

THE IMPACT OF GENERATIVE ARTIFICIAL INTELLIGENCE ON REGULATION OF LEGAL NORMS AND SOCIAL RESPONSIBILITY

Aleksey Minbaleev*

Doctor of legal Sciences, Professor
Head of the Department of Information Law and Digital Technologies,
Kutafin Moscow State Law University (MSAL), Moscow, Russia
ORCID: <https://orcid.org/0000-0001-5995-1802>
e-mail: a.v.minbaleev@mymail.academy

Yury Svirin

Doctor of legal Sciences, Professor,
Academy of Natural Sciences and Fundamental Sciences, Moscow, Russia
ORCID: <https://orcid.org/0000-0001-7616-2637>
e-mail: y.a.svirin@mymail.academy

Sergey Solovkin

PhD in Law, Lecturer at the Department of Information Law and Digital Technologies,
Kutafin Moscow State Law University (MSAL), Moscow, Russia
ORCID: <https://orcid.org/0000-0002-3708-1137>
e-mail: s.v.solovkin@mymail.academy

Kira Taran

PhD in Law, Senior Lecturer at the Department of Information Law and Digital Technologies,
Kutafin Moscow State Law University (MSAL), Moscow, Russia
ORCID: <https://orcid.org/0009-0005-0119-0277>
e-mail: k.k.taran@mymail.academy

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ABSTRACT

The study examines the legal and ethical implications of generative artificial intelligence (AI) within the field of law and social responsibility. Purpose of the study was to identify the main risks associated with the use of generative AI and offer measures for responsible regulation. The main research methods chosen were legal analysis drawing on information law, ethics, and digital governance. The research contrasts national and foreign practices, drawing on key regulatory frameworks such as the Russian AI development strategy, the EU AI Act, the GDPR, the U.S. Blueprint for an AI Bill of Rights, and China's regulations on generative AI, to evaluate how different jurisdictions manage questions of creative ownership, responsibility, transparency, and data protection. Based on the results, it was indicated that current norms leave significant gaps, particularly regarding the improper use of machine-generated material, breaches of personal information, and manipulation of digital records. The article highlights the importance of introducing clear identification of AI-created outputs and defining duties for those who design or employ such tools, to sustain public confidence in digital justice. It concludes that the responsible use of generative AI depends on finding equilibrium between technological progress and the defense of individual freedoms. Its main contribution lies in

defining generative AI as a complex informational object and outlining directions for future regulation that link legal norms with ethical and social accountability.

Keywords: generative artificial intelligence; large language models; deepfakes; legal responsibility; information technology.

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RESUMO

O presente estudo analisa as implicações legais e éticas da inteligência artificial generativa (IA generativa) no âmbito do Direito e da responsabilidade social. Busca-se identificar os principais riscos associados ao emprego dessa tecnologia e propor diretrizes para uma regulamentação responsável. A pesquisa adota análise jurídica fundada no Direito da Informação, na ética e na governança digital, bem como comparação de práticas nacionais e internacionais. São examinados marcos regulatórios relevantes, como a Estratégia Russa de Desenvolvimento de IA, a Lei de IA da União Europeia, o Regulamento Geral de Proteção de Dados (GDPR), o Plano de Ação dos Estados Unidos para a Declaração de Direitos da IA (*AI Bill of Rights*) e as regulamentações chinesas sobre IA generativa. A partir dessa análise, verifica-se que as normas atuais apresentam lacunas significativas, especialmente no que se refere ao uso inadequado de conteúdos produzidos por sistemas automatizados, às violações de informações pessoais e à manipulação de registros digitais. Evidencia-se a necessidade de mecanismos de identificação das produções geradas por IA e da definição de deveres jurídicos e éticos para desenvolvedores e usuários dessas ferramentas, a fim de preservar a confiança pública na governança digital. Conclui-se que o uso responsável da IA generativa depende do equilíbrio entre inovação tecnológica, proteção de direitos fundamentais e fortalecimento da responsabilidade ética e social.

Palavras-chave: inteligência artificial generativa; modelos de linguagem de grande escala; *deepfakes*; responsabilidade legal; tecnologia da informação.

