. Other countries prefer to use private agreements and arrangements between rightholders and platforms to resolve IP infringement [13]. These agreements may include monitoring and grievance mechanisms that enable infringements to be quickly responded to and acted upon.

There are also countries that are actively developing and improving their legislation on IP enforcement on e-commerce platforms. They impose stricter requirements on platforms, strengthen government oversight and provide for serious sanctions for infringements.

International legal instruments such as WIPO and TRIPS play an important role in enforcing IP rights at

the international level. They set minimum standards for the protection of intellectual property and oblige States Parties to take appropriate measures.

China's experience in IP enforcement on live streaming e-commerce platforms is one of the most significant. China actively cooperates with WIPO and other international organizations to develop and improve its legislation in this area. China enforces the principle of strict platform liability and implements mechanisms to quickly address complaints and remove infringing content.

The effectiveness of international legal tools and practices for IP enforcement on e-commerce platforms can be assessed from different perspectives. Some believe that they are a necessary foundation for the development of national legislation and international cooperation. However, others may believe that they do not always effectively address the problems of specific platforms and rightholders.

Exploring whether the Chinese experience can be applied to other countries may be of interest, especially for countries facing similar IP infringement problems on live streaming e-commerce platforms. However, the uniqueness of each country must be taken into account: what works in one country may not always be successfully applied in another. Therefore, it is recommended to analyze the situation in each specific country and identify the specificities and needs in the area of IP enforcement.

Recommendations for applying the Chinese experience may include the following measures:

1) active cooperation between e-commerce platforms and rightholders, including the establishment of mechanisms to quickly respond to complaints and remove infringing content;

2) development of strict legislation that will establish the platforms' obligations to verify and monitor content, ensuring platform accountability and the application of appropriate sanctions;

3) conducting information campaigns and educational programs to raise users' awareness of the harms of intellectual property infringement and the consequences of supporting illegal goods;

4) developing the cooperation of relevant government agencies to ensure control and monitoring of IP rights protection on e-commerce platforms.

However, as mentioned earlier, the implementation of the Chinese experience should be carried out taking into account the specifics and needs of each country, as well as taking into account international legal frameworks and agreements.

CASE

The live-streaming e-commerce model has significantly increased sales and revitalized the market [14]. While this sales model has brought many achievements, many existing problems in e-commerce, such as intellectual property infringement and consumer rights, have increased exponentially as a result. However, in a recent landmark case, the Beijing Haidian Court recognized live selling platforms as e-commerce platforms, which penalized trademark infringement in live selling. The court explained that an e-commerce platform is a platform that provides parties with live online trading services through transaction matching, information dissemination and other services. Using this case as an example, this article will outline the IP enforcement systems of live selling platforms.

CASE GIST

The Haidian Court heard a landmark trademark case in which live streaming platforms were recognized as e-commerce platforms. The plaintiff, Saishi Trading (Shanghai) Co., Ltd.(hereinafter referred to as Saishi), owned the exclusive right to use the AGATHA trademark and the corresponding logo. Saishi discovered that Laizhou Hongyu Arts & Crafts Co., Ltd.(hereinafter referred to as Hongyu) was selling bags containing the AGATHA trademark and logo on the Douyin live broadcast, and filed a trademark infringement lawsuit against Hongyu and Bytedance in the Beijing Haidian Court. The court held that (1) Hongyu's sale of the relevant goods constituted infringement; (2) the transaction provided by Douyin to the parties in the form of online marketing services on its platform fell within the scope of e-commerce. Although Bytedance was sued for allegedly lacking a reasonable duty of care, evidence of its performance of timely pre-inspection, prevention, and remediation measures led the court to conclude that Bytedance had met its duty [15].

MECHANISMS OF INTELLECTUAL PROPERTY RIGHTS PROTECTION ON LIVE STREAMING E-COMMERCE PLATFORMS

Live streaming laws and regulations

Electronic streaming commerce combines both advertising and sales and is subject to a number of laws, regulations and rules, such as the Law on Combating Unfair Competition, the Law on Advertising, the Law on Consumer Protection, the Law on Product Quality, the Law on Food Safety, the Law on Prices, the provisions on the environmental management of online content, etc., as well as a number of other laws, regulations and rules. Provisions more related to IP rights can be found in the Civil Code, the E-commerce Law, the Measures on the Management of Live Marketing, the Code of Conduct

for Live Marketing, the official response of the Supreme People's Court on a number of issues concerning the application of the law to IP infringement disputes on the Internet, the Guiding Opinions of the Supreme People's Court on the Handling of Civil Cases Involving Intellectual Property Rights on E-commerce Platforms, and the Guiding Opinions of the State Administration of the People's Republic of China.

The legal status of live e-commerce

According to the provisions of the E-Commerce Law [17], e-commerce operators are individuals, legal entities and unincorporated organizations that are engaged in the business of selling goods or providing services through information networks such as the Internet, including e-commerce platform operators. An e-commerce platform operator is a legal person or unincorporated organization that provides services such as network operations, transaction matching and information for both parties or multiple parties in e-commerce so that both parties or multiple parties can transact independently [18].

According to the Guidelines of the State Administration for Market Regulation on Strengthening the Supervision of Live Marketing Activities issued on November 6, 2020, a network platform that provides network business premises, transaction aggregation, information release and other services for operators using live streaming to sell goods or provide services for two or more parties to carry out independent trading activities, especially operators offering live e-commerce services, should comply with the Moreover, the court held that with the innovation of internet technology and the diversification of online marketing models, existing e-commerce platforms are no longer limited to traditional platforms with e-commerce as their core business, but also live streaming platforms, audio and video platforms and other platforms whose core business is to produce and provide content, and also gradually provide real-time marketing services to their users. This falls under the relevant definition in the E-Commerce Act and should be considered as an e-commerce platform [19].

IP enforcement mechanisms

For live streaming e-commerce platforms, IP issues are mainly related to counterfeit and low-quality products. This requires the platform to establish and improve IP enforcement rules and complaint mechanisms so that reviews and prompts, regulatory warnings, and timely remediation or punishment are carried out in advance. In particular, it is required [20]:

- formation and improvement of user agreements to clarify ownership and utilization of IP rights between platforms and participating entities such as sellers, presenters, and users;
- establishing grievance mechanisms to handle IP infringement disputes;
- establishing rules for handling disputes on the sale of counterfeit and substandard products, infringement of IP rights of others such as trademark rights, copyrights, patents and unfair competition, as well as violations of the right to name, right to reputation, etc..;
- improving the mechanisms of interaction between dispute resolution platforms, providing adequate information support to consumers in accordance with the law and actively assisting consumers in protecting their legal rights and interests;
- establishing convenient complaint and reporting mechanisms, publishing information on how to file complaints and reports, and handling complaints and reports in a timely manner.

According to the provisions of Articles 41-43 of the E-Commerce Law [3], the measures for implementing the notification and declaration of non-infringement mechanism of the platform shall be formulated according to the types of IP rights and the characteristics of the goods or services. However, the relevant measures should not impose unreasonable conditions or obstacles for parties to protect their rights in accordance with the law.

Regarding the infringement of IP rights in live streaming marketing, the platform undertakes "notice -> removal (blocking) -> declaration of non-infringement -> restoration" in accordance with the "safe harbor principle" [21]. However, it should be noted that under the "red flag principle", i.e., if there is an obvious infringement of live broadcast content, the platform cannot ignore it or rely on lack of knowledge of the infringement as a defense to liability. If the platform is aware of the infringement or is directly involved in the act, it must be jointly and severally liable with the infringer. Therefore, content posted, forwarded and recommended by the platform should be more carefully scrutinized, and proactive measures should be taken in a timely manner when obvious infringing content is detected. Regarding the process of handling IP infringement case on a network platform, the relevant legal rules and judicial interpretations are somewhat different.

DISCUSSION

Based on the study, it can be concluded that China has considerable experience in developing legislation and regulations to enforce IP rights on e-commerce platforms. The adoption of mandatory IPR registration, strict liability measures for infringers and the establishment of a claims and complaints procedure have significantly im-

proved the effectiveness of infringement enforcement on Chinese platforms.

However, it is worth considering some limitations of the Chinese model. First, mechanisms for monitoring and removing infringing content need to be continuously improved to effectively deal with new and evolving forms of infringement. Second, there is a need to enable more effective and responsive cooperation between platforms and rights holders to ensure a faster response to infringement. Third, attention needs to be paid to the problem of indirect sale of infringing products on platforms, which requires the development of additional measures to curb it.

To further improve China's model of intellectual property rights protection on e-commerce platforms, the following improvements can be considered. First, developing more detailed guidelines and methodologies to assess and remove infringing content, as well as developing new artificial intelligence technologies to improve the effectiveness of controls. Second, continuing to update legislation to adapt to the changing digital environment and new forms of infringement. Third, developing more preventive measures, such as awareness-raising activities and educational programs to raise awareness of IP rights.

A study of China's experience with IP enforcement on live streaming e-commerce platforms demonstrates the importance of developing effective mechanisms to protect IP rights in the digital environment. The Chinese model with its legislation, liability measures and cooperation between platforms and rights holders leads to positive results, but requires further improvement and development to more effectively combat IP infringement.

CONCLUSIONS

The presented analysis confirms the effectiveness of the applied legal tools and practices and allows us to conclude that this experience can be applied in other countries, taking into account the peculiarities of their legal system and practical implementation. As a result of the study, it is possible to provide recommendations for further development and improvement of IP rights protection mechanisms on live streaming e-commerce platforms.

While the leading streamers continue to break sales records, they have also identified many challenges. Unlike traditional e-commerce, live streaming of goods combines the two formats of "live streaming" and "selling goods", and has the characteristics of "e-commerce + promotion + shopping guide + selling goods". It also involves many parties such as sellers, presenters and live streaming platforms, which in turn leads to complex legal relationships. There is an urgent need for a legal team with comprehensive and in-depth knowledge and experience in areas such as e-commerce, online intellectual property protection, online entertainment, information network security and online advertising to fully understand compliance standards combined with the specifics of the live streaming industry. With respect to specific live streaming e-commerce issues, in addition to drafting and revising platform user agreements, service agreements and host rules, and codes of conduct for live streaming e-commerce may also require appropriate compliance training, drafting and revising agreements and guidelines for all participants in the live streaming industry.

The protection of intellectual property rights is a critical aspect in today's digital economy. Strategies and measures in this area should be based on research and legislation.

Updating IP enforcement legislation is a necessary step to adapt to rapidly evolving e-commerce technologies. Legislators should strive to create a flexible and specialized legal framework, and take into account the most relevant challenges and trends in this field.

Monitoring and removal of infringing content should become a priority action for e-commerce platforms. The development of effective filtering systems and algorithms for recognizing IP infringements will enable timely detection and removal of illegal content.

Cooperation between e-commerce platforms and rights holders is an integral element of successful IP enforcement. Developing agreements, sharing information on infringements, and educating rights holders on procedures and best practices will help create a mutually beneficial partnership to effectively combat infringements.

Educating and informing users about the affected IP rules and regulations is an important part of enforcement. Educating users and making them aware of the significance and consequences of intellectual property infringement will help reduce infringement and create an informed and responsible consumer environment.

Based on these findings, it can be concluded that the joint efforts of e-commerce platforms, rights holders and law enforcement agencies, supported by a comprehensive approach, can make a significant contribution to the protection of IP rights and the creation of a fair and competitive environment for the development of e-commerce.

SUGGESTIONS AND RECOMMENDATIONS

Today, e-commerce plays a key role in the global economy, but it is also associated with intellectual property infringement risks.

This situation requires attention and action by law enforcement agencies, e-commerce platforms, and rights holders. In order to effectively deal with the problem of

IP infringement, it is necessary to take concrete measures and develop strategies that promote adequate control and cooperation among all stakeholders.

Based on experience and academic research, the author proposes a number of recommendations that can contribute to the effective enforcement of IP rights on e-commerce platforms. These measures include improving legislation, better monitoring and removal of infringing content, promoting cooperation between platforms and rights holders, and implementing training and informing users about the importance and rules of intellectual property protection.

The implementation of these proposals and recommendations can help strike a balance between the right to innovation and creativity on the one hand, and the protection of intellectual property rights holders on the other. Such an approach promotes a fair and competitive environment on e-commerce platforms, stimulates innovative development and contributes to sustainable economic growth.

1. Updating legislation. It is necessary to constantly improve and update the legislation in the field of IP rights protection on e-commerce platforms. Due to the rapid development of technology and changing forms of infringement, laws must be flexible and adaptable to new challenges. In addition, laws should be clear and understandable for more efficient work of law-making bodies and courts.

2. Better monitoring and removal of infringing content. China's model of IP enforcement on e-commerce platforms should be improved in monitoring and removing infringing content. The development and utilization of new artificial intelligence technologies and improved content filtering and processing algorithms can greatly improve efficiency in detecting and removing infringing material.

3. Importance of Collaboration. Cooperation between e-commerce platforms and rights holders should be more efficient and responsive. Mechanisms for information sharing and cooperation should be developed to ensure a quick response to infringements and more efficient operation in general. It is also worth considering the creation of special departments or committees that will specialize in IP enforcement and ensure coordination between the parties.

4. Training and awareness-raising. It is important to educate and inform users of platforms about the importance and rules of intellectual property protection. Users should be made aware of the consequences of infringement and how to report infringements. Training and awareness can include campaigns, creating educational materials, publications, and organizing seminars or webinars for users and rights holders.

5. International cooperation. Cooperation with other countries and international organizations in the field of IP enforcement is also an important aspect. Sharing experiences, transferring best practices, and developing common standards and principles can improve the effectiveness of fighting infringement not only on Chinese platforms but also globally.

6. Fostering an open and innovative culture. Fostering an open and innovative culture on e-commerce platforms is conducive to creating a favorable environment for IP enforcement. Platforms should encourage the creation and development of original content, invest in research and development, and support and encourage innovative entrepreneurial projects.

