



DOI 10.2478/sbe-2025-0041

SBE no. 20(2) 2025

FROM THE ARCHETYPE OF THE EMPLOYMENT RELATIONSHIP TO ALGORITHM MANAGEMENT. CHALLENGES REGARDING MANAGERIAL DECISIONS IN EMPLOYMENT RELATIONSHIPS

Monica GHEORGHE

Lucian Blaga University of Sibiu, Romania

Abstract:

This contribution focuses on identifying the legal entity that embodies the role of "employer" and makes decisions regarding employees. The transformative dynamics brought about by the digital economy are driving changes in the role of the employer. There is a growing discrepancy between the role of the employer, as typically found in labor relations—as the owner of productive assets and able to operate autonomously—and the limited bargaining power of firms gravitating toward digital technology corporations. The approach will consider the impact of new technologies on labor relations, the advantages and risks of using artificial intelligence (AI) systems in the workplace, and how the use of algorithms can influence managerial decisions regarding employees.

Key words: *employer, managerial decision, artificial intelligence, algorithm management tools.*

1. Introduction

In labor relations, the employer is the party that owns or disposes of productive assets and carries out its activities in a relatively autonomous manner, assumes the risk of the business, and has the means to organize, control, and sanction workers. This article initiated a search for European norms to identify the functions and responsibilities that labor law classically assigns to the legal entity that covers the role of "employer," given the organizational, corporate, and power dynamics that unfold in the digital economy. The digital economy develops a power dynamic distinct from that of the traditional economy, thus shaping the distribution and organization of contractual power. As a result, there is a growing discrepancy between the archetype of the "employer," as enshrined in labor law, and the entity that contractually covers the role of employer. The use of digital platforms and artificial intelligence (AI) in the workplace means that the entity that contractually hires often does not use the managerial prerogatives recognized in labor legislation, which may even be attributed to algorithmic systems.

The Reason for the research stemmed from the assumption that labor law systems have not evolved quickly enough to capture and regulate the business model and market trends driven by digital and technology corporations. Within the sections, the study explores the standard employment relationship, captures situations regulated by triangular employment relationships in which managerial decision-making is temporarily transferred from the legal employer to the actual employer, presents recent developments in the regulation of digital platforms and artificial intelligence, artificial intelligence tools encountered in employment relationships, and the advantages and risks of their use. The study concludes with some discussions on the use of AI in the workplace and algorithmic decision-making.

Methodologically, the study analyzed specialized legal literature, academic debates, European norms, as well as studies conducted at the European level by recognized bodies with expertise in the field of labor relations management.

2. From the "traditional" employer to situations of "transfer" of managerial decision-making in the employment relationship

Against the backdrop of economic, demographic, globalization, and technological changes, labor relations have undergone changes in terms of both their origin and execution. Traditionally, labor relations are analyzed in terms of the economic and legal dependence of the worker in relation to his or her employer. Against the backdrop of new forms of work organization, the contractual approach to the employment relationship is making it increasingly difficult to identify the "employee" and the "employer."

The concepts of "employer" and "worker" are frequently used in European social regulations without having legal definitions. European social rules abound in provisions on the rights and obligations of the parties, without any rule expressly defining the concepts of "employer" and "worker" in a uniform manner. While the concept of "worker" has frequently been subject to interpretation by the European Court of Justice, the same cannot be said for the meaning of the concept of "employer." In its case law, the Court of Justice of the European Union (CJEU) has referred to the "employer" as the party with whom the "worker" has concluded the contract or employment relationship. The employment relationship arising from the conclusion of an individual employment contract is characterized by the performance of work for and under the authority of an employer in exchange for remuneration known as a salary. Unlike other private law relationships, the parties to an employment relationship are not equal. The employer, often the owner of the raw materials and means of production, exercises authority over the employee, who is dependent both legally and economically, as income from work is often the sole source of income. (Roşioru, 2013; Ştefănescu, 2017).

Exercising their authority, employers have the right to guide, direct, and control employees, which translates into three specific prerogatives: organizational, normative, and disciplinary (punitive). The right to organize the activity is reflected in establishing the general structure, the various departments and their responsibilities, and the relationships and interactions between them. The normative prerogative consists of the right to give orders,

subject to legality, to employees, to draw up documents regulating the activity of the unit, the employees, and their rules of conduct. An important distinguishing feature of the employer-employee relationship is the employer's right to control the employee's work, to evaluate and sanction them if they do not comply with the orders and instructions given. The disciplinary prerogative is a specific right of the employer. (Roşioru, 2017; Ştefănescu, 2017).

This legal institution represents the traditional model of the employment relationship based on the individual employment contract, designed to reflect the relationship of subordination or direct dependence between workers and employers, which has been identified, as a rule, by the latter's power of control and direction over the former.

Academic debates have focused mainly on the role of the worker in the employment relationship, on their rights and obligations in the workplace. The allocation of the employer's role, on the other hand, has remained largely uncontested, with their traditional prerogatives being recognized. (Gaudio & Prassl, 2024; Prassl, 2016; Gheorghe, 2022; Kullman, 2018).