1 INTRODUCTION

Over the past few years, artificial intelligence technologies (hereinafter - AI), and particularly generative AI, have begun to play a fundamental role in the evolution of the information society, radically altering strategies for the creation, dissemination, and interpretation of data (Polyakova et al., 2023; Kumar et al., 2024). Such technologies already being actively implemented in business, governance, science, and legal practice (Madanchian, Taherdoost, 2025). With each successive generation of AI models comes novel capabilities and accompanying legal questions that are becoming applicable to the development of these technologies (Guler et al., 2024; Rashid, Kausik, 2024).

Generative AI applications can produce text, images, video, audio, and computer code given a prompt text. Applications of generative AI raise various legal and ethical considerations. The major issues raised so far are copyright, liability for an action based on an AI-generated conclusion, privacy, transparency of algorithmic techniques, and automated AI participation in evidence-based litigation (Al-Busaidi et al., 2024; Novelli et al., 2024; Li et al., 2025). Specifically, problematic issues include how to categorize AI-generated texts and images from the point of view of copyright; who is responsible for infringements when these are the outcome of flawed or deceptive AI outputs; and so forth (Duivenvoorde, 2025; Quintais, 2025). Most of these questions are still beyond the purview of detailed legal regulation under both Russian and international law.

Scientific doctrine provides multifarious scientific approaches to the legal nature of AI and generative AI. A number of states and supranational entities are already developing frameworks for special legal regulation in this sphere: United States, European Union, China, South Korea, Russian Federation (China, 2023), etc.

In addition to legal and ethical implications, the development of generative AI raises issues of social responsibility. Legal regulation shouldn't only contain the use of technologies but also promote their ethical and just development in the interest of society and maintain trust.

The purpose of the article was to describe the legal, ethical and social dimensions of generative artificial intelligence (AI), analyze its most severe risks, and suggest a possible regulatory framework for generative AI technologies that can ensure innovation while protecting fundamental rights and freedoms.

2 METHODS

The methodological basis for the study was chosen as a systematic combination of general scientific and special legal methods, which allows for a thorough consideration of the legal nature of generative artificial intelligence as a complex object of information law, based on systemic and structural-functional approaches.

In the context of social responsibility, interdisciplinary and epistemological approaches also see legal regulation as a way to guide the development and use of technologies towards social values and ethical responsibility. The study focused on several national and foreign legal documents such as Russian National Strategy for the Development of Artificial Intelligence Presidential Decree n° 490 (Russian Federation, 2019), Federal Law n° 149-FZ (Russian

Federation, 2006): “On Information, Information Technologies and Protection of Information”, and relevant provisions of the Civil Code of the Russian Federation n° 51-FZ (Russian Federation, 1994), particularly those governing copyright, software, databases, and personal data.

The methodology also included review of foreign regulatory acts and policy frameworks. Those which were adopted in the European Union, the United States, and China currently set the most influential global standards in the governance of artificial intelligence. Thus, authors examined the EU AI Act: first regulation on artificial intelligence (2023), the General Data Protection Regulation (GDPR): Regulation (EU) 2016/679 (European Union, 2016), Blueprint for an AI Bill of Rights (United States, 2022) and China’s Interim Measures for the Management of Generative Artificial Intelligence Services (China, 2023).

Thematic modeling was used to describe legal definitions of AI and its status as a separate informational-intellectual entity. Comparative-legal and doctrinal methods were used to compare the regulation of the informational-intellectual specifics of AI in foreign countries and analyze Russian law's readiness for the digital transformation challenges. Both techno-legal methods and concretization were applied to the questions of validity of AI-produced outcomes, authorship and fault, and normative definition. Epistemology was used to explore the change in legal thinking in the digital age. This interdisciplinary synthesis of communication theory, information technology and ethics improved understanding of the key risks and opportunities for the legal regulation of generative AI technology.

3 RESULTS

It was noted, that social responsibility in designing and deploying generative AI could become an important part of digital transformation. So, its implementations needs to be measured not just in terms of efficiency but also its social and ethical impact.

