

УДК 34:347

DOI: 10.36550/2522-9230-2025-18-276-280

**Olha Zyhrii,**

candidate of economic sciences, associate  
professor, associate professor of the department of civil  
law and procedure of  
West Ukrainian National University  
o.zyhrii@wunu.edu.ua  
ORCID ID: 0000-0001-7092-5306

## ETHICAL AND LEGAL ASPECTS OF USING THE LATEST TECHNOLOGIES IN THE LEGAL SPHERE OF UKRAINE

The article is devoted to the analysis of ethical and legal aspects of the use of new technologies in the legal sphere of Ukraine. Based on scientific research, regulatory and legal sources, international experience and practice of the functioning of the digital society, the key challenges facing legal science and law enforcement in the context of the rapid development of technologies are revealed. The main focus of the study is on finding legal mechanisms that can effectively respond to new social realities, while maintaining a balance between innovation and fundamental human rights.

The modern technological era is shaping a new legal reality, where classical legal constructs are exposed to unprecedented challenges generated by the development of digital technologies. The focus is on phenomena such as digital human rights, the use of artificial intelligence, the functioning of cryptocurrencies, the right to access the Internet, the processing of large amounts of personal data, and the activities of online platforms. These processes change not only the form but also the content of legal relations, highlighting the need to adapt the legal system of Ukraine to new ethical and legal realities.

The purpose of the study is a comprehensive study of the principles of forming legal regulation of new technologies in Ukraine, taking into account international experience, as well as an analysis of the ethical challenges that accompany their introduction into the legal sphere. Particular attention is paid to the consideration of legal approaches to the use of artificial intelligence and mechanisms for protecting personal data in the context of digitalization. A comparative study of Ukrainian and foreign legislation on ensuring information security, privacy, and control over users' digital traces is conducted.

The article analyzes individual cases from the legal systems of countries that are leaders in the field of digital governance, in order to identify effective models of legal regulation for technological challenges. It outlines the need to develop specialized ethical standards that would balance the innovative development of human rights and freedoms.

The practical significance of the study lies in developing theoretical foundations and practical recommendations for updating the domestic regulatory framework in the field of legal regulation of technologies. The results of the study can be used to further develop regulatory acts that will ensure a balance between technological progress and legal security, promote the socio-economic development of Ukraine, and provide sustainable legal support for the digital transformation of society.

**Keywords:** legal system, legal regulation, digital technologies, digital content; Artificial Intelligence; protection of personal data, law.

### **Зигрій О.В. ЕТИЧНО-ПРАВОВІ АСПЕКТИ ВИКОРИСТАННЯ НОВІТНІХ ТЕХНОЛОГІЙ У ПРАВОВІЙ СФЕРІ УКРАЇНИ**

Стаття присвячена аналізу етико-правових аспектів використання новітніх технологій у правовій сфері України. На основі наукових досліджень, нормативно-правових джерел, міжнародного досвіду та практики функціонування цифрового суспільства розкрито ключові виклики, які постають перед юридичною наукою та правозастосуванням у контексті стрімкого розвитку технологій. Основну увагу у дослідженні сконцентровано на пошук правових механізмів, здатних ефективно реагувати на нові соціальні реалії, зберігаючи при цьому баланс між інноваціями та фундаментальними правами людини.

Сучасна технологічна епоха формує нову правову реальність, де класичні правові конструкції піддаються впливу безпрецедентним викликам, породженими розвитком цифрових технологій. У центрі уваги постають такі феномени, як цифрові права людини, використання штучного інтелекту, функціонування криптовалют, право на доступ до Інтернету, обробка великих масивів персональних даних та діяльність онлайн-платформ. Дані процеси змінюють не лише форму, а й зміст юридичних відносин, актуалізуючи потребу в адаптації правової системи України до нових етико-правових реалій.