7. Development of redress mechanisms. In case of infringement of IP rights, it is necessary to develop redress mechanisms for right holders. Establishing procedures and mechanisms to enable right holders to receive compensation for losses caused by infringements contributes to a fairer system and provides an incentive for the protection of intellectual property rights.

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Original article
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MEDICAL INTELLECTUAL PROPERTY: QUESTIONS OF LIFE AND DEATH

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Abstract. Medical intellectual property encourages the development and production of drugs and devices that save and prolong lives. However, finding a balance between encouraging invention by granting monopoly rights and restricting access to inventions by the same monopoly rights is very difficult. Recently, the United States has adopted legislation calling for an important experiment in finding this balance, by effectively forcing pharmaceutical manufacturers and other innovators to contract with the public insurance system for older people at prices that would be lower after a substantial part of the patent term had expired.

Keywords: patents, patent term, insurance, health, aging

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In market economies, the main roles of intellectual property protection are simple. Patent, copyright, and trade secrecy encourage innovation. Trademarks encourage the production of goods and services of consistent high quality. In the case of patents and copyright, this encouragement comes from a government guaranty of a monopoly for a limited time, allowing rightholders to charge more for their products. However, economic theory teaches that every monopoly comes at a cost. Those that cannot afford to pay the monopolistic price cannot enjoy the goods or services.

Medical intellectual property encourages the development and production of drugs and devices that save and prolong lives. Such intellectual property raises two questions of life or death: (1) without adequate incentives, businesses will not invest the huge sums needed to discover new drugs (or new software-based medical devices) and to meet legal requirements of proof of safety and effectiveness and (2) to the extent that the incentives are provided by allowing monopoly pricing, some people may be excluded from the benefits of innovation or impoverished by its cost.

In economically-advanced countries government-subsidized insurance programs generally pay most of the cost of newly-developed drugs and medical devices. Such programs are highly popular with the public. The insurance programs have considerable bargaining power because of the large scale of their purchases. If two or more pharmaceutical companies have patented new drugs with similar health effects, as in the case of recent medicines for diabetes and obesity, an insurance program may bargain a low price with a company willing to supply the drug for all the beneficiaries of the program. However, where there is one new drug that is better than all others, as in the case of blood thinner, government insurance programs are faced with a difficult financial and political choice. Paying the price demanded by the intellectual property holder will have serious budgetary consequences. Not paying the price may have serious political repercussions amid disappointed public insurance beneficiaries.

The pharmaceutical companies maximize returns from their word-wide patent portfolios by engaging in price discrimination. In bargaining with public insurance programs, they settle for lower prices with the national insurance systems of poorer countries but demand higher prices from the insurance systems of richer companies. The United States has been an exception to this policy. A high percentage of United States government payments for expensive drugs are made by the Medicare program, which provides comprehensive protection to Americans 65 years old and older. Because of their advanced age, the program recipients have much more need for expensive patented drugs than younger citizens. The pharmaceutical companies years ago successfully lobbied for a prohibition banning the Medicare system from bargaining on price with makers of patented drugs. As a result, the United States has long paid much more for patented drugs than other economically advanced countries such as the United Kingdom and Germany.

Legislation adopted in the United States in 2022 (but scheduled to go into effect gradually, beginning in 2025), entitled the "Inflation Reduction Act,"[1] will radically change this situation. Key provisions of this legislation provide for gradual elimination of the restriction on bargaining and its replacement with prices that are purportedly negotiated, but are in fact imposed. As is well-known, the United States, as a leading exporter of goods protected by intellectual property is an international leader in pressing for ever higher international legal protection for intellectual property. However, the new law moves away from the centuries-old tradition of equal terms of patent protection for inventions in different areas. Earlier United States legislation had allowed patent term adjustment for unusually long administrative delays in the Patent Office and for the delays necessary to meet the stringent regulatory standards for proving safety and effectiveness before a drug could be marketed. However, these extensions were designed to equate the effective term of protection of pharmaceutical patents with the effective term of ordinary mechanical patents for which patent office delays were shorter and approval by health authorities was not required. Thus these exceptions really continued the tradition of a uniform term during which a patentee could recoup its investment.

The Inflation Reduction Act of 2022, on the contrary, has the effect of reducing the term of effective patent exploitation for many pharmaceuticals. Thus the Act challenges the long-standing principle of equal terms of protection for all inventions. Certainly, in view of the life-and-death and high-cost characteristics of pharmaceutical patent it can be argued that "one size fits all" protection is inappropriate. But the long tradition of equal-term protection has prevented the accumulation of economic data on the effect of the length of protection on incentives for development of new drugs. There is an immense amount of published information, for instance, on the optimum period of taking particular antibiotics for particular illnesses. But, in contrast, there is no data on the optimum period of patent protection for incentivizing the development of new antibiotics. Thus the new law moves the United States into uncharted territory in that it effectively shortens the effective term of patent protection of the drugs for which publicly-financed insurance programs pay the most money.

The new law provides for a gradual transition, starting with a few drugs in 2025 to a maximum of 100 drugs subject to the law's price provisions. The drugs will be selected from those that have the highest total cost to the Medicare program. Obviously Medicare has exact accounting figures, so identifying the most costly drugs will be extremely simple.

There are a number of drugs that are exempted by the law even if they fall into the most costly category. There is an exemption for small-molecule drugs that are less than 9 years and for biological products that are less than 13 years from their approval for marketing. Put in plainer language, this means that the pharmaceutical companies will lose much of the benefit of patent protection between the 9 and 13 year cutoffs and the expiration of their patents. There is an exemption for drugs for which a biosimilar or a bona-fide generic is available. This exemption makes since, since if there is competitive market there may be no need for government price setting. There are a number of other reasonable exceptions, such as one for "orphan" drugs (drugs approved only for rare illnesses).

The law establishes what it calls a "maximum fair price." While the law presents this as an upper limit for negotiation, it is in fact a government-imposed price. The "maximum fair price" varies with the number of years beyond approval, reaching a low of 40% of the prior average sale price for drugs more than 16 years beyond approval. This is in essence another way of shortening the effective term of patent protection.

When negotiating the "maximum fair price" for a drug, the United States Department of Health and Human Services is required to consider the following factors:

> (A) Research and development costs of the manufacturer for the drug and the extent to which the manufacturer has recouped research and development costs.
> (B) Current unit costs of production and distribution of the drug.
> (C) Prior Federal financial support for novel therapeutic discovery and development with respect to the drug.
> (D) Data on pending and approved patent applications

The government is also required to consider the following types of evidence about alternative treatments:

> (A) The extent to which such drug represents a therapeutic advance as compared to existing therapeutic alternatives and the costs of such existing therapeutic alternatives.
> (B) Prescribing information approved by the Food and Drug Administration for such drug and therapeutic alternatives to such drug.
> (C) Comparative effectiveness of such drug and therapeutic alternatives to such drug, taking into consideration the effects of such drug and therapeutic alternatives to such drug on specific populations, such as individuals with disabilities, the elderly, the terminally ill, children, and other patient populations.
> "(D) The extent to which such drug and therapeutic alternatives to such drug address unmet medical needs for a condition for which treatment or diagnosis is not addressed adequately by available therapy.

Because prior draft legislation had been wrongly attacked as creating "death panels" to deny health benefits to elderly patients, the law also provided:

In using evidence described in subparagraph (C), the Secretary [of Health and Human Services] shall not use evidence from comparative clinical effectiveness research in a manner that treats extending the life of an elderly, disabled, or terminally ill individual as of lower value than extending the life of an individual who is younger, nondisabled, or not terminally ill.

Not surprisingly, leading pharmaceutical companies have filed lawsuits alleging that the new legislation is unconstitutional.[2] To date, they have presented two main arguments: (1) that the effective shortening of the period of patent protection amounts to a taking of private property without adequate compensation and (2) that the requirement that the patent-holders sign a document designating a negotiated "fair price" violates constitutional guarantees of freedom of speech since it requires the companies to sign a false statement of fact to which they do not agree, since in their opinion the price is not negotiated but imposed and is not fair but unfair.

Assuming the law is held to be Constitutional, further litigation is inevitable over whether or not the government has properly interpreted and properly considered the factors listed in the law. The listed factors all incorporate very difficult issues of human judgment.

There are important unanswered international legal questions. First, does the new law violate the international intellectual property and investment protection treaty obligations of the United States? Second, if there are no treaty violations are other countries likely to respond with similar legislation?

And there are even more important unanswered economic, moral, and political issues. First, what is the effect of shortening the patent term on research on pharmaceuticals? Second, what reduction of research efforts dues to lessened intellectual property incentives would be an acceptable tradeoff for lower pharmaceutical prices?

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AUTHOR PERSONALITY IN THE ERA OF ARTIFICIAL INTELLIGENCE: LESSONS FROM THE GENERAL THEORY OF AUTHORSHIP

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Abstract. This article covers the problems of the legal personality of artificial intelligence (AI) and the role of humans as creators. In particular, the paper discusses the fundamental possibility of vesting AI with legal rights and responsibilities. To solve this issue, the article turns to the general theory of authorship to argue that AI *per se* is not an author; an author is a natural person who exploits AI to achieve their own goals. For this reason, AI, unlike a natural person, does not have and enjoy personal rights. In addition, the legal history itself supports the idea that it is unreasonable to recognize the legal personality of AI. Jurisdictions adhering to the traditions and principles of Roman law assign a dominant role to humans as the main subject of the legal system. Equalization of the legal status of people, machines, and robots would lead to a diminution of the rights and freedoms of citizens and would destroy the legal system.
Based on these arguments, it is concluded that AI, despite its importance in modern life and society, does not form an independent legal personality. Being an economic instrument of labor, in legal terms, AI should be qualified as an object of rights, not as a subject of rights.

Keywords: artificial intelligence (AI), general theory of authorship, author personality, personal rights, legal responsibility.

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INTRODUCTION: PROBLEM STATEMENT

One of the constitutive principles of Russian intellectual property law is novelty, or the novelty of the results of intellectual activity. It is widely accepted that "copyright protects only those creative results that have the objective novelty" [1]. In turn, the objective novelty consists of "the unknowingness of the obtained creative result not for only its creator but also for other persons" [ibid; *see also* 2].

Dominating in Russian private law, the understanding of novelty as a fundamental characteristic and criterion of protectability relates to the category of creativity. In particular, M.V. Gordon's expression is well known, that "the element of creativity is characterized, first of all, by the fact that the work is distinguished by significant novelty, which speaks of the independent work of the author" [3]. In other words, according to Gordon and most intellectual-property scholars today, the result of intellectual activity is legally protectable when it is created by intellectual efforts, the application of which causes a "significantly new object" to emerge [4].

The Civil Code of the Russian Federation (hereinafter "Civil Code") also contains direct references to novelty as a special condition for granting legal protection to the results of intellectual activity (Articles 1350 and 1437 of the Civil Code, etc.) [5].

This produces the question of how to consider relationships in the frames of which substantially new results of intellectual activity are created but with limited participation of a natural person or without it at all. This refers to the widespread use of artificial intelligence (AI) technologies, capable of imitating human creative activity and producing unique products that formally meet the abovementioned legal requirement of novelty [6]. In this

regard, can AI (program, robot, computer, machine, etc.) be considered a copyright owner?

The answer to this question requires using the general theory of authorship. This theory identifies gaps and contradictions in the existing doctrine of intellectual property with the assistance of a "logical purification of concepts" (G. Marcuse) and the construction of a corresponding metatheory to allow it to be reconstructed at an advanced stage, and, consequently, make both legislation and law enforcement more perfect and predictable" [7, p. 40].

NATURAL-SCIENTIFIC AND THEORETICAL PROBLEMS IN LEGAL RELATIONS REGARDING AUTHORSHIP

The assessment of the protectability of the results of intellectual activity solely based on the characteristics of the objects themselves *per se* (in this case, objective novelty) ignores philosophical and psychological ideas about the nature of human activity. In the 1930s, the Soviet psychologist S.L. Rubinstein suggested that "activity and consciousness are not two aspects facing in different directions. They form an organic whole, not an identity, but a unity" [8]. More importantly, Rubinstein considered the activity a sequence of actions aimed to achieve a specific goal desired or sought by the subject.

Developing and deepening this theory, in the 1980s, A.G. Asmolov concluded that "the subordination of the activity to some final, pre-established goal constitutes that essential feature based on which we evaluate behavior as adaptive" [9].

What has been said is fully applicable to the creative (intellectual) activity of a person: firstly, it is inextricably linked with the consciousness of the individual; secondly, it is aimed at achieving the goals set by the person (satisfaction of material and spiritual needs, etc.).

As Karl Marx once observed,

> [T]he spider performs operations reminiscent of those of the weaver, and the bee, in the construction of its wax cells, puts to shame some human architects. But even the worst architect differs from the best bee from the very beginning in that, before building a cell out of wax, they have already built it in their [imagination]. At the end of the labor process, a result is obtained that was already in the person's mind at the beginning of this process, i.e., ideally. The human does not only change the shape of what is given by nature; in what is given by nature, they also realize their conscious goal, which, like a law, determines the method and the character of their actions and to which they must subordinate their will. And this submission is not a single act [10].

From what has been said, it can be assumed that intellectual activity as a conscious activity is a characteristic of only humans; the actions of animals and machines are shaped by other factors, such as instincts and algorithms.

It is natural that even ancient legal systems, including Roman law, assigned the exclusive status of a subject of law to humans only [11]. Indeed, any legal relationship, being a type of social connection, is formed with the participation of people or legal subjects *sui generis*, having a so-called "human substrate" (referring to legal entities and public-law entities) [12]. Even if AI can be assigned with "fictitious legal personality," similarly to legal entities, such a proposal will not survive criticism, as a legal entity has legal personality insofar as it has property (i.e., acts as "personalized property") [13]. Thus, AI is not the owner, as it does not participate in a property turnover and therefore cannot be considered a legal entity.