Generative AI and neural networks are able to carry out an immense number of tasks in analytics and the generation of diverse works—scholarly papers, artistic works, reports, such as writing drafts, translating, analyzing, and making reports and presentations. When the medium is image, video, music, or audio, generative AI can: generate and edit images, introducing creative features and modifying graphics; create artworks in particular styles and designs; make videos from still photos; edit and process video; and synthesize and edit sound and speech. These technologies are now used even in the historically cautious legal profession.

Lawyers utilize generative AI actively to prepare different legal documents, draw up analytical briefs and memoranda, and work out case strategies for litigation.

The adoption of such technologies in legal practice should follow principles of professional and social responsibility. This includes ensuring that AI-generated legal documents or analyses do not distort legal reasoning, compromise confidentiality, or mislead parties involved in judicial processes. Establishing clear standards of social accountability for the use of generative AI in the legal profession is essential to maintain public confidence in justice and uphold ethical practice.

In recent times, Russian and foreign literature have been increasingly featuring research works devoted to the special legal issues of generative AI. Prior to referring to the legal problems of the usage of generative artificial intelligence (hereinafter – AI), it is required to preliminarily consider the legal nature of artificial intelligence in general and the specific legal features of generative AI itself.

3.1 The legal definition and status of artificial intelligence

In most nations of the globe, artificial intelligence (AI) is seen as a complex of technological solutions, incorporating different technologies and tools like software for electronic computing devices, databases, or their combinations, along with information on the most effective methods of their usage. As per the provisions of the National Strategy for the Development of AI until 2030, such technological solutions also comprise information and communication infrastructure, data processing procedures, and decision-making services (Russian Federation, 2019). Therefore, the legal nature of AI as a subject of legal relations presupposes that it should be viewed as a complex, integrated informational object made up of several informational components, some of which may be as follows:

1) A collection of data and other information, such as the original data used in machine learning and artificial intelligence development, as well as the data created in databases and their systems (datasets, ontologies). “A set of data that is structured or grouped by specific characteristics, complies with the requirements of the legislation of the Russian Federation, and is necessary for the development of computer programs based on AI” is the definition of a dataset (Russian Federation, 2019). A lot of archival data, industrial data, personal data, medical information, and restricted-access information (like trade

secrets and know-how) is also shared within the framework of AI. This group also includes a lot of creative works, like books, photos, videos, and other works. These are the kinds of works that generative AI is most often used to make;

2) A set of informational, including digital, technologies. They are different “processes, ways of searching, collecting, storing, processing, providing, distributing information, and means of implementation of such processes and methods” (Russian Federation, 2006). Hence, digital technologies are considered a subtype of information technologies with their distinguishing factor being the mode of operation, i.e., they name the processes and methods for working with information in a digital environment.

From the standpoint of social responsibility, such complexity also implies collective accountability. The creation, training, and deployment of AI systems involve numerous actors — developers, users, and regulators — each bearing a share of responsibility for ensuring that AI outputs serve legitimate and socially beneficial purposes.

However, the most cited digital technologies that involve AI relate to treatments, making decisions. AI systems, on the other hand, consider trusted AI technologies, which are technologies that guarantee and meet safety standards, and are developed according to principles of objectivity, non-discrimination, and ethics—those technologies that foreclose even the remote possibility of harm to humans, violation of the fundamental rights and freedoms of any individual having an interest in society or the state. Such technologies are considered under a special regulatory regime and should, therefore, become subject to specific binding requirements concerning AI;

3) Information systems. Though they are not clearly called as a type of technological solution, it might be said that the legislator includes within such solutions the information and communication infrastructure, data-processing and decision-making services, software, databases, and assemblies thereof. An information system is defined as “a set of information contained in databases and the information technologies and technical means that enable its processing” (Russian Federation, 2006).

Insofar as these are part of the information and communication infrastructure to which they belong and constitute part of the different services employed in AI, the least that can be said is that information systems are operating software (computer programs) and databases;

4) An information and telecommunications network is a technological system built for transmitting information over communication lines, with access being provided by

some computing device (Russian Federation, 2006). It is often part of the infrastructure of information and communication as an AI technological component, especially in cases where the operation involves interaction with information and telecommunications networks, such as with the Internet.

