UDC: 004.8, 340.12, 342.7, 342.9
DOI https://doi.org/10.37772/2309-9275-2025-1(24)-3
JEL classification: K00, O33, K24

THE IMPACT OF GENERATIVE ARTIFICIAL INTELLIGENCE ON THE LEGAL SYSTEMS OF CONTEMPORARY STATES

Andrii HACHKEVYCH 0000-0002-8494-1937[1]

[1]*Lviv Polytechnic National University, Lviv, Ukraine*

Abstract. This article examines the modernization of legal systems in response to the effects of technological development, a topic that has gained increasing relevance for contemporary states, particularly with the rise of AI. As generative AI systems emerge, capable of producing new information in different formats that resemble the results of human creativity, the importance – and with it the potential danger – of AI has become even more significant. This article aims to summarize and systematize the factors through which generative AI impacts the legal systems of contemporary states, using the case of Ukraine – a representative of the Roman-Germanic legal family. The analysis of these factors involves comparing different types of interests associated with each identified factor and highlighting key issues that could facilitate the modernization of a legal system within the possible spectrum outlined by the author. The article presents the author's definition of generative artificial intelligence as AI technologies used to produce texts, images, audio, and video through "synthetic creativity" based on user instructions. The conclusions drawn in this article aim to enhance understanding of generative AI and its societal effects, particularly regarding the factors that determine the possibilities for improving existing legal systems.

Keywords: artificial intelligence; AI and human rights; disinformation; generative artificial intelligence; generative AI systems; GenAI models; legal systems of modern states; modernization of a legal system; personal data protection; technological progress.

INTRODUCTION

As technological progress transforms society, the law must also evolve. On the one hand, it should enhance access to the latest technologies so that people will meet their needs more efficiently and with fewer resources. On the other hand, the law must protect society from emerging dangers. Artificial intelligence (AI), a significant outcome of technological progress, presents unprecedented opportunities – such as improved healthcare and increased productivity – alongside serious risks. Minimizing these risks is one of the tasks of a legal system.

This article examines the modernization of legal systems in response to the effects of technological development, a topic that has gained increasing relevance for contemporary states, particularly with the rise of AI. The risks associated with AI have been acknowledged since the advent of early pre-generative AI systems, including a lack of objectivity in decision-making, the ability to perform various types of tasks, which leads to a decrease in the number of jobs, and the security threats of cyberattacks and lethal autonomous weapons. As generative AI systems emerge, capable of producing new information in different formats that resemble the results of human creativity, the importance – and with it the potential danger – of AI has become even more significant.

AI-posed risks – both longstanding and newly identified — are increasingly relevant and influence current trends aimed at improving legal systems to better regulate the creation and use of technologies. This area remains one of the most complicated for jurisprudence, as the pace of technological development often outstrips the evolution of positive law. The core of this study is the factors

influenced by generative AI, which constitute a complex set of issues and lead to the challenges that necessitate systematic examination.

THEORETICAL FRAMEWORK

The growing interest of researchers in generative AI is evident in Ukrainian research. Various aspects of generative AI are being explored in publications, including the development of national and international policy (H. Androschuk, O. Baranov, N. Vinnykova, T. Katkova, O. Kostenko). An increasing number of articles demonstrate the possibilities of generative AI systems and the challenges it presents across various fields, such as business process optimization (Ivanenko & Pichyk, 2024), marketing and trade (Oliinyk, 2023), data analysis (Skitsko, 2023), programming (Boiko et al., 2023), and psychology (Melnyk et al., 2024). These challenges, risks, and opportunities are illustrated in part by assessing the level of trust in AI (Androschuk, 2023).

Of particular note is the valuable and progressive monograph by D. Lande and V. Furashev (Lande & Furashev, 2023), along with O. Baranov's recent publication, which is the first part of a comprehensive study entitled "The Existential Nature of Determining the Paradigm of Legal Regulation of the Use of Artificial Intelligence" (Baranov, 2024).