Consequently, legal relations in which people would not participate are impossible. Moreover, AI cannot be classified into any of the listed categories. Unlike humans, not having its own consciousness and will, AI, although it achieves significant results in production activities, does not form a special personality in social relations.

AI does not replace humans and does not become an independent subject of legal relations but instead is another—even if the most advanced—means (tool, instrument) of human activity. However, the most complex operations performed by AI (mathematical calculations, complex formulations of and solutions to scientific problems, generation and editing of texts, etc.) are possible only by a human will. Consequently, the results of intellectual activity created using AI are not legally protectable *per se*; the participation of an individual remains required. That the author uses AI in their work does not diminish their role as a creator and copyright owner.

To confirm this argument, an abstract example should be considered. Say, a writer creates a work of fiction with many grammatical errors. Despite significant shortcomings, the publisher, having reviewed the manuscript, is interested in it and decides to publish the work. In this case, publication should be preceded by edits and proofreading (it is necessary to make a reservation, that the provisions of Paragraph 3 of Article 1266 of the Civil Code prohibit interfering with the author's ideas and require maintaining the initial integrity of the manuscript). At the same time, editors, proofreaders, and publishers preparing the writing for publication do not become co-authors of the "updated" work; the only author is the writer who initially submitted the manuscript to the publisher.

Following the same logic, it can be concluded that the person who created a work using AI also retains the author's "monopoly." (In this sense, AI acts in the same

capacity as an editor and proofreader in a publishing house but does not become a co-author, since its role remains subordinate to the will of the author.) This argument is also confirmed by civil law doctrine: as V.Ya. Ionas noted, "objects of copyright can be works created [with or without] someone else's labor" [2, p. 12].

Thus, to protect the results of intellectual activity, both the new object and the presence of an author and their actual involvement in creating such objects are required. In cases wherein the author does not disclose authorship (due to death, fear of political persecution, or other reasons), authorship is presumed to belong to an unidentified person, on whose behalf and in whose interests the publisher acts (Clause 3 of Article 1049 of the Civil Code).

From this follows the general rule that the legal relationship regarding authorship *a priori* cannot be considered "subjectless." Granting AI—which is *de jure* not a legal entity—subjective rights and obligations would be legal nonsense and would lead to the destruction of the legal system.

PERSONAL RIGHTS IN THE GENERAL THEORY OF AUTHORSHIP

The approach outlined has clear ethical foundation: recognition of authorship for only an individual is a manifestation of respect for the individual qualities that prompted them to conduct an intellectual activity. As rational beings, humans play a special role in nature, which should be reflected in legislation. It is significant that Article 2 of the Russian Constitution defines humans, human rights, and human freedoms as the highest constitutional value [14].

The Civil Code takes an unambiguous position on this issue; Article 1257 states that only a natural person may be the author of a work. This provision of the law expresses the humanistic, progressive essence of copyright, its focus on human personality, and personal-rights protection. Today, the opinion of Ye.A. Fleishitz expressed in the 1930s does not lose its relevance: scientific, literary, and artistic works, as well as technical inventions, are "inseparable from the personality of the author," as they "bear [the author's] individuality" [15].

Domestic law inherits the traditional view of humans as the sole subject of intellectual activity. As the only intelligent being of this kind, only humans are capable of creativity in the full sense of this word.

In foreign law, a similar question appears in relation to the "intellectual activity" of animals, birds, and plants. (In particular, a question is raised about the legal status of paintings created by dolphins, etc.) The guidance issued by the U.S. Copyright Office is as follows:

> *306. The U.S. Copyright Office will register an original work of authorship, provided that the work was created by a human being.*
>
> *The copyright law only protects "the fruits of intellectual labor" that "are founded in the creative powers of the mind." Trade-Mark Cases, 100 U.S. 82, 94 (1879). Because copyright law is limited to "original intellectual conceptions of the author," the office will refuse to register a claim if it determines that a human being did not create the work. Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53, 58 (1884)* [16].

This conservatism of the Russian and foreign legal systems can be explained by the regard for the personality of the author as the owner of the "creative powers of the mind." Such "powers" are based on human, personal experience, education, upbringing, values, social environment, etc. By definition, AI has none of these.

In private law, these individual qualities are protected by an independent group of so-called personal non-property rights. In copyright law, they include the right of authorship, the author's right to name, the right to the inviolability of the work, and the right to publication (Article 1255 of the Civil Code). In patents and the achievements of selection law, personal rights include the right of authorship (Articles 1345 and 1408 of the Civil Code).

It is generally accepted by Russian scholars that personal rights are "secondary" in relation to property rights. Leaving aside the balance of property and personal non-property rights in civil legislation, it should be assumed that in authorship relations personal rights play a crucial role in any society.

Despite the well-known expression of the French philosopher Roland Barthes about the "death of the author" (*la mort de l'auteur*), or the need to "liberate the reader" from "the tyranny of interpretation" [17], it is impossible to disregard the specific author's identity in intellectual property law. From a general theoretical perspective, any object often cannot be perceived without understanding the subject's personality. In turn, the subject is the bearer of unique qualities and characteristics that ultimately determine the object they create. Further, such characteristics allow the author to be identified in authorship examinations. (For example, in litigation challenging authorship, text analysis generally requires studying the potential author's personality, education, literacy, and oral and written speech to compare with the disputed sample.) Indeed, as M.A. Fedotov stated, "at the center of the entire ecosystem of intellectual property the author themselves [stands], but not the result of their intellectual activity" [7, p. 41]. In turn, AI lacks individual

(personal) characteristics and therefore cannot be considered an author.

But the question remains: who is recognized as an author when the result of intellectual activity is created by a machine or program? The answer depends on circumstance. If the disputed object was created with the assistance of AI but a human played a key role in its creation, then this person will be considered the author. However, if the object is entirely created by AI, then the presumption of non-authorship applies, which means that no person is granted any rights related to the disputed object. (This scenario is analogous to that described in Paragraph 6 of Article 1259 of the Civil Code.) The second option, in which no person may be an author, seems unlikely and exceptional, since an individual is almost always involved to some degree in the creative process (i.e., setting a task, introducing the initial parameters of the task being solved, etc.) and, as a result, is granted the rights of an author.

A similar problem was discussed in the 19th century regarding the copyright of photographs. It was believed that the photographer was not involved in the creation of the photograph and therefore could not claim authorship of the final product. At the same time, the work of a photographer was contrasted with the work of an artist, who must put in significantly more physical effort to paint a picture. However, it later became clear that the photographer's work is not limited to mechanically pressing the camera button—they also select the angle and light, choose a fine background, organize objects in the frame, etc., and thus own the copyright [18].

The use of AI is always subject to the will of humans. In this regard, personal rights, which protect the individuality of the author, serve, among other things, as the key to resolving the more general question of the protectability of the results of intellectual activity created with the help of AI.

THE RESPONSIBILITY OF ARTIFICIAL INTELLIGENCE

As shown, AI cannot be endowed with classical rights—meaning, it cannot be an independent subject of property or personal non-property rights. However, is AI or should AI be subject to a *sui generis* legal regime that includes new types of rights?

Some authors believe that "the foundations of legal regulation [of AI systems], which may be laid in the near future, should provide the subsequent possibility of recognizing a certain range of rights and obligations for such systems, depending on certain criteria that may indicate the development of such systems into something more." [19]. Other researchers proceed from the need to grant rights and obligations to natural persons themselves in legal relations in which AI is used: "[It is proposed] to think about the formation of a new generation of human rights that are directly related to the development of [AI] technologies and are in dire need of international recognition" [20].

Despite these differences, scholars who hold both positions acknowledge that modern law is on the threshold of fundamental changes that must properly reflect them. Law cannot outpace the development of the basis (social existence). However, at the same time, the law must be ready for changes in public life and adequately regulate them.

To date, there are no objective prerequisites for recognizing the legal capacity of AI. Therefore, talks about the complete or even partial replacement of humans by robots seem exaggerated. Such concerns are in many ways consonant with the fears that reigned in European societies during the Industrial Revolution in the 18th and 19th centuries: fearing the loss of their traditional roles and jobs, factory workers smashed machines and equipment [21]. Modern people experience similar feelings in the face of technological progress, which results in contradictory attempts of the jurisprudence to define the legal regime of artificial technologies.

If the opposite point of view is taken and it is assumed that AI acquires independent legal capacity, then a further question must be answered: who is responsible for the actions of a machine, program, or robot? For comparison, common law doctrine assumes that the legal order grants a person the status of a legal subject if such a person can and should bear an independent responsibility [22]. The further complication of the mechanisms of AI and the adaptation of its functionality and capabilities to the most complex practical tasks and technological processes will lead to a situation wherein not all operations performed by AI will be completely under human control [23].

Despite the apparent novelty of the problem, the jurisprudence has already faced a similar question and successfully resolved it over the past centuries. Besides the machines that appeared during the Industrial Revolution, since the time of Roman law, lawyers have had to seek answers to related questions about the responsibility of a person—a "good man" (Latin: *vir bonus*) [24]—relative to the forces of nature or the actions of animals.

The legal regime of AI, archaic 19th-century factory machines, and domestic animals have many differences. However, their most important similarity, which determines the need for equable legal regulation, lies in a certain unpredictability and limited human control over their characteristics and behavior. Over the past hundreds of years, most legal systems have found answers to these questions. Thus, existing approaches can and should be applied—albeit with certain reservations—to AI.

At the same time, different legal orders should offer radically different approaches and models for regulating relations using AI [25]. For example, continental European legal systems and common-law countries traditionally adhere to different approaches to regulating the liability of animals and owners. Similar distinctions may also be made in terms of regulating relations using AI. However, such differences will be technical in nature and will not be able to level out the main issue: that a human can and should bear the responsibility for the actions of AI.

Regarding authorship relations, what has been said can be interpreted as follows: the author who created the result of intellectual activity using AI acquires rights in authorship. However, recognizing a person as an author also gives rise to certain legal consequences: in particular, this person becomes responsible to third parties (i.e., for plagiarism, defamation, etc.)

Given widespread "digitalization", it will be increasingly difficult to be satisfied with disparate approaches to regulating intellectual activity and the use of its results. Further, although many jurisdictions will retain regulatory autonomy and follow their own legal traditions, in the 21st century, the problem of international cooperation will increase significantly. "Digitalization" of the economy and other areas of public life requires consolidating the efforts of various countries and unifying legal standards in AI regulation. In this context, some authors, such as Rolf Weber [26], suggest creating a "global law" designed to regulate relations using AI.

The dynamics of political processes in international life in modern times confirm that it would be overly optimistic to expect that the international community is ready to create "global" regulation even for limited issues. In this regard, a transitional solution to the problem can be the creation and implementation of regional standards in AI use (such as within the European Union, etc.)

CONCLUSION

The development of information technologies requires a re-evaluation of many classical legal institutions. The anachronism of legal principles and theories should not stand in the way of progress. However, it would be wrong to arbitrarily destroy legal concepts based on centuries-old tradition that have proven effective.

The development of AI technologies has raised the question of AI's legal status. This article attempts to revise fundamental legal categories for their adaptation to the use of AI. The article has shown that AI should not be considered a legal subject (i.e., an owner of rights); instead, it should be considered an object of rights and, in economic terms, a tool of human labor. Recognizing AI as an object of rights does not solve the problem of authorship itself but opens a discussion about a new generation of human rights related to AI.

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Original article
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OBJECTIVE ROYALTY CALCULATION METHOD FOR FORENSIC EXAMINATIONS AND COMMERCIAL TRANSACTIONS[1]

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Abstract. The article presents an innovative method for calculating royalty rates for forensic examinations, based on the use of data from a large number of independent sources. The method allows for the objective determination of royalty rates for the use of intellectual property, which is especially important for forensic examinations and commercial transactions, regardless of the country of application. The paper details the stages of the method's implementation: from the collection and analysis of accounting reports and industry statistics data to the calculation and reconciliation of results using fuzzy logic. The use of this approach minimizes errors and inaccuracies caused by incorrect initial data and outdated assessment methods, ensuring high accuracy and reliability of the results.

Keywords: royalty rate, LABRATE ROYALTY PRO method, fuzzy logic, intellectual property, financial reporting, industry statistics, objective evaluation, forensic examinations, computational models, reconciliation apparatus, commercial transactions, error minimization, reliability of results, licensor, licensee

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[1] This article may cause confusion among some of the traditional readers of our magazine, among whom are predominantly legal scholars and practicing lawyers, since it is written in a language natural for economists and mathematicians, and contains many mathematical formulas and concepts. However, the editors considered it appropriate to offer it to the attention of readers, believing that it may be useful to those who are directly involved in concluding license agreements that provide for the payment of royalties. — Editorial comments.

LABRATE ROYALTY PRO is a method for calculating royalty rates (RoS — Royalty on Sales Price) for the use of intellectual property in forensic examinations and transactions. The method is based on the use of fuzzy logic to reconcile the results of RoS calculation based on three key indicators obtained from the accounting data of the parties to the transaction or litigation (hereinafter referred to as "stakeholders"), as well as industry statistics covering all enterprises in the industry with positive return on sales and EBIT by types of activity corresponding to the main codes of the types of activity of stakeholders in the countries of registration (Table 1):

- Licensor's share in the licensee's profit (LS);
- Return on Sales (ROS);
- EBIT margin (EM).

This method is applicable in any country and allows for more accurate and fair royalty rate calculations, which significantly improves the decision-making process in both commercial transactions and forensic examinations.

The main purpose of the method is to determine royalty rates for the use of intellectual property in forensic examinations and transactions as objectively as possible based on industry statistics of stakeholders (see examples in Tables 2 and 3), financial statements of a licensee and a licensor, or parties to a legal dispute.

