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The impact of Artificial Intelligence in the European Union on human work (view of the European Economic and Social Committee EU)

Summary

The author presents the conditions for the development of Artificial Intelligence in the European Union, directly related to work performed by humans together with “learning” automatic devices, and discusses legal issues regulating the functioning of this intelligence under direct human supervision.

Keywords: labour market, Artificial Intelligence, European Union.

1. The fourth industrial revolution

Artificial Intelligence (AI) is currently the subject of numerous analyses in terms of its impact on various areas of human life. Undoubtedly, the development of AI has and will have a major impact on the situation on the labour market. One of the most important entities commenting on this matter is EESE. In the article, the author presents the opinion of the Committee on the conditions for the development of Artificial Intelligence in the European Union, directly related to work performed by humans together with “learning” automatic devices. Analyzing the documents published by EESE, he points out that the activities have focused so far on legal regulations necessary to organize possible and predictable effects in this area, already called the “fourth industrial revolution”.

AI, which is developing intensively and systematically on a global scale, is exercising an increasing impact on employment, economy and society¹. In the middle of the last century, the seeds of Artificial Intelli-

¹ See A. M. Świątkowski: *Szanse, zagrożenia i niewiadome zatrudnienia w stadium „czwartej rewolucji przemysłowej”*. “Polityka Społeczna” 2018, no. 4, pp. 1–9.

gence were devices that functioned as work tools used by humans. Currently, with electronic progress, automatic devices equipped with the ability to learn independently are beginning to take over some of the activities and tasks previously performed by employees, employed or self-employed. It is estimated that the Artificial Intelligence market will reach USD 38.8 billion in the first quarter of this century². Compared to 2017, when the institutions of the European Union (EU) decided to monitor the development, there has been an unimaginable increase in the value of AI on a global scale. Therefore, the European Commission (EC) rightly believes that AI is changing our world. For this reason, the European Economic and Social Committee (EESC) has undertaken to monitor the situation and progress of AI not only in the spheres of production and technology, but also in security, ethical and social matters. AI poses a challenge in eleven areas of socio-economic life³. Since the publication of the above opinion, the EESC has become the representative of organized EU civil society. It is the responsibility of the EESC to initiate and shape social debates on the role of AI, taking actions to centralize it and appropriately stimulate it so that it develops in line with the interests of the EU and its Member States. All interested parties and entities were invited to participate in discussions on AI: politicians and policy-makers, industry representatives, social partners, consumers, non-governmental organizations, educational institutions, scientific institutions, healthcare facilities, experts and academics from various fields of knowledge, such as AI, security, ethics, economics, labour sciences, legal sciences, behavioural sciences, psychology, philosophy⁴.

² Opinions of the European Economic and Social Committee (EESC), 526th EESC Plenary Session, 31 May 2017 – 1 June 2017; EESC: *Opinion Artificial Intelligence: The Impact of Artificial Intelligence on the Single Market (Digital), Production, Consumption and Society* (EESC own-initiative opinion). Rapporteur C. Muller, point 1.1. Journal of Laws EU C 288/1, 31 August 2017, hereinafter referred to as "EESC Opinion"; *Annex to the Communication from the Commission to the European Parliament, the Council, the EESC and the Committee of the Regions. Coordinated Plan on Artificial Intelligence*. Brussels, 7 December 2018, COM(2018) 795 final Annex.

³ Security, ethics, privacy, transparency, work, education and professional skills, (in)equality and inclusion, legal and regulatory frameworks, governance and democracy, warfare, super intelligence. EESC opinion, point 1.5.

⁴ Ibidem, point 1.2.

2. Artificial Intelligence and work

The EESC has no doubt that AI will impact employment levels and the type and nature of many jobs⁵. The impact will be comparable to that of previous industrial revolutions. AI is a general-purpose technology that simultaneously affects all economic and social departments of modern countries and their societies. But that does not mean that our civilization is finished, even if the technological progress is so fast and surprising that it is not just humans who cannot keep up. It is imperative that we understand these phenomena, consider their consequences and are able to develop appropriate strategies, which will allow people to face the challenge of high unemployment and other negative consequences of the race with machines. AI can and should be used to perform specific tasks and specific activities, particularly in roles that demand strenuous, dangerous, burdensome, unpleasant, unhygienic and monotonous work. It can bring significant benefits to employees who have previously performed such jobs.

AI may also constitute a stimulus for entrepreneurs to establish a new social relationship in labour relations⁶. Workers currently employed in this type of professional activities will have the opportunity to transition to less physically demanding and more intellectually stimulating jobs, provided that they possess the necessary professional skills, which, however, will be generally within the reach of a significant proportion of the workforce. Therefore, AI will contribute to raising the intellectual level not only of the less educated part of individual societies.