Метою дослідження є комплексне вивчення принципів формування правового регулювання новітніх технологій в Україні з урахуванням міжнародного досвіду, а також аналіз етичних викликів, що супроводжують їх впровадження у правову сферу. Особливу увагу приділено розгляду правових підходів до використання штучного інтелекту та механізмів захисту персональних даних в умовах цифровізації. Проведено порівняльне дослідження між українським та зарубіжним законодавством щодо забезпечення інформаційної безпеки, приватності та контролю над цифровими слідами користувачів.

У статті проаналізовано окремі кейси з правових систем країн, що є лідерами у сфері цифрового врядування, з метою виявлення ефективних моделей правового регулювання на технологічні виклики. Окреслено необхідність розробки спеціалізованих етичних стандартів, які б урівноважували інноваційний розвиток прав і свобод людини.

Практична значущість дослідження полягає у виробленні теоретичних засад і практичних рекомендацій щодо оновлення вітчизняної нормативної бази у сфері правового регулювання технологій. Результати дослідження можуть бути використані для подальшого формування нормативних актів, які забезпечать баланс між технологічним прогресом і

правовою безпекою, сприятимуть соціально-економічному розвитку України та забезпечать сталий правовий супровід цифрової трансформації суспільства.

**Ключові слова:** правова система, правове регулювання, цифрові технології, цифровий контент; штучний інтелект; захист персональних даних, закон.

**Formulation of the problem.** The development of technologies has caused an increase in the amount and direction of information use, the accumulation of which can violate the legitimate interests of a person and lead to material or moral damage. All this requires legal science to search for new legal models that were previously unknown to legal doctrine and did not meet the standards of legal regulation. Information technologies influence lawmaking and law enforcement, and also cover the sphere of private law and civil circulation.

The problem of the research is revealed in establishing the features of state policy vectors regarding the regulation of information technologies in the EU and the USA. The emergence of a new reality, in particular the virtual space of doing business, the Internet of Things, artificial intelligence and the protection of personal data, requires legal science to search for new models of legal doctrine that are not included in the established standards of legal regulation. In Ukraine, the first regulatory act that determined the need to create legal, financial, economic, organizational, scientific-technical, methodological and humanitarian prerequisites for the development of informatization was the Law of Ukraine "On the National Informatization Program" of 02/04/1998 No. 74/98 -VR. However, at the beginning of the era of digital development of society, this document was far from the ubiquitous life of consumers, as today it is recognized as outdated, leaving only the main tasks of informatization to be defined. In this connection, there is a need to study this phenomenon as a new legal phenomenon.

**Analysis of the study of the problem.** The works of scientists such as O. Baranov, K. Efremova, T. Katkova, M. Karchevskiy, O. Posykalyuk, K. Tokareva, O. Telychko, O. Chernenko. However, the legal regulation of the latest technologies, in particular artificial intelligence, cryptocurrencies, is only at the stage of formation, which determines the relevance of the research topic.

**The purpose of the study** the impact of modern technologies on the legal system of Ukraine, including the main challenges associated with their use and the possibilities of adapting national legislation to global trends, to propose conceptual approaches to the formation of an effective model of legal regulation that will meet the technological challenges of today.

**Presentation of the main research material.** The latest technologies cause an increase in the amount and directions of information use (collection, processing, storage of personal data), which leads to the emergence of an open bank of information. Similar technological processes have intensified in Ukraine since the pandemic and continue through a full-scale war. During this period, there is a growing demand for optimization of some processes (online accounts, signing documents online, receiving services online, working in the legal field of other countries, working online, providing legal services, electronic courts, electronic justice, etc.). Despite the war in the country, the growth of the IT sector is quite significant, and, in general, the IT services market in Ukraine is growing rapidly [9].

Information technologies have completely changed the vision of social relations (the virtual environment for conducting business, the Internet of Things, the emergence of a new reality, artificial intelligence, the circulation of digital content). In Ukraine, at the end of the last century, a new direction of IT practice began to take shape in the activities of legal firms Legal Tech [7] and from the end of the 2000s - the provision of legal services to consumers using information technologies, the purpose of which was to investigate traditional ideas about the provision legal services for the implementation of information technologies from private services to the "Action" application [9].