However, there is an urgent need for Ukrainian scholars to establish a theoretical foundation for elaborating the general approach and improving the legislation. This will be facilitated by a better understanding of the impact of generative technologies of AI (such as ChatGPT, GitHub Copilot, Synthesia, etc.) on the legal sphere. Ukrainian authors like V. Bazalytskyi, M. Bereda, D. Bielov, M. Bielova, O. Punda, and K. Rezvorovych have investigated personal data protection issues related to GAI. Meanwhile, K. Zerov, Y. Kapitsa, S. Kholiavko, H. Androschuk, Y. Bysaha, M. Bielov, and V. Zaborovskyi have focused on protecting copyright and other intellectual property rights. Ukrainian science is also increasingly interested in the means of propaganda, disinformation and manipulation involving AI systems (O. Kuznetsova, R. Lorian, O. Petriv). At the same time, more works have been published on how AI helps counter disinformation and manipulation.

Foreign researchers have made significant contributions to the study of generative AI as well, with works by F. Fui-Hoon Nah et al. (2023), P. Hacker et al. (2023), and A. Bandi et al. (2023), among others, covering various aspects of the subject. One of the most popular research areas is the application of generative AI systems in education.

METHODOLOGY

The concept of generative AI serves as the foundation of this study. Using a comparative method to examine existing definitions within national and international legal frameworks, we propose a broad definition of generative AI, focusing on its features.

We address the cause-and-effect relationship between the influencing factors of generative AI and the resulting challenges in the legal domain. This analysis highlights the often conflicting interests of individuals, IT companies, and governments representing society in general. We focus on specific factors associated with generative AI that differentiate it from the factors previously discussed in the context of earlier AI technologies, such as biased decision-making, system insecurity and vulnerability, and threats of military applications, all of which remain relevant today. Key issues include the legality of using data for training AI models and operating AI systems, the legal evaluation of generated content, and the reliability of generative AI outputs.

Through synthesis, we identify various dilemmas which reflect current legal challenges posed by the rise of generative AI and present a corresponding range of solutions.

Ultimately, by explaining and generalizing the factors influencing the imact of generative AI systems on the legal systems of contemporary states, this article enhances the understanding of

generative AI and its implications for society. This understanding may lead to improvements in the legal systems of different legal families.

We base our results on the legal framework of Ukraine as an example representative of the Roman-Germanic legal family.

RESULTS

The term "generative artificial intelligence" came into use as a result of the creation of the latest AI systems that were able to produce new types of output data in various formats, ranging from answers to questions typical of conversational chatbots to online services that can generate videos based on user prompts.

We have summarized the definitions of generative AI from several recent documents, including those from UNESCO, OECD, the Canadian Cyber Defense Center, and the Infocommunications and Media Development Authority of Singapore. These documents are part of both national and international legal frameworks. Below, we present the most important features of generative AI as outlined in each definition (Table 1).

Table 1. Comparative characteristics of existing definitions of generative AI

Name of a document	Relationship to AI	Whai it is capable of
Guidance for generative AI in education and research (UNESCO)	AI technology	automatically generates content in response to prompts written in natural-language conversational interfaces (UNESCO, 2023, p. 8).
Towards a G7 Common Understanding on Generative AI (OECD)	form of AI model	produce new digital material as an output (including text, images, audio, video, and software code), including when such AI models are used in applications and their user interfaces (OECD, 2023, p. 6).
Cyber security guidance on generative artificial intelligence (AI) – ITSAP.00.041 (Canadian Centre for Cyber Security)	type of AI	that generates new content by modelling features of data from large datasets that were fed into the model (Canadian Centre for Cyber Security, 2023).
Model AI Governance Framework for Generative AI (Infocomm Media Development Authority)	AI models	capable of generating text, images or other media types by learning the patterns and structuring their input training data (AI Verify Foundation, 2024, p. 3).