The method served as the analytical basis for the LABRATE ROYALTY reference book on royalty rates for the use of intellectual property objects[2]. An example of the application of this method to prepare a reference book on royalty rates for the industry with OKVED code 26.20 is presented in Table 5 (see at the end of the article). The licensor's share in the licensee's profit (LS) can be calculated analytically or taken from Table 4, given in [1, p. 22].

Table 1. Main classifiers of types of activities

System	Description	Countries of use	Code example	Code decoding
NACE	Statistical Classification of Economic Activities in the European Community	European Union countries, including Germany, France, Italy, Spain, Netherlands, etc.	26.20	Manufacture of computers and peripheral equipment
NAICS	North American Industrial Classification System	USA, Canada, Mexico	334111	Electronic Computer Manufacturing
ISIC	International Standard Industrial Classification	Most countries in the world, members of the UN	C2620	Manufacture of computers and peripheral equipment
OKVED	Russian Classification of Economic Activities	Russia	26.20	Manufacture of computers and peripheral equipment
ATECO	Classification of Economic Activities in Italy	Italy	26.20	Fabbricazione di computer e unita periferiche
NOGA	Swiss System of Classification of Economic Activities	Switzerland	26.20	Herstellung von Datenverarbeitungsgeraten und peripheren Geraten
ANZSIC	Australian and New Zealand Standard Industrial Classification	Australia, New Zealand	2421	Computer and Electronic Office Equipment Manufacturing
SIC	Standard Industrial Classification of the United States (historically)	USA (previously used, but since 1997 replaced by NAICS)	3571	Computer and Office Equipment

[2] For the first time, a fragment of the reference book on industry 85.22 (Higher education) was presented on 19 April 2024 at the IV International Scientific and Practical Conference "AUTHOR — 2024" (Moscow, HSE) in the report by A.V. Kostin "Monetization of the results of the creative activity of an IP expert, or How can a lawyer, journalist and qualimetrist make money on #IPValuationSchool technology?" (https://clck.ru/3BrDAA).

Table 2. An example of industry statistics as per OKVED code 26.20

Period	ROS — industry return on sales (operating margin), OKVED code 26.20, %			EM — industry return by EBIT (operating earnings), OKVED code 26.20, %			Revenue, Σ[2110], billion rubles	Sample size by code 26.20
	Median	Average	Weighted average	Median	Average	Weighted average		
2019	7.9	16.9	13.0	6.8	17.5	12.5	113.4	376
2020	8.7	15.7	11.6	7.6	15.0	10.3	159.6	410
2021	8.3	14.5	9.6	7.1	13.2	9.1	105.1	401
2022	10.3	16.8	12.6	9.4	16.5	11.9	174.0	408
2023	10.3	16.3	15.9	9.2	15.9	15.5	179.0	447
min	7.9	14.5	9.6	6	13.2	9.1	105.10	Total — 2,042
max	10.3	16.9	15.9	9.4	17.5	15.5	179.00	
Average	9.1	16.0	12.5	8.0	15.6	11.9	146.22	

Table 3. Calculation of ROS and EM by industry with OKVED 26.20

Period	ROS — industry return on sales, % (operating margin), OKVED code 26.20			EM — industry return by EBIT, % (operating earnings), OKVED code 26.20			Revenue, Σ[2110], billion rubles	Sample size by code 26.20
	1st quartile	Median	3rd quartile	1st quartile	Median	3rd quartile		
2019	3.8	7.9	21.0	3.1	6.8	20.5	113.4	376
2020	4.2	8.7	18.5	3.1%	7	17	159.6	410
2021	3.8	8.3	17.4	2	7.1	16.9	105.1	401
2022	4.5	10.3	23.4	3.7	9.4	22.8	174.0	408
2023	4.2	10.3	22.3	3.5	9.2%	21.4	179.0	447
Min	3.8	7.9	17.4	2.7	6.8	16.9	105.10	Total — 2,042
Max	4.5	10.3	23.4	3.7	9.4	22.8	179.00	
Average	4.1	9.1	20.5	3.2	8.0	19.8	146.22	

Note. The first quartile is the value that 25% of observations will be less than, and 75% will be greater than. The third quartile is the value that 25% of observations will be greater than. The median divides the distribution in half.

Table 4. Licensor's share (LS) in the licensee's profit, %

Degree of value of technology	License				Unlicensed know-how
	Exclusive		Non-exclusive		
	patent	non-patent	patent	non-patent	
Most valuable	40–50	30–40	25–30	20–25	25–30
Medium value	30–40	20–30	20–25	15–20	10–25
Low value	20-30	10-20	15-20	10-15	3-10

The approach allows for avoiding incorrect results when calculating royalty rates due to errors in reporting, incorrect source data and the choice of an irrelevant method.

The LABRATE ROYALTY PRO method for calculating royalty rates from sales is implemented in several stages:

1) formulation of the research question, time frame of the research, collection of information necessary and sufficient for the research;

2) stakeholder analysis, data validation, determination of each stakeholder's expectations in relation to the amount of the result obtained (royalty rate);

3) collection and analysis of data (financial indicators) of the licensor and the licensee (or parties to a legal dispute), their industries of operation, taking into account time frames and restrictions;

4) calculation of royalty rates using the LABRATE ROYALTY PRO method;

5) construction of calculation models for three groups of parameters (min, max, average);

6) coordination of results in accordance with the mathematical apparatus of fuzzy logic.

The calculation method of LABRATE ROYALTY PRO has the following formal form:

$$\begin{cases} y(RoS) = f(LS, ROS \vee EM); \\ LS \in [0;1]; \\ ROS = \dfrac{OP}{Sales}; \\ EM = \dfrac{EBIT}{Sales}. \end{cases} \quad (1)$$

The methodology has a set of basic restrictions that determine all subsequent calculations, the number of source data tables and the results. Let us assume that *ROS* and *EM* in model (1) are the result of calculating the corresponding *ROS* and *EM* for three scenarios (min, max, average) based on the financial statements of the licensor, the licensee and their industries of operation for a certain period. Let us introduce a set *Q* containing relevant source data for calculating *ROS* and *EM* based on the data of the licensor, the licensee and the required number of industries for analysis: $Q = \{q_n\}$, where $q_n = \{ROS_{nt} \vee EM_{nt}; > 0\}$, source data sets — for a five-year period with only positive values of return on sales and EBIT, i.e. $t \geq 5$.

Then, the formal form of the models for determining ROS and EM in three scenarios based on the financial statements of the licensor, the licensee and their industries of operation from the set $Q = \{q_n\}$ has the following form:

$$ROS_{\min}^{q_n} = \min(ROS_{nt}^{q_n}); \quad (2)$$

$$ROS_{\max}^{q_n} = \max(ROS_{nt}^{q_n}); \quad (3)$$

$$ROS_{average}^{q_n} = \frac{\min(ROS_{nt}^{q_n}) + \max(ROS_{nt}^{q_n})}{2}; \quad (4)$$

$$EM_{\min}^{q_n} = \min(EM_{nt}^{q_n}); \quad (5)$$

$$EM_{\max}^{q_n} = \max(EM_{nt}^{q_n}); \quad (6)$$

$$EM_{average}^{q_n} = \frac{\min(EM_{nt}^{q_n}) + \max(EM_{nt}^{q_n})}{2}. \quad (7)$$

Let us denote the scenarios (in our case min, max, average) as a set $SC = \{sc_n\}$. Then, the final royalty rates (RoS) in all scenarios, $e(RoS_{sn}^{q_n}) = f(LS, ROS_{sn}^{q} \vee EM_{sn}^{q})$, are calculated using the following models:

$$RoS_{sc_n}^{q_n} = LS \cdot EM_{sc_n}^{qn}; \quad (8)$$

$$RoS_{sc_n}^{q_n} = LS \cdot ROS_{sc_n}^{qn}. \quad (9)$$

It becomes obvious that the number of scenarios can be expanded if necessary, and then, set $SC = \{sc_n\}$ will contain more than three elements.

The LABRATE ROYALTY PRO method results in several output tables of calculated royalty rates for different data sets (scenarios). For example, when analyzing only two stakeholders and two industries of operation, the final number of calculation tables will be eight [1, pp. 23–24]. Each increase in the number of stakeholders and/or analyzed industries (including the intersection of types of activities according to OKVED) leads to an increase in the number of output calculation tables of royalty rates. For example, including one additional industry in the calculation leads to an increase in the number of calculation tables by two units.

It is obvious that the determination of the final royalty rate for all output calculation tables requires the use of an apparatus for coordinating the results. The LABRATE ROYALTY PRO method uses the mathematical apparatus of fuzzy logic as a coordination apparatus, the methodology of which was first described in [2] and is presented below in strict mathematical form. The stage of coordinating the results using fuzzy logic corresponds to the sixth stage of implementing the LABRATE ROYALTY PRO method described above.

Let us consider the problem of determining the value of the royalty rate for the use of an intellectual property object for the purposes of determining the equitable amount of payment under a license agreement in the context of a legal dispute [1, p. 18]. A variety of royalty rate calculation methods, underlying assumptions, and sources of financial information result in varying final results. In this regard, in litigation or in the licensing process, there is an urgent need for a scientifically based and accurate determination of the market royalty rate.

Let us assume that $\tilde{A}$ — an elementary fuzzy statement (a sentence expressing a complete thought, the truth or falsity of which can be judged only with a certain degree of certainty). In this case, the set of elementary fuzzy statements $\tilde{A}$ defines a fuzzy set A_i. Then, in terms of fuzzy logic, it is arguable that $\tilde{A} \in [0, 1]$, where the interval [0, 1] represents a continuous set of quantitative estimates of the degree of truth of the statement [3].

The set of all fuzzy statements regarding the problem of determining the royalty rate is denoted by $\tilde{U}$, then, *T* is the mapping of the truth of fuzzy statements $\tilde{A}_l$. The truth of some fuzzy statement regarding the problem of determining the royalty rate can be determined through the operator $T(\tilde{A}_l)$.

Thus, the initial statement of the problem can be formalized as follows:

$$\tilde{A}_l \in \tilde{U}; \quad (10)$$

$$T(\tilde{A}_l) \in [0, 1]; \quad (11)$$

$$T(\tilde{A}_l) = x. \quad (12)$$

The most important stage in the implementation of the royalty rate approval procedure using fuzzy logic is the construction of membership functions based on the calculated data. Let us denote the membership function as $\mu_A(x)$, then, the set of ordered couples of values A, transformed by the membership function, is defined as $A = \{\mu_A(x)/x\}$.

The operations of union and/or intersection of fuzzy sets serve as the basis for determining the matching fuzzy set [4]. The intersection of fuzzy sets (in our case, the sets of royalty rate determinations for different data sets) is the largest fuzzy subset $A_i \cap A_{in}$, that is contained simultaneously in the fuzzy sets A_i and A_{in} with a membership function defined as follows:

$$\mu_{A_i \cap A_{in}}(x) = \min\left(\mu_{Ai}(x), \mu_{Ain}(x)\right). \quad (13)$$

The union of fuzzy sets defined on the universal set is a fuzzy set $A_i \cup A_{in}$, which includes both of these fuzzy sets with the membership function defined as follows:

$$\mu_{A_i \cup A_{in}}(x) = \max\left(\mu_{Ai}(x), \mu_{Ain}(x)\right). \quad (14)$$

In practice, it is convenient to use those membership functions that allow analytic representation in the form of some simple mathematical function. This not only simplifies the corresponding numerical calculations, but also reduces computing resources. Analytic representations of membership functions have a general form and construction methodology and are applicable, among other things, to determining royalty rates. It is obvious that the analytical forms of membership functions are approximations of the general function.

In most cases, the analytical form of the membership function is set using standard forms. The most widely used membership functions are the triangular, trapezoidal and Gaussian functions [5]. From a practical point of view, the most acceptable forms of typical modeling of the membership function are triangular and trapezoidal forms. The general form of defining a membership function in triangular form has the form [defined by numbers (a, b, c), where a, b, c are some numerical parameters that take arbitrary real values and are ordered by a relation]:

$$MF(x) = \begin{cases} 0, & x \le a, \\ \dfrac{x-a}{b-a}, & a \le x \le b, \\ \dfrac{\tilde{o}-}{c-b}, & b \le x \le c, \\ 0, & x \le c. \end{cases} \quad (15)$$

The triangular form of the membership function is used to specify such properties of sets that characterize the following types of uncertainty: "approximately equal", "average value", "located in the interval". Thus, it is the triangular function that accurately approximates the fuzzy set A of royalty rates calculated from different data sets[3].

An important stage in constructing membership functions is the definition of the universe X, that is, the domain of definition of the approximated membership function. The universe in general is defined as $x \in X$. In relation to determining the royalty rate for different sets of data[4], an expert or a group of experts defines for each fuzzy set of royalty rates an admissible universe $x \in X$.

After defining the basic terms, it is necessary to describe the procedure of fuzzy logical inference — obtaining a specific clear value of the royalty rate as a result of defuzzification.

The first stage is the formation of a rule base for fuzzy inference systems. A set of rules $P = \{R_1, R_2, ..., R_n\}$ is specified, each of which is assigned a vector of certainty (reliability) coefficients $F_n(i \in \{1, 2, ..., n\})$, where $F_n \in [0, 1]$ and a set of input linguistic variables (royalty rates for different databases and data samples) $V = \{b_1, b_2 \ldots b_n\}$. A set of output linguistic variables is also specified — the calculated royalty rates $W = \{w_1, w_2, ..., w_n\}$.

