DIGITALIZATION OF THE LABOUR MARKET: EUROPEAN UNION MEASURES TO ENSURE LEGAL PROTECTION FOR EMPLOYEES

DIGITALIZÁCIA TRHU PRÁCE: OPATRENIA EURÓPSKEJ ÚNIE ZABEZPEČUJÚCE PRÁVNU OCHRANU ZAMESTNANCOV[1]

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ABSTRACT

Digitalization as a global phenomenon is fundamentally changing society in various areas, including the labour market. Digital technologies and the associated modernization are influencing the way work is organized and performed, posing a challenge for the European Union as an actor providing labour law protection to workers across member states. In this article, the authors address the issue of the legislative response of European Union bodies to current challenges in the transformation of labour relations in the digital age, while also paying attention to the necessary processes of transforming the legislative framework in the Slovak Republic. The issue has a significant ontological and philosophical dimension, as it touches on the very essence of human beings as subjects performing dependent work in the digital age. It is an open scientific problem that is not archival in nature but is developing dynamically alongside technological and social progress.

ABSTRAKT

Digitalizácia ako globálny fenomén zásadne mení podobu spoločnosti v rôznych oblastiach, trh práce nevynímajúc. Digitálne technológie a s tým súvisiaca modernizácia vplývajú na spôsob organizácie práce a jej výkon a predstavujú výzvu pre Európsku úniu ako aktéra poskytujúceho pracovnoprávnu ochranu pracovníkom naprieč členskými štátmi. Autorky sa v príspevku zaoberajú problematikou legislatívnej reakcie orgánov Európskej únie na aktuálne výzvy v oblasti transformácie pracovnoprávnych vzťahov v digitálnej ére, pričom pozornosť tiež venujú aj nevyhnutným procesom transformácie legislatívneho rámca v Slovenskej republike. Problematika má výraznú ontologicko-filozofickú dimenziu, keďže zasahuje do samotnej podstaty človeka ako subjektu, ktorý vykonáva závislú prácu v digitálnej ére. Ide o otvorený vedecký problém, ktorý nemá archívnu povahu, ale dynamicky sa vyvíja spolu s technologickým a spoločenským pokrokom.

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I. INTRODUCTION

The process of gradual digitalization is fundamentally changing the structure of the labour market in the European Union. We are witnessing an era of expanding digital technologies, automation, artificial intelligence, and the development of digital platforms, which are leading to the emergence of new forms of employment, reducing costs, increasing efficiency, and enabling more flexible work organization. The effects of digitalization on the economy, society and quality of life imply significant challenges for the labour market, while there is a great need to increase people's confidence in their skill levels and to make the most of the digitalization of companies.[4] Requirements for work performance methods have changed significantly in recent years, mainly due to the continuous development of information and communication technologies.[5]

Artificial intelligence, which is already a reality in many areas, is also affecting labour relations.[6] The introduction of new digital technologies gives employers a competitive advantage, improves their products and services, and creates new job opportunities.[7] This is also confirmed by European Commission, according to which collaborative platforms offer the possibility of creating new job opportunities, flexible working conditions, and new sources of income.[8] Rapidly developing digital technology systems bring a wide range of benefits and advantages to the economic life of countries, on the other hand, the competitive advantage for employers is linked to concerns about the possible unpredictability of their behavior, especially in situations where decision-making processes that should involve human "intelligence" are also transferred to these systems.[9]

The introduction of digital systems, algorithmic control, and artificial intelligence systems brings with it many risks, particularly in relation to the observance of fundamental human rights such as the right to privacy, the protection of personal data, but also equality before the law and the prohibition of discrimination.

Despite the advantages, opportunities, and benefits that technological changes bring, they also place new demands on the legal protection of employees. Labour law in its "traditional" form no longer reflects and provides sufficient protection for the rights of employees working in the digital environment. These changes in the field of labour law are a precursor to the problems that legislators will have to deal with, as conflicts and disputes between employees and employers arise and are expected to continue to arise in the new era. The established method of resolving disputes in the field of labour law is through the courts, which involves disputes involving the protection of the weaker party. We are also seeing the emergence of alternative forms of dispute resolution, which have the potential to be a solid alternative in the future, particularly with the advent of digitalization in the workplace. Mediation is an effective tool for possible dispute resolution. The legal system of the Slovak Republic lacks the institution of court mediation as a separate institution for the alternative resolution of labour disputes. Although many EU Member States have adopted specific legislation on mediation and the courts fully encourage the parties to resolve their disputes out of court, mediation is still not

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4 VASILESCU, M.D. Digital divide, skills and perceptions on digitalisation in the European Union - Towards a smart labour market. In: PlosOne, 2020, vol. 15, no. 4. ISSN:1932-6203. DOI: https://doi.org/10.1371/journal.pone.0232032.