China's Interim Measures for the Management of Generative Artificial Intelligence Services is a pioneering regulatory framework and one of the first in the world to specifically address generative AI as a subject of regulation. Adopted by the Cyberspace Administration of China in coordination with several other government authorities, this document offers a clear and precise definition of generative AI: Article 22 encompasses models and related technologies capable of creating text, images, audio, video, and other types of content (Cyberspace Administration of China, 2023). While we find this wording particularly effective, we will also provide our definition as the following: *Generative artificial intelligence refers to AI technologies that produce text, images, audio, and video through the process of "synthetic creativity" based on user instructions.*

Generative AI belongs to the family of AI, and thus, all the characteristics of AI, as well as the challenges it poses, apply to generative AI systems. Moreover, an essential aspect of generative AI is

inherent in its name and explains its role. The word "generative" means having the power or function of generating, originating, producing, or reproducing (Merriam-Webster Dictionary, 2025), which is facilitated by a unique methodology for training AI models on large data sets. Our definition includes the rather controversial term "synthetic creativity," which we believe aptly describes the ability of generative AI to produce new content. This creativity, being "synthetic," however this term is not well-accepted yet, arises from prompts, given by a user, which may include specific content requirements or stylistic preferences, alongside the functionality of an AI system itself, developed through modern software advancements and trained on vast amounts of data. The concept of "synthetic creativity" in AI is explored in greater detail in another publication by the author, which is currently being prepared for release ("Synthetic creativity" of generative artificial intelligence poses challenges for legal protection of copyright and related rights).

Table 2 outlines six factors through which generative AI (or GenAI) affects the legal systems of contemporary states and the challenges it presents. Each factor is examined through the lens of the conflicting interests of individuals, IT companies and governments representing society, which are in line with Ukrainian laws. Additionally, we pose specific questions that highlight dilemmas for lawmakers and propose a range of potential solutions.

Table 2. Analysis of GenAI-related influencing factors on a legal system

Influencing factors	Conflicting interests	Issues and prospects for legal regulation
The effectiveness of GenAI systems depends on the large datasets used for training, the quality of which ultimately determines the overall accuracy of GenAI's outputs. **Challenge 1.** Use of copyrighted works and related rights objects, as well as personal data (confidential information) for training GenAI models.	The copyright holder has the right to authorize or prohibit the use of their work by others (Article 12) along with the holders of corresponding rights for related rights objects (Articles 38-41) (Supreme Council of Ukraine, 2022). Additionally, the rights of individuals regarding confidential information and personal data protection are enshrined in Article 32 of the Constitution of Ukraine (Supreme Council of Ukraine, 1996) and the Law of Ukraine on Personal Data Protection (Supreme Council of Ukraine, 2010b). IT companies are allowed to operate in accordance with their registration documents, which may include the development and use of GenAI systems following Section 62 of the Classification of Economic Activities SC 009:2010 (Supreme Council of Ukraine, 2010a). To fulfil the obligations of contracts supporting the automation of the process for the benefit of a contracting party, they may provide both existing and newly developed software.	One pertinent issue is the use of published works that are not yet in the public domain, as well as datasets containing personal data and other confidential information for training AI models. *The spectrum* of this issue ranges from the freedom to train AI models to the need for obtaining permission to use works or other protected objects and data, excluding public domain and open access materials.