In 2007, a startup appeared on the US market - Rocket Matter, a program for managing the affairs of lawyers - a planner, CRM system and accountant in one service, which allows automated processing of documents, managing cases, planning meetings, managing legal contacts, creating schedules and calendars [3].

However, despite breakthroughs in technology and research by leading companies, innovations were met with skepticism and delayed implementation into work processes until the 2020 pandemic. According to Wolters Kluwer [10], already in 2021, the majority of EU and US law firms understand technology spending as an investment.

In 2021, the Spanish international company Wolters Kluwer published a report on the demand for technological innovation in the legal market. 700 lawyers from Europe and the USA took part in the survey. Conclusion: automation of certain objects of legal activity for legal companies and specialized law and attorney offices is an urgent need that will increase productivity and lead to business profitability [10].

There are certain deficiencies in the Ukrainian legislation, or, in other words, there is no legal regulation regarding IT freelancers and it is not defined in the Labor Code (Labor Code), but is contained in the letter of the Ministry of Social Policy dated May 15, 2008, which is essentially of a recommendatory nature. For example, in the USA the number of freelancers reached 57.3 million (2017), about 36% of the working population of the country [8]. Freelancers are projected to number 86.5 million in 2027, accounting for 50.9% of the total US workforce [11].

The analysis of national legislation indicates the absence of clear restrictions on the use of personal data of users of digital content by its providers. At first glance, the need to obtain the consent of the subject of personal data, which is a prerequisite for their use, should be a key factor in formulating the right of a person to decide on the collection, accumulation, processing, storage and distribution of personal data [16].

The problem of personal data protection in Ukraine is confirmed by the data of the Unified State Register of Court Decisions, where over the past 5 years, Ukrainian courts have issued about six thousand decisions regarding the protection of personal data of individuals on the Internet.

In Ukraine, the IT industry occupies the third position in the level of export of services, where the main customer continues to be the USA. Export companies in the market structure make up 80%, where more than 60% work according to the outsourcing model, food companies make up only 30%. IT law serves the economic sector. With approximately 2.98 billion users as of the first quarter of 2023, Facebook is the world's most used online social network. Based on this, the basis for the analysis of IT law is laid, which takes into account the changes occurring in the legal regulation of social relations and related to their digitization through special legislative acts in the information field.

In Ukraine, the IT industry ranks third in the level of export of services, while the main customer remains the USA. Export companies account for 80% of the market, of which more than 60% operate under an outsourcing model, while the share of food companies is only 30%. IT law serves the economic sector. As of the first quarter of 2023, Facebook had approximately 2.98 billion users, making it the most popular online social network in the world. On this basis, the basis for the analysis of IT law is formed, which takes into account the changes in the legal regulation of social relations associated with their digitalization through special legislative acts in the information field. Consequently, this area of information law narrows to regulated relations, without offering models for new ones that are rapidly developing. For example, relationships related to cryptocurrency still remain outside the scope of legal regulation. Regulatory and legal acts of Ukraine regulating the information sphere include the Law of Ukraine "On Information" [2], the Law of Ukraine "On Protection of Personal Data" [13], etc. In 2016, a draft of the Concept of the Digital Code of Ukraine was prepared, which has not yet been secured by strategic measures regarding the legal support of digitalization. In September 2021, the Verkhovna Rada adopted the draft law "On Virtual Assets" [5], but this law was returned by the President of Ukraine for revision. In 2022, the Law of Ukraine "On Cloud Services" [1] was adopted.

Explores the legal response of society, how legal issues in IT can affect society and ordinary individuals. Using the example of Great Britain and the EU, it examines the international problems of IT law and provides a holistic view of the functioning of legislation in the world. Covers the General Data Protection Regulation and the Data Protection Act 2018, as well as Regulation (EU) 2016/679 and Directive (EU) 2016/680 on the protection of personal data in its guides, including an analysis of Facebook's use of data in the US presidential election, an analysis of the misuse of personal information and the regulation of digital operators such as Google and Facebook by the European Commission, as well as an overview of the nature and regulation of cryptocurrencies. The European Commission notes that the recognition of digital content as an element of the EU economy necessitated the development and consolidation of a normative definition of the concept itself [12].