5 KATSABIAN, T. It's the End of the Working Time as We Know It – New Challenges to the Concept of Working Time in the Digital Reality. In: McGill Law Journal. 2020, vol. 65, no. 3, p. 380-419. ISSN: 1920-6356. DOI: https://doi.org/10.7202/1075597ar.

6 MORÁVEK, J. Změna některých výchozích paradigmat a její reflexe v právní úpravě pracovněprávních vztahů a sociálního zabezpečení. In Právník, 2021, vol. 160, no. 2, p. 136-152. ISSN: 0231-6625.

7 KEŠELOVÁ, D. et al. Vplyv robotizácie, automatizácie a digitalizácie na trh práce v SR. [online]. 2022. [Accessed 30. September 2025]. Available from https://ivpr.gov.sk/wp-content/uploads/2024/01/Vyskumna_sprava_digitalizacia.pdf.

8 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - A single market for 21st century Europe.

9 BARANCOVÁ, H. Umelá inteligencia a pracovné právo. In: Právny obzor, 2024, vol. 107, no. 2, p. 112. ISSN 2729-9228. DOI: https://doi.org/10.31577/pravnyobzor.2024.2.02.

widespread in the EU. Radanova a Tvaronavičiené[10] are examining the challenges of regulating the profession of mediator at the European Union level. Its slower growth is mainly due to a lack of structured information about mediation and its advantages over litigation.[11]

If labour law is to truly fulfill its protective function, it must guarantee that adequate protection will apply to everyone for whom it is intended, taking into account the content and nature of the relationship in which they perform work for another person. If a certain group of persons performing dependent work were excluded from the application of this protection, this would render the normative regulation of labour law rules ineffective, which is highly problematic in terms of respect and trust in the law as an instrument for influencing social reality, and would also create the risk of social dumping, social exclusion, labour market segmentation, and other highly problematic phenomena.

The changing nature of work has become a controversial topic in public debate across society and beyond, with interest from think tanks, companies, international organizations, governments, employers, and the wider public continuing to grow.[12] The European Union plays an irreplaceable role in this area, actively addressing the challenges of labour market digitalization by formulating policy and legislative initiatives that take into account new forms of work and ensure labour protection for workers across EU member states.

The implementation of autonomous artificial intelligence systems has legal implications that affect various areas of social life, including administrative law and other public and private law disciplines. Scientific discussions across various legal disciplines are considering, for example, whether artificial intelligence can meet the legal characteristics of a legal entity or the legal characteristics of a natural person. It is questionable whether artificial intelligence can be a person "sui generis" (a so-called electronic person) and whether such highly autonomous action by artificial intelligence can constitute a legal act. In our opinion, there is an absence of volition and a lack of expression of subjective will as a fundamental requirement of a legal act, which makes it impossible to attribute legal personality to highly autonomous artificial intelligence that could also perform legal acts.

The philosophical implications of technological autonomy go far beyond the scope of ordinary legal issues. Modern autonomous systems are changing the fundamental paradigms of labor relations by shifting the boundaries between freedom and determination, between human will and algorithmic decision-making, creating a need to redefine the ethical and legal principles that form the basis of labor law protection.

In terms of the methods of scientific research used, we examined the substantive content of the contribution using the method of analysis of the legal status de lege lata, employing systematic qualitative analysis of legal regulations, which examines the dynamics of a particular event from the perspective of its legal regulation. For the purposes of a more in-depth analysis, we focused on the following research questions:

1. Is the current definition of "employee" and "dependent work" sufficient?
2. Is the European Union active in terms of legislative measures aimed at providing legal protection?

Given the considerable breadth of the issue, it is clear that it cannot be explained without an outline of the current legislative framework. Of the other methods of scientific inquiry, generalizing abstraction was appropriately used to draw conclusions. We used the analytical-

[10] RADANOVA, Y. and TVARONAVIČIENÉ, A. Free movement of mediators across the European Union: a new frontier yet to be accomplished? In: Access to Justice in Eastern Europe, 2024, vol. 7, no. 1, p. 83-106. ISSN: 2663-0583. DOI: https://doi.org/10.33327/AJEE-18-7.1-a000122.

[11] STEFAN, A. and PRYTYKA, Y. Mediation in the EU: common characteristics and advantages over litigation. In: InterEULawEast: Journal for the international and european law, economics and market integrations, 2021, vol. 8, no. 2, p. 175. ISSN: 1849-3734. DOI: https://doi.org/10.22598/iele.2021.8.2.9.