Over time, with the emergence of new forms of work, this normative model has suffered, the effect being either the existence of triangular relationships, in which control and direction are provided by entities other than the worker's employer, or the exclusion of certain categories of workers who do not fit into the typical form of subordination (De Stefano & Countouris, 2024).

At the European Union level, there are directives regulating triangular employment relationships in which managerial decision-making is "transferred" for a fixed period of time from the employer with whom the employee has concluded the contract or employment relationship to another legal entity.

Such situations exist in the case of workers who have concluded an employment contract or are in an employment relationship with a temporary employment agency and who are made available to user companies to work temporarily under their supervision and management. Although there is no contractual relationship between the temporary worker and the user, there are certain mutual rights and obligations between the parties (Dimitriu, 2008). An atypical legal relationship under labor law arises between the temporary worker and the user (Panainte, 2021). The division of rights and obligations specific to labor law between the temporary employment agency and the user operates under the law, even if there is no direct contractual legal relationship between the worker and the user. The user is the one who, during the assignment, has the organizational, supervisory, and control prerogatives over the worker.

The posting of workers is another situation in which the prerogatives of organization and control are exercised over the worker, for a limited period, by an entity other than the one with which the employment relationship was established. Both cross-border and "internal" posting involve a temporary change of employer, i.e., the replacement of the employer with a third party—the legal entity for which the posted worker performs the work.

Significant in relation to the concept of employer in contexts of corporate complexity are the EU rules (directives) on workers' rights in the event of restructuring/reorganization of the undertaking/employer (Rainone, 2023a). These directives establish a series of obligations for employers in relation to workers in situations of mergers, transfers of undertakings, establishments or parts thereof, and collective redundancies. The directives

were adopted in the pre-digital economy era. The general position of the European legislator is to establish that the obligations as an employer lie primarily with the legal entity that employs the workers and is directly responsible for the economic activity in which they are engaged, even in the case of the dominant corporate influence of another company.

However, in the case of collective redundancies (Council Directive 98/59/EC of 20 July 1998 on the approximation of the laws of the Member States relating to collective redundancies, OJ L225/16 of 12.8.1998) provides that the obligations to inform, notify, and consult with workers' representatives with a view to concluding an agreement on collective redundancies apply regardless of whether the decision to make collective redundancies is taken by the employer or by an undertaking controlling that employer. Therefore, in the case of collective redundancies, the obligations fall on the direct, contractual employer, even if it does not have the necessary autonomy to influence the development of the business and the decisions discussed during the consultation process.

It is important to note that in the event of a transfer of an undertaking, business, or part of an undertaking to another employer as a result of a conventional transfer or merger (Council Directive 2001/23/EC of March 12, 2001, on the approximation of the laws of the Member States relating to the safeguarding of employees' rights in the event of transfers of undertakings, businesses, or parts of undertakings or businesses OJ L 082/19 of March 22, 2001) establishes that the transferee must maintain the employment relationships that the employees had with the transferor at the time of the transfer, without deteriorating their working conditions (Ana-Maria Vlăsceanu, 2016). The rules apply regardless of the formal corporate structure of the legal entities concerned (Rainone, 2023b) and that the natural or legal person acting as employer is not necessarily transferred as a result of changes in the ownership of the undertaking (Ny Mølle Kro case, C-287/86).

Where a transfer takes place between two formally independent legal entities, but the transferor continues to exercise decisive control over the transferee after a business reorganization, greater attention is paid to the actual power dynamics between the companies concerned (Ellinika Nafpigeia AE case, C-664/17, 5). There can be no transfer of an undertaking and, therefore, no transfer of the role of employer, in situations where the tangible assets essential for carrying out the transferred activity were permanently held by the transferor, identified fraudulent intent when it found that the transferred entity had no functional autonomy from the transferor and specified that "maintaining the autonomy of a detached unit such as that at issue in the main proceedings requires, therefore requires that, after the transfer, the latter has sufficient guarantees to ensure access to the production factors of the third party concerned so as not to be dependent on the economic choices made by the latter unilaterally" (paragraph 69 of the judgment).

In fact, in defining "employer," legal relevance was given to the independent presence of the entity on the market. In this context, we note that with regard to workers in Community-scale undertakings and groups of undertakings, the obligations to inform and consult are assigned to the central management of the Community-scale undertaking or, in the case of a Community-scale group of undertakings, to the undertaking which exercises control (Directive 2009/38/EC of the European Parliament and of the Council of May 6, 2009, on the establishment of a European Works Council or a procedure for informing and consulting employees in Community-scale undertakings and Community-scale groups of undertakings

(OJ L122/28 of May 16, 2009). A controlling undertaking means an undertaking which can exercise a dominant influence over another undertaking (the "controlled undertaking"), for example by virtue of ownership, financial participation, or the rules governing it (article 3(1) of the Directive 2009/38/CE). An enterprise is deemed to have the ability to exercise dominant influence, subject to evidence to the contrary, when, directly or indirectly, in relation to another enterprise: it holds the majority of the subscribed capital of the enterprise; it holds the majority of the votes attached to the shares issued by the enterprise; it can appoint more than half of the members of the administrative, management, or supervisory body of the undertaking (article 3(2) of the Directive 2009/38/CE). In practice, a link is recognized between corporate control and the exercise of decisive influence in matters concerning the employees of the controlled undertaking.