It is rightly assumed that AI, in addition to routine tasks, will also take over activities requiring the ability to process large databases and obligations defined by the parties to employment relations. It is believed that machines will continue to increase their capabilities. They will work by anticipating the development of specific socio-economic situations and processes, based on descriptions of collected information and experience. AI, as a modern technology that influences employment, will also apply to work performed by highly qualified

⁵ P. Nowik: *Definicja sztucznej inteligencji w nauce prawa pracy*. "Praca i Zabezpieczenie Społeczne" 2023, no. 9, pp. 7 et seq.

⁶ A. M. Świątkowski: *Digitalizacja prawa pracy*. "Praca i Zabezpieczenie Społeczne" 2019, no. 3, pp. 15–16.

people. It will continue to manage not only automatic but also autonomous machines trained by humans. However, AI will not replace people in key activities⁷.

In consequence, the existing, generally applicable daily and weekly working time standards will be reduced, sometimes significantly beyond the current daily and weekly norms. They will be replaced by even longer rest periods than before. AI and the consequences resulting from its development should significantly contribute to the cooperation of representatives of state interests and social partners in shaping the socio-economic policy in labour relations that is most beneficial to all interested parties. AI will have a significant impact on the creation of new, previously unknown jobs. It will influence the types of work and the ways in which it is performed. Applications, algorithms used by AI and other electronic technologies will enable machines to assign tasks and activities to be performed. They will allow workers to manage their working time, and therefore enable the management of other factors that constitute the content of employment relations. They will also allow machines to constantly and accurately monitor the work progress of employees, including those who work – *via* modern employment platforms⁸ – on their own account. In the literature on labour law, the question is increasingly being asked who supervises whom in employment relations – employees with automated devices or vice versa?⁹ According to the current state of affairs, AI cannot independently take over supervision of employees. There is no reason to consider whether machines can, for their own good and benefit, take over the supervision of work performed by humans and employers employing workers.

⁷ J. Oster: *Code Is Code and Law Is Law – The Law of Digitalization and the Digitalization of Law*. "International Journal of Law and Information Technology" 2021, no. 29, p. 116.

⁸ A. M. Świątkowski: *Elektroniczne technologie zatrudnienia ery postindustrialnej*. Kraków 2019, pp. 77 et seq.

⁹ M. Ivanowa, J. Bronowicka, E. Kocher, A. Degner: *The App as a Boss? Control and Autonomy in Application-Based Management, Arbeit/Grenze/Fluss – Work in Progress*. "Interdisziplinäre Arbeitsforschung" no. 2, Frankfurt (Oder), *passim*.

3. Supervision and responsibility over AI

AI is not yet taking control of people¹⁰. However, it is not certain, due to the pace of learning of machines, that in the uncontrolled process of development of this technology, people will still be able to supervise the development of AI. The supervision is therefore particularly important in the case of augmented intelligence. Automatic machines created by humans may not limit their own intellectual potential to what humans have “instilled” in them. For this reason, supervision over AI should take on one common legal and organizational form. It must be based on common ethical foundations accepted by the EU. They should be based on the values defined in the EU Charter of Fundamental Rights¹¹. The EU institutions are moving in this direction. They call on Member States to “develop and establish a uniform code of ethics for the development, implementation and use of artificial intelligence”¹². Such a plan should address the following issues, problems and concerns: a) internal and external security; b) issues of transparency, understandability, and the ability to explain the functionality of AI systems; c) the possibility of controlling them; d) education and development of skills in using AI; e) equal availability and distribution of opportunities offered by AI to the EU citizens. Assuming that AI may lead to effects inconsistent with established legal regulations, it is necessary to take a position on matters relating to the material and legal liability of “learning” machines that independently undertake actions that are unfavourable or harmful to people and their property¹³. In matters relating to the construction of civil law instruments of liability for damage caused by robots, recommendations were formulated on the possibility of introducing a separate legal concept of E-personality¹⁴. The EESC expressed skepticism towards

¹⁰ Opinion prepared in 2017 by the EESC.

¹¹ Official Journal of the EU C No. 83, p. 389.

¹² EESC opinion, point 3.6.

¹³ J. Mazur: *The European Union Towards the Development of Artificial Intelligence: Proposed Regulatory Strategies and Building a Single Digital Market*. “European Judicial Review” 2020, no. 9, pp. 13–18.

¹⁴ European Parliament (EP) resolution of 12 January 2017 with recommendations to the Commission on civil law provisions relating to robotics (2015/2103(INL)) and the Report of the Global Commission on the Ethics of Scientific Knowledge and Technology (COMEST) on the ethics of robotics. See P. Stylec-Szromek: *Artificial Intelligence – Law*,

this idea and the proposals for its legal regulation. It was not without reason that the Committee found that the transfer of financial liability for damage caused by machines would directly lead to the exclusion of civil and legal liability of natural and legal persons acting as creators of devices having the ability to “learn”. Inventors and manufacturers should be responsible for the operation of all types of automatic machines and devices. Such liability should also be borne by negligent or faulty users of these devices, who do not follow the instructions developed by the manufacturers when using them. However, in this opinion the EESC did not formulate any strong recommendations to reject the idea of equipping AI and other machines with an electronic personality. The final conclusion on this issue was made dependent on a thorough analysis of the state of legal acts in force in the Member States and the EU, the jurisprudence of national courts adjudicating on civil and commercial matters in the Member States and the case law of the Court of Justice of the EU. *De lege lata*, the legal systems of the Member States do not resolve the dilemma regarding direct, civil law liability for damage caused by devices without legal personality.