5) Software for electronic computing machines, or computer programs. It refers to the definition of “a set of data and commands presented in an objective form intended for the operation of Electronic Computing Machines (ECMs) and other computing devices to achieve a particular result, including preparatory materials produced during the development of an ECM program, and audiovisual displays generated thereby” (Russian Federation, 1994). Operating systems and software packages are examples of computer programs. They can be written in any language and form, such as source code and object code.

AI models are one of the most important types of ECM software in AI. They are “computer programs (or their components) intended for performing intellectual tasks at a level comparable to or exceeding the results of human intellectual activity, using algorithms and datasets to identify patterns, make decisions, or predict outcomes” (Russian Federation, 2019).

Among AI models, a distinction should be made between the following categories:

- Large foundational models, which are AI systems that serve as the basis for the development and refinement of various types of software. These models are trained to recognize specific patterns, contain at least one billion parameters, and are designed to perform a wide range of tasks (Russian Federation, 2019).

- Large generative models, which are capable of interpreting and generating multimodal data—such as text, images, and video—at a level comparable to or even exceeding human intellectual performance. For example, they can provide informative responses based on user queries (e.g., identifying objects in an image or analyzing a piece of text) (Russian Federation, 2019). These models form the technological core of generative AI.

Software and hardware systems, or multiple interconnected complexes designed for data processing and problem-solving (including computational tasks), often operate as a unified infrastructure and constitute what are generally referred to as computing systems;

6) Databases. A database is defined as “an objectively presented collection of independent materials (such as articles, calculations, legal acts, court decisions, and similar

resources) organized in a way that allows them to be retrieved and processed using a computer” (Russian Federation, 1994). Databases, along with other types of information assets, are integral components of AI technologies.

Thus, from a legal perspective, AI must be considered in the context of the specific legal features of several distinct informational objects. Each of these components has its legal status and is subject to a particular regulatory framework. At the same time, AI as a whole represents a complex form of intellectual property — a multifaceted legal construct encompassing several protected results of intellectual activity. These include copyright-protected works (such as software and databases), neighboring rights (e.g., database content), trade secrets (know-how), and objects of patent law.

Hence, AI can be construed as a database of techniques involving information technologies, including digital technologies, and other informational assets that allow for the solving of tasks which traditionally have demanded human-level cognition, and in some instances, have surpassed human cognition. From the point of view of the institute of information law, AI constitutes a complex informational object — a specialized subject of informational legal relations functioning as an integrated system composed of a plurality of informational elements. The legal regime of such a complex informational object involves the concomitant use of at least two different informational components, each of them governed by its own set of legal rules (Minbaleev, 2024).

A wide conceptual approach to defining AI would fully acknowledge the potential of these technologies to serve any number of challenges plaguing every area of public life. Depending on the purposes for which a system employing AI is constructed and on the characteristics of such a system, targeted legal requirements can be laid down. The model thus forms the basis for a flexible regulatory framework capable of accommodating further evolution in AI technologies.

3.2 Specific features of the legal nature of generative artificial intelligence

Generative AI is one kind of AI system based on large generative models. This new generation of AI is somehow different from existing ones due to its understanding of certain inputs (e.g., answering questions about objects in a certain image or what kind of content is contained within analyzed text) and its capability to generate multimodal output, such as the generation of text, images, and video, at a level comparable to or even superior

to human intelligence. From a legal standpoint, what essentially distinguishes generative AI from other forms of AI or similar technologically driven enterprises is the generation of multimodal content, possibly including texts, images, or video materials, for given prompts. The system thus generates its outputs by performing an interpretation of whatever data has been uploaded for its use and annotated during the process of training. It is important to note that the multimodal data generated by such systems are based on a finite and predefined dataset. In contrast to the emerging class of agent-based AI, which is capable of independently retrieving relevant information, generative AI operates solely within the framework of interpretative possibilities derived from previously established data sources. Therefore, its outputs are not the result of autonomous data acquisition but of inference from constrained inputs.

Recognizing generative AI as both a technological and social construct underscores the need to frame its regulation within a paradigm of shared responsibility. Ensuring that AI-generated content contributes to the public good and does not undermine democratic values is a fundamental element of social responsibility in the digital era.