[12] VÁZQUEZ, I.G. et al. The changing nature of work and skills in the digital age. Luxembourg: Publications Office of the EU, 2019, p. 102. ISBN: 978-80-89517-48-0.

synthetic method mainly in the section on legislative sources, and we also relied on citation content analysis, which we used to interpret sources from professional literature and other related documents. We also applied semantic analysis, which allows us to penetrate the terminology of the issue under investigation as a basic postulate necessary for interpreting the content of the legal text. In the section presenting evaluative attitudes and conclusions, in addition to logical procedures, we applied the methods of causality and deduction, generalization, and the search for analogies.

II. ARTIFICIAL INTELLIGENCE AND THE LABOUR MARKET

Artificial intelligence (hereinafter referred to as "AI") is a term used to describe computer systems capable of performing tasks that typically require human intelligence. AI has become a transformative force in the labour market, changing the nature of work, job positions, and employment dynamics across various industries. As AI technologies continue to evolve, the impact of AI on the labour market is multifaceted and complex. Its development can bring benefits to citizens and businesses across Europe and can lead to increased productivity, task automation, improved decision-making processes, the creation of new jobs (in areas such as data analysis, machine learning, AI development), improved quality of existing jobs, and improved working conditions. However, the rise of AI also brings challenges. Technological progress brings growing uncertainty; among other things, technology can have a significant impact on the number of traditional jobs and the way work is done, which ultimately affects the quality of life of workers.[13,14] AI is changing the workplace by altering the content and design of work, the way employees communicate with each other and with machines, and the way work effort and efficiency are monitored.[15]

Although most AI systems do not pose a risk and can contribute to solving many societal challenges, some artificial intelligence systems create risks that need to be addressed in order to prevent undesirable outcomes.[16] The European Union has taken on this task by adopting *Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828* (hereinafter referred to as the "Artificial Intelligence Act"). The Artificial Intelligence Act is the first comprehensive legal framework for the use of artificial intelligence in the world and is binding and directly applicable in all Member States of the European Union.

The purpose of the Artificial Intelligence Act is to improve the functioning of the internal market, promote the deployment of trustworthy, human-centered artificial intelligence, ensure a high level of protection of health, safety, fundamental rights, including democracy, the rule of law, and the protection of the environment from the harmful effects of AI systems in the European Union, and to promote innovation. This legislation defines uniform rules for the development and use of AI technologies in the European Union, focuses on identifying and

[13] EUROPEAN COMISSION. Artificial Intelligence and the future of work. [online]. 2025. [Accessed 01. October 2025]. Available from https://europa.eu/eurobarometer/surveys/detail/3222.

[14] INTERNATIONAL ECONOMIC DEVELOPMENT COUNCIL. Artificial Intelligence Impact on Labor Markets. [online]. 2025. [Accessed 01. October 2025]. Available from https://www.iedconline.org/ clientuploads/ EDRP% 20Logos/AI_Impact_on_Labor_Markets.pdf.

[15] LANE, M. and SAINT-MARTIN, A. The impact of Artificial Intelligence on the labour market: What do we know so far? [online]. 2021. [Accessed 01. October 2025]. DOI: https://doi.org/10.1787/7c895724-en.

[16] EURÓPSKA KOMISIA. Akt o umelej inteligencii. [online]. 2025. [Accessed 01. October 2025]. Available from https://digital-strategy.ec.europa.eu/sk/policies/regulatory-framework-ai.

regulating AI systems according to their riskiness, and sets out obligations for providers, distributors, and users of AI systems.[17]

The Artificial Intelligence Act also has a fundamental and direct impact on how AI is introduced, used, and managed in the workplace. As we have already mentioned, the implementation of AI systems poses challenges for both employers and employees, which are addressed by the legislation in question.

One such challenge is the *lack of transparency* in the use of certain AI systems (e.g., algorithms and decision-making systems). Transparency, as defined in the regulation, means that AI systems are developed and used in a way that allows for adequate traceability and explainability, alerting people that they are communicating and interacting with an AI system, while also adequately informing those deploying the AI system about its capabilities and limitations, and those affected about their rights. In the workplace, AI systems are increasingly being used to make important decisions that affect employees (e.g., in recruitment, performance evaluation, task allocation, or dismissal). However, employees often do not know on what basis decisions are made and have no opportunity to challenge them. In this context, these are high-risk systems, which, according to Annex III, are: AI systems to be used for the recruitment or selection of natural persons, in particular for targeted job advertisements, the analysis and filtering of job applications, and the evaluation of candidates; AI systems to be used in deciding on the terms and conditions of employment, on career progression in employment or termination of contractual employment relationships, on the assignment of tasks based on individual behavior or personal characteristics or traits, or on the monitoring and evaluation of the performance and behavior of persons in such relationships. The Act on Artificial Intelligence in relation to high-risk AI systems introduces requirements for transparency, security (e.g., risk management system, quality management system, fundamental rights impact assessment system, obligation to prepare technical documentation, documentation retention, requirements for accuracy, reliability, and cybersecurity, etc.) and human oversight aimed at preventing or minimizing risks that may arise when using a high-risk AI system. *Employees are also often unaware of how to defend themselves against AI system decisions* due to the absence of legal mechanisms or the definition of a responsible person. The adoption of the Artificial Intelligence Act overcomes these shortcomings by introducing measures to ensure human oversight, a liability framework, and oversight systems.