4. Opportunities for modern development

At this stage of considerations, it is impossible to assess the chances of individual societies for the development of AI in the world. The assessment of a new, previously unknown phenomenon, which is AI, has been classified as a very important current problem requiring assessment “from a broad perspective” and immediate responses to “important and breakthrough changes, both technological and social, in the field of artificial intelligence and spheres related to it”¹⁵. The most significant technological changes were considered to be “striking or significant leaps” in the development of AI skills. They precede not only the real, but even inevitable and most likely imminent probability of the materialization of general control over work by AI. In the social sphere, “a significant reduction in work with no prospects for

Responsibility, Ethics. “Scientific Journals of the Silesian University of Technology” 2018, Series: Organization and Management, issue 123, pp. 501 et seq.

¹⁵ EESC opinion, point 5.2.

new jobs” has already been mentioned¹⁶. Social partners were mentioned directly, after political decision-makers, as people and entities with a vested interest in regulating these problems and participating in work aimed at agreeing on the conditions for the development of AI within the EU and on a global scale. However, the last statement is too optimistic for the EU. The EU’s influence on the development of AI on other continents – in North America and Asia – is undoubted. It has been admitted that “Europe is lagging behind in private investment in AI”¹⁷. Our continent therefore has very strong competitors in the international arena in matters related to AI. The topic of AI has become one of several key issues in the European politics¹⁸. Without examining the attitude of the most important EU Member States (France and Germany) towards the issue of AI, it is impossible to take a responsible position towards the views of the EC towards AI presented in the article. It may seem paradoxical, but the most advanced activities related to the use of AI in Europe were undertaken twenty – not three – years ago. This situation occurred in Estonia. Modern Estonia is considered the most digitized society in the world. As much as 99% of public services in this country are made available in digital form. The basis for the success of electronic administration in Estonia is the cooperation of state authorities, the public sector and the private sphere. Therefore, the success of the AI development desired by society results from the proper management of electronic technologies. The EU is only in the early stages of managing the conditions for AI growth. The first stage of the pro-EU AI development policy took the legal and organizational form of cooperation. The aim of such an EU policy towards AI is the need to unify activities aimed at convincing advanced countries, the USA and China, of the basic condition for the development of the phenomenon of digitalization. It is absolutely necessary to constantly have human supervision over AI. Nowadays, it can only be guaranteed and fully implemented in Europe.

¹⁶ Ibidem.

¹⁷ Communication from the Commission to the European Parliament, the European Council, the European Economic and Social Committee and the Committee of the Regions, “Artificial Intelligence for Europe”, 237 final, Brussels, 24 April 2018 [SWD(2018) 137 final], COM(2018).

¹⁸ *Iloraz Sztucznej Inteligencji. Potencjał Sztucznej Inteligencji w sektorze publicznym*. Ed. 3. THINK-TANKT, Warszawa 2020, pp. 35 et seq.

5. Conclusion

AI, as an electronic technology of the future, should be trustworthy and guarantee the safety of its users. The EU has a chance to convince its Member States of the necessary need to use modern electronic technologies in practice by all interested parties and at the same time respect European values, principles and human rights. This common goal unites EU Member States, especially those with the ambition to become leaders in the use of AI for economic and social development. The EU is competing to become a world leader, while its two largest Member States, Germany and France, have the ambition to become the AI leaders on the European continent. It is therefore possible and very likely that ambitious EU projects on the conditions for the development of AI in the EU will be implemented.

It is worth noting, however, that in addition to extremely valuable general reflections on projects introducing AI in the EU countries, common sense in predicting its effects also requires us to notice the possible socially negative sides of this innovation and check them in specific research. Already today, there are analyses of changes in the labour market situation for professions such as lawyers, IT specialists, etc., which will certainly be surprising for “white collar” workers.

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Wpływ sztucznej inteligencji w Unii Europejskiej na pracę człowieka (W świetle opinii Ekonomicznego i Społecznego Komitetu UE)

Streszczenie

Autor przedstawia warunki rozwoju Sztucznej Inteligencji w Unii Europejskiej bezpośrednio dotyczące pracy świadczonej przez człowieka wspólnie z „uczącymi się” urządzeniami automatycznymi oraz omawia kwestie dotyczące zagadnień prawnych regulujących funkcjonowanie tej inteligencji pod bezpośrednim nadzorem człowieka.

Słowa kluczowe: rynek pracy, sztuczna inteligencja, Unia Europejska