3. Recent developments in the regulation of labor relations at European level in the context of the digital economy

Over the last decade, flexible working arrangements have been steadily increasing. According to the Joint Report by the International Labour Organization and Eurofound (Eurofound & ILO, Working Anytime, Anywhere: The Effects on the World of Work, 2017), information and communication technologies (ICT) have revolutionized work and daily life in the 21st century. Particular attention has been drawn to a new form of work: work on digital platforms. The first sectors of activity to use digital platforms were: tourism (AirBnB), transport (Uber, Lyft), legal services (Rocket Lawyer), and daily commission services (TaskRabbit, Airtasker). In less than a decade, over 10,000 platforms have been created and many more jobs have been created. A feature of digital platforms is that they provide a means for people to connect for work or services without being limited by national borders, where matching supply and demand is done through a simple application. However, the labor market is still dominated by the standard employment relationship, conceptualized as a full-time, open-ended relationship between an employee and a single employer, usually linked to a job with well-defined spatial and physical boundaries, which acts as a reference point for distinguishing typical from atypical employment relationships. Platform workers, as many researchers have pointed out, did not easily fit into the established categories of employees or self-employed workers. In this context, there has been much debate about the precariousness of digital platform workers and the failure to comply with the principle of equal treatment and remuneration. (Kullmann, 2018).

Whether it is called the gig economy, on-demand economy, platform economy, digital economy, mesh economy, access economy, peer-to-peer economy, app economy, or sharing economy, it is undeniable that the way many people work today has changed significantly. The literature has distinguished between crowdwork, which is used more specifically by Amazon Mechanical Turk and Crowdfunder, for example, while on-demand work via mobile apps is used by companies such as Uber and Deliveroo (V. De Stefano, ILO 2016). Crowdwork means that platforms connect an unlimited number of organizations and individuals via the internet, potentially enabling the connection of customers and workers globally, while on-demand work refers to a form of work in which the performance of

traditional work activities, such as transportation, cleaning, and running errands, as well as forms of clerical work, is channeled through apps managed by companies that also intervene in setting minimum service quality standards and in the selection and management of the workforce. The International Labor Organization (ILO) economist Janine Berg wrote that crowdworking platforms are ideal for micro-tasks that can be performed quickly and without much instruction or supervision, such as finding information, checking and validating (people or information), interpreting and analyzing, creating content, completing surveys, and accessing content (J. Berg, 2016). Work on platforms has been characterized as allowing a certain degree of flexibility for workers in deciding when and where to work, as well as what type of work they want to accept.

Against the backdrop of these new forms of work, influenced by increasingly widespread use of ICT, platform workers could not be classified using standard concepts in the field of labor relations. The status of workers on digital platforms has sparked heated debate (ETUC, 2024).

Digitalization is changing the world of work, improving productivity and increasing flexibility, but at the same time it poses certain risks to employment and working conditions. Algorithm-based technologies, including automated monitoring and automated decision-making systems, have enabled the emergence and development of these digital work platforms. New forms of digital interaction and new technologies in the world of work, if properly regulated and implemented, can create opportunities for access to decent and quality jobs for people who traditionally did not have such access (Kullmann, 2022). However, if not regulated, they can also lead to technology-enabled surveillance, increased power imbalances and opacity in decision-making processes, as well as risks to decent working conditions, occupational health and safety, equal treatment and the right to privacy. In view of these considerations, a notable development is the adoption of Directive (EU) 2024/2831 of the European Parliament and of the Council of 23 October 2024 on improving working conditions in platform work (OJ L 11.11.2024), which regulates working conditions in the digital platform economy (Smorto, Donini, 2024). The invocatory nature of this act is represented by the introduction of the presumption of the existence of an employment relationship between a digital labour platform and a person who performs work on platforms through that platform in situations where there are facts indicating leadership and control, in accordance with national law, collective agreements, or practices in force in Member States, and taking into account the case law of the Court of Justice (Article 5(1) of the Directive). In addition, there are two other elements of the Directive that are particularly relevant to addressing the corporate fragmentation that characterizes the platform economy. The Directive provides workers with additional guarantees that directly target the platform as the main contracting entity. Article 3 states: "Member States shall take appropriate measures to ensure that, in cases where a digital labour platform uses intermediaries, persons performing work on platforms who have a contractual relationship with an intermediary benefit from the same level of protection under this Directive as those who have a direct contractual relationship with a digital labour platform." Thus, liability for violations of workers' rights extends beyond the boundaries of the employment relationship and to intermediaries.

On the other hand, in Chapter 3 on algorithmic management, the Directive establishes a series of prohibitions and obligations regarding the use of automated

monitoring and decision-making systems, which platforms should also comply with in relation to self-employed workers (*Smorto, Donini, 2024*). The logic is to prevent the platform from deriving disproportionate value from its ability to collect, aggregate, and exploit workers' data, using it to exacerbate power imbalances and impose unfair working conditions.