The second stage is fuzzification. Definition of a set $V' = \{a_1, a_2, ..., a_n\}$, representing specific values of linguistic variables $\{b_1, b_2 \ldots b_n\}$. In general, $a_n \in X_n$, where X_n is the universe of the linguistic variable. Next, based on the known a_n and membership functions, the values $b'_n = \mu(a_i)$ and the set of all values of the linguistic variable (royalty rates) $B = \{b'_n\}$ are found. The set $B = \{b'_n\}$ is the result of fuzzification of the conditions.

The third stage is aggregation. Formation of the set $B'' = \{b''_1, b''_2, ..., b''_n\}$. If the set $B = \{b'_n\}$ includes different

[3] In mathematics, there are many analytical forms of defining membership functions, among which Z-shaped and S-shaped membership functions (spline functions), U-shaped membership functions can be distinguished. The latter type of function generates normal fuzzy sets and can be used to improve the reliability of results under uncertainty conditions that are better approximated by a normal distribution.

[4] The minimum set of estimated royalty rates for two stakeholders and two industries includes eight data sets: 1) royalty calculation based on ROS of Stakeholder 1 (accounting statements of Stakeholder 1); 2) royalty calculation based on EM of Stakeholder 1 (accounting statements of Stakeholder 1); 3) royalty calculation based on ROS of Stakeholder 2 (accounting statements of Stakeholder 2); 4) royalty calculation based on EM of Stakeholder 2 (accounting statements of Stakeholder 2); 5) calculation of the industry royalty rate based on ROS (according to OKVED corresponding to Stakeholder 1); 6) calculation of the industry royalty rate based on EM (according to OKVED corresponding to Stakeholder 1); 7) calculation of the industry royalty rate based on ROS (according to OKVED corresponding to Stakeholder 2); 8) calculation of the industry royalty rate based on EM (according to OKVED corresponding to Stakeholder 2).

linguistic variables (royalty rates[5] calculated for different data sets), then the formation of the aggregate set $B'' = \{b_1'', b_2'', ..., b_n''\}$. is preceded by the stages of fuzzy conjunction or the connection "AND" and fuzzy disjunction or the connection "OR" according to the following formulas (the values b_n' are used as arguments of the corresponding logical operations):

$$«И»: T(b_1 \wedge b_2) = \min\{b_1', b_2'\}; \quad (16)$$

$$«ИЛИ»: T(b_1 \wedge b_2) = \max\{b_1', b_2'\}. \quad (17)$$

The aggregation stage is completed if for the entire set of rules $P = \{R_1, R_2, ..., R_n\}$ all values $B'' = \{b_1'', b_2'', ..., b_n''\}$. are found.

The fourth stage is activation. In the general case, it is an algebraic product of the sets $B'' = \{b_1'', b_2'', ..., b_n''\}$ and $F_n(i \in \{1, 2, ..., n\})$. It is easy to see that if the set $F_n(i \in \in \{1, 2, ..., n\})$ is defined by the coefficient 1 for all n, then, the set $B'' = \{b_1'', b_2'', ..., b_n''\}$ corresponds to the set of values of the linguistic variables obtained in the previous stage.

The fifth stage is accumulation or the process of finding a membership function for each of the output linguistic variables of the set $W = \{w_1, w_2, ..., w_n\}$. The output variables are denoted by different letters, unlike in the previous stages, where b_n denoted the input variables. In essence, in this case the output linguistic variable is the desired royalty rate in all variants. As a result, for each output variable $W_n \in W$ and the fuzzy sets $C = \{C_{n1}, C_{n2}, ..., C_{nq}\}$ related to it, the unions of fuzzy sets are determined according to the union rule $C_{ni} \cup C_{nq}$. As a result, the final united fuzzy sets $C = \{C_1, C_2, ..., C_n\}$ are formed for all output linguistic variables $W = \{w_1, w_2, ..., w_n\}$.

The sixth stage is defuzzification. Let us assume that the sets $C = \{C_1, C_2, ..., C_n\}$ and the corresponding output variables $W = \{w_1, w_2, ..., w_n\}$ are known. Next, each of the output linguistic variables and the final fuzzy set related to it are considered sequentially, and the final clear result of the value of all royalty rates $W_n \in W$ is determined by the barycenter method [6]:

$$y = \frac{\int_{\min}^{\max} x \cdot \mu(x) dx}{\int_{\min}^{\max} \mu(x) dx},$$

where: y is the crisp value of the royalty rate; x is the variable corresponding to the output linguistic variable w; min and max are the left and right points of the interval of the carrier of the fuzzy set of the output variable w under consideration (essentially, the boundaries of the royalty rate); $\mu(x)dx$ is the membership function of the fuzzy set corresponding to the output variable w after the accumulation stage.

In defuzzification using the barycenter method, the value of the output variable is equal to the abscissa of the barycenter of the area bounded by the graph of the membership function curve of the corresponding output variable. It becomes obvious that the method of specifying the analytical membership function (in our case, triangular) will determine the final result of the defuzzification procedure.

The defuzzification stage is considered complete, when for each of the output linguistic variables the final quantitative values in the form of a number are determined, that is, the set $y = \{y_n\}$, where n is the total number of output linguistic variables in the rule base of the fuzzy inference system.

Limitations and assumptions of the model:

1) the result of fuzzy inference depends on the chosen method of defining the membership function;

2) the result of fuzzy inference depends on the defuzzification method[6];

3) the result of fuzzy inference depends on the chosen royalty rate universe;

4) the result of fuzzy inference depends on the database used to calculate royalty rates (industry data, sample size, geographical parameters, time horizon, etc.);

5) the result of fuzzy inference depends on the method of determining and the size of the licensor's share in the licensee's profit, as well as the determination of the type of license / degree of value of the technology.

The specified parameters that influence the final conclusion are determined by the expert and set the basis for further calculations.

Thus, the general formal form of the mathematical notation of the methodology for coordinating results using the fuzzy logic apparatus and calculating the final royalty rate using the "LABRATE ROYALTY PRO" method has the form presented below. The sequential implementation of the stages leads to obtaining the desired value of the royalty rate from all possible calculation bases:

[5] Royalty rates for the use of intellectual property objects in forensic examinations and RoS transactions are calculated based on the licensor's share in the licensee's profit (LS), return on sales (ROS) and EBIT margin (EM) based on the accounting statements of stakeholders and industry statistics, according to the OKVED code corresponding to the main and/or additional OKVED codes of stakeholders, for all enterprises in the industry with a positive return on sales and EBIT. Additional OKVED codes may be general (overlapping) OKVED codes of Stakeholder 1 and Stakeholder 2.

[6] The following methods exist for finding the final crisp value: the barycenter method (discussed above), the barycenter method for single-point sets, the center of area method, and the left and right modal value method.

$$P=\{R_1, R_2, ..., R_n\}; V=\{b_1, b_2 \dots b_n\};$$
$$F_n(i\in\{1, 2, ..., n\});$$
$$F_n\in[0,1]; W=\{w_1, w_2, ..., w_n\};$$
$$V'=\{a_1, a_2, ..., a_n\}, a_n\in X_n; b_n\mapsto a_n;$$
$$B=\{b'_n\}, b'_n=\mu(a_i);$$
$$B''=\{b''_1, b''_2, ..., b''_n\};$$
$$(B''=\{b''_1, b''_2, ..., b''_n\}\cdot F_n=\{F_1, F_2, ..., F_n\},$$
$$F_n\in[0,1]);$$
$$W=\{w_1, w_2, ..., w_n\}, w_n\in W;$$
$$C=\{C_1, C_2, ..., C_n\}, C_i=C_{ni}\cup C_{nq}$$
$$y=\{y_n\}, y\in R; y=\frac{\int_{\min}^{\max} x\cdot\mu(x)dx}{\int_{\min}^{\max}\mu(x)dx}.$$

The table below presents 480 royalty rate values for the period 2019-2023, calculated using two methods: return on sales (ROS) and EBIT margin (EM). The data was submitted to the Federal Tax Service of Russia by enterprises with the main OKVED code 26.20 (Manufacture of computers and peripheral equipment) that have a positive return on sales and EBIT. Royalty rates are calculated for three groups of *ROS* and *EM* values: median, arithmetical average and weighted average. Each value in the table can be uniquely identified by its row and column number. For example, the royalty rate *RoS* calculated on the basis of *ROS* at *LS* = 0.25 for 2023 based on the median return on sales is designated as LABRATE ROYALTY (2019-2023, 26.20, 39/IV). In the case where the royalty rate is calculated on the basis of *ROS* at *LS* = 0.45 for 2021 based on the arithmetical average of the return on sales, it is designated as LABRATE ROYALTY (2019-2023, 26.20, 57/V). The reference to the royalty rate calculated on the *EM* basis at *LS* = 1 for 2019 based on the weighted average EBIT margin is designated as LABRATE ROYALTY (2019-2023, 26.20, 85/IX). Royalty rates at *LS* = 1 are used to calculate the losses of copyright holders, in accordance with Article 15 of the Civil Code of the Russian Federation.

Table 5. Reference book on royalty rates (26.20) for the period 2019-2023

Line No.	According to the Online Media Information Resource SPARK for OKVED 26.20	Period	ROS — industry return on sales (operating margin), OKVED code 26.20, %			EM — industry return by EBIT (operating earnings), OKVED code 26.20, %		
			Median	Arithmetical average	Weighted average	Median	Arithmetical average	Weighted average
I	II	III	IV	V	VI	VII	VIII	IX
1	Return for five years	2019	7.9	16.9	13.0	6.8	17.5	12.5
2		2020	8.7	15.7	11.6	7.6	15.0	10.3
3		2021	8.3	14.5	9.6	7.1	13.2	9.1
4		2022	10.3	16.8	12.6	9.4	16.5	11.9
5		2023	10.3	16.3	15.9	9.2	15.9	15.5
6	Return statistics for a five-year period	Min	7.9	14.5	9.6	6.8	13.2	9.1
7		Max	10.3	16.9	15.9	9.4	17.5	15.5
8		Median	8.7	16.3	12.6	7.6	15.9	11.9
9		Average	9.1	16.0	12.5	8.0	15.6	11.9
10	Royalty rate at LS = 0.03	2019	0.2	0.5	0.4	0.2	0.5	0.4
11		2020	0.3	0.5	0.3	0.2	0.4	0.3
12		2021	0.2	0.4	0.3	0.2	0.4	0.3
13		2022	0.3	0.5	0.4	0.3	0.5	0.4
14		2023	0.3	0.5	0.5	0.3	0.5	0.5
15	Royalty rate at LS = 0.05	2019	0.4	0.8	0.7	0.3	0.9	0.6
16		2020	0.4	0.8	0.6	0.4	0.7	0.5
17		2021	0.4	0.7	0.5	0.4	0.7	0.5
18		2022	0.5	0.8	0.6	0.5	0.8	0.6
19		2023	0.5	0.8	0.8	0.5	0.8	0.8

Table 5 (continued)

Line No.	According to the Online Media Information Resource SPARK for OKVED 26.20	Period	ROS — industry return on sales (operating margin), OKVED code 26.20, %			EM — industry return by EBIT (operating earnings), OKVED code 26.20, %		
			Median	Arithmetical average	Weighted average	Median	Arithmetical average	Weighted average
20	Royalty rate at *LS* = 0.1	2019	0.8	1.7	1.3	0.7	1.8	1.2
21		2020	0.9	1.6	1.2	0.8	1.5	1.0
22		2021	0.8	1.4	1.0	0.7	1.3	0.9
23		2022	1.0	1.7	1.3	0.9	1.6	1.2
24		2023	1.0	1.6	1.6	0.9	1.6	1.5
25	Royalty rate at *LS* = 0.15	2019	1.2	2.5%	2.0	1.0	2.6	1.9
26		2020	1.3	2.4	1.7	1.1	2.2	1.6
27		2021	1.2	2.2	1.4	1.1	2.0	1.4%
28		2022	1.6	2.5	1.9	1.4	2.5	1.8
29		2023	1.5	2.4	2.4	1.4	2.4	2.3
30	Royalty rate at *LS* = 0.2	2019	1.6	3.4	2.6	1.4	3.5	2.5
31		2020	1.7	3.1	2.3	1.5	3.0	2.1
32		2021	1.7	2.9	1.9	1.4	2.6	1.8
33		2022	2.1	3.4	2.5	1.9	3.3	2.4
34		2023	2.1	3.3	3.2	1.8	3.2	3.1
35	Royalty rate at *LS* = 0.25	2019	2.0	4.2	3.3	1.7	4.4	3.1
36		2020	2.2	3.9	2.9	1.9	3.7	2.6
37		2021	2.1	3.6	2.4	1.8	3.3	2.3
38		2022	2.6	4.2	3.2	2.4	4.1	3.0
39		2023	2.6	4.1	4.0	2.3	4.0	3.9
40	Royalty rate at LS = 0.3	2019	2.4	5.1	3.9	2.0	5.3	3.7
41		2020	2.6	4.7	3.5	2.3	4.5	3.1
42		2021	2.5	4.3	2.9	2.1	3.9	2.7
43		2022	3.1	5.0	3.8	2.8	4.9	3.6
44		2023	3.1	4.9	4.8	2.8	4.8	4.6
45	Royalty rate at LS = 0.35	2019	2.8	5.9	4.6	2.4	6.1	4.4
46		2020	3.0	5.5	4.0	2.6	5.2	3.6
47		2021	2.9	5.1	3.4	2.5	4.6	3.2
48		2022	3.6	5.9	4.4	3.3	5.8	4.2
49		2023	3.6	5.7	5.6	3.2	5.6	5.4
50	Royalty rate at *LS* = 0.4	2019	3.2	6.7	5.2	2.7	7.0	5.0
51		2020	3.5	6.3	4.6	3.0	6.0	4.1
52		2021	3.3	5.8	3.9	2.9	5.3	3.6
53		2022	4.1	6.7	5.0	3.8	6.6	4.8
54		2023	4.1	6.5	6.4	3.7	6.3	6.2
55	Royalty rate at *LS* = 0.45	2019	3.6	7.6	5.9	3.1	7.9	5.6
56		2020	3.9	7.1	5.2	3.4	6.7	4.7
57		2021	3.7	6.5	4.3	3.2	5.9	4.1
58		2022	4.7	7.5	5.7	4.2	7.4	5.4
59		2023	4.6	7.3	7.1	4.1	7.1	7.0

