

INDIVIDUALS AND THEIR RIGHTS IN THE MIDDLE OF DIGITALIZATION AND TECHNOLOGICAL PROGRESS OF THE SOCIETY*

Diana Treščáková, PhD, Assistant Professor

Pavol Jozef Šafárik University in Košice, Law faculty

Kováčska 26, Košice, Slovakia

diana.trescakova@upjs.sk

ABSTRACT

The digitalization of the society, which has been going on for many years is considered as a natural process. We are part of processes that change ourselves and based on that change the essence of the functioning of our society every day. Many times we don't even think about the consequences of our activity in the online environment - how we declassify our working and private spheres. Many times we do not even ask what is the fate of our data that we provide on the Internet and what kind of interference in our privacy can cause e.g. simple chatting on a social network. Our simply behaviour can extend to the violation of the protection of our basic rights and freedoms. The more serious is the situation when the above happens without our cause and knowledge, when Big Tech entities whose task is to "monitor" us for various reasons and our data are then passed on to other entities for a commercial purposes. Precisely for the reasons mentioned, it is very important to have these spheres protected by legal acts, adopted in compliance with the principle of technological neutrality, which are completed by court jurisprudence and which can guarantee us the observance of our fundamental rights and freedoms. The task of this article will be to analyse the ongoing digitalization and related legislative activity aimed at protecting the basic rights and freedoms of the individual, especially the protection of personal data of individuals and their privacy in the online environment.

Keywords: Digital transformation, Digital single market, human rights, personal data protection, privacy

1. INTRODUCTION

It was not so long ago that the fourth industrial revolution, called Industry 4.0, was intensively mentioned in society. After a few years of technological advancement of the society and its intensive digitalization a higher level of the industrial revolu-

* This article was prepared within the investigation of Grant Project APVV-19-0424 „Innovative corporation: intra-corporate transformations, digital challenges and the rise of artificial intelligence“.

tion is already mentioned. It is the fifth industrial revolution (Industry 5.0). What is the difference between the Industry 4.0. revolution and Industry 5.0.? What impact do these industrial revolutions, the base stone of which are digitalization and technological progress, have on society? How do they affect the individuals and their rights? In order not to forget the individuals and their rights in the light-speed technological progress, it will be necessary to focus on finding answers to the above asked questions by using scientific methods as analysis, deduction, synthesis and comparison. As we look at all these processes, we can say that one thing seems to be clear, however, that the society and its character will no longer be the same, and for this reason it will be necessary to adopt a new or update the current legislation to protect the individuals and their rights. On March 9, 2021, the European Commission presented a vision and ways to achieve Europe's digital transformation by 2030.¹ The Commission proposes a Digital Compass for the EU's Digital Decade, which develops around four main points:

1. Skills
2. Business - digital transformation of a business
3. Infrastructures (digital)
4. Digitalization of a Government

All the mentioned areas are interconnected and complement each other. Without skills, especially digital skills, the digital transformation of businesses would not be possible. It would not be possible without a secure and sustainable digital infrastructure and also without digital public services. But all this must take place in compliance with legal rules and strict protection of individual rights.

2. HOW IS BUSINESS CHANGING AND HOW DOES DIGITALIZATION AFFECTS BUSINESS PROCESSES?

In order to address the digital transformation of business, it is appropriate to point out some of the historical aspects of business development. If we look at history of trading, we can briefly define important milestones that gradually changed trading.

First of all, back in the ancient times, at the first signs of trading, there was an exchange of goods, the so-called barter. Subsequently, the international exchange of goods began, which was the first form of international economic relations. The revo-

¹ Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions: 2030 Digital compass: the European way for the Digital Decade available at: [\[https://eur-lex.europa.eu/resource.html?uri=cellar:12e835e2-81af-11eb-9ac9-01aa75ed71a1.0001.02/DOC_1&format=PDF\]](https://eur-lex.europa.eu/resource.html?uri=cellar:12e835e2-81af-11eb-9ac9-01aa75ed71a1.0001.02/DOC_1&format=PDF), Accessed 15 April 2023.

lution in the development of world trade was brought about by great geographical discoveries or technical inventions that happened mainly in the Middle Ages.

Subsequently, in the 18th century, the first industrial revolution began in the textile industry, the essence of which consisted in the change of production from manual to mechanical, mainly using steam. Its use for industrial purposes was the biggest breakthrough for increasing human productivity. Instead of hand weaving, steam engines were used for propulsion. Inventions such as the steamboat or (about 100 years later) the steam locomotive brought about other huge changes as people and goods could be transported over long distances in a shorter time.

In the 19th century another industrial revolution began. It was the second industrial revolution, and this advanced manufacturing as well as the international trade associated with it due to the discovery of electricity and based on that assembly line manufacturing.

The third industrial revolution began in the 1970s through the partial automation of manufacturing processes with the help of the first computers.

The fourth industrial revolution is based on the results of the third industrial revolution. Manufacturing systems that already use computer technology are being extended through network connectivity. Using the achievements of Industry 4.0 is the path leading to a digital enterprise, in the framework of which the so-called smart approaches, digital communication within the company, with customers, other business partners, automation of production, distribution, marketing - based on the use of data - collection - evaluation - use - big data.² The fourth industrial revolution is changing the current form of industry. The introduction of automation and digital production, the digitalization of control systems and the use of communication networks to ensure the interoperability and flexibility of business processes is becoming a priority for the industry.³

At present, despite the fact that many processes that have been predicted, or started by the fourth industrial revolution was not finished yet and the goals that were related to the digital transformation of enterprises within this revolution were not

² Hučková, R.; Sokol, P.; Rozenfedlova, L., *4th industrial revolution and challenges for European law (with special attention to the concept of digital single market)*, EU and comparative law issues and challenges series (ECLIC 2), EU law in context – adjustment to membership and challenges of the enlargement: Conference book of proceedings. - Osijek: Sveučilište Josipa Jurja Strossmayera u Osijeku, 2018, p. 203, Available at: [\[https://hrcak.srce.hr/ojs/index.php/eclic/issue/view/313/Vol2\]](https://hrcak.srce.hr/ojs/index.php/eclic/issue/view/313/Vol2), Accessed 15 April 2023.