Influencing factors	Conflicting interests	Issues and prospects for legal regulation
GenAI systems process data and present their outputs based on copyrighted works and related rights objects, as well as personal data. **Challenge 2.** Uploading copyright and related rights objects alongside personal data and confidential information in order for GenAI to create the expected content.	The first group of interests is grounded in Articles 12, 38-41 of the Law of Ukraine on Copyright and Related Rights, as well as Article 32 of the Constitution of Ukraine and the Law of Ukraine on Personal Data Protection (Supreme Council of Ukraine, 2010b; Supreme Council of Ukraine 2022). Freedom of information exchange and the right to information, which includes, among other things, the permission of unrestricted use and dissemination of information (Article 5 of the Law of Ukraine on Information) (Supreme Council of Ukraine, 1992).	Should the law oblige developers to prohibit users from entering certain information for GenAI processing, or should it support the enhancement of the internal operations of a GenAI system to ensure data anonymity? *The spectrum* here ranges from the freedom to input any information to the technical ability to download only freely available information.
Modern GenAI systems are capable of creating content in various formats (audio, images, video, and text) that can imitate new works or other objects of intellectual property rights protection. **Challenge 3.** GenAI outputs resemble elements of training datasets and contain personal data and other confidential information.	All that is listed above.	If the use of GenAI might lead to the unauthorized borrowing of parts of copyrighted works or other infringements of intellectual property rights, as well as the disclosure of personal data or other confidential information, who is responsible for it? Again, *the spectrum* varies from the freedom to train AI models to the necessity of obtaining permission to use specific works or other protected objects and data.
Modern AI systems produce highly realistic content that can be indistinguishable from fake content. **Challenge 4.** The outputs of GenAI are convincing (given the hyper-realistic content) and increase the threat of propaganda, manipulation and disinformation.	IT companies are allowed to create new software, including those related to GenAI systems, as permitted in their registration documents. At the same time, individual developers enjoy creative freedom in this regard. However, preventing disinformation and combating propaganda are vital national interests. Various attempts have been made in Ukraine's legal system to regulate national information security, including two draft laws: the 1999 Draft on Information Sovereignty and Information Security of Ukraine (Supreme Council of Ukraine, 1999) and the 2020 Draft on Amendments to Certain Legislative Acts	Should there be restrictions on the purposes for which AI-generated content is developed or used, such as propaganda, manipulation and disinformation? How can these restrictions be effectively implemented in the developing process, using an AI system, or distributing its content? *The spectrum* ranges from the freedom to create any content and distribute it freely to banning certain AI systems due to their potential risks.

Influencing factors	Conflicting interests	Issues and prospects for legal regulation
	of Ukraine on Ensuring National Information Security and the Right to Access Reliable Information (the latter commonly referred to as the "draft law on disinformation") (Ukrainian National Information Agency, 2010).	
When interacting with a GenAI system, a user may feel as though they are engaging with an expert in fields like medicine, legal advice, or economics. **Challenge 5.** The imitation of humans during interactions, including the mimicry of trusted experts.	IT companies are allowed to develop new software, including related to GenAI systems, as permitted in their registration documents. Individual developers also possess the freedom to express their creativity in this regard. Freedom of information exchange and the right to information, which, as outlined in Article 5 of the Law of Ukraine on Information, includes the ability to search for and obtain information freely (Supreme Council of Ukraine, 1992). Typically, individuals assume that the information they receive is reliable unless explicitly stated otherwise.	Should users of a GenAI system be held responsible for making decisions based on the information they receive? How can developers and providers of GenAI systems ensure that users understand that the information is not of human origin? *The spectrum* ranges from freely distributing AI systems that imitate experts to completely banning them. A more balanced approach may involve determining the conditions under which these systems produce results, such as through labeling.
The suitability of GenAI systems for learning to produce some kind of intellectual creation as a result. **Challenge 6.** The ability of GenAI to perform tasks that previously required a high level of qualification, such as software development and roles in creative industries.	According to Article 43 of the Constitution of Ukraine, everyone has the to work, which encompasses the opportunity to earn a living through a job that a person freely chooses or accepts (Supreme Council of Ukraine, 1996). More specific details can be found in the Law of Ukraine on Employment of the Population (Supreme Council of Ukraine, 2013). Creative industries and IT companies can choose how to optimize their processes, whether by hiring specialists for certain tasks—often at a high cost—or by using GenAI systems that may produce lower-quality results but at a lower price. Although most GenAI systems require a fee, they are generally less expensive than human resources. Fighting unemployment and ensuring job opportunities for the population are traditional responsibilities of the government.	Are there valid reasons for banning the use of AI in the creative industries and software development? Should the law restrict specific activities to human involvement? Governments may consider providing benefits, such as tax incentives, to companies that employ non-artificial specialists instead of relying on GenAI systems. *The spectrum* varies from allowing creative industries and software companies the freedom to choose whether to utilize AI over human resources to legally recognizing a monopoly for humans in specific areas.