III. WORK FOR DIGITAL WORKING PLATFORMS

In the context of the current digital era, we are witnessing a widespread dynamic growth of new electronic and digital forms of work, which bring opportunities and jobs available through various online application platforms. One subcategory of digital forms of work is "platform work," which is characterized by flexibility, a simple selection process, and relatively low qualification requirements for workers.[18] Platform work is a form of employment in which organizations or individuals use an online platform to access other organizations or individuals in order to solve specific problems or provide specific services in exchange for payment.[19] Digital work platforms support innovative services and new business models, create numerous opportunities for consumers and businesses, effectively match labour supply and demand, and offer opportunities to earn or obtain additional income, even for disadvantaged job seekers (e.g., graduates, people with disabilities, migrants, people from minority racial or ethnic

[17] ÚRAD PRE VEREJNÉ OBSTARÁVANIE. Nariadenie o umelej inteligencii. [online]. 2024. [Accessed 01. October 2025]. Available from https://www.uvo.gov.sk/aktualne-temy/aktualita/nariadenie-o-umelej-inteligencii.

[18] SÍPOS, A. Platformová ekonomika: Výzvy a príležitosti pre efektívnu právnu ochranu zamestnancov. In: Acta Facultatis Iuridicae Universitatis Comenianae, 2023, vol. 42, no. 2, p. 46. ISSN: 1336-6912. DOI: https://doi.org/10.62874/afi.2023.2.

[19] EURÓPSKA RADA, RADA EURÓPSKEJ ÚNIE. Pravidlá EÚ týkajúce sa práce pre platformy. [online]. 2025. [Accessed 05. October 2025]. Available from https://www.consilium.europa.eu/sk/policies/platform-work-eu/.

backgrounds). Digital labour platforms provide employers with broader access to consumers, opportunities to diversify their income and develop new areas of business, and consumers with better access to a wider range of products and services. The use of platform work has become standardised during the COVID-19 pandemic, and as a result of increased migration in connection with the war in Ukraine, the popularity of this type of employment continues to grow.

With the growing popularity of platform work, there has been an increased need for legal regulation, given that digital work platforms disrupt and relativize the existing legal framework in the areas of labour and social law. As they operate across European Union member states, they often exploit regulatory differences to their advantage. The European Union was the first legislator to take such a step with the adoption of *Directive (EU) 2024/2831 of the European Parliament and of the Council of October 23, 2024, on improving working conditions in platform work* (hereinafter referred to as the "Platform Work Directive"). The Platform Work Directive entered into force on December 1, 2024, and Member States are required to ensure its transposition by December 2, 2026.

The general objective of the Directive is to improve working conditions and protect personal data in the field of platform work. In order to achieve this objective, specific objectives have been set, namely: to introduce measures to facilitate the determination of the correct employment status of persons working for platforms; promoting transparency, fairness, human oversight, safety, and accountability in algorithmic control in the field of platform work, and improving transparency in the field of platform work (including in cross-border situations).

The legislation in question responds to several challenges. The first of these is the phenomenon of *incorrect classification of work as self-employment*,[20] which prevents the correct employment status of persons working for platforms from being determined and ensures their access to decent living and working conditions. Under Article 5, a legal presumption of an employment relationship is introduced if facts are found that indicate management and control in accordance with national law, collective agreements or established practice in Member States, taking into account the case law of the Court of Justice. At the same time, the burden of proof is shifted to the digital work platform, which, if it seeks to rebut the legal presumption, must prove that the contractual relationship in question is not an employment relationship. In connection with the incorrect classification of employee status, workers on digital labour platforms face *reduced labour and social protection* (no social insurance, holidays, obstacles to work or minimum wage). Based on the accurate determination of the employment relationship, workers have access to the rights arising from labour regulations and the social system.