³ Concept of a smart industry for Slovakia available at: [\[https://www.mhshr.sk/inovacie/strategie-a-politiky/smart-industry\]](https://www.mhshr.sk/inovacie/strategie-a-politiky/smart-industry), Accessed 22 April 2023.

fulfilled yet, technology experts started the industrial revolution 5.0. If we pointed out the basic difference between industrial revolution 4.0. and 5.0., we can state that the main difference lies in their goals. While the basic goal of the industrial revolution 4.0. was technological progress, industrial revolution 5.0. focus on people and sustainability.⁴

3. LEGISLATIVE ACTIVITY OF AUTHORITIES ACCORDING TO THE DIGITAL SOCIETY AND ITS BASIC PRINCIPLES AND GOALS

If we proceed from the historical context that we pointed out above, it can be concluded that the digitalization of society is unstoppable. Technological development is moving at such a speed that it is unrealistic for the legislative activity of the relevant authorities to adequately follow up on this development. It is necessary to solve the above on the basis of the principle of technological neutrality, in the sense of which the goal of legislative activity should be the creation of such a legal framework that is flexible enough and that enables the application of the adopted legislation not only to the technologies existing at the time of its adoption, but also to those whose creation often cannot be predicted at the time of admission. In this case, we can talk about the application of the so-called the principle of technological neutrality. It is the effort of the legislator to adopt a legal arrangement that is technologically neutral, i.e. which is not limited to a specific technology, but which is applicable to any newly emerging technology without the need to revise the relevant legislation. One of the ways in which the legislator can achieve the adoption of technologically neutral legal norms is the use of general designation of legal provisions with an open meaning. An example of the above is definition of personal data given in the article 4(1) of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC⁵ (General Data protection regulation – hereinafter referred as GDPR), which simply considers as personal data any information that enables the direct or indirect identification of a natural person through an identifier, regardless of the technology used in the processing of the information in question. The danger in the case of such open definitions, how-

⁴ Kajati, E.; Zolotova, I., *Industry 5.0 – revolúcia alebo evolúcia?* (2), available at: [https://www.atp-journal.sk/rubriky/prehladove-clanky/industry-5.0-revolucia-alebo-evolucia-2.html?page_id=33851], Accessed 22 April 2023.

⁵ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC [2016] OJ L 119/1.

ever, lies in the overly general definition of a specific term, which subsequently also includes facts not originally anticipated by the legislator.⁶ The application of the principle of technological neutrality is therefore not without problems, but it nevertheless becomes a standard requirement when adopting new legislation in the context of the law of information and communication technologies.

The essence of digitalization not only of businesses, but of society as a whole is connection and sustainability. For this reason, initiatives are being created within the European area with the task of improving the smooth use of electronic services according to the rules of fair competition and with a high level of consumer protection, regardless of their nationality or place of residence.⁷ The effort is to create a Single Digital Market and improve its functioning by removing various barriers. On October 28, 2015, the Commission published a communication entitled Enhancing the Single Market: more opportunities for people and businesses⁸, which focused on delivering practical benefits for people in their everyday lives and creating more opportunities for consumers, professionals and businesses. With it, the Commission complemented its efforts aimed at promoting investments, taking advantage of opportunities in the digital single market, increasing competitiveness and improving access to financing.

Even before that, on May 6, 2015, the European Commission presented the Strategy for the Single Digital Market in Europe⁹, in which it specified its goals and intention to create and operate a single digital market within the EU. Digital Single Market initiatives cover the following areas, namely:

⁶ See e.g. Purtova, N., *The Law of Everything. Broad Concept of Personal Data and Future of EU Data Protection Law*, Law, Innovation and Technology, Vol. 10, No. 1., 2018, pp. 40-81.

⁷ Action Plan – Digital Single Market – opportunities for Slovakia available at: [\[https://www.slov-lex.sk/legislativne-procesy?p_p_id=processDetail_WAR_portletsel&p_p_lifecycle=0&p_p_state=normal&p_p_mode=view&p_p_col_id=column2&p_p_col_count=1&_processDetail_WAR_portletsel_startact=1485786560000&_processDetail_WAR_portletsel_idact=1&_processDetail_WAR_portletsel_action=files&_processDetail_WAR_portletsel_cisloLP=LP%2F2017%2F53_\]](https://www.slov-lex.sk/legislativne-procesy?p_p_id=processDetail_WAR_portletsel&p_p_lifecycle=0&p_p_state=normal&p_p_mode=view&p_p_col_id=column2&p_p_col_count=1&_processDetail_WAR_portletsel_startact=1485786560000&_processDetail_WAR_portletsel_idact=1&_processDetail_WAR_portletsel_action=files&_processDetail_WAR_portletsel_cisloLP=LP%2F2017%2F53_), Accessed 21 April 2023.

⁸ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Upgrading the Single Market: more opportunities for people and business available at: [\[https://eur-lex.europa.eu/legal-content/SK/TXT/?qid=1534172388870&uri=CELEX:52015DC0550\]](https://eur-lex.europa.eu/legal-content/SK/TXT/?qid=1534172388870&uri=CELEX:52015DC0550), Accessed 21 April 2023.