In this context, where the European level aims to protect workers' rights, we must also refer to Directive (EU) 2024/1760 of the European Parliament and of the Council of June 13, 2024, on corporate sustainability due diligence and amending Directive (EU) 2019/1937 and Regulation (EU) 2023/2859 (OJ L 5.7.2024). This recent directive targets large multinational companies that are identified on the basis of criteria that take into account both the number of employees and turnover (Article 2). For these companies, the Directive sets out rules on obligations not to violate human rights, including workers' rights throughout the supply chain, which also includes the activities of subsidiaries and direct and indirect business partners. In this regard, multinationals have a duty of care to include in their policies measures to prevent human rights (and labor) violations, identify and assess actual and potential negative impacts, and eliminate or minimize negative impacts.

In practice, the Directive requires large (multinational) companies to prevent and respond to violations of human rights and fundamental rights in the workplace, even if the violations do not result from their own actions, but from those of legal entities that fall under their duty of care. As stated in the recitals of the Directive, its purpose is to assign legal responsibility for respecting human rights and labor rights to all corporate actors—subsidiaries, business partners, members of the supply chain—who, by virtue of their ownership, effective control, and market power, the nature and scale of their business operations, and their geographical and operational context, are in a position to influence their business partners and take measures that have a negative impact on protected rights (recital 32 of the Directive). We note that this is the first regulatory instrument adopted at EU level that explicitly takes into account global power relations through business supply chains that go beyond simple commercial contractual links and extends human rights and workplace obligations to non-contractual employers, including responsibilities in the event of violations.

In view of the two recently adopted EU directives, there has been an evolution in regulations concerning the recognition of workers' status, including in the digital economy, the establishment of responsibilities even for "de facto" employers, and the protection of rights at work.

4. From the archetype of the working relationship to algorithm management

The fast evolution of digital technology systems has brought a wide range of benefits to economic and social life. The implementation of artificial intelligence systems as a competitive advantage benefits not only "players" in the economic sphere, but also other areas of social life. Artificial intelligence, a reality in many fields, also has legal effects and implications in the field of labor relations. The debate on artificial intelligence and its place in the future of work initially focused mainly on issues related to the creation or disappearance of jobs. Without underestimating the importance of the subject, however, other issues are raised in practice, more subtly, namely the effects of the use of artificial intelligence systems on workers and their rights. The introduction of artificial intelligence

systems into labor relations involves a number of risks related to the observance of certain fundamental rights and workers' rights in the workplace (Rainone, 2025).

There are many discussions regarding the use of AI in the workplace. Given the purpose of the study, with regard to AI, we aim to show the categories of algorithmic management tools used by employers to manage their relationship with workers, to present the impact of the use of these tools on managerial decisions, but also the risks they pose with regard to respecting workers' rights in the workplace.

The use of "algorithmic management" systems to train, evaluate, discipline, and reward workers has rapidly spread from the collaborative economy to standard/traditional jobs (Kelly-Lyth, Thomas, 2023). By 2018, 75% of human resources professionals surveyed at the European level were already using data to "understand... workforce performance and productivity," and 14% were using AI to receive "employee reports" (CIPD and Workday, 2018). In July 2021, 66% of companies reported adopting new digital management practices since March 2020 (Capucine Riom, Oliveira-Cunha, 2021). Some of the most widely used operational software packages now provide detailed information about workers' activities and behavior, shaping group and individual decision-making. The use of technology to evaluate and manage workers is not a new phenomenon.

Algorithmic management has received increased attention over the past decade. This was initially due to legal action against employers who relied on algorithmic decisions when hiring workers. More recently, AI has developed new algorithmic management tools, further amplifying interest.

In this context, Regulation (EU) 2024/1689 of the European Parliament and of the Council of June 13, 2024, laying down harmonized 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 - Regulation on artificial intelligence (OJ L, 12.7.2024). Regulation (EU) 2024/1689 provides in Article 1 that it comprises "(a) harmonized rules for the placing on the market, putting into service, and use of AI systems in the Union; (b) prohibitions on certain practices in the field of AI."

The AI system is defined in Article 3(1) of the Regulation as "a machine-based system that is designed to operate with varying levels of autonomy and may exhibit adaptability after deployment, and which, pursuing explicit or implicit objectives, deduces, from the input data it receives, how to generate results such as predictions, content, recommendations, or decisions that may influence physical or virtual environments." The use of AI systems also involves certain risks. The Regulation classifies risks into different levels, each level determining specific obligations for providers and/or users of AI systems, including those who use them in a professional context. From this point of view, an AI system is considered to be high risk for employment, worker management, and access to self-employment when it is intended to be used (a) for the recruitment or selection of individuals, in particular to place specifically targeted job advertisements, to analyze and filter job applications and evaluate candidates, or (b) to make decisions that affect the terms of employment relationships, promotion, and termination of employment relationships, to assign tasks based on individual behavior or personal traits or characteristics, or to monitor

and evaluate the performance and behavior of persons in such relationships (Annex III - High-risk AI systems referred to in Article 6(2)(4) of EU Regulation 2024/1689).

