

THE FUTURE OF ARTIFICIAL INTELLIGENCE (AI) IN THE WORKPLACE: OPPORTUNITIES AND CHALLENGES

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ABSTRACT: *In this study, my goal is to analyse the transformation of employer rights in the context of the application of artificial intelligence (AI). The introduction of AI technologies has a significant impact on the employers' right to instruct, control and discipline, and also raises new data management challenges. My central theme is the growing role of automated decision-making, particularly in the areas of recruitment, selection and performance appraisal, which are also an important part of human resource management, a subset of employer rights. In the course of the above-designated research path, I attempt to answer questions that make the relevance of the topic indisputable: How can the transparency and legality of automated decision-making be ensured in the employment relationship? What data protection concerns arise in the application of AI? Due to the rise of AI technologies, examining these questions is of fundamental importance from the aspect of the protection of employee rights and interests.*

KEYWORDS: labour law; artificial intelligence; employer's authority; data protection; outsourcing.

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1. INTRODUCTION

Digitalisation is a pressing issue today, which does not spare the world of work either. Technological developments appear widely within individual employment relationships, sometimes in collaboration with human labour, sometimes replacing it, and sometimes even replacing the employer. It is not disputed that the coronavirus pandemic that unfolded in 2019 greatly contributed to the rapid advance of the fourth industrial revolution, however, I note that the area and its impact on the labour market were already under investigation before that, as it was also reflected in the submitted work for the National Economic and Social Council.¹ (Kelemen, 2018)

Digitalisation as an umbrella term is with us and formulates a very complex issue in the field of employment law, despite the fact that at the time of this study we cannot yet

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¹ Szakszervezeti háttéranyag a Nemzeti Gazdasági és Társadalmi Tanács 2018. október 12-i ülésére, Budapest

speak of an extensive legislative background. Although we already have EU-level directive drafts for some sub-fields of "digital employment", such as platform work, (Kiss, 2021) the regulation of artificial intelligence in the context of employment has yet to be observed.² (Mezei, 2023)

The purpose of this study is to provide a suitable basis for mapping the impact of artificial intelligence on employment relationships, despite the shortcomings of the legal background, from the employer's point of view: what is the situation in the event that the subjects of the employment relationship are replaced by artificial intelligence? What is the primary task of employers to solve the problem, if in the course of their activities they use the help of artificial intelligence in addition to, or possibly instead of, their employees? Will the balance of rights and obligations arising from employer's power be upset, or can a regulatory system be developed that can respond to the ever-increasing changes generated by technological development? How can human rights appear in this type of employment relationship? In the next few pages, I am looking for answers to these theoretical and practical questions.

2. AUTOMATION OF EMPLOYER RIGHTS

2.1. The transformation of employer rights in the light of digitalisation

The defining element of the employment relationship is the employer's power, which is the set of rights and obligations on the employer's side that pervade the entire legal relationship, arising from the hierarchy between the parties. The foundations for the exercise of employer rights are laid down in Section 20 of Act I of 2012 on the Labor Code (hereinafter: Labour Code), from which it can be established that the employer and the exerciser of the employer rights can sometimes be separated in relation to the given employment. (Berke, 2016) This duality is mostly based on the fact that the position of the employer is held by a legal entity that does not have the - human - qualities that are necessary to properly fulfil the rights and obligations related to the legal relationship. In line with the central theme of the present study, the question arises for a reason: if the exercise of the employer rights can be removed from the competence of the person in the specific role of the employer, can artificial intelligence itself fulfil this role?

In order to answer this question, I first state that the exercise of the employer rights requires a legal entity under employment law. There have been several studies (Jakab-Berényi-Rácz 2020) regarding empowering robots and artificial intelligence with legal entity, however, regarding the assessment of this I agree with the conclusion of RICZU. According to RICZU, it is necessary to maintain the decision-making authority linked to humans, despite the fact that artificial intelligence can acquire the ability of independent decision-making by learning from the database generated from experiences. (Riczu, 2022) My point of view is also supported by the data protection provisions currently in force, which stipulate that automated decision-making can be considered legal if there is

² EU initiatives on standardisation of artificial intelligence (AI) in the EU have already been developed, such as the European Commission's White Paper on Artificial Intelligence: A European approach to excellence and trust, and a draft regulation, but none of these regulate the role of AI in employment. For more on the current regulation of AI, see: MEZEI Kitti: A mesterséges intelligencia jogi szabályozásának aktuális kérdései az Európai Unióban. *In Medias Res*, 2023/1., p. 53-70.

meaningful, human contribution. I will address some data management concerns related to automated decision-making later in more detail.