⁹ Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions from 6th of May 2015: A Digital Single Market Strategy for Europe, available at: [\[https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52015DC0192\]](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52015DC0192), Accessed on 21 April 2023.

1. digital culture,
2. digital future,
3. digital life,
4. digital credibility,
5. digital shopping,
6. digital connectivity

In the Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions from February 19, 2020, the solutions and goals of the European Commission in the field of shaping the digital future were outlined. Commission President Ursula von der Leyen declared that Europe must be at the forefront of the transition towards a healthy planet and a new digital world. The Commission has set as Europe's main goal that our European society is driven by digital solutions that are firmly rooted in our shared values and that enrich the lives of all: people must be able to develop personally, make decisions freely and safely, and participate in the life of society without regardless of age, gender or occupation. Businesses need a framework that allows them to start a business, grow their business, collect data, innovate.¹⁰

In accordance with the above, the Commission is focusing on three key objectives for the next five years to ensure that digital solutions help Europe find its own path to a digital transformation that benefits people while respecting our values. These are the following objectives:

1. Technology that works for people
2. A fair and competitive economy
3. An open, democratic and sustainable society

On March 9, 2021 the European Commission presented to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions a Communication 2030 Digital compass: the European way for the Digital Decade. Among other things, the announcement also points out the fact that the COVID-19 pandemic has fundamentally changed the role and perception of digitalization in our societies and economies in a single year and has accelerated its pace, but at the same time it has also revealed the vulnerabilities of

¹⁰ Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions from 19 February 2020 available at: [<https://op.europa.eu/en/publication-detail/-/publication/db95106e-53ca-11ea-aece-01aa75ed71a1/language-en>], Accessed 21 April 2023.

our digital space, its dependence on non-European technologies and the impact of misinformation on our democratic societies.¹¹

In our opinion the rights of the individual, especially the right to data protection and privacy, are not sufficiently protected in the current digitalization. For this purpose, it is necessary to focus not only on technological development, but also on the protection of the basic values of society and the individuals. In addition, the digital technologies and services that people use must comply with the applicable legal framework and respect the rights and values inherent in the “European way”. In addition, a safe and open human-center digital environment should comply with legal regulations, but also allow people to assert their rights, such as the right to privacy and data protection, freedom of expression, children’s rights and consumer rights. This European way of digital society is also based on ensuring full respect for EU fundamental rights, namely:

1. freedom of expression, including access to diverse, reliable and transparent information,
2. the freedom to set up and run a business online,
3. protection of personal data and privacy, as well as the right to be forgotten,
4. protection of intellectual property of individuals in the online space.

For this purpose, the Declaration on European Digital Rights and Principles in the Digital Decade¹² was adopted on January 26, 2022. This declaration is primarily based on primary EU law, in particular the Treaty on European Union (TEU)¹³, the Treaty on the Functioning of the European Union¹⁴ (TFEU), the Charter of Fundamental Rights of the EU¹⁵ and the case law of the Court of Justice of the EU, as well as secondary law. At the same time, it reflects and complements the European Pillar of Social Rights. It has a declarative character, which as such does not affect the content of legal norms or their application.

The European Declaration on Digital Rights and its adoption followed calls by the European Parliament to ensure full compliance between the Union’s approach to digital transformation with fundamental rights such as data protection or non-

¹¹ Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions: 2030 Digital compass: the European way for the Digital Decade available at: [https://eur-lex.europa.eu/resource.html?uri=cellar:12e835e2-81af-11eb-9ac9-01aa75ed71a1.0001.02/DOC_1&format=PDF], Accessed 21 April 2023.

¹² Declaration on European Digital Rights and Principles [2023] OJ C 23/1.

¹³ The Treaty on European Union (2007).

¹⁴ The Treaty on the Functioning of the European Union (2009).

¹⁵ The Charter of Fundamental Rights of the EU (declared 2000).

discrimination, as well as principles such as technological and network neutrality, but also with inclusiveness. At the same time, Parliament called for increased protection of users' rights in the digital environment. The European Declaration on Digital Rights followed the Tallinn Declaration on e-Government (2017)¹⁶, the Berlin Declaration on Digital Society and Value-Based Digital Governance (2020)¹⁷ and the Lisbon Declaration - Meaningful Digital Democracy (2021).¹⁸

4. THE RIGHT TO PROTECT PERSONAL DATA AND PRIVACY OF THE INDIVIDUALS IN THE MIDDLE OF THE DIGITAL SOCIETY

As stated in the Preamble of a Declaration on European Digital Rights and Principles, it aims at common policy objectives, not only to recall the rights that are most important in the context of digital transformation, but also to serve as a reference point for businesses and other stakeholders in development and implementation new technologies.¹⁹ And at this point we come to the fundamental difference between the principles of Industrial Revolution 4.0, which is aimed at the digital transformation of enterprises and businesses regardless of the background of the individual and his rights and Industrial Revolution 5.0, which is about focusing on people and their rights.

It is necessary to realize that digitalization and the creation of the Single Digital Market should be implemented for individuals who live in a digital society and use digital conveniences.²⁰ Also, the transformation of business is not only an advantage for the companies that go through the transformation, but also for the consumer himself, who gets products and services faster, can secure them more conveniently, but for the price of a kind of violation of the integrity of his privacy and basic rights. In connection with the use of electronic communications, there is a massive collection of data about consumers, their privacy and their behaviour, for example during

¹⁶ See Tallinn Declaration on e-Government available at: [<https://digital-strategy.ec.europa.eu/en/news/ministerial-declaration-egovernment-tallinn-declaration>], Accessed 21 April 2023.