The nature of the data collected should also be taken into account when determining whether the AI system qualifies as high risk or not. According to Article 9 of the Regulation, the risk management system for high-risk AI systems requires periodic, systematic updating and review, in several stages, including by estimating and assessing the risks that may arise when the high-risk AI system is used in accordance with its intended purpose and under reasonably foreseeable conditions of misuse.

The increasing use of algorithmic management in standard workplaces brings benefits, but also risks. The benefits relate to productivity, efficiency, and the employer's ability to coordinate work remotely, including creating the impression of objective, neutral decisions. However, research has documented that the use of algorithmic management tools can, in some cases, also have negative effects on workers, such as lower job satisfaction, increased stress, diminished trust, and violations of personality rights (Kelly-Lyth, Thomas, 2023).

5. Algorithmic management tools in the employment relationship

The algorithmic management tools used by employers vary, posing different levels of risk to workers. These tools can be used in the selection and recruitment of workers, their training, monitoring, and evaluation, as well as in the employer's decision-making process regarding the organization of workers' working and rest time.

A very recent study (2025) conducted by the Organisation for Economic Cooperation and Development (OECD) shows that in European countries (France, Italy, Spain, Germany), 69% of employers report using such tools for at least one of the reasons mentioned above in relation to workers (OECD, 2025).

In the process of selecting and recruiting staff, employers use software systems to evaluate, classify, select, and eliminate candidates based on algorithmic criteria. The use of these recruitment tools has the advantage of a shorter selection period, identification of the best candidates, lower costs, and elimination of personal or social biases regarding candidates. However, selection based on how algorithms work also has certain disadvantages and risks. The employer cannot know all the candidates, and the algorithm can generate errors, which can lead to discrimination in hiring. If, during the selection process, the algorithm selects, evaluates, classifies, and eliminates certain candidates, the question arises as to who will be responsible in the event of a violation of a right and the creation of a situation of discrimination in hiring. When using such selection and recruitment tools, the decision is made by the AI system, not by the employer's representative.

AI tools are also used to monitor workers' activities. Various AI systems are used to check the location of workers, how they perform their work, and the time they allocate to performing certain tasks/duties. AI systems for monitoring and decision-making that replace managerial decisions on task allocation, monitoring and evaluation of work performed, granting incentives or even proposing sanctions are becoming more widespread, being more common in the use of digital platforms. Moreover, the same set of data can be analyzed and used differently depending on the objective set by the algorithm, i.e., the weight assigned to

certain factors in the decision-making process (Collins, Marassi, 2021). In practice, worker monitoring is a managerial function of the algorithm.

According to the OECD study, monitoring tools are commonly used in the United States, moderately used in European countries, and less frequently used in Japan: 90%, 67%, and 31% of firms, respectively, use them to automate at least one monitoring task. Although there are significant differences in prevalence levels between regions, a similar pattern is present in all of them.

The use of monitoring tools is more common when it comes to "basic monitoring" activities, such as monitoring working time and completion of work activities. More than 44% of employers in the European countries analyzed (France, Italy, Germany, Spain) use AI systems to monitor workers' working time, to check the status of task completion or the time taken to perform tasks. The advantages for the employer in this case are obvious: a quick and relatively neutral analysis of how workers perform their activities. However, these systems can also be intrusive in the private life of the worker at the workplace.

When it comes to employee evaluation, employers use algorithmic management tools to partially or fully automate evaluation tasks. According to the OECD study, in the United States, 90% of employers use an algorithmic management tool to automate at least one evaluation task. The same percentage drops to 35% for European countries and 11% for Japan. In the United States, 83% of employers use such tools to reward worker performance, 74% to set targets for workers to meet, 67% to penalize them for not doing their jobs properly (e.g., disciplinary measures, withholding benefits), and 50% to provide performance reviews based on certain criteria. In European countries, the impact of using AI systems in employee evaluation is lower, with 13% of companies using such software to reward performance, 19% to set targets for employees, 4% to penalize poor performance, and 7% to provide rankings. Assessment tools are also risky because the algorithmic decision can have consequences for workers' livelihoods or, in cases where dismissal is proposed, for their employment status. Furthermore, if the AI tool, when making decisions about worker performance, takes into account previous results (even from other employers) without considering other data from the employer (such as general behavior at work), it could lead to erroneous decisions.

Algorithmic management tools are also used to make decisions about the organization of workers' working time and rest periods, from setting the work schedule to fixing shifts, breaks during the workday, daily and weekly rest periods, or scheduling vacation time.

In fact, the use of algorithmic management systems is encountered in all aspects related to the creation and execution of employment relationships and in the process of decision-making by employers regarding workers. The implementation of new technologies and artificial intelligence in the workplace creates new situations that challenge labor law norms, with labor relations in these cases being affected by a certain degree of "deregulation." Through its implementation in labor relations, AI collects and uses personal data, can lead to discriminatory situations, and can affect workplace safety and/or health or the private life of workers (Peyronnet, 2020).

The use of algorithms for decision-making in the workplace may infringe on the principle of non-discrimination when the method of data selection, the intended purpose, the

algorithm's mode of operation, the elements taken into account, and their weight in decision-making are not known (Kullmann, 2018). AI systems can make certain predictions based on the elements collected and subsequently formulate proposals for resolving certain issues identified. Users of AI systems based on software (which they did not design) are often unaware of how the deductions are made, which is why the algorithms suggest certain decisions. The hard-to-detect nature of discrimination caused by the algorithm's operation reduces the possibility of eliminating, correcting, or even sanctioning it.