DISCUSSION

The problem of modernizing a legal system in response to technological progress is complex. This complexity is exacerbated by the fact that, in addition to the challenges stemming from the rise of pre-generative AI technologies—such as bias in decision-making, suitability for human labor, security risks related to military use, and cyber threats—with the emergence of generative AI capable of producing new content in various formats, national laws should be updated given the new conditions.

First, there is an increasing need for legal protections surrounding intellectual property, personal data or other confidential information, acknowledging that the General Data Protection Regulation establishes high standards for the legal system of Ukraine to follow.

Second, generative AI technologies are often misused for propaganda, manipulation and disinformation. We support the raising of the question of whether the provisions of the Criminal Code of Ukraine are sufficient to combat these issues. In addition to criminal law, the Supreme Council of Ukraine is expected to adopt special laws to address disinformation and enhance national information security.

Third, the regulation of information as an object is incomplete. The emergence of generative AI additionally emphasizes this incompleteness. People naturally tend to trust the information they receive unless there are compelling reasons not to. Unfortunately, this ability at the present becomes harmful to them. They may not always recognize that the source of this information is not necessarily an expert but could be a software program.

Fourth, this article discusses the right to work and employment, particularly as generative AI impacts creative industries, software development, journalism, psychology, and other branches of activity where humans previously held a monopoly on jobs.

GenAI-related influencing factors can be grouped into three categories:

– those related to the development of generative AI models and their training based on large data sets,

– those related to the use of GenAI capabilities in the form of "synthetic creativity," which involves user inputs to generate texts, images, audio, and video,

– those related to the societal impact of the content produced by generative technologies of AI, especially concerning propaganda, manipulation and disinformation.

Furthermore, we can categorize influencing factors based on whether they relate to input data (i.e., data entered into the system) or output data (i.e., creations generated by the system and stored within it).

Another classification of factors can be made according to the object of influence: human rights, democratic values, corporate interests, which aim to earn revenue, and national security. Conflicts can arise between these values.

Among the areas we have not explored is the impact of AI on fraud. This is becoming more and more evident, particularly through fake audio recordings where a person impersonates a company's CEO and instructs the transfer of funds to criminals.

CONCLUSIONS

Our research indicates that generative AI poses multiple challenges for legal systems, which demonstrate its impact on society and are related to various areas of the national legislations of contemporary states, including civil, labor, administrative, economic, criminal, and information law. The diversity of these related fields of law underscores the correctness of a systematic perspective when solving the problems of generative AI systems development and use. We do emphasize the importance of studying their phenomenon in an inter-field legal context.

Generative AI, much like AI itself, remains a significant macro factor influencing a legal system and causes several micro factors described in this article.

Trends of modernizing the law will continue in the coming years. We believe that a balanced approach to improving legal systems that considers fundamental values and the co-existence of different types of interests should be applied in the future. This balanced approach will ensure fairness and equity within the legal system of contemporary states, providing effectiveness in this evolving landscape.

REFERENCES

AI Verify Foundation. (2024). *Model AI Governance Framework for Generative AI*. https://aiverifyfoundation.sg/wp-content/uploads/2024/05/Model-AI-Governance-Framework-for-Generative-AI-May-2024-1-1.pdf

Androschuk, H. (2023). Level of trust in artificial intelligence: analysis of global research results and the state in Ukraine. *Information and Law,* (4), 217-231.

Bandi, A., Adapa, P. V. S. R., & Kuchi, Y. E. V. P. K. (2023). The Power of Generative AI: A Review of Requirements, Models, Input–Output Formats, Evaluation Metrics, and Challenges. *Future Internet, 15*(8), 260.