Another challenge in relation to the development of the platform economy is the *lack of transparency in information about automated monitoring and automated decision-making systems* used to make or support decisions affecting people working for platforms, including the working conditions of platform workers (access to work tasks, income, health and safety, working time, access to training, promotion or equivalent measures, etc.). Article 9 introduces an information obligation for digital labour platforms regarding the use of automated monitoring or automated decision-making systems towards persons working for platforms, representatives of platform workers and, upon request, the relevant national authorities. In line with the above, Article 10 introduces an obligation for digital work platforms to monitor the impact of individual decisions taken or supported by automated monitoring and automated decision-making systems. Digital labour platforms are also required to ensure sufficient human resources for effective oversight and evaluation of the impact of individual decisions taken or

[20] In this context, it is a false self-employed activity, which is formally declared as self-employment, but meets the conditions characteristic of an employment relationship.

supported by automated monitoring and decision-making systems. Persons entrusted by a digital work platform with the function of oversight and evaluation must have the competence, training, and authority necessary to perform this function, including for the purpose of revoking automated decisions. The directive also guarantees persons working for platforms the right to an oral or written explanation of any decision taken by an automated decision-making system.

The lack of transparency also applies to *data processing through automated monitoring and automated decision-making systems.* Digital work platforms use these systems to make decisions about job allocation, performance evaluation, and termination of cooperation, while workers do not have transparent information about how these systems work, as a result of which they are unable to defend themselves against these decisions. Under Article 7, the systems defined above may not process any personal data relating to the emotional or psychological state of a person working for the platforms; no personal data in connection with private conversations, including communications with other persons working for platforms and representatives of persons working for platforms; personal data for the purpose of anticipating the exercise of fundamental rights, including freedom of association, the right to collective bargaining and collective action, or the right to information and consultation; personal data to infer a person's racial or ethnic origin, migration status, political opinions, religious or philosophical beliefs, disability, health status, including chronic illness or HIV status, emotional or mental state, trade union membership, sexual life or sexual orientation, and do not process any biometric data relating to a person working for platforms in order to identify that person by comparing that data with the biometric data of natural persons stored in a database; they do not collect any personal data during the period when the person working for the platforms does not offer or perform work for the platforms.

Digital labour platforms are often *international businesses that operate and implement business models in several Member States or across borders.* In such cases, it is not always clear which Member State is competent to apply the law or which entity is responsible for supervising the activities of the digital labour platform concerned. The competent national authorities also do not have easy access to data on digital labour platforms, including the number of people working for the platforms, their employment status and their working conditions. In order to avoid confusion, the Directive introduces a systematic and transparent system of information provision and mutual cooperation between the competent national authorities. The operation of digital work platforms in several Member States and varying degrees of legal regulation also lead to a *lack of legal certainty and different conditions for performing the same work.* The Platform Work Directive introduces a uniform legal framework for the entire European Union, establishing the same rules for digital work platforms in all Member States and thus protecting the rights of workers regardless of where they operate.

IV. PERSISTENT CHALLENGES, ADAPTATION NEEDS AND CHANGE IN THE NATURE OF EMPLOYMENT RELATIONS IN THE CONTEXT OF THE IMPACT OF DIGITALIZATION ON THE LABOUR MARKET

As mentioned above, the European Union is responding to various challenges related to the digitalization of the labour market. The institutions of the European Union play an irreplaceable role in shaping legislation that takes developments into account and, above all, ensures the protection of employees. Despite this, however, Member States continue to face and will continue to face various types of adaptation needs in the context of ongoing developments.

The digitalization of work activities has an inseparable impact on employee privacy, rest time, and family life.[21] The culture of constant availability causes an increased risk of

[21] VÍTKOVÁ, L. Nedostatky právnej úpravy práva zamestnanca na odpojenie. In: Legal Point, 2024, vol. 1, no. 1. ISSN: 1339-0104.

depression, anxiety, and burnout.[22] This trend has increased during the COVID-19 pandemic, when many employees were forced to work from home. Although this option saved many jobs and a large number of businesses, remote working has also proven to have its drawbacks. One example is the fact that many people continue to work outside their normal working hours (beyond the maximum working time), and as a result, the balance between work and private life has deteriorated significantly. Being constantly connected to work can also lead to health problems (disruption of mental and physical well-being).[23] In response to this, the European Parliament[24] calls for the adoption of new legislation enshrining the so-called right to disconnect, which means the right of workers not to perform work activities and not to engage in work-related communication outside working hours using digital tools such as phone calls, emails, or other messages. The right to disconnect should entitle workers to switch off their work tools outside working hours and not have to respond to their employer's requests without facing adverse consequences such as dismissal or other retaliatory measures. At the same time, employers should not require workers to work outside working hours. Employers should not promote a culture of "always on" work, in which workers who give up their "right to disconnect" are clearly favored over those who do not. Workers who report situations of non-compliance with the right to disconnect in the workplace should not be penalized. The second round of consultations between the European Commission and the social partners on this issue is currently underway and should result in a proposal for a legislative act enshrining the labour law protection of employees in relation to their right to disconnect.