It has been observed that European employers tend to adopt tools that are less potentially invasive for workers and less likely to collect sensitive data, such as training tools and basic monitoring tools.

With regard to the category of employers, we find that the use of algorithmic management in managing labor relations does not vary significantly depending on the sector of activity or the size of the employer. However, large employers use more algorithmic management tools. According to the OECD study (pp. 27-28), 76% of managers in companies with 250 or more employees use such tools, compared to 74% of managers in medium-sized (50-249 employees) and small (20-49 employees) companies.

6. Advantages and risks of algorithmic decision-making in the employment relationship

For employers, the use of algorithmic management tools undoubtedly improves the decision-making process. This improvement is determined by the large amount of information that the AI system can filter, the way in which the collected data and information are systematized, and the short time required to make decisions. Algorithmic management tools also have the potential to eliminate certain biases or prejudices in decision-making (Kelly-Lyth, Thomas, 2023).

As algorithmic management tools automate or supplement managerial decision-making, it must be recognized that they also require other skills from users (employers, in this case). Thus, the managerial role should require analytical skills, such as the ability to use and interpret data, and digital skills. At the same time, in order to preserve the human qualities that differentiate the employer from algorithmic management, social skills must be maintained.

In relation to workers, decision-making using AI tools can bring benefits in terms of occupational safety and health. Tools for monitoring worker activity can provide data on the worker's health (physical and/or emotional) (such as heart rate, fatigue, activity level), detect stress or job satisfaction, and, based on the data collected, predict certain behaviors of the worker. Based on this prediction, the AI system can determine whether a worker is (still) fit for work or suitable for certain tasks, or whether they need a break. Thus, based on health data, it can prevent and anticipate accidents at work or occupational diseases. The use of AI systems to detect, analyze, and interpret emotions, already practiced for workforce recruitment, determines the so-called "affective computing" effect, which could extend in the future to capturing emotions using devices (e.g., headphones) that measure brain activity. These sensors would constantly monitor brain activity and send the data to servers running

AI algorithms capable of detecting states of high emotionality, such as anxiety, anger, and even depression.

On the other hand, as AI is a new technology, employers using such devices must consider the emerging risks to which employees are exposed and which must be assessed. Subjecting workers to the instructions of the machine/robot, the absence of social interaction in a fully automated environment, or the inability to communicate could constitute a type of risk in the workplace. Also, monitoring the worker's activity by assigning tasks, tracking the worker, and setting breaks through devices may be reasons for increased stress in the workplace, having a negative impact on the health and safety of workers (Prassl, 2019). Looking ahead, it has been suggested that the use of virtual worlds (metaverse) by employers and the creation of workspaces where workers interact with avatars could lead to other risks to workers' physical and mental health (such as motion sickness, stress, visual fatigue, etc.) (Loiseau, 2023).

As we have shown, the introduction of artificial intelligence systems into labor relations involves a number of risks related to the observance of certain fundamental rights of workers. The main rights that may be affected by the use of AI in the workplace are: human dignity, respect for privacy, and personal data. The principle of non-discrimination may also be violated.

Thus, although they may seem harmless, certain AI systems used by employers to monitor workers, their working hours, or their rest periods can be intrusive. The International Labour Organization has emphasized since 2019 that artificial intelligence must be used in such a way that final decisions affecting workers are made by people, not algorithms. The exercise of management, supervision, and algorithmic control through sensors, wearable devices, and other forms of monitoring must be regulated to protect the dignity of workers. Work is not a commodity; nor is it a robot (Report *Work for a brighter future*, ILO, 2019).

The use of algorithms for decision-making in the workplace may violate the principle of non-discrimination when the method of data selection, the intended purpose, the functioning of the algorithm, the elements taken into account, and their weight in decision-making are not known (Kullmann, 2018). Users of AI systems based on software (which they did not design) often do not know how the deductions are made or why the algorithms suggest certain decisions. The hard-to-detect nature of discrimination caused by the algorithm's operation reduces the possibility of eliminating, correcting, or even sanctioning it.

With regard to personal data, the collection and systematization of data by algorithms results in workers losing de facto and de jure control over how their data is accessed and used by employers. Confidentiality becomes complicated, if not compromised, as an obligation in labor relations (Carter, 2025).

7. Conclusions regarding "traditional" decision-making and algorithmic decision-making in the employment relationship

In a standard employment relationship, the employer is defined as having a certain degree of power in the labor market and bargaining power to determine the employee's working conditions and contractual terms. The employer is the one who owns the productive

assets, operates in a relatively autonomous manner, assumes the business risk, and has the necessary means to organize and control the work of employees and to sanction them in case of failure to fulfill their obligations. Managerial prerogative can be understood as the employer's power to control and direct the work process. This works at the level of each employee, when the employer assigns tasks, checks how they are performed, grants benefits or, where appropriate, imposes sanctions; but also at the organizational level, when the employer decides to reorganize the business or change the size of a work team, review production processes, or reorganize the structure of the unit. Under the standard model, the managerial decision is made by the unit representative and is related to the time and place where the workers perform their activities.