Technology by its legal nature is a very complex and multifaceted phenomenon. It is customary to perceive it in several basic legal statuses, which it can acquire when involved in legal relations. Technology acts as a special socio-economic phenomenon and is defined by the provisions of the Law of Ukraine "On Innovative Activity" as part of innovative activity and the object of the innovation cycle and the Law of Ukraine "On State Regulation of Activities in the Field of Technology Transfer", which separates the definition of "technology" as the result of scientific and technical activity, a set of systematized scientific, technical, organizational knowledge and the sequence of operations [12].

The regulation of social relations is influenced by the modernization of legal procedures in the current law, for example: identification of a person as a legal subject, realization of human rights in the digital space, financial digital technologies, use of databases, definition of the concept of a virtual thing, etc. Digitization of the legal reality determines the regularity in the immersion in the virtual legal space of many state functions, electronic participation of citizens in law-making and spheres of activity of municipal bodies, in the examination of projects of regulatory and legal acts. The method of payment for the provision of digital data is diverse, which varies from the transfer of funds to the fulfillment of obligations in kind (in particular, receiving e-mail, viewing advertising materials on the Internet, selecting contextual advertising, passing a questionnaire to develop a supplier's marketing strategy, etc., providing personal data). The transfer, accumulation and use of personal data occurs through the conclusion of contracts for the supply of digital content through automated online systems. The method of payment for the provision of digital data is diverse, ranging from the transfer of funds to the fulfillment of obligations in kind (in particular, receiving e-mail, viewing advertising materials on the Internet, choosing contextual advertising, passing questionnaires for the development of the supplier's marketing strategy, etc., providing personal data). The movement, accumulation and use of personal data occurs through the conclusion of contracts for the supply of digital content through automated online systems. In these cases, the agreement of the parties on all essential terms of a separate contract does not arise, and the contract is concluded on the basis of automated processing of information provided by the parties [4].

An example of such automatically concluded agreements can be services provided by digital content based on user registration. Under such conditions, it is possible to use artificial intelligence to obtain data for political or commercial purposes, which often happens without the consent of individuals. Moral principles should be taken into account in the development of the latest technological solutions. If this is neglected, then artificial intelligence

technologies will lead to the spread of false information and biased opinions, which will make public negotiations impossible and will allow the manipulation of public opinion.

In the scientific doctrine, there are a number of positions that reveal the legal system in relation to modern technologies from different angles. Some scholars focus on its concept, some on its structure and subjects. In order to compare the results obtained during the research with the ideas of other authors, it is worth revealing their content and essence. Technology and human rights were discussed on the platform of the Council of Europe. For example, at the end of 2022, the symposium "Human Rights in the Digital Sphere" was held, which was organized by the Consulate General of the United States of America in Strasbourg, the Consulate General of Japan at the Council of Europe, the Directorate General of the Council of Europe for Human Rights and the Rule of Law, the European Court of Rights a person The number of platforms and services that provide research information and analytics, as well as opportunities for the development of artificial intelligence, continue to grow as technology becomes more complex and the volume of information and data increases. In May 2023, the second panel of ECDF and Elsevier together with the Einstein Center Digital Future (ECDF) held a discussion on supporting the new digital era "Conversations on Science in the Digital Future" between scientists from the University of Berlin and the Einstein Center Digital Future (ECDF) [16], which provided an opportunity to better understand the relevance of the topic and identify real problems of the digital future, while involving research communities, politicians, academic publishers and society in cooperation.

However, the Resolution on the Promotion, Protection, and Enjoyment of Human Rights on the Internet and the Charter of Digital Rights still lack an effective comprehensive international legal act that would be able to fully define, regulate, and protect [14].