¹⁷ See Berlin Declaration on Digital Society and Value-Based Digital Governance available at: [<https://digital-strategy.ec.europa.eu/en/news/berlin-declaration-digital-society-and-value-based-digital-government>], Accessed 21 April 2023.

¹⁸ See Lisbon Declaration - Meaningful Digital Democracy, available at: [<https://www.lisbondeclaration.eu>], Accessed 21 April 2023.

¹⁹ Preamble of a Declaration on European Digital Rights and Principles [2023] OJ C 23/1.

²⁰ Rudohradská, S., *Jednotný digitálny trh - výzvy a perspektívy*, Jarná škola doktorandov 2020: zborník príspevkov zo 7. ročníka. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, 2020, pp. 230-234 available at: [<https://unibook.upjs.sk/img/cms/2020/pf/jarna-skola-doktorandov-2020.pdf>], Accessed 21 April 2023.

online shopping or online searching for various information (a Big Data).²¹ Merchants' acquisition of information about the customers, whether actual or potential, may adversely interfere with and violate their right to privacy and protection of their personal data. Already in the Universal Declaration of Human Rights from 1948, Art. 12 established rule that *"no one may be subjected to arbitrary interference with private life, family, home or correspondence, nor to attacks on his honor and reputation. Everyone has the right to legal protection against such interference or attacks."*

Also, the International Covenant on Civil and Political Rights from 1966, where in Art. 17 entrenched prohibition against arbitrary interference in private life. Another important legal document that guarantees the right to privacy is the Convention on the Protection of Human Rights and Fundamental Freedoms. This convention, adopted by the Council of Europe in 1950, is enshrined in Art. 8 *"the right to respect for one's private and family life, home and correspondence."*

On the territory of the Slovak Republic, the Constitution enshrines the right to the inviolability of a person and his privacy (Article 16, paragraph 1), as well as the right to protection against interference in private and family life, the right to protection against unauthorized collection, publication or other misuse of personal data (Article 19 paragraphs 2 and 3 of the Constitution of the Slovak Republic). In Art. 22 of the Constitution of the Slovak Republic²² guarantees the right to the secrecy of transmitted messages and the protection of personal data. Fundamental rights are regulated similarly by Art. 7 par. 1, Art. 10 par. 2 and 3 and Art. 13 Charter of Fundamental Rights and Freedoms.

Also, the Charter of Fundamental Rights of the EU as a primary right of the EU in Art. 7 establishes the fundamental right of every person to respect his private and family life, home and communication. In Art. 8 of the Charter is stated a legal basis for the protection of personal data.

The current legal basis for the protection of personal data in the form of secondary law is GDPR, the adoption of which led to a clarification of the legislation in the field of personal data protection of natural persons. At this point, it is also necessary to mention the efforts of the standard-setting authorities, which are trying to improve the current legislation in the area of protecting the rights and privacy of the individual in the digital age. The European Commission drafted a proposal for

²¹ See e.g. Bania, K., *The role of consumer data in the enforcement of EU competition law*, European Competition Journal, Vol. 14, Issue 1, 2018, p. 40, [<https://doi.org/10.1080/17441056.2018.1429555>] or Wasastjerna, M.C., *The role of big data and digital privacy in merger review*, European Competition Journal, Vol. 14, Issue 2-3, 2018, p. 420, [<https://doi.org/10.1080/17441056.2018.1533364>].

²² The Constitution of the Slovak Republic, Official Gazette No. 460/1992.

Regulation 2017/0003 of the European Parliament and of the Council on respect for private life and protection of personal data in electronic communications in 2017, which should repeal the then-current Directive 2002/58/EC on privacy and electronic communications. However, the proposal has not yet been adopted.

An important document is also the Convention of the Council of Europe No. 108 on the protection of individuals during the automated processing of personal data, which applies not only to the protection of personal data, but also to the protection of privacy. The goal of the convention is to protect the right to privacy recognized in Article 8 of the Convention for the Protection of Human Rights and Fundamental Freedoms. Both the right to privacy and the right to data protection are enshrined in Articles 7 and 8 of the Charter of Fundamental Rights of the European Union and Article 16 of the TFEU.

According to the explanatory report of the Council Decision authorizing the member states to ratify in the interest of the European Union the protocol amending the Council of Europe Convention on the Protection of Individuals with Automated Processing of Personal Data (ETS No. 108), Convention No. 108 ready for ratification in 1981, i.e. long before the era of the Internet and electronic communication. The development of technology and the globalization of information present new challenges in the field of personal information protection. For this reason, an amending protocol was prepared, the purpose of which is to modernize Convention No. 108 in order to provide solutions to these challenges.²³

The modernized Convention (i.e. Convention No. 108 modified by the Amending Protocol) will have a uniform scope for all parties to the Convention without the possibility to completely exclude sectors or activities (e.g. in the field of national security) from its scope. It will thus cover all types of data processing within the jurisdiction of the parties in both the public and private sectors.

The amendment protocol significantly increases the level of data protection provided under Convention No. 108. In particular, the modernized convention sets out in more detail the principle of lawful processing (especially with regard to consent requirements) and further strengthens the protection of special categories of data (while also expanding the categories that are recognized as special categories of personal data in Union law). In addition, the modernized convention will establish additional guarantees for individuals when their personal data is processed

²³ See Proposal for a Council decision authorising Member States to ratify, in the interest of the European Union, the Protocol amending the Council of Europe Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (ETS No. 108) available at: [<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018PC0451>], Accessed 27 April 2023.