It is precisely to counterbalance these prerogatives that labor legislation imposes a series of obligations on the employer in relation to workers.

However, the digital economy is developing a power dynamic that is distinct from that of the traditional economy, thus shaping the distribution and organization of contractual power. As a result, there is an increasing risk of misalignment between the archetype of the "employer," as enshrined in labor law, and the firm that contractually covers the role of the employer (Hassel, Sieker, 2022). In other words, the entity that contracts the employee often does not have all the managerial prerogatives, which are taken over, in part, by other entities. Such situations are encountered in triangular relationships, such as secondment or temporary work through temporary employment agencies.

AI surveillance involves a group of computer techniques, including machine learning algorithms and data processing systems that can generate statistics. These come together in a multimodal system that provides managerial decisions on various aspects, such as staff selection, working conditions, resource allocation, staff evaluation, and rewards (Newlands, 2021). From the moment the data is collected to its processing and decision-making, workers' ability to express free and informed consent regarding the data and how it is used is significantly reduced because many AI systems lack transparency and predictability. Before processing the data collected through the AI system, the employer may have access to workforce data, including geographic, physical, sensory, or emotional data, which is sensitive and protected by law. Supervision is no longer tied to the physical workplace, but can often be carried out remotely, either for mobile workers or for those who perform activities using ICT (teleworkers, employees on digital platforms). With AI applications, there are no limits to the duration, frequency, and timing of data monitoring and processing, with the possibility of workers being monitored constantly, not only during working hours, but also outside of them. Data collection is usually followed by processing, where AI surveillance generates detailed profiles of workers by extracting statistical inferences to predict future actions and behaviors. The accuracy of predictions may differ between different social groups, raising additional issues of discrimination. For example, monitoring worker productivity based on the speed at which they complete tasks and allocating work on this basis could discriminate against people who take longer to complete tasks due to a pre-existing condition or disability. The question of how the algorithm takes these issues into account is even more controversial (Carter, 2025).

Data processing through AI determines various organizational and managerial decisions, from hiring, changing job responsibilities, firing, salary, assigning tasks,

supervision, and other types of decisions, depending on the employer's intentions. How and why the algorithm correlates a variable with an indication of a particular predictor is at the discretion of the programmer and, potentially, the employer's preferences.

In the case of AI surveillance, workers have very limited, if any, access to the content of the algorithms used and how data is processed and decisions are made. This highlights the importance of consulting workers on the acquisition and adoption of new technologies in order to mitigate potential risks and ensure that the use of algorithmic management tools is beneficial to both workers and managers.

The implications of these dynamics for the world of work are the absence of job protection and a deregulation of working conditions in general. A normative reconfiguration of the notion of 'employer' would be an important step towards overcoming the fragmentation of contractual relationships and restoring legal consistency regarding the allocation of managerial responsibilities at the appropriate level.

8. References

- Berg, J. (2016). *Income Security in the On-demand Economy: Findings and Policy Lessons from a Survey of Crowdworkers*. *Comparative Labor Law & Policy Journal* 37, 543-545.
- Capucine Riom, A., Oliveira-Cunha, J. (2021). *The Business Response to Covid-19 One Year on: Findings from the Second Wave of the CEP-CBI Survey on Technology Adoption*. Centre for Economic Performance.
- Case 287/86, Judgment of the Court (Third Chamber) of 17 December 1987, Landsorganisationen i Danmark for Tjenerforbundet i Danmark v Ny Mølle Kro. Reference for a preliminary ruling: Arbejdsretten - Denmark. Safeguarding of employees rights in the event of transfers of undertakings, *European Court Reports 1987 -05465*, ECLI identifier: ECLI:EU:C:1987:573.
- Case C-664/17, Judgment of the Court (Third Chamber) of 13 June 2019, Reference for a preliminary ruling — Social policy — Directive 2001/23/EC — Scope — Transfer of part of an undertaking — Safeguarding of employees' rights — Concept of 'transfer' — Concept of 'economic entity' — Transfer of part of the economic activity of a parent company to a newly created subsidiary — Identity — Autonomy — Pursuit of an economic activity — Criterion requiring stability of the pursuit of an economic activity — Recourse to factors of production of third parties — Intention to liquidate the entity transferred, ECLI identifier ECLI:EU:C:2019:496.
- CIPD and Workday, *People Analytics: Driving Business Performance with People Data*, 2018 30, 33 - [people-analytics-report_tcm18-43755.pdf](#)
- Collins, Ph., Marassi, S. (2021). *Is That Lawful? Data Privacy and Fitness Trackers in the Workplace*, *International Journal of Comparative Labour Law and Industrial Relations*, 37, 65-70.
- Carter, C. (2025). *AI surveillance: Reclaiming privacy through informational control*. *European Labour Law Journal*, 16(2), 245–258.
- De Stefano, V., Countouris, N. (2024). *Lifting the private-law veil: Employer authority and the contractual-coating of worker subordination*. Osgoode Hall Law School Legal Studies Research Paper Series.
- Dimitriu, R. (2008). *Trends toward greater flexibility in labor relations*. S.D.R. no. 1, 246.
- ETUC, *Platform Work Directive: A milestone towards innovation that delivers for all*. *Syndicate European Trade Union*, 29 March 2024, <https://www.etuc.org/en/publication/platform-work-directive-milestone-towards-innovation-delivers-all>
- Eurofound & ILO, *Working Anytime, Anywhere: The Effects on the World of Work*, Geneva: Publications Office of the European Union and the International Labour Office 2017.