One may regard generative AI as an advanced technological setup that brings together an array of information technologies and other information-related elements like information systems, datasets, telecommunication networks, and infrastructural frameworks for their integration in one place. Such a configuration equips the system to interpret input data (e.g., identifying objects in an image or interpreting the meaning in a text) and generate multimodal content (texts, images, video materials, and so on) with a degree of sophistication traditionally associated with human intellectual activity or even beyond.

3.3 Challenges of using generative AI in the legal domain

At the core of generative AI lie large language models, which, in other words, are neural network architectures built on transformer mechanisms. Models such as GPT, BERT, T5, ruGPT, and their derivatives are trained on extensive text corpora that include books, academic articles, legal documents, internet content, and other sources. As a result, these systems acquire the ability to produce logically coherent texts while adapting to the style and context of user queries.

The increasing use of generative AI in law has both potential benefits and drawbacks.

Below are some of the most important, and timely, applications of this technology within the practice of law. The pace of scientific information and the ever-increasing corpus require legal scholars to compare huge amounts of data on a large scale. However, the sources may vary in their relevance and trustworthiness and differentiating them can be complex. The generative and analytical AI algorithms behind smart tools play an important role in this. Tools such as Semantic Scholar, Elicit, Scite, Dimensions, Consensus, and others also help to analyze these publications, collect citations, and identify new academic trends, as well as visualize the relationships between research topics.

The most advanced of these systems are able to perform semantic search, searching for documents based not just on keywords in a document, but also on the meaning of the document. Such semantic searches are particularly useful in legal research, where the same legal concepts are often described differently in different legal areas, schools of thought and jurisdictions. Some systems can then automatically summarize those articles, extract the main thesis of the articles, and even output a comparative chart, thereby fundamentally changing the task of conducting legal research.

Systems for automatic analysis of case law content are of particular interest to lawyers. An example is the Russian Sutyazhnik from the Garant Research and Software Center. Furthermore, such techniques making it possible to enter the text of any legal document and find a whole list of courts of general jurisdiction and arbitration courts decision applicable to it, taking into account the content of the document, are of great importance at the stage of forming legal positions, especially when judicial practice is one of the main sources of legal positions.

One other significant field that is rapidly evolving with the help of generative AI is the visualization of legal data. Law might seem, at first glance, a text-based science, yet even here, visual lucidity can make the difference. Sophisticated legal procedures – be they enforcement algorithms, judicial system structures, litigation procedural phases, or the interconnections among legal norms and court verdicts – are more easily understandable in chart, diagram, map, or infographic form. There are a wide variety of programs, including Tableau, Datawrapper, Google Charts, Canva, Visme, and more specifically data-oriented programs such as Julius and Napkin AI, which allow users to create explanatory infographics for academic papers and educational presentations.

Modern infographic makers include smart algorithms to select how to represent data; systematic, automatic data layouts; and enormous libraries of templates. Such tools are effectively used in the area of legal education, for example, to produce visual aids such as

presentation slides, explanatory diagrams, and documents accompanying expert reports for the courts.

Also important are applications of generative AI to audio and video. Speech recognition and speech synthesis are the two most common. Examples include Salute Speech, Whisper, VALL-E, and many more. It can be used to assist in transcription in court hearings, interviews, lectures, seminars and assignments, as well as in the production of high-quality voiceovers including legal documents. Using this software can greatly improve the speed of documentation and analysis and can help in making the law more accessible to the visually and hearing impaired.

As well, voice cloning allows the generation of speech that may be indistinguishable from an actual speaker, which raises numerous ethical and legal questions. Questions identify the user, allow the user to consent to use of vocal data, and act as evidence in legal proceedings. Laws will need to evolve in order to take into account the unique features and issues posed by technologies that are still in their infancy.

Video Lectures generation is another rapidly growing area where video lectures can be created by adding a speaker and a voiceover to a presentation, in such applications as HeyGen and Visper. Being able to automatically generate multilingual versions of such materials, with built-in translation and contextualization, renders technologies like these particularly useful for sharing legal knowledge on an international scale. This is especially promising in the fields of continuing legal education and lawyers' professional development.