End of Table 5

Line No.	According to the Online Media Information Resource SPARK for OKVED 26.20	Period	ROS — industry return on sales (operating margin), OKVED code 26.20, %			EM — industry return by EBIT (operating earnings), OKVED code 26.20, %		
			Median	Arithmetical average	Weighted average	Median	Arithmetical average	Weighted average
60	Royalty rate at *LS* = 0.5	2019	4.0	8.4	6.5	3.4	8.8	6.2
61		2020	4.3	7.9	5.8	3.8	7.5	5.2
62		2021	4.2	7.2	4.8	3.6	6.6	4.5
63		2022	5.2	8.4	6.3	4.7	8.2	6.0
64		2023	5.1	8.1	7.9	4.6	7.9	7.7
65	Royalty rate at LS = 0.6	2019	4.7	10.1	7.8	4.1	10.5	7.5
66		2020	5.2	9.4	6.9	4.5	9.0	6.2
67		2021	5.0	8.7	5.8	4.3	7.9	5.4
68		2022	6.2	10.1	7.6	5.7	9.9	7.2
69		2023	6.2	9.8	9.5	5.5	9.5	9.3
70	Royalty rate at *LS* = 0.7	2019	5.5	11.8	9.1	4.8	12.3	8.7
71		2020	6.1	11.0	8.1	5.3	10.5	7.2
72		2021	5.8	10.1	6.7	5.0	9.2	6.3
73		2022	7.2	11.7	8.8	6.6	11.5	8.4
74		2023	7.2	11.4	11.1	6.4	11.1	10.8
75	Royalty rate at *LS* = 0.8	2019	6.3	13.5	10.4	5.5	14.0	10.0
76		2020	6.9	12.6	9.3	6.1	12.0	8.3
77		2021	6.7	11.6	7.7	5.7	10.5	7.3
78		2022	8.3	13.4	10.1	7.6	13.2	9.5
79		2023	8.2	13.0	12.7	7.4	12.7	12.4
80	Royalty rate at *LS* = 0.9	2019	7.1	15.2	11.7	6.1	15.8	11.2
81		2020	7.8	14.2	10.4	6.8	13.5	9.3
82		2021	7.5	13.0	8.7	6.4	11.8	8.2
83		2022	9.3	15.1	11.3	8.5	14.8	10.7
84		2023	9.2	14.6	14.3	8.3	14.3	13.9
85	Royalty rate at *LS* = 1	2019	7.9	16.9	13.0	6.8	17.5	12.5
86		2020	8.7	15.7	11.6	7.6	15.0	10.3
87		2021	8.3	14.5	9.6	7.1	13.2	9.1
88		2022	10.3	16.8	12.6	9.4	16.5	11.9
89		2023	10.3	16.3	15.9	9.2	15.9	15.5
90	Sample parameters for which the industry royalty rate at *LS* = [0.1; 0.5] is in the range from 0.7 to 8.8%	Period	Number of firms in the sample	Intangible assets [1110], billion rubles	Revenue [2110], billion rubles	Profit [2200], billion rubles	Assets [1600], billion rubles	EBIT, billion rubles
91		2019	376	1.057	113.400	14.764	96.372	14.145
92		2020	410	2.217	159.600	18.463	142.615	16.515
93		2021	401	0.993	105.100	10.124	82.021	9.532
94		2022	408	1.870	174.000	21.940	141.135	20.772
95		2023	447	2.012	179.000	28.433	153.366	27.683

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CRITICAL ASPECTS OF THE USE OF ARTIFICIAL INTELLIGENCE IN THE LEGAL PROFESSION

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Abstract.
What is the current and potential relationship between automated processing tools for legally relevant data and the performance of the legal profession? Is it possible to consider whether there is a potential for synergy, integration, or alternation between classical human legal activities and procedurally designed algorithmic processes? What definitions and control mechanisms would be required for the potential avenues of inquiry into this subject, given the need to comply with existing principles and guarantees?

Keywords: Artificial intelligence, legal defense, legal profession, rights, guarantees

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1. Regarding the complex relationship between artificial intelligence and the legal profession, some preliminary questions can be advanced.

Firstly, it must be determined whether automated processing tools aimed at the interpretation of law, which can compare normative data and jurisprudential decisions, can be of assistance to those in the legal profession. If this is the case, it is necessary to identify the conditions under which they should be used. Moreover, if implemented, should legal algorithms be regarded solely as supplementary activities or even as substitute actions for the work of lawyers? In light of these considerations, what assumptions should be made about the extent to which it is permissible for part of legal activity to be computerized? Thus, the question arises whether and to what extent institutional control mechanisms should be implemented with a view to ensuring compliance with existing procedural principles and substantive legal guarantees.

In attempting to provide at least partial answers to these questions, in a reconstructing and explorative perspective, it can be posited that the professional activities performed by attorneys are, at least in part, defined by their technical foundations and the creative processes inherent in the practice of law. If the role of the lawyer is to present a particular party's point of view, thus contributing to the trial dialectic, and to compare and have that perspective compared with even opposing ones contrib-

uted by other parties, it is essential that the arguments put forward, whether directly or indirectly based on documentation, be subjected to a rigorous and systematic examination. This examination must take place within the formal legal system and within the decisional framework that has been shaped by the principles of jurisprudence. This interpretive activity, which encompasses both facts and norms, cannot be reduced to a mere act of compilation or verification. Rather, it should be regarded as an activity in itself, one that is inherently and manifestly creative. It is crucial to underscore the significance of this assumption, particularly in light of the potential disruptive implications that may arise in the context of "autonomously" algorithmic computing in new application areas[1]. Accordingly, it is important to highlight that the application of artificial intelligence to the field of jurisdiction is also making changes with regard to the complex activities carried out by lawyers, thereby also affecting the idea and practices of creativity in the legal field.

It is important to note that the gradual consolidation of a legaltech approach with respect to the role played by lawyers can be read as a result of two factors: firstly, the availability of data of a statistical-social, economic, commercial nature, as well as very large documentation of a legal and judicial nature in digital format; and secondly, the usability of applied mathematics and information science techniques, combined with the development of machines with exponentially growing computational potential.

2. These findings raise significant questions regarding the recognition of authorship in the context of works created with the aid of artificial intelligence (AI), with respect to which some critical points should be considered. In the event that a lawyer employs such software for the purpose of generating legal documents, it is imperative that the human contribution be duly acknowledged. This can be achieved by recognizing the unique and original elements that the human input brings to the specification and personalization of the software's output. However, in accordance with the prevailing norms of copyright, the software itself or, even more so, its programmers may be granted the right to legal protection, which is inherent in the recognition of ownership for the intellectual work produced. It is also necessary at this juncture to consider the desirability (or the necessity) of entering into some sort of contractual agreement between the lawyer, the developer of the technologies in question, and the provider of the software, which would set out the conditions under which the program may be used and the authorship of the works generated by its use. In any case, if the value of such algorithmic procedures were to be reclassified as purely tools, these issues would be somewhat overcome at the outset. Nevertheless, it cannot be denied that, in the "exciting" frenzy of maximizing the benefits of the use of artificial intelligence in the legal sphere[2] (even at the hypothetical expense of the public maintenance of professional integrity requirements[3]), this use may become that which mainly determines the documentary and even procedural content of the required legal activity. At this juncture, the creative output may be perceived to be primarily attributable to the formulation of the posed questions and the subsequent verification of the electronically expressed findings. In addition to the dimension inherent to the critical capacity that is consistently present in human acting and thinking (and not in the artificial, which is flattened in the description of prediction, with an inadequacy to assume the datum of implausibility and, above all, with an inability to evaluate sharply the ethicality of something), precisely here can be traced the second place of maximum recognition of authorship (of being the true author) of the professional intellectual work accomplished. It is important to note that there is a social risk associated with the perception that these activities can be carried out by anyone. This perception can lead to a lack of clarity regarding the role of responsibility in the recognition of professional expertise and the professionalization of the activity itself. A certain objectification of responsibility is evident in the reliance on instrumentation, which is presented as both powerful and entirely reliable.

3. These issues thus pertain, in some ways, to the very activity of the lawyer carried out within the legislative and jurisprudential framework and the progressive substitution of many of his tasks.

In light of the technological opportunities that are currently available, it could be argued that the role of the lawyer is rendered superfluous[4]. This is because the lawyer's work appears to be merely a form of packaging, or even a misappropriation of authorship, of information that is already in the form of data and has been transformed into a format that can be used to make decisions. In this scenario, the only remaining entities bearing responsibility would be the holders and objective referents of responsibility, due to their inherent profiles of guilt arising from the only theoretically implementable choice and control over what is algorithmically processed. However, the first and last originator of the proposed legal acts would not be included in this designation.

It should be noted that distrust in the fallibility of humans and the tendency to view nonhuman entities, including machines, as inherently infallible, also plays a role in this context.

Consequently, it may be argued that human activity is almost entirely dependent on computer processing power, with the potential for true creativity, rather than merely being generative. It is evident that one might be

inclined to consider the role of the lawyer as superfluous, and instead allow a non-legal official to input the data to be processed. At this juncture, it is possible to posit that the administration of justice could be carried out in an "impersonal" manner, no longer necessitating the involvement of all the practitioners of the process, including the judges themselves. It is evident that this outcome is the consequence of a simplistic perspective that fails to acknowledge the nuanced, emotionally charged work carried out by legal professionals and the inherently human aspect of judicial decision-making, which is both law-compliant and socially creative.

Furthermore, if the linguistic and intellectual distinction between humans and computers lies in the former's ability to utilize finite tools in an infinite manner, while the latter employs finite combinations of seemingly infinite elements, the misunderstanding arises from the assumption that one can precisely substitute an activity of comparison, assonance, and arrangement of the preexisting with a productive activity of the new (based on a flawed theoretical conception of language and knowledge)[5]. In this context, rather than a replication of human thought in its original dynamics, uncritical artificial intelligence invokes patterns of cognitive connection and especially results of prior thought. Consequently, there is a risk that, by employing the statistical basis of judicial precedent in a simplistic manner, the creative element inherent in the evolution of law, which is derived from human thought, will be lost, thereby preventing the innovative effects that are produced by jurisprudence[6], whether explicitly or implicitly. Nevertheless, it is important to recognize that AI tools may reveal previously unidentified and underrepresented aspects that could be beneficial for legal professionals. Nonetheless, the potential risk in the face of the advantages deriving from automation of repetitive tasks and large-scale data analysis may be precisely that of improperly exchanging aid proposals[7], necessarily instrumental, coming from this sort of "code-lawyers." This is also taking into account the traits of immediacy and the orality characteristics of the procedural rite, especially criminal, as well as the constitutionally inescapable human work in the matter of establishing principles.

4. It is also essential to highlight some critical issues pertaining to the fundamental assumptions underlying the use of the instruments in question.

Firstly, the technical and specialized expertise that lies at the origin and is enhanced through the design and development actions of automation and artificial intelligence devices (which may include symbolic, statistical, generative) is held asymmetrically and largely oligopolistically by market actors. It would be prudent to consider the potential involvement of institutional advocacy in digital design, particularly in the context of "co-design"[8] for program settings that have a direct impact on the jurisdiction. This could involve defining the criteria for quality and security in the analysis and use of socio-judicial information that becomes operational data, with the aim of ensuring the effectiveness of the guarantees formally provided[9]. This could, to some extent, offset the trend towards enhancing work efficiency and reducing costs by compromising extensive areas of privacy and confidentiality.

Furthermore, the personalization of legal activity, which has traditionally been characterized by originality and, even more so, the personalization of its content relative to the subjects it addresses, encounters patterns of standardization of decisional addressing procedures and tendencies to place their results in a median position. The outcomes in question should be subject to careful scrutiny and monitoring by the bar, not least to ensure that they do not lead to any potential misuse.

A related topic is the discussion of the control that can and should be exercised over professional activities conducted through algorithmic tools of this kind[10]. Notwithstanding the hypothetical variety of ways in which this can be implemented, it cannot be ruled out that, even for said activity, computerized procedures of verification could be used, which would make (at least in part) the control carried out on acts that are themselves the result of generative automation "automated", generating a short circuit of information that would be difficult to resolve.

It is possible to place certain cautions on these points. Indeed, in the European Federation, the bar associations have drawn up certain guiding canons that are, at least in part, binding (and bring back the need to reflect on possible integrations and modifications of the deontological codes in force in the various countries). These canons pertain to the use of artificial intelligence mechanisms in the legal profession. In June 2023, the New Technologies Commission of the European Bars Federation (Fédération des Barreaux d'Europe) proceeded to elaborate seven guidelines with the objective of ensuring the responsible and informed use of these technologies. In order to safeguard ethical parameters and protect client confidentiality, these guidelines address a number of specific concerns, including an understanding of the technology in question, awareness of its inherent limitations, keeping abreast of relevant regulations, integration with human skills, respect for professional secrecy, protection of personal data, and transparent communication with clients. These indications, however, appear to address only some of the existing problems and do not provide a comprehensive understanding of the creative potential of such tools. It seems prudent to note, despite concerns about job security, that the use of artificial intelligence will not replace the lawyer's professional judgment, critical capaci-

ty, and competence. This reiterates the inescapable specialized evaluative discretion for resolving both technical and ethical issues. For automated processing systems, respect for ethical standards can only be activated by prohibitions that, in effect, prevent any discussion of the matter.