The European Parliament seeks to introduce the world's most stringent legislative regime for the development of artificial intelligence. Regarding the possible directions of development of legal regulation, legislation in the field of regulation of developments using technologies and units of artificial intelligence should develop in parallel with the basic principles of law, including the principle of protection of human rights, taking into account new problems caused by the development of artificial intelligence.

Analyzing the experience of Ukraine regarding legislation in the field of providing, processing and protecting personal data, it should be noted that this process is in the initial stages of development. Consolidation of legislation adds significant value to this process. In accordance with the provisions of Art. 200 of the Civil Code of Ukraine, a person has the right to provide, receive and distribute information, regarding the collection, storage and use of information related to the private life of an individual and requires a certain consent. The Law of Ukraine "On Information" establishes information or a set of data about a natural person who is identified or can be specifically identified [2]. A similar definition is contained in special legislation aimed at personal data protection in the Law of Ukraine "On the Protection of Personal Data" [13].

The legislation of Ukraine does not establish a single list of personal data. The Law of Ukraine "On Information" includes in the list of personal data information about a person's nationality, marital status, education, religious beliefs, as well as his address, state of health, date and place of birth. The Law of Ukraine "On Advocacy" supplements this list of personal data with questions that a person addresses to a lawyer for advice, content, and a list of data obtained by a lawyer during the performance of his professional duties. In the conditions of the development of technologies and information systems and uncertainty in decision-making, there is a need to specify the information in the list of personal data. The legislator must determine the list of data that needs protection.

The Convention defines personal data as any information relating to a natural person or an identified person. This gives rise to the assumption that there is a wide range of information that can be defined as personal data, as well as other information about a person that allows him to be identified. According to Regulation 2016/679 of the European Parliament and of the Council on the protection of natural persons with regard to the processing of personal data and on their free movement, as well as the repeal of Directive 95/46/EC, personal data is defined as any information relating to an identified or identifiable natural person ("data subject").

The Convention defines personal data as any information relating to an individual or an identifiable individual. This gives reason to assume the thesis of the existence of a wide range of information that can be defined as personal data, other data about a person that allow him to be identified.

In accordance with Regulation 2016/679 of the European Parliament and of the Council on the protection of natural persons with regard to the processing of personal data and their free movement, as well as the repeal of Directive 95/46/EU, personal data is defined as any information relating to an identified or identifiable natural person ("data subject"). It is worth paying attention to the provisions of Directive 2002/58/EC of the European Parliament and the Council on personal data processing and privacy protection in the field of electronic commerce [6] with a clear list of personal data. This information also applies to the tracking of an individual's location through technology.

**Conclusion.** As a result of the research, it was established that law and technology are an important vector in the new social relations of EU countries, as well as Ukraine. Of particular significance is foreign practice, namely, the legal system of the EU and the USA, which is regulated by new structures that contradict the classical law of our country. Incompatibility also arises with other legal systems of countries that implement a policy of developing innovative technologies. The content of international normative legal acts was disclosed, which made it possible to describe the approaches based on which the influence of modern technologies on the legal system takes place. The



main approaches to understanding the concept of law and technology as a coherent set of legal phenomena, the goal of which is to achieve new social values of justice, equality, freedom, humanism and the state of law and order, are revealed. The position of outstanding scientists is supported, according to which the legal regulation of technological processes is considered from the standpoint of the functions it performs.

It was possible to describe the structure of horizontal legislation of the EU. It includes four directives, one regulation, one recommendation and one resolution. In addition, the legislative framework of Canada, Japan and the Czech Republic was developed. The provisions of these acts provide for the formation of tasks aimed at solving problems with IT technologies, digital law, the right to protect personal data, as well as methods for their implementation. Particular attention was paid to the legislation of Ukraine, as well as its reform in the course of European integration and societal challenges. The work revealed the structure of Ukrainian national legislation, which regulates the field of information and digital law. The priority approaches for the implementation of EU regulatory acts into the current provisions of the laws and codes of Ukraine were considered.