(in particular the obligations to examine the possible impact of the intended data processing operation and to implement the relevant technical and organizational measures; the obligation to report serious data protection breaches) and will also strengthen their rights (in particular if it's about transparency and access to data). New data subject rights have also been introduced, such as the right not to be subject to a decision that significantly affects the data subject and is based solely on automated processing, the right to object to processing and the right to redress in the event of a violation of the individual's rights.

It is important to note that the amending protocol is in full compliance with the GDPR regulation and with Directive (EU) 2016/680 of the European Parliament and of the Council of April 27, 2016 on the protection of natural persons in the processing of personal data by competent authorities for the purposes of crime prevention, investigation, disclosure or prosecution or for the purpose of enforcing criminal sanctions and on the free movement of such data (hereinafter referred to as the "Data Protection Directive").²⁴

Among the other documents on EU soil in the form of soft law, which are supposed to guide digitalization to be democratic, ethical and to protect basic human rights, is the "Lisbon Declaration - Meaningful Digital Democracy", adopted in 2021. The Lisbon Declaration builds on previous initiatives such as the Tallin and the Berlin declarations and aims to contribute to the ongoing public consultation on digital principles, launched by the European Commission.

It defines common understandings and commitments in three main domains:

1. Upholding human rights, ethical values and democratic participation in the context of the digital era, namely by fighting discrimination, disinformation and other malicious online activities, but also by stating the importance of accessible connectivity and digital skills' training
2. Promoting multi-stakeholder and wider international cooperation in the digital context, in fields such as standards, infrastructure, data flows, R&D and secure and trustworthy online services
3. Recognising the importance of green and digital technologies, as a key element to a new paradigm of economic growth, balancing innovation and competitiveness with social and environmental sustainable development.

The issue of personal data protection and privacy is also being addressed by other organizations whose activities extend beyond EU borders. Such is the case of the

²⁴ Directive (EU) 2016/680 of the European Parliament and of the Council of April 27, 2016 on the protection of natural persons in the processing of personal data by competent authorities for the purposes of crime prevention, investigation, disclosure or prosecution or for the purpose of enforcing criminal sanctions and on the free movement of such data [2016] OJ L 119/89.

OECD which has adopted a Recommendation of the Council Concerning Guidelines Governing the Protection of Privacy and Transborder Flows of Personal Data (OECD Privacy Guideline)²⁵

The aim of the aforementioned texts is to provide a legal environment in which the consumer can be digitally active without fearing a breach by online businesses of his personal data and privacy rights.

The terminological definition of the personal data and privacy is also important for the application practice and for the exercise of individual rights. With the adoption of the GDPR, the concept of personal data was defined (article 4(1) of GDPR), which removed many ambiguities and controversies about what personal data is and what it is not.

As for the definition of privacy, the situation is more complicated. The concept of privacy does not yet have a fixed definition. A historical shift in the perception of privacy occurred at the turn of the 19th and 20th centuries in the United States of America. In one of the most influential articles in American legal history, “The Right to Privacy,” authors Louis D. Brandeis and Samuel D. Warren linked the protection of the private sphere to individual freedom in modern history. Brandeis developed the basic ideas as a member of the Supreme Court from 1916 to 1939 in the well-known dissent in the legal case *Olmstead v. United States of America* in 1928. The result was, from today’s point of view, a significantly restrictive perception of the concept of privacy, which was understood as “the right to be left alone”, i.e. the right to peace and protection from outside interference, especially at home.²⁶

The question of defining privacy and its protection is also dealt with by application practice, which, mainly through jurisprudence, interprets the protection of privacy as well as the data of individuals. According to the Constitutional Court of the Czech Republic “*in the Charter, the right to respect for private life is not guaranteed in one all-encompassing article (as is the case with Article 8 of the Convention). On the contrary, the protection of an individual’s private sphere is spread out in the Charter and supplemented by other aspects of the right to privacy, declared in various places of the Charter (e.g. Article 7 paragraph 1, Articles 10, 12 and 13 of the Charter). In the same way, the right to informational self-determination itself can be derived from Article 10, paragraph 3 of the Charter, which guarantees an individual the right to protection*

²⁵ See Recommendation of the Council Concerning Guidelines Governing the Protection of Privacy and Transborder Flows of Personal Data (OECD Privacy Guideline) available at: [https://www.oecd.org/sti/ieconomy/oecd_privacy_framework.pdf], Accessed 27 April 2023.

²⁶ Warren, D. S.; Brandeis, L. D, *The Right to Privacy*, Harvard Law Review, Vol. 4, No. 5, available at: [<http://faculty.uml.edu/sgallagher/Brandeisprivacy.html>], In: Siskovicova, K., *Ochrana súkromia a osobných údajov zamestnanca*. Trnava: Publisher: Typi Universitatis Tyrnaviensis, 2015, p. 20.

against unauthorized collection, publication and/or other misuse of personal data, in conjunction with Article 13 of the Charter, which protects postal secrecy and secrecy of messages carried, whether kept in private, or sent by post, given by telephone, telegraph, or other similar device, or by any other means. However, the “fragmentation” of the legal regulation of aspects of an individual’s private sphere cannot be overestimated, and the list of what must be subordinated under the “umbrella” of the right to privacy or private life in the Charter cannot be considered exhaustive and final. When interpreting the individual fundamental rights, which are the capture of the right to privacy in its various dimensions as stated in the Charter, it is necessary to respect the purpose of the generally understood and dynamically developing right to privacy as such, or it is necessary to consider the right to private life in its contemporary integrity. Therefore, the right to informational self-determination guaranteed by Article 10, paragraph 3 and Article 13 of the Charter must be interpreted especially in connection with the rights guaranteed by Articles 7, 8, 10 and 12 of the Charter. By its nature and meaning, the right to informational self-determination falls among basic human rights and freedoms, because together with personal freedom, freedom in the spatial dimension (domestic), freedom of communication and certainly other constitutionally guaranteed basic rights, it completes the personal sphere of the individual, whose individual integrity as the absolutely necessary condition for the dignified existence of an individual and the development of human life in general must be respected and consistently protected; quite rightly, therefore, respect and protection of this sphere are guaranteed by the constitutional order, because - viewed only from a slightly different angle - it is an expression of respect for the rights and freedoms of man and citizen (Article 1 of the Constitution of the Czech Republic).²⁷