Based on all of this, it can be concluded that employer rights cannot be delegated in their entirety to the entities operating with artificial intelligence, in the absence of a legal entity, however, in relation to some sub-areas, they can be entrusted with a decision support function, so outsourcing is still implemented to a certain extent.

The employer's right of instruction and control can be considered such a sub-area, the outsourcing of which appears most prominently in relation to certain platform works. Although in the case of the above forms of work, several studies have addressed the topic of who can actually be considered an employer, as well as the legal environment that is taking shape, (Kiss 2023)³ there is no doubt that either as an intermediary medium or as a party providing actual decision support, artificial intelligence, through the application used, takes part in the legal relationship.⁴ (Rácz, 2018, Rácz, 2020, Rácz, 2018)

However, this cannot be considered "outsourcing"⁵ in the classical sense. In this context, I share MÉLYPATAKI'S view that platform providers, independently of the "consumer using the service", to some extent formulate several requirements, or even instructions, towards the persons performing the work, which amount to an employer status, thus performing a quasi-employer role. (Mélypataki, 2019) This implies that the determination of performance by the employer may essentially be delegated to an entity that does not currently have the appropriate legal personality to own the whole process, but the increasing advance of digitalisation makes it necessary to keep the emerging situation under scrutiny. This process, in addition to transcending the hitherto known framework of employment relationships and allowing for a high degree of autonomy outsourced from the employer, is moving the most well-known form of employment towards employment within the framework of civil law and is also affecting the individual and collective will of the parties to form the employment relationship. (Jakab, 2020)

Artificial intelligence could also play a role in employer control, which also raises serious concerns. (Sipka-Zaccaria, A tervezőasztal dilemmája a munkajogi jogalkotásban: várat építsünk vagy börtönyt?, 2018) In this context, we should also bear in mind that AI-based systems learn from processing and organising a considerable amount of data and develop the appropriate strategy from this information. Artificial intelligence, despite being based on a program created by humans, is unable to detect the fine line between work and private life for a given set of data due to its continuous learning, which violates the employee's right to privacy. I need to point out that this right of the employee is given special protection by Hungarian law, as provided for in Section 9(2) of the Labour Code.

³ For more information on the legal framework for platform work, see: KISS Gergely Árpád: A platformmunka szabályozási perspektívái az új uniós irányelv tükrében. *Közjogi Szemle*, 2023/3. p. 65-70.

⁴ With regard to platform work, Ildikó Rácz has dealt several times with algorithmic performance evaluation and work organisation. See more in this round: RÁ CZ Ildikó: Algoritmizált teljesítményértékelés, *Infokommunikáció és Jog*, 2018/1. (70.), p. 32-35., RÁ CZ Ildikó: Algoritmizált menedzsment, azaz algoritmusok által vezérelt munkaszervezés. In: MISKOLCZI-BODNÁR Péter (szerk.): *XVI. Jogász Doktoranduszok Szakmai Találkozója*, Jog és Állam 29. szám, Patrocinium Kiadó, 2020. p. 227-235. RÁ CZ Ildikó: Teljesítményértékelés – kiszervezve? In: PÁL Lajos – PETROVICS Zoltán (szerk.): *Visegrád 15.0. – A XV. Magyar Munkajogi Konferencia szerkesztett előadásai*, Wolters Kluwer, Budapest, 2018. p. 417-432.

⁵ For more information on the phenomenon of outsourcing, see: SZEKERES Bernadett: A változó munkavégzés megjelenése és megítélése a bírói gyakorlatban. *Miskolci Jogi Szemle*, 2018/2. p. 141.