The use of generative AI tools in audio-visual media is also associated with important risks, in particular, the development of deepfake content, which is already being used as evidence in courts and for identification purposes. Consequently, the question of obligatory marking of AI-generated content is now being actively discussed both in Russia and around the world (Bryukhovetsky, 2024).

Although interaction with large language models seems to be straightforward, the relevance and accuracy of their output rely significantly on the quality of the initial query. This puts in perspective the phenomenon of prompt engineering — a practice of developing structured and contextually accurate instructions input into the model. A good prompt contains not just a task definition, but also role, context, objective, and detail level specifications. For example, in the case of generating a legal opinion using generative AI assistance, the model should be instructed to use a legal style of writing, adhere to the relevant regulatory environment, and follow legal argumentation logic. In this regard, the key challenge is

achieving a balance between programming and law expertise. It is thus extremely important to engage legal experts in the process of creating large generative models intended for legal use.

Generative AI does not answer questions solely based on its training data but tends to produce information that is invented or estimated. Its responses' accuracy and reliability are directly proportional to that of the training data. If the model is trained on an open set of online sources, it learns from all publicly available internet content, irrespective of credibility. Training AI on a filtered and reviewed dataset is more suitable if accuracy and reliability are critical, for example, in scientific or legal research. The utilization of factual, legal, medical, or scientific data generally produces better quality results but also generates concerns regarding the use and security of personal data (Dobrobaba, 2023). Conversely, tight data constraints can limit the breadth and depth of AI answers since the model works within tighter knowledge boundaries. The user, unlike the model, can reformulate their questions iteratively until they get a response that matches their expectations. This presents two significant risks: firstly, the devaluation of knowledge, and secondly, the creation of content that is not suitable for public release.

AI systems tend to internalize erroneous logical sequences and mistaken mathematical calculations, then replicate them in their responses as a result of an intrinsic disparity between machine processing and human perception of reality. AI does not perceive mistakes within the information it is given, taking them as originally correct. Additionally, it does not check, and, more importantly, is not always in a position to check the validity of the information that users present in their inquiries. Although the application of AI to resolve everyday legal issues is undoubtedly possible, its inability to assess information properly can generate serious problems. Specifically, AI systems can fail to comprehend intricate legal phenomena like essential legal principles like justice, equality before the law, and the rule of law and to keep up with the swift evolution of legislation. In this sense, numerous modern legal researchers and legal professionals believe that it is necessary to legally demarcate the area of acceptable AI uses particularly generative AI within certain areas of law (Grishchenko, 2019).

Globally, the development of AI systems in national languages is followed by adaptation to national legal systems. The appearance of the Russian language and legal tradition-oriented models has made it possible for a more active introduction of generative AI into Russian legal practice. Of particular interest are the examples of Sber GigaChat, YandexGPT, and DeepSeek—all three of which are attuned to comprehend and generate legally applicable content in the Russian language. The models are integrated into the ecosystem of leading digital

platforms, which makes it easy for them to be widely used in both corporate and academic legal spheres.

Generative artificial intelligence tools are increasingly being used in the generation of legal documents, the organization of document workflows, the preparation of legal memoranda, and the analysis of normative legal texts (Li, 2023). In addition, these tools can aid in the generation of summaries related to court practices, the production of contract templates, and the construction of legal arguments applicable to typical or recurrent situations. However, in all these applications, an essential issue arises about responsibility for the accuracy of the produced texts and the permissibility of their use without further legal review.

This problem becomes particularly acute when generative artificial intelligence is used in official legal proceedings, e.g., litigation. It is not uncommon for parties to fail to reveal that a document was generated with the help of AI. In some cases, fake judicial decisions are artificially generated and presented as if they reflect established legal doctrines applicable to the issue under dispute or even presented to the court as a ground for influencing judicial decisions.

Given these dangers, there is a growing need to determine legal accountability for the use of false or misleading outputs from artificial intelligence in formal government agencies, as well as the need for greater accountability when such content is introduced in court.

Legal researches show more interest in and worry about AI technologies used in legal contexts. To deploy AI-based systems can increase efficiency and improve outcomes within the judicial system. However, some barriers relate to social responsibility and ethical issues. Several studies within an international context (Cárdenas, Molano, 2021; Cárdenas, Molano, 2024; Tirso Ester Sánchez, 2025) can reference these types of concerns. These results can provide perception into how AI can be implemented in the field of law whilst providing social responsibility and fairness.