Baranov, O. (2024). Existentiality of defining the paradigm of legal regulation of the use of artificial intelligence (part 1*). Information and Law, 1,* 45-61.

Boiko, V., Vasylenko, M., Slatvinska, V. (2023). Programming with generative artificial intelligence systems: risks and challenges. *Information Technologies and Society, 8*(2), 18-26.

Canadian Centre for Cyber Security. (2023). *Generative artificial intelligence (AI) – ITSAP.00.041*. https://www.cyber.gc.ca/en/guidance/generative-artificial-intelligence-ai-itsap00041

Cyberspace Administration of China. (2023). *Interim Measures for the Management of Generative Artificial Intelligence Services (in Chinese)*. https://www.cac.gov.cn/2023-07/13/c_1690898327029107.htm

Fui-Hoon Nah, F., Zheng, R., Cai, J., Siau, K., & Chen, L. (2023). Generative AI and ChatGPT: Applications, challenges, and AI-human collaboration. *Journal of Information Technology Case and Application Research, 25*(3), 277–304.

Hacker, P., Engel, A., & Mauer, M. (2023). Regulating ChatGPT and other Large Generative AI Models. In *Proceedings of the 2023 ACM Conference on Fairness, Accountability, and Transparency (FAccT '23)* (pp. 1112-1123). Association for Computing Machinery.

Ivanenko, A., and Pichyk, K. (2024). Generative models of artificial intelligence as an effective tool for optimizing business processes. *Empirio, 1*(1), 112-121.

Lande, D., Furashev, V. (2023*). Parliamentary control using generative artificial intelligence: monograph*. Engineering LLC.

Melnyk, M., Malynoshevska, A., Androsovych, K. (2024). Generative artificial intelligence in psychology: implications and recommendations for science and practice. *Information Technologies and Learning Tools, 103*(5), 188-206.

Mirriam-Webster Dictionary. (2025). *Synthetic*. https://www.merriam-webster.com/dictionary/generative

OECD. (2023). *G7 Hiroshima Process on Generative Artificial Intelligence (AI). Towards a G7 Common Understanding on Generative AI*. https://www.oecd-ilibrary.org/science-and-technology/g7-hiroshima-process-on-generative-artificial-intelligence-ai_bf3c0c60-en

Oliynyk, I. (2023). Prospects for the implementation of generative artificial intelligence in the field of marketing and trade. *Scientific Bulletin of the Flight Academy. Series: Economics, Management and Law, 8,* 110-115.

Proposed Model AI Governance Framework for Generative AI Fostering a Trusted Ecosystem. AI Verify Foundation. URL: https://aiverifyfoundation.sg/downloads/Proposed_MGF_Gen_AI_2024.pdf

Skitsko, V. (2023). Data analysis using generative artificial intelligence: opportunities and challenges. *Problems of economy,* (4), 217-225.

Supreme Council of Ukraine. (1992). *Ukraine's Law on Information (in Ukrainian)*. https://zakon.rada.gov.ua/laws/show/2657-12#Text

Supreme Council of Ukraine. (1996). *The Constituion of Ukraine (in Ukrainian)*. https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80#Text

Supreme Council of Ukraine. (1999). *Draft of the Law on Information Sovereignty and Information Security of Ukraine (in Ukrainian)*. http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?pf3511=6670

Supreme Council of Ukraine. (2010a). *The Classification of Economic Activities SC009:2010 (in Ukrainian)*. https://zakon.rada.gov.ua/rada/show/vb457609-10#Text

Supreme Council of Ukraine. (2010b). *Ukraine's Law on Personal Data Protection (in Ukrainian)*. https://zakon.rada.gov.ua/laws/show/2297-17#Text

Supreme Council of Ukraine. (2013). *Ukraine's Law on Employment of the Population (in Ukrainian)*. https://zakon.rada.gov.ua/laws/show/5067-17#Text