According to this legal provision, the employee's right to privacy may be restricted if the restriction is absolutely necessary for reasons directly related to the purpose of the employment relationship and proportionate to the achievement of the objective. The employee must be informed in advance and in writing of the manner, conditions and expected duration of the restriction of the right to privacy and of the circumstances justifying its necessity and proportionality. Somewhat related to this, Section 11/A(1) states that the employee may be subject to control in the context of their conduct in the employment relationship. In this context, the employer may also use a technical device and inform the employee in writing in advance, thus fulfilling the obligation of prior information. An important aspect of the amendment is that the Labour Code, as if eliminating most of the issues arising from this, states that the employee may use the information technology or computer equipment or system (hereinafter referred to as "IT equipment") provided by the employer for the work solely for the purpose of performing the employment relationship, unless otherwise agreed. Of course, the derogation clause may include unilaterally defined rules that the employer may make in the exercise of its right to instruct and control, which may also restrict the employees' personal rights. (Sipka-Zaccaria, A munkáltató ellenőrzési joga a munkavállaló munkahelyi számítógépén tárolt magánadatai fölött, 2018) For example, prohibiting the private use of the internet during working hours is an interference with the right to freedom of expression, or controlling a work-related phone call is a restriction on the right to privacy. (Arany-Tóth, 2011) Overall, it can therefore be seen that AI can be lawfully used in the context of employee monitoring, provided that its legal basis is duly justified, and the data subjects have been informed in advance in an appropriate manner.

2.2. The importance of automated decision-making

One of the main areas of exercising the employer rights that has been and continues to be greatly influenced by AI is human resource management. The ongoing digitalisation and the rise of atypical forms of work are leading to the personal contact between the parties to the employment relationship being pushed into the background, so that the personal relationship is replaced by the relationship between the employee and the digital environment. (Lőrincz, 2018)

I would like to emphasise that, although artificial intelligence does not yet have legal personality, it can provide employers with some support in carrying out the necessary tasks. However, this requires the human being to become "data", since AI has any influence on human policy only if the qualities, characteristics and environment of the person can be digitally captured. However, this raises certain issues of principle, especially in the areas of equal treatment, fair consideration and the duty to inform.

2.2.1. Recruitment and selection using artificial intelligence

It is common for large companies to use an AI-based tool to advertise an open position and for subsequent interviews. This is done in order to save time and costs, given that automated entities are able to refine job advertisements according to the objective to be achieved, as well as to vary their appearance. Subsequently, AI can also play a role in pre-selecting job seekers: it can not only screen potential candidates with the relevant qualifications and work experience, and the most required qualities for the job, but also subject potential candidates to a deeper analysis, examining their qualifications and personality traits that best fit the work environment. Despite the fact that some of the tasks related to recruitment and selection are outsourced to AI, it is still necessary for the

employer to comply with the relevant provisions at the level of fundamental principles. (Selejő Joó-Komóczy-Csukonyi, 2024) Therefore, even when automated decision making is used, it is essential that the decision maker informs the data subject in advance. This is supported by a “pilot” project carried out by Amazon in 2015, which used a so-called “HR robot”. The use of the HR robot in recruitment and selection was not communicated to the stakeholders in advance. In doing so, the employer violated the above principle, as cooperation and information are based on mutuality and trust between the parties. (Stefán, 2020) However, this was not the only problem: after a certain period, the robot made unjustified distinctions between male and female applicants. The discrimination was based on linguistic analysis, as the program was more persuaded by the terms used by men and the CVs uploaded to the teaching database, which were mostly associated with male employees. The other significant problem was that it selected inadequately qualified workers to fill jobs that would have required highly qualified workers.⁶ Even if not the person expressly authorised to do so acted, the employer must remedy the AI infringements and cannot be exempted from liability in relation to them. (Nagy, 2019)

The question may arise: how could discrimination occur if the AI acts alone, based on the data it collects, in performing these tasks?