In the study, a conditional division was made regarding the affiliation of technologies to a specific field of law in order to conduct a more detailed analysis of legal regulation and reflect the impact of technologies on the modern legal system. In particular, it was possible to describe the features of some of the latest technologies, which cause rapid development and require urgent legal reinforcement. It was possible to consider and submit for discussion the promising ideas of representatives of this direction, attention was drawn to the holding of various events in the world regarding the consideration of issues of artificial intelligence and the protection of personal data of individuals.

#### REFERENCES:

1. About cloud services: Law of Ukraine. (2022). URL : <https://zakon.rada.gov.ua/laws/show/2075-20#Text>
2. About information: Law of Ukraine. (1992). URL : <https://zakon.rada.gov.ua/laws/show/2657-12>.
3. Brittany, G. (2008). Trusted by Law Firms Since 2008 for Unparalleled Product & Service. Rocket Matter. URL : <https://www.rocketmatter.com/>
4. Busch, Ch., Schulte-Nolke, H., Wiewiorowska-Domagalska A., Zoll, F. (2016). The Rise of the Platform Economy: A New Challenge for EU Consumer Law? *Journal of European Consumer and Market Law*.
5. Draft Law on Virtual Assets. (2020). URL: <https://itd.rada.gov.ua/billInfo/Bills/Card/2698>
6. Edited by R. Schulze, Beck, C. H.. (2012). Common European Sales Law (CESL). A Commentary. URL : <https://www.bloomsbury.com/us/common-european-sales-law-cesl-9781849463652/>
7. Hibnick, E. (2014). What is Legal Tech? Wayback Machine home page. URL: <https://web.archive.org/web/20170125000221/http://www.thelawinsider.com/insider-news/what-is-legal-tech/>
8. Hordeyuk, A. O. (2018). The problem of legal regulation of private law relations in the conditions of their virtualization. URL: [http://nbuv.gov.ua/j-pdf/FP\\_index.htm\\_2018\\_2\\_6.pdf](http://nbuv.gov.ua/j-pdf/FP_index.htm_2018_2_6.pdf).
9. Ivanov, V. (2022). The main trends of the LegalTech industry during the war in Ukraine. URL : <https://www.epravda.com.ua/rus/columns/2022/09/15/691521/>
10. Kluwer, W. (2021). El informe Future Ready Lawyer. URL : <https://www.wolterskluwer.com/es-es/know/future-ready-lawyer-2021>
11. Number of freelancers in the United States from 2017 to 2028 (2020). URL : <https://www.statista.com/statistics/921593/gig-economy-number-of-freelancers-us/>
12. On innovative activity: Law of Ukraine. (2002). URL : <https://zakon.rada.gov.ua/laws/show/40-15?find=1&text=%D1%82%D0%B5%D1%85%D0%BD%D0%BE%D0%BB%D0%BE%D0%B3#Text>
13. On the protection of personal data: Law of Ukraine. (2010). URL : <https://zakon.rada.gov.ua/laws/show/2297-17#Text>
14. Resolution of the Cabinet of Ministers of Ukraine "Some issues of functioning of the web portal "Action. Digital Community. (2023). URL : <https://zakon.rada.gov.ua/laws/show/556-2023-%D0%BF#Text>
15. Voegler, M. (2023). Responsible AI and the many dimensions of artificial intelligence. URL : <https://www.elsevier.com/connect/responsible-ai-and-the-many-dimensions-of-artificial-intelligence>
16. Zyhrii, O., Trufanova, Yu., Parashchuk, L., Sampara, N., Tsvigun, I. (2023). Law and technology: The impact of innovations on the legal system and its regulation. *Social and Legal Studios*. Volume 6, Issue 4, P. 267 - 275  
URL: <https://www.scopus.com/record/display.uri?eid=2-s2.0-85184422162&origin=resultslist&zone=contextBox>

Стаття надійшла до редакції 12.06.2025