As the use of AI in the justice system increases, Alghizzawi et al. (2024) consider social responsibility as a key issue, and that regulation must keep pace with technological advancements. Other commentators warn that if AI systems are given discretion it risks a decline in professionalism and a loss of confidence in the legal system. As AIs take more control of parts of the legal system, from making rulings to predictive policing, social accountability will need to be legislated. There will be an intrinsic balancing act between the protection of the individual and their rights and not reinforcing stereotypes or discrimination, on the one hand, and building an infrastructure to allow further development and ethical use of technology, on

the other.

These ethical concerns show the importance of the use of AI in lawyering as demonstrated in Cárdenas & Molano (2021) but also the importance of maintaining the human parts of adjudication. This is to say, although algorithms make lawyers' and judges' jobs easier by reducing the number of low-level tasks they need to perform, too much dependency on their decisions may weaken them as adjudicators because of the subjectivity and context sensitivity they are capable of. There are also worries about algorithmic bias and algorithmic opacity. If people cannot determine what an AI algorithm outcomes, they cannot judge its process as fair, especially its use in a legal context where its use to determine someone's fate is concerning.

Furthermore, to modernize justice systems requires one to follow ethical principles with prioritization of fairness and inclusion. In the opinion of Tirso, the use of AI tools in the field of justice requires a critical analysis of the ethical principles of their use. AI can have a positive impact, if AI is developed and implemented in a responsible way within the legal domain. However, when AI develops and is used, it must respect society's ethical values in addition to individuals' rights. One important function of the law is to provide justice and promote human dignity. National and international legal frameworks should promote respect for social responsibility in AI governance. So, the role of AI in the law becomes an opportunity and a challenge.

3.4 Copyright challenges in the application of generative AI

In spite of the evident benefits of generative AI, its mass adoption is followed by a range of legal ambiguities. Among the most urgent issues is the one of authorship and the legal status of AI-assisted outputs. To date, Russian law and most foreign legal systems do not consider AI a legal entity that can possess rights, including copyright or exclusive intellectual property rights. That gives rise to the essential question of who owns the result produced by the system: the user, the developer of the algorithm, or the provider of the platform?

Also contested is whether users have rights to prompts they feed to generative AI models. For example, the user will generally not hold copyright of an image generated by a generative AI model from the user's prompt, as copyright will instead tend to be retained by the operator of the generative AI model. Human prompts inform further improvements to the model, and the system continues training by solving novel tasks. They are generally one-off and cannot be replicated by other users. Because they are the result of a creative effort, they are

arguably copyrightable. An user's right to privacy can be violated if they prompt the program with private or protected data that is returned in the output.

Generative AI also sparks worries about originality and novelty, which are requirements for copyright protection, since generative AI is often trained on datasets that comprise copyrighted text, images and other works. Such issues raise a number of legal questions that need to be resolved not only from the perspective of intellectual property law but also from the perspective of social responsibility. National legislation must specify the allocation of rights concerning outputs generated with the assistance of generative AI systems, ensuring equitable recognition of human creative contributions and the protection of cultural and informational diversity in training datasets. Embedding social responsibility into these legal frameworks will help balance innovation with respect for authors' rights and societal interests.

3.5 Ethical concerns in the application of generative AI

Ethics also plays a central role (Neznamov, 2024). The usage of generative AI raises ethical concerns, such as misattribution of work to the wrong author, misunderstanding research outcomes, and generating an illusion of analytical comprehension, despite the agent lacking knowledge of the underlying subject or research. AI systems deployed in courts need to meet high standards of accuracy, verifiability, and transparency, or they would pose an unreasonable threat to the right to a fair trial (Bodrov & Lebedeva, 2024).

Algorithmic bias and discrimination are also considered concerns with algorithms. If they are trained to optimize using datasets that are historically biased, algorithms may reproduce or increase these patterns and biases. These findings have been documented in AI use in recruitment, credit risk assessment of loan applicants, and predictive policing, but in law enforcement and court decisions this is unacceptable. Their use requires an algorithmic ethical and legal audit that uses rigid standards, especially in the face of the decisions made by a public authority.