One possible case of digital discrimination is when an otherwise well-functioning algorithm is taught with the “wrong” data. This essentially means asking the algorithm to make a decision through biased sampling. The “HR-robot” used by Amazon also created the above-mentioned scenario. So, on this basis, there were some human impacts which ended up in discrimination by AI. The other possible case is that the algorithm’s operation causes a disadvantage. This means that there may be a case where, even though the algorithm is programmed to ignore a protected characteristic, the machine replaces it with another “indirect” characteristic during learning. (Ságvári, 2017)

2.2.2. Performance appraisal by artificial intelligence

Another area of HR management where AI is widely used is in the assessment of employee performance. In this context, earlier in this paper I referred to platform employment, whereby “Big Data” based systems⁷ can also be used by artificial intelligence to track employee performance in real time and produce current statistics to help employers in their decision-making. With continuous control, the manager still has the opportunity to intervene in time and eliminate poor performance of tasks.

The application of performance appraisal and the consequences thereof is also a unilateral right of the employer, limited by the principle of fair assessment.⁸

Assertion of the above principle is questionable if performance appraisal, or even other rights and obligations arising from the employer’s powers, are delegated to AI-based entities, given that these systems operate on the basis of a program code, and the assessment of external, human circumstances is beyond their competence. Hence, if we

⁶ For digital discrimination, see more: LUKÁCS Adrienn: Digitális diszkrimináció és automatizált döntéshozatal, különös tekintettel a munka világára. *Miskolci Jogi Szemle*, 2023/2. p. 103-117.

⁷ For more on “Big Data” systems, see: ZÓDI Zsolt: *Platformok, robotok és a jog – Új szabályozási kihívások az információs társadalomban*. Gondolat, Budapest, 2018. p. 85.

⁸ Among others, György Nádas dealt with the relevance of fair consideration in labour law when he states that the mentioned principle is a general clause that requires employers to take into account aspects other than the law, i.e. written legislation, when making their decision. In this regard, see: NÁDAS György: A méltányos mérlegelés elvének aktuális kérdései. *Miskolci Jogi Szemle*, 2022/2. (1. különszám) p. 281-289.

assume that the employer role is played by AI, human workers are an imperfect cohort in terms of automation, since the accuracy that would otherwise exist in a program is not fully realized. (Hajdú, 2020) Artificial intelligence, if so empowered, makes decisions following program codes, without taking into account the variables that are essential to comply with the principle of fair assessment. (Mélypataki, 2020)

All of this means that placing AI in the role of the employer may still be in breach of fundamental principles, as it is not capable of making decisions based on equity and a social perspective.⁹ It has thus been confirmed that, apart from the fact that AI does not have legal personality in its present state, it cannot be imagined as a serious decision-maker in the current system of employment law.

2.3. Data management concerns

As I explained earlier, AI can greatly contribute to simplifying and speeding up HR tasks for employers, but it is not without concerns from a data management perspective, among others. An AI-based “assistant” can learn from processing a huge amount of data, and thus draw striking conclusions by making sense of it. This process is also reflected in the increasingly stringent data processing regulation, as Regulation (EU) 2016/679 of the European Parliament and of the Council on the protection of individuals with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (hereinafter the General Data Protection Regulation, GDPR), recognizing the need for it, already imposes strict requirements for automated data processing.

First of all, it is important to note that Article 22 of the GDPR, in response to the major technological advances, states that *“the data subject shall have the right not to be subject to a decision based solely on automated processing - including profiling - which produces legal effects concerning him or her or similarly significantly affects him or her.”* Recital 71 defines profiling as *“it consists of any form of automated processing of personal data evaluating the personal aspects relating to a natural person, in particular to analyse or predict aspects concerning the data subject’s performance at work, economic situation, health, personal preferences or interests, reliability or behaviour, location or movements, where it produces legal effects concerning him or her or similarly significantly affects him or her.”* This notion can be applied to activities carried out by AI-based HR systems, thus their use certainly constitutes profiling for the purposes of the GDPR.¹⁰

On this basis, therefore, “automated” decision making and profiling by fully artificial intelligence is generally prohibited from a data protection perspective, i.e., as a general rule, the use of this process is excluded, in particular in the context of employment relationships. In these cases, there is no human involvement, because in addition to collecting and analysing the data, the machine entity also makes the resulting decision autonomously. (G. Karácsony, 2020) It is important to underline that the above case is excluded from the scope of the general prohibition, following a strict grammatical interpretation of the legal provision. An exception to the above general rule is where the decision is fully automated, without any substantive human intervention, and is carried out