The European Court of Human Rights also dealt with the issue of private life and what this term covers. According to the ECHR, the term “private life” does not even have a restrictive interpretation. The right to informational self-determination also falls under the scope of Article 8 of the Convention - protection against unauthorized collection and storage of data about an individual’s private life. The guarantees under Article 8 of the Convention include the protection of both the content of communications (checking the content of mail, interception of calls, and other forms) and the metadata of electronic communications (detection of telephone numbers, telephone connection data, and other data). By analysing metadata about telecommunications traffic, it is possible to create a comprehensive picture of an individual’s private life, including his most intimate spheres.²⁸

²⁷ See the decision of the Constitutional court of the Czech republic, No. Pl. ÚS 24/10 (22th of March 2011 (*Data retention I*), point 31.

²⁸ Judgment *Amann v Switzerland*, (2000) Application No. 27798/95, 16th of February 2000, para. 65 and Judgment *Rotaru v Romania* (2000) Application No. 28341/95 para 43.

The collection and processing of personal data in the online environment, which may breach the protection of an individual's privacy, is a common practice of many entities whose task is to monitor consumers in particular and create their profiles by collecting this data. It is also worth thinking about, for example, online stores and the collection of data about consumers, which are subsequently used, for example, in targeted advertising, creating personalized prices, etc.²⁹ Profiling is based on online identifiers that, in the sense of point 30 of the GDPR, can be assigned to natural persons and that are provided by their devices, applications, tools and protocols such as IP address or cookies. These may leave traces which, in particular in combination with unique identifiers and other information obtained from the servers, may be used to create profiles of natural persons and to identify them.³⁰

The technical capabilities to collect, store and search large quantities of data concerning telephone conversations, internet searches and electronic payment are now in place and are routinely used by government agencies and corporate actors alike. For business firms, personal data about customers and potential customers are now also a key asset.³¹

Important for the protection of personal data in the above-mentioned cases is a more precise control by the control authorities, an increase in their competences and stricter sanctions. In essence, the GDPR created a mechanism for greater control over the acquisition and collection of personal data, not only by the controlling authorities, but also by the data subjects themselves. As Zandt stated the regulatory framework of the GDPR aims to give users more control over their data – and lays the groundwork for fining companies offering their services in the EU for breaching its articles. The GDPR was instated on May 25, 2018, as a replacement for the EU's Data Protection Directive from 1995. So far, the GDPR Enforcement Tracker lists 1,546 individual breaches of the GDPR, although the data is most likely incomplete since not all fines are made public.³² The highest fine got Amazon in amount of EUR 746 million in 2021. On July 16, 2021, the Luxembourg National Commission for Data Protection (CNDP) issued the biggest fine ever for the violation of the GDPR in the amount of €746 million (\$888

²⁹ Hutchinson, Ch. S.; Trescakova, D., *The challenges of personalized pricing to competition and personal data protection law*, European Competition Journal, Vol. 18, Issue 1, 2022, pp. 105-128.

³⁰ Rozenfeldova, L.; Sokol, P., *New Initiatives and Approaches in the Law of Cookies in the EU*, IDIMT-2018: Strategic modeling in management, economy and society: 26th interdisciplinary information management talks. Linz: TRAUNER Verlag, 2018, pp. 303-310.

³¹ *Privacy and Information Technology*, Stanford Encyclopedia of Philosophy, available at: [<https://plato.stanford.edu/entries/it-privacy/>], Accessed on 19 April 2023.

³² Zandt, F., *GDPR BREACHES, Big Tech Big Fines*, available at: [<https://www.statista.com/chart/25691/highest-fines-for-gdpr-breaches/>], Accessed on 25 April 2023.

million) to Amazon.com Inc. The fine was issued as a result of a complaint filed by 10,000 people against Amazon in May 2018 through a French privacy rights group that promotes and defends fundamental freedoms in the digital world- La Quadrature du Net. The CNPD opened an investigation into how Amazon processes personal data of its customers and found infringements regarding Amazon's advertising targeting system that was carried out without proper consent.³³

Meta Ireland is the other subject that was fined in a huge amount – EUR 405 million in 2022. On September 5, 2022, Ireland's Data Protection Commission issued a €405 million GDPR fine to Meta Ireland concerning the lawfulness of processing children's personal data in accordance with the legal bases of performance of a contract and legitimate interest.

The DPCs' investigation focused on teenagers between the ages of 13 and 17, the operation of Instagram business accounts, and how such accounts automatically displayed the contact information (email addresses and/or phone numbers) of children publicly.

According to DPC, Meta failed to take measures to provide child users with information using clear and plain language, lacked appropriate technical and organizational measures, and failed to conduct a Data Protection Impact Assessment where processing was likely to result in a high risk to the rights and freedoms of child users.³⁴

Even the mentioned fines can at least partially help in creating a digital society that protects basic human rights and develops in a democratic society while preserving ethical and moral principles.