Another urgent issue that will need to be addressed is the change in the structure of the labour market as a result of digitalization. The automation of manual and routine work is leading to the displacement of low-skilled workers from the labour market, which increases the need for activation measures in relation to people with lower qualifications or low digital literacy. Digital exclusion creates a need to actively engage people who are distant from the labour market in employment, with municipalities often taking on an irreplaceable role in providing assistance to residents in accordance with the principle of subsidiarity. Although the state retains key responsibility for employment levels, municipalities are active players in social inclusion, especially in smaller or disadvantaged regions. Municipalities are able to identify the needs of local communities and the unemployed, provide social counseling, support education and digital literacy, and, last but not least, directly create jobs, for example through activation measures. By organizing smaller municipal services, the municipality contributes to social activation and the maintenance of social habits, which is a transitional step towards stable employment.

The development and implementation of new technological systems and artificial intelligence is fundamentally changing the nature of labour relations and affecting many aspects of the working environment. First and foremost, artificial intelligence has a significant impact on job stability, with a decline in traditional full-time employment and an increase in flexible but often precarious forms of work. *Future legislation therefore faces the complex task of creating a balanced legal framework that provides adequate protection for employees.*

One of the aspect is the increased level of employee monitoring through artificial intelligence systems. These technologies enable detailed monitoring of work activities, including identifying whether an employee is actually working during working hours or engaging in

[22] WEBER, T. and ADĂSCĂLIȚEI, D. Right to disconnect: Implementation and impact at company level. Luxembourg: Publications Office of the European Union, 2023, p. 57. ISBN 978-92-897-2337-4. DOI: 10.13140/RG.2.2.19335.16800.

[23] EURÓPSKY PARLAMENT. Poslanci chcú v celej EÚ garantovať právo odpojiť sa od práce. [online]. 2021. [Accessed 08. October 2025]. Available from https://www.europarl.europa.eu/topics/sk/article/20210121STO96103/poslanci-chcu-v-celej-eu-garantovat-pravo-odpojit-sa-od-prace.

[24] European Parliament resolution of 21 January 2021 with recommendations to the Commission on the right to disconnect (2019/2181(INL)).

private activities, such as using social networks or playing games. For example, an artificial intelligence system can accurately recognize the actual use of working time to perform work tasks and can identify whether an employee is working or engaging in other activities during working hours. This is followed by the risk of sanctions against the employee by the employer, including unilateral termination of employment by the employer. Under Article 5 of the Artificial Intelligence Act, the use of various types of AI systems (e.g., systems for inferring the emotions of a natural person in the workplace) is prohibited,[25] or biometric categorization systems that individually categorize natural persons based on their biometric data in order to deduce or infer their race, political opinions, trade union membership, religious or philosophical beliefs, sex life or sexual orientation, etc.).

The use of artificial intelligence also extends to occupational health and safety. The Artificial Intelligence Act explicitly prohibits the use of systems that pose an unacceptable risk to the health and safety of employees. The aim of these measures is to ensure that technological progress does not come at the expense of human dignity or the physical or mental well-being of workers.

It is also important to consider the possibility of artificial intelligence intervening in the selection of suitable employees for employers, which may also have an impact on the termination of employment . For example, if artificial intelligence systems identify a violation of work instructions and procedures set by the employer, they may, assuming the employee is at fault, lead to the termination of employment by the employer for a breach of work discipline or a serious breach of work discipline. With such an assessment of work performance without the "soft techniques" of human intelligence, the degree of legal uncertainty is on the rise.

The nature of essential characteristics of dependent work is also changing. Currently, there is a boom in new forms of dependent work through information and digital technologies.[26] With regard to the impact of autonomous artificial intelligence systems on the field of work, the Artificial Intelligence Act applies to all categories of workers within the meaning of Article 45 of Treaty on the Functioning of the European Union, including workers working for platforms. It follows from the above that the regulation in question goes significantly beyond the conceptual definition of "employee" or "dependent work" as these basic legal concepts are defined in the Labour Code. Artificial intelligence is used to a greater extent in platform work, crowdworking with characteristic algorithmic control, which partly deviates from the content of the concept of "dependent work" as regulated by Section 1 of the Labour Code. For example, a ruling by the German Federal Labour Court granted legal status as an employee to a crowdworker with a high degree of independence in the performance of their work and with all the basic rights that an employee has in so-called "standard employment".[27] Automated monitoring and decision-making systems controlled by algorithms are increasingly replacing the functions that managers used to perform in companies. This includes not only the employer's instructions for assigning work tasks to employees and giving other instructions, but also evaluating the work performed, providing work incentives, and imposing possible sanctions. We also perceive as "non-standard" a situation where an employee does not even communicate with their "employer," but their work performance is evaluated by an end user through an automated system without human intervention. The employer's right to give instructions reflecting the employee's dependence and subordination, enshrined in several provisions of the Labour Code, is being transferred to a greater or lesser extent to artificial intelligence. According to the legal status de lege lata, an essential component of dependent work is the

[25] Except in cases where the use of the AI system is intended for putting into service or placing on the market for health or safety reasons.