However, it is important to note that the convenience of using certain tools in operational contexts may lead to concrete practices of slavish "accommodation" with respect to the results[11], even in probabilistic terms, returned by generative algorithms. This is a matter that warrants careful consideration, particularly given the fact that artificial intelligence algorithms are capable of operating through decision-making processes that are "impenetrable" with respect to their full understanding and explanation. This raises significant concerns about the transparency and interpretability of their outputs, particularly in legal contexts where it is of paramount importance to fully understand the procedures and reasons that underpin any given decision.

Furthermore, if it is commonly agreed that, in the event of potential liability, lawyers who utilize such systems must do so at their own discretion, in accordance with the instructions provided by the manufacturer, and without modifying the programs, altering their operation, or introducing different input data. It can be observed that this regulatory framework, rather than potentially relieving the lawyer of responsibility, seeks to hold the producers and suppliers of the relevant computer programs accountable. This may result in a limitation of the lawyer's autonomy in organizing settings and expanding the complexity of legal computation. While modifications to the program may potentially compromise its reliability, thereby rendering the aforementioned rules generically logical, it is nevertheless evident that these programs do not offer any guarantees of certainty in light of the increasing tightening of the originality of forensic activity (which remains irreplaceable, even from an ethical standpoint, but is informatically constrained). Instead, there is a shift towards broader delegations of computational rationality.

Nevertheless, the most crucial challenge lies in establishing procedures to assist the legal profession, which is confronted with novel developments with essential awareness and questionable competence.

Even if one resolves, with regard to the distinction between civil law and common law legal systems, the distinction between deductiveness and inductiveness in the elaborative process of artificial intelligence (where only the former could theoretically reduce the risk of socio-cognitive bias), the question of defining and arranging the rules of legitimacy and proceduralism remains.

It can be argued that inductively there is a greater tendency to perpetuate distortions (and therefore potential injustices) than can be deductively inferred from the general principles of law and legislation under consideration. However, it is important to recognise the inescapable aspect of qualification of reality, which can be equally susceptible to distortion. It can be argued that inductively there is a greater tendency to perpetuate distortions (and therefore potential injustices) than can be deductively inferred from the general principles of law and legislation under consideration. However, it is important to recognise the inescapable aspect of qualification of reality, which can be equally susceptible to distortion.

In light of these considerations, it seems reasonable to suggest that the aforementioned issues must also be viewed through the lens of a tendency to rely on legal processes of cognitive elaboration that are characterized by a substantial absence of classical responsibility. This is to say that such processes are founded upon a mechanical capacity to will, which is associated with an inability to intend, within an inclination to make technique the expression of a calculating thought that is divorced from emotions and feelings. This, in turn, serves as the engine of institutional functions.

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com/documents/news/2024/05/09/intelligenza-artificiale-per-58-percento-avvocati-opportunita).

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9. It is also noteworthy that the Italian bar's institutional representative body is engaged in deliberations regarding the potential establishment of a control system to certify the use of artificial intelligence applications in law firms. (see *Si è aperto il G7 delle Avvocature a Roma sull'intelligenza artificiale,* at *https://www.consiglionazionaleforense.it/web/cnf-news/-/24697-273*).
10. It is worthwhile to recall the well-known case concerning U.S. attorneys who were sanctioned for producing in court a pleading containing nonexistent court records. This was done through their use of the "ChatGPT" program, which is worthy of further reflection, Bechini U., *L'intelligenza artificiale, i notai e l'avvocato Schwartz,* in *Notariato,* 2023, n. 6, p. 610.
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AUTHORSHIP WITHOUT AN AUTHOR: LEGAL ASPECTS OF WORKS CREATED BY AI

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Abstract. The article explores the challenges posed by the emergence of generative artificial intelligence to copyright law, particularly regarding traditional concepts of authorship and creative works. The author examines the complexities of how the legal system might respond to works created by units of artificial intelligence, suggesting that significant regulatory changes are necessary. Special attention is given to the need for reassessing the legal paradigm in light of the increasing role of artificial intelligence in creating literary, musical, and visual works. The article highlights key issues such as the exponential growth of AI-generated content, which could overwhelm traditional creative markets and reduce human creativity. This could have far-reaching effects on intellectual property protection and the future of cultural production. In response, the author proposes several regulatory approaches, including shortening the protection term for works created by artificial intelligence and introducing limited protection for content created without significant human involvement. The author argues that these measures could help balance innovation with the protection of human creators' interests, ensuring that copyright law keeps pace with technological progress. This approach would help the legal system better preserve the value of human creativity in a world increasingly dominated by automation. It will require a comprehensive review and possible overhaul of existing copyright laws to account for the unique characteristics of works created by units of artificial intelligence.

Keywords: Generative Artificial Intelligence, copyright law, authorship, protection of works, digital technologies, human creativity, intellectual property.

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The emergence of generative artificial intelligence poses a serious challenge to two fundamental principles of copyright: authorship and work. This problem directly concerns the fundamental element of copyright — the author himself, but also indirectly affects the concept of the work. *A work is recognized as a result of the author's creative activity.* [1]. It is impossible to talk about the copyright in the modern sense without an author. Also, even talking about a work becomes difficult when it comes to so-called "content" created by artificial intelligence. It seems that, when considering the scientific literature on this topic in general, the various possible approaches demonstrate the insufficiency of the existing legal paradigm to solve the question satisfactorily. Therefore, it is necessary to develop a new mechanism for the appropriation of works created by artificial intelligence. However, it is also possible to completely eliminate this form of appropriation.

Until recently, only humans could create objects protected by copyright. In addition, works created by people with the help of an artificial intelligence unit (for artificial intelligence units, see Morhat P.M. [2]) also raise questions, since the author is usually considered to be the one who has made certain intellectual efforts in creating the work. In our opinion, traditional copyright is probably experiencing its biggest crisis in its history. E. A. Voinikanis even speaks of a crisis in the current paradigm of intellectual property [3], although at the time of publication of her mentioned work the most powerful generators of artificial intelligence did not exist yet. Especially now? So it becomes clear to us that in the face of new and such fundamental challenges, one cannot simply accept the current legislative paradigm for scientific research as absolute [4]. We must go beyond the current paradigm, turn to other areas of knowledge, as well as to the established socio-economic reality, in order to try to reform or correct it.

First, the traditional figure of the human author is under threat because the carriers of generative artificial intelligence are much more productive "authors" than humans. Of course, there are many different types of literary works. However, it is certain that the efficiency of artificial intelligence carriers is growing at such a rate that they are becoming more and more efficient in various types of works. If we take translations for example, it seems that the translator will become much less in demand and will perhaps turn into a kind of machine translation editor. It would not be surprising if after some time the figure of the translator becomes completely unnecessary, no matter how sad it may be.

So, if some kind of legal protection will be introduced for works created with the help of an artificial intelligence unit, for example, in favor of the copyright holders of these units, the number of works will grow exponentially. Even if the copyright for a work created by an artificial intelligence unit was assigned to the user who gave the unit instructions, the final result would probably not be significantly different. In other words, the number of works will grow exponentially. This can be confirmed by an example of Amazon.com. After the appearance of artificial intelligence generators like ChatGPT, works created with its help have literally flooded Amazon.com. There are many articles on the internet about filling Amazon.com with books created entirely by artificial intelligence units. We can mention an article in the Futurism magazine (The__Bite), published in June 2023, entitled «Amazon Is Being Flooded With Books Entirely Written By Ai. It's The Tip Of The AIceberg.» [5], i.e. Amazon is being filled with books written entirely by artificial intelligence. This is just the top of the iceberg. It is interesting, that the word translated as "filled" means that a flood is occurring. In turn, the magazine "Wired" published an article "Scammy AI-Generated Book Rewrites Are Flooding Amazon" [6], where they show that some people rewrite famous books in a different way using an artificial intelligence unit, calling such works fraudulent. The problem here is not only about hidden piracy, but also about the poor quality of imitations of works made by the artificial intelligence unit. It is important to note that the low quality is not due to the work being done by an AI unit, but to unscrupulous users abusing the service and creating low-quality, unfinished works in an attempt to mislead buyers into thinking they are buying a different work.

These two situations clearly demonstrate at least two aspects of this problem. The first is that such works are entirely written by an artificial intelligence unit. Authors typically use various tools to stimulate their creativity,

and we don't think artificial intelligence units are at odds with this reality. However, whether works are entirely (or not entirely) written by an artificial intelligence unit is a question to which we will return later. The second point of the problem is that artificial intelligence units can easily rewrite entire books with some changes, which, in essence, is an illegal use of someone else's creativity. It is possible that laws in different countries will establish that works created in any way using an artificial intelligence unit will not be protected by copyright. If this happens, serious authors will also lose out on significant assistance in the form of artificial intelligence units that can be used responsibly. It is also necessary to consider whether it is technically and practically possible to recognize whether the "content" was partially written by an artificial intelligence unit, if the passages are scattered or have undergone significant edits. On the other hand, if they have been significantly edited, then, in our opinion, there are no obstacles to recognizing such a work as copyrighted in our opinion.

It is clear that artificial intelligence technologies are developing rapidly, and the pace of this development will only increase. Already at the present stage, the quality of texts created by artificial intelligence units is not inferior to the texts of human authors, if the user works with them correctly. Given that machines can produce texts non-stop, we can expect them to quickly displace many human authors from the market. Even recognizing that there is often no remuneration for the author, such additional competition can cause a person to lose motivation to create works. It is not difficult to imagine an almost monopolization of the market for works by large technology companies if such works would be granted legal protection.

Secondly, it must be recognized that the modern market for copyrighted objects, although quite large, is hostile to authors. Although such platforms as YouTube, Amazon, Litres and others have made it much easier for authors to publish their works and, accordingly, fulfill their social function of distributing works to a wide audience, there is no adequate legal regulation of adhesion agreements for publication at these platforms. Moreover, more practically applicable criteria for assessing the transparency of the work of such platforms are needed. [7].

Despite the discussions about the status of works created by artificial intelligence units become more relevant these days, there are some works that date back as far as the 1980s. Some of them include "Can a Computer be an Author — Copyright Aspects of Artificial Intelligence" by T. L. Butler [8] and "Allocating Ownership Rights in Computer-Generated Works" by P. Samuelson [9]. This question was probably raised by the emergence of Racter, a computer program that created the first book written using artificial intelligence.

So, the first book written by artificial intelligence was published in 1984. The book "The Policeman's Beard Is Half Constructed" [10] was written entirely by a computer program (Racter) and, although grammatically was well written and was not entirely meaningless, it did not contain any real history/poetry, which in the distant 80s only a human could write. A simpler version of Racter was later released as a game named «A Conversation with Racter». Most likely, the scientists considered that the works created by the artificial intelligence unit even in the long term were far from viable. In modern times, the picture is completely different and in this regard, scientists in the field of intellectual property can no longer avoid various issues related to both technology and the growth in the number of works created by artificial intelligence units or with their help. The attention of scientists to this issue was limited, for quite obvious reasons. Perhaps to think about such a question would be to look too far ahead. The strong acceleration of technological development shows, however, that legal scholar must look long into the future, or risk not receiving the answers that modernity demands.

The articles mentioned above, among other issues, consider the authorship of works created using an artificial intelligence unit. This is important to note, because many scholars will naturally try to fit such questions into the traditional copyright paradigm. Although this is the first approach of positive legal scholars, as it has already been said, in the current moment of rapid technological development it is more appropriate to consider the possibility of correcting/adding the copyright paradigm.

In any case, scientific research in this area has not continued since the 1980s, no doubt, because there was no way to economically exploit the works created by artificial intelligence units, at least not in the way literary works are usually used. In fact, the economic factor, the author's ability to receive remuneration, has always been one of the philosophical foundations of copyright protection. It is interesting that G. F. Shershenevich opened his work on copyright with the chapter "The Economic Basis of Copyright" [11]. As a rule, a certain issue only becomes a vector of development of the science of civil law when economic interests are significant, which is understandable. Regarding our topic, economic interests in works, including those created by artificial intelligence units, are quite significant. Therefore, we understand that legal regulation must correspond to the characteristics of such works and civil law researchers must answer the question of what paradigm the legislator should adhere to, as well as who will own the rights and who will be able to economically exploit works created with the help of artificial intelligence units.

In this context, it is important to note that the idea of assigning rights to the copyright holders of an artificial

intelligence unit (as some propose [12]) allows in fact a copyright without an author. Perhaps another branch of law will be created to regulate this issue, which will no longer be a direct concern of copyright researchers. This will not eliminate the problem completely, since protection in favor of the specified copyright holders may lead to a gradual decline in human creativity, although most likely never completely. On the other hand, I am convinced that there has never been a better technological and economic context for protecting the economic interests of authors, rather than third parties engaged in the exploitation of objects protected by copyright. This is our basic thought that drives us and will be discussed further. How to understand the ethical use of artificial intelligence tools to support and enhance human creativity, and discuss works created using an artificial intelligence unit randomly or without significant creativity.

According to the opinion of P. M. Morhatu, one approach to this issue is that the artificial intelligence unit is considered as a tool in the hands of a person, which makes the user (or another person) the owner of the results of intellectual activity created with the help of the artificial intelligence unit. This approach is supported by both judicial practice and legislation in many countries, particularly referring to the Copyright, Designs and Patents Act 1988 (UK) [2]. Clause 3, Article 9 of this Law states: "In the case of a literary, dramatic, musical or artistic work which is computer-generated, the author shall be taken to be the person by whom the arrangements necessary for the creation of the work are undertaken." [13]. Indeed, such a law interprets the issue very carelessly, since, according to this law, if I gave instructions and an artificial intelligence unit produced a work as a result, it will belong to that person (or company, perhaps?), despite the shorter term and the absence of moral rights. [14]. Of course, the question is not that simple, since, for example, ChatGPT can copy parts of other works, which deprives the work of originality. However, this can be largely avoided by giving instructions not to copy anything, but this does not eliminate the risk completely.