Supreme Council of Ukraine. (2022). *Ukraine's Law on Copyright and Related Rights (in Ukrainian)*. https://zakon.rada.gov.ua/laws/show/2811-20#Text

Ukrainian National Information Agency. (2024). *Draft law on disinformation in the Rada at the "stage of proposals" – Yurchyshyn*. https://www.ukrinform.ua/rubric-polytics/3833077-zakonoproekt-pro-dezinformaciu-u-radi-na-stadii-propozicij-urcisin.html

UNESCO. (2023). *Guidance for generative AI in education and research*. https://unesdoc.unesco.org/ark:/48223/pf0000386693

ВПЛИВ ГЕНЕРАТИВНОГО ШТУЧНОГО ІНТЕЛЕКТУ НА ПРАВОВІ СИСТЕМИ СУЧАСНИХ ДЕРЖАВ

Анотація. У статті досліджується модернізація правових систем у відповідь на наслідки технологічного розвитку — тема, яка набуває все більшої актуальності для сучасних держав, особливо у зв'язку з розвитком штучного інтелекту. Зі зростанням ролі генеративних систем ІІІІ, здатних створювати нову інформацію в різних форматах, що імітують результати людської творчості, значущість і водночас потенційна небезпека ІІІІ стали ще відчутнішими. Метою статті є узагальнення та систематизація чинників, через які генеративний ІІІІ впливає на правові системи сучасних держав на прикладі України — представника романо-германської правової родини. Аналіз чинників включає порівняння різних типів інтересів, пов'язаних із кожним визначеним чинником, і виокремлення ключових проблем, які можуть сприяти модернізації правової системи в межах запропонованого автором спектру можливостей. У статті подано авторське визначення генеративного штучного інтелекту як технологій ІІІІ, що використовуються для створення текстів, зображень, аудіо та відео шляхом «синтетичної креативності» на основі інструкцій користувача. Висновки, зроблені в статті, мають на меті поглибити розуміння генеративного ІІІІ та його суспільного впливу, особливо щодо чинників, які визначають можливості вдосконалення існуючих правових систем.

Ключові слова: штучний інтелект; ІІІІ та права людини; дезінформація; генеративний штучний інтелект; генеративні системи ІІІІ; моделі GenAI; правові системи сучасних держав; модернізація правової системи; захист персональних даних; технологічний прогрес.

THE IMPACT OF GENERATIVE ARTIFICIAL INTELLIGENCE ON THE LEGAL SYSTEMS OF CONTEMPORARY STATES

Abstract. This article examines the modernization of legal systems in response to the effects of technological development, a topic that has gained increasing relevance for contemporary states, particularly with the rise of AI. As generative AI systems emerge, capable of producing new information in different formats that resemble the results of human creativity, the importance—and with it the potential danger—of AI has become even more significant. This article aims to summarize and systematize the factors through which generative AI impacts the legal systems of contemporary states, using the case of Ukraine—a representative of the Roman-Germanic legal family. The analysis of these factors involves comparing different types of interests associated with each identified factor and highlighting key issues that could facilitate the modernization of a legal system within the possible spectrum outlined by the author. The article presents the author's definition of generative artificial intelligence as AI technologies used to produce texts, images, audio, and video through "synthetic creativity" based on user instructions. The conclusions drawn in this article aim to enhance

understanding of generative AI and its societal effects, particularly regarding the factors that determine the possibilities for improving existing legal systems.

Keywords: artificial intelligence; AI and human rights; disinformation; generative artificial intelligence; generative AI systems; GenAI models; legal systems of modern states; modernization of a legal system; personal data protection; technological progress.

Cite this article: Hachkevych, A. (2025). The impact of generative artificial intelligence on the legal systems of contemporary states. *Law and Innovative Society, 1*(24), 37–46. doi: https://doi.org/10.37772/2309-9275-2025-1(24)-3.