5. CONCLUSION

The article points out the aspects of the digitalization of our society that has to be ethical, humane and in accordance with rights of the individuals. By using a scientific methods as analysis, deduction, synthesis and comparison the legislative and other activity of the European Union was analysed. We also compared the activity of other organizations that create the functioning of society in the digital environment through the creation of rules in the form of soft law. European

³³ Luxembourg DPA issues €746 Million GDPR Fine to Amazon available at: [<https://dataprivacymanager.net/luxembourg-dpa-issues-e746-million-gdpr-fine-to-amazon/>], Accessed 25 April 2023.

³⁴ Kashyap, K., *Meta Fined €405 Million for Mishandling Teenagers' Data on Instagram*, available at: [<https://www.spiceworks.com/marketing/customer-data/news/meta-fined-405-million-for-mishandling-teenagers-data-on-instagram/>], Accessed 25 April 2024.

Union and other organizations currently focus not only on development of the digital society, but also focus on individuals and their rights what we can denote as steps forward. Also, when we look at the Industry 4.0. and Industry 5.0. we can see the differences between them which lie in the approach to human being. As we can read in a scientific research smart manufacturing is being shaped nowadays by two different paradigms: Industry 4.0 proclaims transition to digitalization and automation of processes while emerging Industry 5.0 emphasizes human centrality.³⁵ We can also present that Industry 5.0. focuses on collaboration between and machines. When we compare Industry 4.0. and 5.0. the fourth revolution was driven by technological change, the fifth is powered by values and sustainability by preservation of human rights. In the age of massive processing of our data and massive entering to our privacy is very important to define not only the rules of interference in our private and personal sphere, but also to define what all falls under the term of protection of personal data and privacy. And this should be goal of the authorities adopting rules and control its preservation. As already mentioned in this article, the adoption of the GDPR has led to a clarification of the legislation in the area of personal data protection and to the removal of doubts about what is personal data and what is not. A more complicated situation is in the area of privacy protection, which does not have a clear terminological expression. For this reason, it is possible for commercial companies from a private law point of view, as well as for the state from a public law point of view, to dispute whether a certain activity is breaching of privacy and not. On the other hand, however, it is also necessary to realize the fact that irrespective of the rules, rights and duties imposed by the legal regulations on persons handling personal data, i.e. controllers, processors, data protection officers, etc. and protection of our privacy, the data subjects must be aware of the fact that it is them, in the first place, who must protect their personal data from being misused. As noted by Kasl, the prevailing majority of internet users are far from being aware of the digital footprint they leave behind.³⁶

³⁵ See e.g. Golovianko, M.; Terziyan, V.; Branytskyi, V.; Malyk, D., *Industry 4.0 vs. Industry 5.0: Co-existence, Transition, or a Hybrid*, Procedia Computer Science, Vol. 217, 2023, p. 1 [<https://doi.org/10.1016/j.procs.2022.12.206>], Accessed 5 September 2023.

³⁶ Kasl, F., *Internet věci a ochrana dát v evropském kontextu*, Revue pro právo a technologie, No. 13, 2016, p. 120, available at: [<https://journals.muni.cz/revue/article/view/5422/pdf>], Accessed on 20 April 2023.

REFERENCES

BOOKS AND ARTICLES

1. Bania, K., *The role of consumer data in the enforcement of EU competition law*, European Competition Journal, Vol. 14, Issue 1, 2018, pp. 38-80, [<https://doi.org/10.1080/17441056.2018.1429555>]
2. Golovianko, M., Terziyan, V., Branytskyi, V., Malyk, D., *Industry 4.0 vs. Industry 5.0: Co-existence, Transition, or a Hybrid*, Procedia Computer Science, Vol. 217, 2023, pp. 102-113, [<https://doi.org/10.1016/j.procs.2022.12.206>]
3. Hučková, R., Sokol, P., Rozenfedlova, L., *4th industrial revolution and challenges for European law (with special attention to the concept of digital single market)*, EU and comparative law issues and challenges series (ECLIC 2), EU law in context – adjustment to membership and challenges of the enlargement: Conference book of proceedings. - Osijek: Sveučilište Josipa Jurja Strossmayera u Osijeku, 2018, pp. 201-216, Available at: [<https://hrcak.srce.hr/ojs/index.php/eclic/issue/view/313/Vol2>], Accessed 15 April 2023
4. Hutchinson, Ch. S., Trescakova, D., *The challenges of personalized pricing to competition and personal data protection law*, European Competition Journal, Vol. 18, Issue 1, 2022, pp. 105-128.
5. Kasl, F., *Internet věci a ochrana dát v evropském kontextu*, Revue pro právo a technologie, No. 13, 2016, pp. 111-146, available at: [<https://journals.muni.cz/revue/article/view/5422/pdf>], Accessed 20 April 2023.
6. Purtova, N., *The Law of Everything. Broad Concept of Personal Data and Future of EU Data Protection Law*, Law, Innovation and Technology, Vol. 10, No. 1., 2018, pp. 40-81.
7. Rozenfeldova, L., Sokol, P., *New Initiatives and Approaches in the Law of Cookies in the EU*, IDIMT-2018: Strategic modeling in management, economy and society: 26th interdisciplinary information management talks. Linz: TRAUNER Verlag, 2018, pp. 303-310.
8. Rudohradská, S., *Jednotný digitálny trh - výzvy a perspektívy*, Jarná škola doktorandov 2020: zborník príspevkov zo 7. ročníka. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, 2020, pp. 230-234 available at: [<https://unibook.upjs.sk/img/cms/2020/pf/jarna-skola-doktorandov-2020.pdf>], Accessed 21 April 2023.
9. Warren, D. S., Brandeis, L. D., *The Right to Privacy*, Harvard Law Review, Vol. 4, No. 5, In: Siskovicova, K., *Ochrana súkromia a osobných údajov zamestnanca*. Trnava: Publisher: Typi Universitatis Tyrnaviensis, 2015, p. 20., available at: [<http://faculty.uml.edu/sgallagher/Brandeisprivacy.html>].
10. Wasastjerna, M.C., *The role of big data and digital privacy in merger review*, European Competition Journal, Vol. 14, Issue 2-3, 2018, p. 420, [<https://doi.org/10.1080/17441056.2018.1533364>]