⁹ On the relationship between artificial intelligence and social security, see: MÉLYPATAKI Gábor: Az Ipar 4.0. és a jog kapcsolata – Problémafelvetések a foglalkoztatás és szociális biztonság témaköre kapcsán. *Jogelméleti Szemle*, 2023/1. p. 61-74.; BERKE Gyula – ZACCARIA Márton Leó: A szociális jogok védelmében: honnan jön és hová tart a Szociális Jogok Európai Pillére?, *JURA* 2019/25., p. 25-32.

¹⁰ For more information on the privacy implications of profiling, see: ESZTERI Dániel: Hogyan tanítsuk jogszerűen a mesterséges intelligenciánkat? *Magyar Jog*, 2019/12., p. 669-682.

in accordance with one of the bases as an exemption listed in Article 22(2) of the GDPR: these include the conclusion or performance of a contract, the explicit consent of the data subject or the authorisation by law.

In the case of human involvement, we stress that the data controller, in this case the employer, must ensure that the review of the decision is a substantive input. This is supported by the position of the Article 29 Working Party on Data Protection, which states that substantive input must come from a person with the authority and competence to change the decision.¹¹ It is clear that in each employment relationship, the appropriate decision-making power lies with the employer, who has the obligation to build a support system in which any data collected and analysed by AI is explicitly passed on to the employer, and then to make an informed decision based on their own conviction and specific criteria, acting within their discretion. To comply with the legal requirements, it is therefore sufficient to build the possibility of substantive intervention into the decision-making mechanism. (G. Karácsony, 2020)

The other area of exceptions, where automated decision-making based entirely on artificial intelligence may lawfully take place, is the scope of the bases as exemptions.¹² In this respect, it is necessary to examine the invocability of certain legal bases listed in Article 22(2) of the GDPR in relation to employment relationships. These legal bases include statutory delegation, the framework of which has not yet been developed to such an extent in Hungarian law that we can draw any significant conclusions from its analysis, so we will not examine it within the framework of this study.

In addition to the above delegation, an appropriate legal basis for automated decision-making based on artificial intelligence is the explicit consent of the data subject. According to the GDPR, consent is a voluntary expression of the data subject's wish, based on specific and unambiguous information. First of all, as a main rule, it is important to note that the voluntary consent of the data subject in employment relationships cannot be interpreted, since in the recommendations of the Article 29 Working Party on Data Protection and in Hungarian data protection practice it became clear that the data subject's consent only fulfils its function in employment relationships in certain cases, which is well illustrated by the provisions of Section 9(3) of the Labour Code. This means that, employees cannot generally waive their individual right in advance and must make such a statement in writing. The voluntariness of consent was called into question, and the legal basis for consent became unclear or difficult to interpret due to the nature of the hierarchical relationship. According to the practice of the National Authority for Data Protection and Freedom of Information (hereinafter: NADPFI), the voluntary nature of consent cannot be interpreted in employment relationships, as the refusal of consent may cause the data subject material or non-material disadvantage. In the practice of the NADPFI, it was thus established that reference to the consent of the data subject as a legal basis can only be made in exceptional cases, basically when it is clear that the employee will obtain unconditional "benefits" from the processing and that they will not suffer any disadvantage if the processing is refused. This is confirmed by the European Data Protection Board in its position, when it states that, in general, the legal basis for processing

¹¹ Article 29 Working Party guidance on the application of Regulation 2016/679 on automated decision-making and profiling. WP251rev01., Brussels, 3rd October 2017, p. 22.

¹² GDPR Art. 4. point 11.

in the context of an employment relationship cannot be the consent of the employee, due to the hierarchical relationship between the employee and the employer.¹³

On the basis of the above, it can be concluded that automatic decision-making and profiling based on artificial intelligence in the context of the employment relationship cannot be lawfully carried out on the legal basis of the express consent of the data subject, i.e. mostly employees, since it can only be interpreted in an extremely narrow scope due to the hierarchical relationship in the employment.