Equally important will be establishing the ethical governance principles of generative AI systems in the context of social responsibility. Principal science and technology organizations have expressed the concept of "responsible AI", which promotes fairness, explainability, safety, privacy, reliability, and resiliency in the development and deployment of the technology. However, it has proved difficult to put these principles into practice, not least because ethical codes tend to be unenforceable. Private for-profit actors are not likely to self-

regulate voluntarily in the absence of additional legislation. Therefore, in addition to constructing ethical governance of generative AI systems and their accountability, formal legal regulation of generative AI will also be important to construct a framework of social accountability. This means not only compliance with the law, but the prevention of harm, the advancement of fairness, and the promotion of goodwill in the administration of law. These should be pursued in the development, deployment, and use of AI, and serve as guidance for the responsible development of generative AI for social good and for technology that advances peaceful, just, and inclusive societies and the rule of law.

4 CONCLUSION

The following conclusions were made as a result of the study:

1. The legal description of artificial intelligence in the context of legal relations presumes that it should be viewed as a complex, composite informational entity that comprises multiple informational components. AI is a synthesis of information technologies, including digital technology, with other informational entities that provide problem-solving at the level of, or surpassing, human intelligence. From an information law perspective, AI is a special type of informational object in legal relations, existing as an integrated system consisting of various informational components. Additionally, AI is classified as a composite intellectual property object, comprising different protected results of intellectual activities, such as copyrightable subject matter (software, databases), neighboring rights (content of databases), trade secrets (know-how), and patented inventions.

2. Generative AI can be described as a technological system that combines a set of information technologies and related objects (information systems, data sets, telecommunication networks, and the infrastructure facilitating their interaction), which is tasked with interpreting inputs (e.g., recognizing objects within images or processing text) and creating multimodal content (texts, images, videos, etc.) at a level that is comparable to or even better than a human intellectual production.

3. One of the most urgent challenges involves the question of legal liability. Should the person who created the prompt be accountable? Who created the model? Who hosts the AI service? The question of whether responsibility is to be collective or apportioned to the individual case is not clearly or consistently answered in modern law. In fact, some jurisdictions do not even offer the basic procedural tools to ascertain the origin of the mistakes or the

violations of existing laws committed in cases involving an AI system. This calls for legal recognition and regulation at the national level.

4. A matter of urgency relates to the need for legal transparency of generative AI models. The requirement to disclose training datasets, the underlying rationale for algorithmic processes, and the parameters dictating decision-making is fundamental to competent legal oversight. However, developers often invoke trade secret protections to keep details about how their models work hidden. This creates a tension between the public's right to reliable information and the developers' right to protect intellectual property. Resolving this conundrum requires legislative intervention to create clear guidelines for a balance between public interest and proprietary rights. Particular attention should also be drawn to the increasing dangers of informational manipulation. Generative models can not only generate texts mimicking legal or scientific styles but also create forged documents, fake visual materials, audio recordings, and even deepfake videos. This creates a challenge to the admissibility of evidence and erodes the basis of judicial processes, requiring new verification tools. In this regard, the implementation of a system of legal labeling of AI-generated content such as digital signatures or metadata could be important in the future. There is an urgent need to introduce legal liability for using deceptive AI-generated outputs in government agencies and to hold individuals to a stricter account when such materials are utilized in judicial proceedings.

5. Generative AI systems are both a powerful driver of digital transformation and a significant cause of legal uncertainty. Their integration into legal, educational, and scientific fields holds potential for optimizing the efficiency and availability of legal services and knowledge. At the same time, the fact that there are unsettled legal and ethical problems regarding authorship, liability, transparency, bias, and misuse demonstrates the need for comprehensive legal regulation of relations in the field of generative AI.

6. Regulatory frameworks at national and international level should be balanced, and promote innovation in ways that safeguard fundamental rights and freedoms. This balanced regulatory approach should be shaped and pursued by legal professionals, software engineers and cybersecurity experts, as well as civil society representatives. Only through this collective effort can a regulatory framework be established for generative AI to be integrated into the digital ecosystem in a lawful and respectful manner.

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