- Gaudio G., & Prassl, J. (2024). *The concept of the employer*, in G. Davidov, B. Langille, & G. Lester (Eds.), *The Oxford handbook of the law of work*, Oxford University Press, 187–200.
- Gheorghe, M. (2022). *The Employer – a Uniform European Concept?*, in vol. *In Memoriam Ion Traia Ștefănescu*, Ed. Universul Juridic, Bucharest, 537-552.
- Kelly-Lyth, A., Thomas, A.(2023). *Algorithmic management: Assessing the impacts of AI at work*. *European Labour Law Journal*, 14(2), 230–252.
- Hassel, A., Sieker, F. (2022). *The platform effect: How Amazon changed work in logistics in Germany, the United States and the United Kingdom*. *European Journal of Industrial Relations*, 28(3), 2022, 363–382.
- Loiseau, G. (2023). *Intelligence artificielle et travail*. vol. *Un droit de l'intelligence artificielle*, Ed. Bruylant, 373-375.
- Kullmann, M. (2022). *Platformisation at work: An EU perspective on Introducing a legal presumption*. *European Labour Law Journal*, 13 (1), 66-80.
- Kullmann, M. (2018). *Platform work, algorithmic decision-making, and EU gender equality law*. *International Journal of Comparative Labour Law and Industrial Relations*, 34 (1), 1-21.
- Moarcăș, C.-A., Zărnescu, V.-L. (2023). *Contemporary Architecture of Individual Labor Rights*, Ed. Universul Juridic, Bucharest, 61-78, 150-153.
- Newlands, G. (2021). *Algorithmic Surveillance in the Gig Economy: The Organization of Work through Lefebvrian Conceived Space*, *Organization Studies*, 42(5), 719–737.
- OECD, *Algorithmic Management in the Workplace. New Evidence from an OECD Employer Survey*, OECD Artificial Intelligence papers, February, 2025, no. 31, p. 24, [287c13c4-en.pdf](#).
- Prassl, J. (2016). *What if your boss was an algorithm? Economic Incentives, Legal Challenges, and the Rise of Artificial Intelligence at Work*, 1-29.
- Panainte, S. (2021). *Individual Labor Law*, Ed. Hamangiu, 2nd edition, revised and expanded, 244.
- Peyronnet, M. (2020). *L'usage des algorithmes et de l'IA dans le recrutement: une occasion de (ne) plus discriminer?* Vol. *Intelligence artificielle, gestion algorithmique et droit du travail*, coord. P. Adam, M Le Friant și Y. Tarasewicz, Paris, Dalloz, 139.
- Rainone, S. (2025). *Rethinking the Concept of the Employer in the Digital Economy: Corporate Fragmentation and Power Dynamics Through Labour Corporate Fragmentation and Power Dynamics Through Labour Law and Competition Law Lenses*. *Comparative Labor Law & Policy Journal*, 45(1), 17-40.
- Rainone, S. (2023). *Digital and remote work: Pushing EU labour law beyond its limits*. Vol. *The future of remote work*, eds. N. Countouris, V. De Stefano, A. Piasna, S. Rainone (Eds.), 163–183.
- Raportul *Work for a brighter future – Global Commission on the Future of Work*, International Labour Office – Geneva, ILO, 2019, p. 43; [Work for a brighter future – Global Commission on the Future of Work](#)
- Roșioru, F. (2017) *Individual Labor Law*, Ed. Universul Juridic, Bucharest, 94-115.
- Roșioru, F. (2013) *The changing concept of subordination*. Vol. *Recent Developments in Labour Law*, coord. G. Kiss, A. Kiado, Budapest, 150-160.
- De Stefano, V. (2016). *The Rise of the 'Just-in-Time Workforce': On-Demand Work, Crowdwork and Labour Protection in the 'Gig- Economy'*, *Conditions of Work and Employment Series*, No. 71, ILO 2016.
- Smorto, G., Donini, A. (2024). *L'approvazione della Diretta sul lavoro mediante piattaforme digitali: prima lettura*, *Labour & Law Issues*, 10(1), 23–44.
- Ștefănescu, I.T. (2017) *Theoretical and Practical Treatise on Labor Law*, Ed. Universul juridic, Bucharest, 246-249, 573-586.
- Țiclea, A. (2023). *Theoretical and Practical Treatise on Labor Law*, Ed. Universul Juridic, Bucharest, 440-441.
- Vlăsceanu, A.-M. (2016). *Protection of Employees' Rights in the Event of a Transfer of Undertakings, Businesses, or Parts Thereof*, Ed. Universul Juridic, Bucharest, 70-90.