Finally, with regard to the remaining legal basis, i.e. the establishment or performance of a contract between the controller and the data subject, it is underlined that processing based on artificial intelligence can only be considered lawful where the volume of data received would make routine human intervention ineffective. On this basis, the reference to the performance of a contractual obligation as an appropriate legal basis for data processing can only be interpreted in the context of large enterprises, and will not always be justified for smaller companies, which, due to their size, process data of fewer employees. I stress that the necessity-proportionality test should also be carried out for large enterprises, based on the position of the Article 29 Working Party on Data Protection, which could prove that there is no other more efficient and effective way to manage data and make decisions than using artificial intelligence.¹⁴

In sum, it is clear that AI-based automated decision-making and profiling in employment relationships can be legitimate if the entity concerned acts only in a supporting role, but the decision on the merits is made by a person with the power to make it. Fully automated decision making is only meaningful in a narrow scope, relying on the contract as the legal basis, for companies handling a significant amount of data, and even then, only if the need for it is justified.

3. FINAL THOUGHTS

In this study, I sought to address the issues caused by the ongoing digitalisation developments that are having a major impact on the world of work. Thus, the focus of my investigation was on the role of AI in employment relations, within which the role of the employer and the delegation of certain aspects of employer rights to this external entity were given great emphasis.

Overall, it can be said that artificial intelligence and decision making based on it is no longer a utopian idea but an increasing reality.¹⁵ It is important to underline, however, that under the current legal framework, the full outsourcing of the exercise of employer rights to automation cannot yet be legally implemented, since, among other things, the relevant provisions of the GDPR and those mentioned in this paper exclude it also from a data protection perspective, given that "unleashing" artificial intelligence without human control would create harmful situations. All this means that full scale decision-making

¹³ European Data Protection Board Guidelines 05/2020 on consent under Regulation 2016/679. (Brussels, 4th May 2020) p. 9.

¹⁴ Article 29 Working Party guidance on the application of Regulation 2016/679 on automated decision-making and profiling. WP251rev01., Brussels, 3rd October, 24.

¹⁵ See: FERENCZ Jácint: *Jogalkotás a munkaviszonyok szolgáltatásban – a munkajogi szabályozás gazdasági és társadalmi kihívásai*. Universitas-Győr Nonprofit Kft., Győr, 2019.

cannot be delegated to AI, but its decision-support function is undoubtedly present in the employment relationship.

The rise of the decision support function is also supported by the fact that some HR tasks have been partially outsourced from the employer rights and migrated to AI-based systems. However, it should be stressed that these cannot happen without raising some concerns. On the one hand, it is important to note that, while still sharing the view of the literature that it is doubtful to treat AI as a conscious entity and thus to confer legal personality on it, the lack of regulation means that AI is not a legal entity, either in civil law or in employment law. (Riczu, 2022) On the other hand, any procedures involving the use of artificial intelligence based on an algorithm could lead to a proliferation of unlawful abuses, in violation of fundamental principles that are at the core of the employment relationship, such as the principle of fair consideration, the requirement of equal treatment, the duty to inform and cooperate, or the protection of individual rights in relation to the distinction between work and private life.¹⁶ And for these alleged or actual infringements, in the absence of legal personality of the AI, the employer is liable.

Against this background, I believe it is important that the limited legal framework (Berke-Kiss, 2023) currently available is continuously expanded in response to current and future technological changes, which have a major impact on the employment relationship. In my view, this is essential for the legal protection of both employee and employer rights, given that the use of artificial intelligence can rebalance the balance of power in the employment relationship, which without a properly designed and responsive legal framework would lead to chaos. This is why it is of paramount importance to examine and continuously monitor the role of AI in the employment relationship, contributing to a smoother development of future employment law.

¹⁶ In this regard, compare: FÜZES Barnabás – SZÓKE Gergely László: A technológiai változások hatása a munkavégzésre, különösen a munka-magánélet elhatárolására és annak jogi megítélésére. *Pécsi Munkajogi Közlemények*, 2024/1. p. 43-64.

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