ECHR

1. Judgment *Amann v Switzerland*, (2000) Application No. 27798/95, 16th of February 2000
2. Judgment *Rotaru v Romania* (2000) Application No. 28341/95

EU LAW

1. Berlin Declaration on Digital Society and Value-Based Digital Governance available at:
2. [<https://digital-strategy.ec.europa.eu/en/news/berlin-declaration-digital-society-and-value-based-digital-governance>], Accessed 21 April 2023.
3. Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions: 2030 Digital compass: the European way for the Digital Decade available at:
4. [https://eur-lex.europa.eu/resource.html?uri=cellar:12e835e2-81af-11eb-9ac9-01aa75ed71a1.0001.02/DOC_1&format=PDF], Accessed 21 April 2023.
5. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Upgrading the Single Market: more opportunities for people and business available at:
6. [<https://eur-lex.europa.eu/legal-content/SK/TXT/?qid=1534172388870&uri=CELEX:52015DC0550>], Accessed 21 April 2023.
7. Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions from 6th of May 2015: A Digital Single Market Strategy for Europe, available at:
8. [<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52015DC0192>], Accessed on 21 April 2023.
9. Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions from 19 February 2020 available at:
10. [<https://op.europa.eu/en/publication-detail/-/publication/db95106e-53ca-11ea-aece-01aa75ed71a1/language-en>], Accessed 21 April 2023.
11. Declaration on European Digital Rights and Principles [2023] OJ C 23/1
12. Directive (EU) 2016/680 of the European Parliament and of the Council of April 27, 2016 on the protection of natural persons in the processing of personal data by competent authorities for the purposes of crime prevention, investigation, disclosure or prosecution or for the purpose of enforcing criminal sanctions and on the free movement of such data [2016] OJ L 119/89.
13. Lisbon Declaration - Meaningful Digital Democracy, available at: [<https://www.lisbondeclaration.eu>], Accessed 21 April 2023
14. Proposal for a Council decision authorising Member States to ratify, in the interest of the European Union, the Protocol amending the Council of Europe Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (ETS No. 108) available at:
15. [<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018PC0451>], Accessed on 27 April 2023.
16. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC [2016] OJ L 119/1
17. Tallinn Declaration on e-Government available at:

18. [<https://digital-strategy.ec.europa.eu/en/news/ministerial-declaration-egovernment-tallinn-declaration>], Accessed 21 April 2023.
19. The Charter of Fundamental Rights of the EU (declared 2000)
20. The Treaty on European Union (2007).
21. The Treaty on the Functioning of the European Union (2009).

LIST OF NATIONAL REGULATIONS, ACTS AND COURT DECISIONS

1. The Constitution of the Slovak Republic, Official Gazette No. 460/1992
2. Decision of the Constitutional court of the Czech republic, No. Pl. ÚS 24/10, 22th of March 2011 (*Data retention I*)

WEBSITE REFERENCES

1. Action Plan – Digital Single Market – opportunities for Slovakia available at:
2. [https://www.slov-lex.sk/legislativne-procesy?p_p_id=processDetail_WAR_portletset&p_p_lifecycle=0&p_p_state=normal&p_p_mode=view&p_p_col_id=column2&p_p_col_count=1&_processDetail_WAR_portletset_startact=1485786560000&_processDetail_WAR_portletset_idact=1&_processDetail_WAR_portletset_action=files&_processDetail_WAR_portletset_cisloLP=LP%2F2017%2F53], Accessed 21 April 2023
3. Concept of a smart industry for Slovakia available at: [<https://www.mhsr.sk/inovacie/strategie-a-politiky/smart-industry>], Accessed on 22 April 2023
4. Kajati, E., Zolotova, I., *Industry 5.0 – revolúcia alebo evolúcia? (2)*, available at: [https://www.atpjournals.sk/rubriky/prehľadove-clanky/industry-5.0-revolucia-alebo-evolucia-2.html?page_id=33851], Accessed 22 April 2023
5. Kashyap, K., *Meta Fined €405 Million for Mishandling Teenagers' Data on Instagram*, available at:
6. [<https://www.spiceworks.com/marketing/customer-data/news/meta-fined-405-million-for-mishandling-teenagers-data-on-instagram/>], Accessed 25 April 2024.
7. Luxembourg DPA issues €746 Million GDPR Fine to Amazon available at:
8. [<https://dataprivacymanager.net/luxembourg-dpa-issues-e746-million-gdpr-fine-to-amazon/>], Accessed 25 April 2023
9. Recommendation of the Council Concerning Guidelines Governing the Protection of Privacy and Transborder Flows of Personal Data (OECD Privacy Guideline) available at: [https://www.oecd.org/sti/ieconomy/oecd_privacy_framework.pdf], Accessed on 27 April 2023
10. *Privacy and Information Technology*, Stanford Encyclopedia of Philosophy, available at: [<https://plato.stanford.edu/entries/it-privacy/>], Accessed on 19 April 2023.
11. Zandt, F., *GDPR BREACHES, Big Tech Big Fines*, available at: [<https://www.statista.com/chart/25691/highest-fines-for-gdpr-breaches/>], Accessed on 25 April 2023