Since this is a very new topic, the interaction between humans and machines, as well as the creative process that results from this interaction, are not yet fully understood. Thus, it often seems that legal research treats the issue as if the user gives certain instructions and the computer creates the final result. Of course, that is often exactly what happens, but not always, and this is of great importance in demonstrating that it is possible to combine the human mind with the work of an artificial intelligence unit and get an author's result.

Therefore, we believe that the regulation of the UK Copyright, Designs and Patents Act 1988 is far from ideal. In our opinion, the binomial pair "author and work" should be preserved. The author is the one who created the work (or performed the creative work, also protected by copyright), and the work is the result of the author's intellectual work. In this way it is possible to consider the work as authorial, even if it was created with the help of an artificial intelligence unit, provided that a significant human contribution was made to its creation. In fact, to deny such protection is to ignore a future that seems to be near, when the integration of man and machine will become so significant that the machine will become part of the man through chips or other less invasive means. It seems like an inevitable future, as those who integrate with the machine will be much more productive, and those who don't — will be left behind. However, it is necessary to develop the correct security model, and this is what we will do.

When it comes to copyright protection for intellectual activity, it is assumed that this creativity took place over time and involved thinking, creativity, writing and rewriting. In other words, there was a creative process. Similarly, in scientific works there is literary research on a specific topic, then new ideas arise from this research (and intuition before or after the research, or even before and after), and on this basis the work is created. Of course, this is a simplified description of such a process. There may even be a situation where a person was very inspired when writing his ideas and recorded them. In any case, this process does not necessarily exclude the use of an artificial intelligence unit in the creation of works. This is an extremely important aspect that needs to be considered and will be demonstrated.

But before we talk about how to use artificial intelligence as a tool in the true sense of the word, let's talk a little about some types of works and the process of creating them with an artificial intelligence unit. Let's take, for example, image-generating artificial intelligence units like Midjourney and Leonardo.ai. These tools are used with prompts, that is, commands in which the user describes the image he wants, and the tool creates it. These images become better when the prompt is more detailed. There is even a term "prompt engineering" which describes the art of creating prompts that generate good results. Although there is human activity in describing the image, it is difficult to attribute authorship to the person who created the prompt, since the image is created randomly, although based on the prompt. If the user does not like the images received, he can request new images again with the same prompt (or with a change to it) until the desired result is achieved.

It's also worth noting that there are other ways to influence image creation in Midjourney and Leonardo.ai, such as using seeds. This means that, in addition to the prompt, you can send an image and it will influence

the creation of new images by these artificial intelligence units. In any case, the process of creating images is more or less degree of human intervention occurs in a largely random manner. Therefore, it cannot be argued that human involvement is significant enough to provide a protection as broad as it is in traditional copyright law. One can recall "Jet art", where the canvas is placed behind the turbine of an airplane, the position of the turbine is chosen so that the air flow is directed to the place desired by the artist, and then paint is applied. However, the result of this activity will be random but not a creative. Of course, it is expected in the coming months, that there will be opportunities for artificial intelligence carriers to have a greater influence on the image-making process, so that we can talk about significant human contributions. Most likely, this is what we will come to.

The Suno tool works in a similar way, creating completely realistic musical pieces based on user-defined prompts. The result is also random, but the user can give instructions such as the musical genre, the choice of instrumental or vocal version, and set a theme so that Suno will write the lyrics for the song itself. With these instructions (not necessarily all of them) Suno creates a song. In addition, the user can combine different parts of the song, delete unnecessary fragments, insert new elements such as choruses, and the tool itself connects them in a single whole. This process allows you to have a song that looks solid and professionally produced despite the changes and additions. Additionally, Suno provides the ability to adjust pace and rhythm, select instruments and arrangements, allows to create unique compositions that reflect the user's creative vision.

Of course, in cases of creating music and images using artificial intelligence media, the user can use other tools (Photoshop, etc.) to change the result and create an original work based on it. But we are talking about the creation of a complete work by a specific carrier of artificial intelligence.

Another type of intellectual work that can be created using an artificial intelligence carrier is a literary work. Despite the fact that the process of creation of the carrier of artificial intelligence is not fundamentally different — that means that the carrier of artificial intelligence receives instructions (prompt) and on the basis of this creates the text requested by the user — the interaction between the artificial intelligence carrier and a person is significantly different and, in our opinion, provides a more complete understanding of the issue. If we recall the creation of an image, the user of the artificial intelligence carrier requests an image and receives it. After that, he cannot request changes to a specific image (at the current stage of technology development, perhaps by the time this article is published, the situation will change). The user can reuse the same prompt (or change it) to create new images that are not a continuation of the previous one. It is very important to note that ChatGPT is a chat room. At least in terms of creating texts, we can interact with it and change the text according to our own ideas. With the help of this artificial intelligence carrier, we can change parts of the text, give instructions and thus demonstrate our creativity. Additionally, ChatGPT is a powerful idea generator, allowing a writer who may be running out of ideas for a particular point in their work to turn to ChatGPT for an inspiration. However, he is not obliged to copy the text verbatim; he can and should edit it. In other words, the process of creating a literary work, even with the help of ChatGPT, can be considered completely original.

This logic can also be applied to other types of intellectual works as technology advances and the degree of interaction between the author and the result of that interaction increases. In such a case, it seems entirely possible to assign copyright to works in which human creativity has truly been expressed. Thus, it is important to note that the problem is not the creativity of the machine, but the lack of human creativity. [15]

In his «A Manifesto on WIPO and the Future of Intellectual Property» James Boyle [16] demonstrated the problem of having a single broad regime for all intellectual works. As early as in 2004, James Boyle expressed concern that developing and poor countries were, through international treaties, afforded broad protections that were more widely enjoyed by developed countries. The poorest countries received little benefit, but were virtually forced to provide such protection given the implications of treaties such as TRIPS. Failure to sign TRIPS could lead to problems within the World Trade Organization, which is certainly not desirable for any country. Developing countries also did not get as much benefits as developed countries. However, while this problem remains in many ways, it becomes clear once again that the crisis facing copyright today is largely caused by this single regime for the protection of intellectual works. Not only this, but it is also necessary to either acknowledge the inadequacy of the current paradigm for protecting intellectual works, or consider changing the approach for protection works created by carriers of artificial intelligence. We suppose that new regulation needs to be developed for such works, which in our opinion do not deserve the broad protection reserved for works by human authors. Here we are not talking about works created with the help of artificial intelligence in general, but about those where the level of human contribution is too low to be recognized as original.

It is important to emphasize that the current reality of social relations itself requires such changes. When

talking about copyright, a protected work is implied. To protect a work, it is not necessary that it has got a specific volume or quality; it is enough that it would be the result of intellectual work expressed in a form perceptible to the senses. If you look at the modern reality of blogging and content marketing in general, it becomes obvious that we are talking more and more often not about works, but about "content". At first glance this may seem insignificant, but this shift from work to simple content demonstrates a more frivolous approach to traditionally copyrighted objects. These materials often do not even indicate their author. But even when the author is indicated in the "content," as if there were copyright without the work itself, as states José de Oliveira Ascenção [17].

A more conservative approach could be taken by changing only certain elements of the regulation, such as the duration of protection and moral rights in relation to works of this type. It is possible that there is even no need to recognize copyright to works created by artificial intelligence carriers. In our opinion, it is important to understand how the market functions in relation to works created by artificial intelligence carriers so that an appropriate approach can be developed. Of course, the rapid pace of technological development makes this task more difficult.

When it comes to creating unique images and music, as has been stated earlier, it seems inappropriate to grant copyright protection to these objects created by carriers of artificial intelligence, even if there was some human interaction, at least at the current stage of development of the technology. However, often images, characters, music and other elements are used as parts of complex objects such as cartoons, movies and games. For example, Netflix Japan, citing a labor shortage, has begun using images created by artificial intelligence carriers. Another notable case is the opening sequence of the Marvel series "Secret Invasion", which used only images created by artificial intelligence carriers. In China there was a 70% decrease in demand for illustrators' work [18].

In the production of audiovisual works, protection is provided globally to certain persons (clause 2, Article 1263 of the Civil Code of Russian Federation), who usually assign their rights to the studio. Thus, while there may be questions about third parties using individual elements of a work created by an artificial intelligence unit, such as images or music, the entire work will be protected by copyright. This practice means that even if individual components of a work were created using artificial intelligence, the final work that combines all of those elements will be protected. This allows the copyright holder to reserve rights to their work and prevents illegal use of the final product, although the question of copyright on specific elements created by artificial intelligence remains open. In any case, in 2023, the market size for images created by artificial intelligence carriers has already amounted to 48 billion dollars [18, p. 363].

Our understanding is that if legislation provides for protection of works created by artificial intelligence, this period should be significantly shorter. We propose 10 years for the protection of such works without an author. It is also possible to consider the possibility of introducing the right to the results of the organization of creative activity of artificial intelligence units using their copyrighted work as a seed. A simpler protection for this type of work, which actually has no author, would have several advantages. Firstly, it would resolve the current question of whether such works should be protected. Secondly, the owners of rights to these works would have to weigh the benefits of using an image with limited protection, which might be convenient in some cases and not in others, which would provide certain restrictions on the use of such works due to the short-term nature of their protection. This could provide more work for authors, as their works would be fully and widely protected. Thus, time-limited protection could at least help stimulate creativity to some extent.

Moreover, today we live in a world where content is becoming more and more disposable. Every Instagram* post, every YouTube video quickly loses its relevance and ceases to be the center of attention (if it was ever the center of attention at all) and then, very often, loses its meaning. In reality, there is far more content and/or works than any person could possibly consume in a lifetime. Art created by artificial intelligence units is widely used by small content producers, often to promote their social media profiles, and therefore a shorter period of protection would be ideal for these citizens, who are often more concerned with competition issues than copyright protection itself. Such limited protection would allow creators to focus on their competitive advantages while ensuring fair use of artificial intelligence carriers generated content.

Another important aspect that should be enshrined in legislation is to provide the responsibility of the copyright holder for possible plagiarism committed by artificial intelligence. It is clear that problems with plagiarism committed by artificial intelligence will decrease, but they can still arise, so such responsibility must be provided. Such responsibility will help users to use the artificial intelligence unit more seriously and carefully. This will also indirectly help develop methods for detecting borrowings in images, songs, etc., by giving special importance to originality.

On the other hand, it does not seem right in the discussed cases to provide such protection as copyright, since there is no author and, consequently, no work, at

least in the traditional sense of these terms. Except, of course, in cases where the human contribution is significant. However, such contents could be considered as an exclusive right and protected as intellectual property. In any case, regardless of the presence of protection, the artists and musicians market has significantly shrunk and will most likely continue to shrink. In other words, the development of artificial intelligence technologies seriously contradicts the main purpose of copyright and intellectual property in general: stimulus to innovate and create intellectual works. Therefore, there is always the option of classifying such objects as public domain, as P. Samuelson proposed back in the 1980s [9].

It is even possible to provide royalties to the creator of an artificial intelligence unit for some (or all) uses of the works they create. However, it seems that the market does not need this, and this is not the expectation of the owners of these units, contrary to the opinion of those who believe that the rights to these objects should belong to the owner of the unit [12]. Perhaps a better option is to provide the right of the copyright holder of an artificial intelligence unit to demand a pre-set one-time payment, in accordance with the platform's terms of use agreement, in order for the user to be able to exploit the work. In turn, the work would be protected for a short period, for example, 10 years. We believe it is important to go beyond simply thinking about who will own the possible copyright. Why not consider in such cases the aforementioned one-time payment to the copyright holder of the artificial intelligence unit with which the object was created? Such payment will grant the user an exclusive right to use the work for a specified period, even if that period is significantly shorter than provided for works created primarily by man.

It is important to note that the content creation market is partially moving from an author mentality to a simple service provision mentality. Someone is hired to create a work, shall it be an artist, a musician, or just someone who can write a good prompt, and the user creates the work and can use it economically. Works often have short-term use (as in the case of marketing posts on Instagram[1]), and protection is not so necessary in this case, that is why a few years is more than enough. Moreover, creating your own original post is so easy that plagiarism is becoming less of a concern with the advent of these new technologies. From the point of view of service provision, we see that there is no need for extensive protection and moral rights.

In any case, we must understand that it is necessary to think beyond the current copyright paradigm, which, in our opinion, is completely insufficient. Not only in the area of copyright, but in general, the digital economy requires modernization of legislation [19]. On one hand, it is impossible to provide broad protection to millions of objects that appear every day and do not require legal protection. On the other hand, the simple use of an artificial intelligence tool cannot serve as a pretext for completely excluding the protection of a work in which there is sufficient human contribution.

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About the UNESCO Chair on Copyright, Neighboring, Cultural and Information Rights at HSE University

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The UNESCO Chair on Copyright, Neighboring, Cultural and Information Rights (abbreviated as UNESCO Chair of the HSE University) was built by the Agreement between UNESCO and the National Research University "Higher School of Economics" (HSE University) dated August 7, 2020.

The Chair traces its history back to the UNESCO Chair on Copyright and Other Intellectual Property Rights, established by initiative of the Permanent Representative of the Russian Federation to UNESCO in 1993–1998, Ambassador Extraordinary and Plenipotentiary (ret.), Doctor of Legal Sciences, Professor Mikhail Fedotov. The agreement on the organization of the UNESCO Chair was signed on June 12, 1998.

UNESCO Chair realizes versatile research, education, consulting, and expert activities in the field of freedom of creativity and freedom of expression, legal and ethical aspects of information pluralism. The Chair works on the progress of the informational society and multilingualism in cyberspace. Chair toils on overcoming the digital divide, transhumanism technologies, and the impact of artificial intelligence on social and legal institutions. All this requires the stable functioning of an open discussion platform for the exchange of opinions, discussion of ideas, transfer, and knowledge popularization.

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