[26] LACKO, M. Sociálna ochrana zamestnanca v digitálnej dobe. In: Zamestnanec v digitálnom prostredí. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, Vydavateľstvo ŠafárikPress, 2021, p. 36. ISBN: 978-80-574-0068-4.

[27] Decision of the Federal Labour Court BAG 1.12.2020-9 AZR 102/20, No. 132 on the term "dependence".

employee's subordination to the employer, and the employee's dependence in the area of labour relations is manifested by the employee's obligation to follow the instructions of their employer, whose culpable failure to comply may also lead to dismissal by the employer for breach of work discipline.

Due to the introduction of artificial intelligence systems into the field of labour relations, it will also be necessary to legislate on the legal status of employees in relation to instructions given by artificial intelligence, especially in situations where these instructions would be contrary to applicable law or would endanger the health of employees. Therefore, artificial intelligence systems must have the necessary legal frameworks in place. At the same time, in line with the preparation of legislation at EU level, human control of artificial intelligence systems is envisaged if these systems take over decision-making, particularly in relation to significant changes in employees' working conditions. If an employer decides to deploy artificial intelligence systems, it delegates a large part of its discretionary power to the artificial intelligence system. The instructions issued by artificial intelligence operating autonomously are not identical to the discretionary power of a specific employer or its senior employee. In this context, the question arises as to whether an employee is obliged to comply with such instructions from artificial intelligence. In such situations, a human element (human intelligence) should intervene in the process and verify the correctness of the instructions issued in order to protect the employees themselves. A different approach would be necessary for AI instructions relating to the protection of personal data, which take the legal form of recommendations that employees are not obliged to comply with, and a different approach would be necessary for AI instructions that are in the nature of decisions against which employees could appeal.[28]

Limiting human intervention in the management of work processes can also give rise to and cause new forms of discrimination. The data on which artificial intelligence learns can be discriminatory in itself, e.g. if the process of collecting or processing this data was discriminatory. So-called automated discrimination is more difficult to recognize, more abstract, more subtle, and therefore much less identifiable in practice and thus less sanctioned. For example, it is particularly difficult to prove the existence of indirect discrimination against employees or job applicants. Algorithmic systems still lack sufficient signaling mechanisms for comparing employees or individual groups of employees, which is required to identify indirect discrimination. Particularly in the area of anti-discrimination law, it would be necessary in the future to further expand the collective legal protection of employees and to strengthen the existing legal instruments for the prevention of discrimination against employees.

V. CONCLUSION

The world of work is constantly changing; it is a living process that reflects developments in the technological, social, and economic environment. This is not only a legal problem, but also a profound philosophical issue, whereby the philosophical dimension of the problem lies in redefining the relationship between humans and work in the context of technological autonomy, which raises new questions concerning human dignity, freedom, and responsibility of the subject in an era where the institution of will is reduced or transformed by the influence of autonomous artificial intelligence systems. The traditional model of dependent work is based on the ontological assumption of human dependence and subordination, where the employee exchanges time and performance for wages and legal protection. In the digital era, however, "time" as a basic category of labor law is losing its stability—work is performed within the

[28] BARANCOVÁ, H. Umelá inteligencia a pracovné právo. In: Právny obzor, 2024, vol. 107, no. 2, p. 116. ISSN 2729-9228. DOI: https://doi.org/10.31577/pravnyobzor.2024.2.02.

framework of constant availability, often without a clear definition of working hours and place of performance.

This raises a fundamental philosophical question: where does human autonomy end and digitally determined work performance begin? When an algorithm issues work instructions and evaluates performance, employees find themselves in a situation where they must respond to the decisions of a system that, while functionally rational, lacks moral and ethical responsibility. This is a problem of ethical imputation in an environment where there is no subject of will, which requires a new reflection on the fundamental principles of labor law—dignity, freedom, and responsibility.

In a socioeconomic context marked by the symbiotic dynamics established between the development of new technologies and the implementation of new forms of work organisation and management, the concept of digitalization becomes increasingly interesting as a structuring phenomenon of the labour market.[29] Fundamental changes in development will be brought about by another revolution – social revolution 5.0, which is linked to the advent of artificial intelligence. There is no doubt that the labour market will change. We are already witnessing this change, for example when we enter a grocery store and instead of five cashiers, we find self-service checkouts with one assistant.[30]

Digitalization, automation, robotization, the rapid advance of artificial intelligence, is no longer a futuristic vision. It is already indisputable that artificial intelligence is affecting, and will affect, the field of labour relations, specifically in the areas of employee data protection, the right to privacy, the right to protection of human dignity, the quality of working conditions, the safety and health protection of employees, methods of employee remuneration using algorithms, and consequently also the methods of performing managerial functions, the area of responsible labour relations, as well as the termination of employment.

Future labour legislation therefore faces the difficult task of creating an optimal legal framework for the legal status of employees when deploying artificial intelligence systems. According to the authors, it appears that the deployment of autonomous artificial intelligence systems also requires changes to the legal wording and a "redrawing" of the concept of dependent work and the optimal legislative formulation of the term "employee." The key findings of the paper confirm the need for a systematic review of legal concepts, processes, and relationships.

A significant change was brought about by the adoption of Act No. 261/2025 Coll., which amends and supplements certain acts in connection with the consolidation of public finances. Effective January 1, 2026, Act No. 311/2001 Coll. of the Labor Code will be amended. Among other things, there will be a change in the definition of the term "dependent work". The words *"during working hours determined by the employer*" will be deleted. This characteristic component of dependent work will no longer be an essential part of the definition of dependent work. The change in the definition of dependent work should help to detect so-called fictitious trades. This means helping to determine when people are forced to work in a trade, even though they are clearly performing work that is dependent work, and thus preventing such situations from arising. In fact, the fact that a self-employed person worked at a time determined by them and not at a time determined by their employer, even though the other defining characteristics of dependent work were met, was a frequent objection during inspections carried out by the labor inspectorate.

[29] CALDERÓN-GÓMEZ, D. et.al. The labour digital divide: digital dimensions of labour market segmentation. In: Work Organisation, Labour & Globalisation, 2020, vol. 14, no. 2, p. 23. ISSN: 1745-641X. DOI: https://doi.org/10.13169/workorgalaboglob.14.2.0007.

[30] DOLOBÁČ, M. Futurológia pracovného práva. In: Zamestnanec v digitálnom prostredí. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, Vydavateľstvo ŠafárikPress, 2021, p. 61. ISBN: 978-80-574-0068-4.

This amendment to the definition of dependent work is also intended to respond to the rise of flexible working arrangements, in particular remote working, teleworking, platform work, and the use of autonomous task management systems. The new wording of the definition allows for the inclusion of a broader spectrum of employment relationships in which the employee does not perform work during traditionally defined working hours but remains dependent on the instructions or evaluation of algorithmic systems. From this perspective, this is a fundamental step towards modernizing labor law concepts and adapting legislation to new technological and organizational models of work in the digital age.

With this statement, we have addressed the first research question posed in the introduction to this article. It will be necessary to consider a new legal model of the employer's so-called "instructional" right (the so-called digital instructional right), because the introduction of artificial intelligence into the field of labour relations will increasingly lead to the "delegation" of employer instructions to employees. The employer's right to give instructions to employees, enshrined in several provisions of the Labour Code, will be taken over to a greater or lesser extent by artificial intelligence. With the deployment of artificial intelligence in the field of labour relations, it is therefore reasonable to expect that new legal instruments will be adopted in the near future to prevent the violation or endangerment of employees' human rights in the context of labour relations, in particular the protection of privacy, personal data protection, and prohibition of discrimination, which also reflects the second research question. At the same time, we believe that current legal models of protection and liability for damage in the case of the deployment of artificial intelligence systems will not be sufficient.

We believe that future legal developments will depend on the ability of legislators to balance technological innovation with the preservation of fundamental labor law guarantees. In our opinion, legislation will need to continue to adapt to hybrid forms of employment, strengthen transparency, and expand accountability frameworks for autonomous systems. In this dynamically changing context of labor law protection, cooperation between legislators, labor law experts, and technology experts will be critical to ensure that legislation evolves in a way that effectively responds to the digitalization and automation of the labor market without compromising legal certainty or the social protection of employees. The authors' broader perspective emphasizes the importance of implementing future legislative developments in a thoughtful manner, taking into account new complex social and technological contexts.

The authors consider proposals to address this issue by introducing the principle of "algorithmic transparency" and the right of employees to have work instructions generated by artificial intelligence explained to them. They also address the issue of legally enshrining rest periods to protect against excessive working hours in the digital environment, as well as various participatory models of work management with the necessary involvement of employees in the evaluation of algorithmic systems. At the same time, it is necessary to legislatively define liability for damage caused by autonomous systems. Last but not least, it is necessary to support employee training in digital skills and legal protection in the digital work environment. These solutions create a solid foundation for further interdisciplinary research and the creation of legal standards that will not only respond to technological changes but also strengthen social standards and dignity in the workplace in the era of artificial intelligence.

KĽÚČOVÉ SLOVÁ
digitalizácia, umelá inteligencia, právna ochrana, zamestnanec

KEY WORDS
digitalization, artificial intelligence, legal protection, employee

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