

**Krzysztof Stefański**

University of Lodz, Poland

kstefanski@wpia.uni.lodz.pl

ORCID ID: <https://orcid.org/0000-0001-6313-7387>

**Katarzyna Żywolewska**

University of Białystok, Poland

k.zywolewska@uwb.edu.pl

ORCID ID: <https://orcid.org/0000-0002-6839-4320>

## **Lack of Transparency in Algorithmic Management of Workers and Trade Unions' Right to Information: European and Polish Perspectives**

**Abstract:** The 'black box issue' is one of the biggest problems with algorithmic management. The lack of transparency in the operation and decision-making of AI is of greatest concern to those whose data is being processed (including employees). Trade unions, as the organisations that most represent the interests of workers, can play a big role here; however, they need to be empowered. There is a lack of legislation at EU and Member State level to set norms for this issue; the only country that has already introduced such legislation is Spain. The draft Polish regulation refers to the Spanish solutions and seems to be very interesting. It introduces the possibility for trade unions to obtain data from an employer on the operation of AI in relation to the algorithmic management of employees. The authors present this regulation against the background of EU recommendations and previous Polish legislation on the employer's obligation to provide information. They also identify elements that need to be refined during the parliamentary process in order to make the regulation more effective in protecting workers' rights.

**Keywords:** AI, algorithmic management, black box, trade unions

## Introduction

The algorithmic management of employees is becoming commonplace in many companies and is evident at every stage of the employment relationship. At the recruitment stage, employers may use an ATS (Applicant Tracking System) to automate the entire employee sourcing process. AI-based systems are used to determine work standards, give instructions to employees and also to control the proper performance of work. Finally, AI enables the optimal selection of employees for redundancy. The variety of tasks performed by AI, as well as the ubiquity of its use in the management of employees, has raised questions about the subjectivity of AI on the employer's side (Stefański, 2022, p. 99).

Algorithmic management has many advantages and allows employers to make significant savings. However, it is not without drawbacks. The literature points to a number of legal issues relating to many aspects of algorithmic management, including algorithmic discrimination (Adams-Prassl et al., 2023; Gyulavári & Menegatti, 2022, p. 271). This can arise from the inappropriate design of algorithms by their developers, who incorporate their personal beliefs and stereotypes into the algorithms they develop (De Stefano, 2018; Otto, 2022). It can also be caused by differences in the data available to AI (Dastin, 2018). Another major concern is the threat to fundamental rights (Otto, 2019), including in particular the employee's right to privacy, e.g. through the collection of large amounts of data about him/her and the use of this data in making employment-related decisions (Aloisi & Gramano, 2019; European Commission, 2017), as well as the extension of employer surveillance into the domestic sphere of employees, e.g. in the case of remote working (Ajunwa et al., 2017, p. 772).

### 1. The black box problem

A key problem in algorithmic management is the issue of the black box – the lack of transparency in the data processing and decision-making carried out by AI. AI operates according to implemented rules and instructions that are very difficult to review and understand, both for those using it and, more importantly, for those whose data is being processed. As pointed out in the literature, this lack of transparency is a 'design feature of the technology and as such not a remediable flaw' (Roßnagel et al., 2019, pp. 5–14).

Sometimes solutions are proposed that are based on a different approach and allow stakeholders to interpret the results of AI, which may avoid the black box problem (Rudin, 2019, p. 206). However, this is not an ideal solution and still needs to be refined. The difficulties are compounded when we consider that a feature of AI is its ability to learn deeply. This means that millions of pieces of data are fed into an algorithm, which then identifies correlations between certain features to produce results.

However, this process is largely closed and poorly understood, both by the programmers dealing with the data and, of course, by the users. It should also be remembered that most AI applications rely on neural networks, which are difficult to decipher. In addition, AI applications are usually based on the recognition of abstract patterns; these then form the basis of decisions that affect a particular person, but are not themselves related to that person. Such a person will be treated by the AI system according to a statistical average.

There is no doubt that the people in the most difficult situation are those whose data are processed and who do not know how the algorithm works and on what criteria it bases its results. An employee whose data has been processed and as a result of which a decision has been taken regarding his/her employment has little chance of obtaining information about the design of the algorithm or how and why a particular decision has been taken. And yet these decisions may be of existential importance to these individuals. For example, they may involve a refusal of employment or the termination of an employment relationship, which may result in the loss of resources needed to support a family. Lack of access to such information can mean that certain employee rights become illusory. This is particularly true of an employee's right to appeal a particular decision (e.g. dismissal). Unfortunately, such information is also not often available to other parties; the State Labour Inspectorate of Poland can be mentioned here, as can the courts that decide on labour disputes. However, the role of trade unions, set up to represent the interests of workers, appears to be crucial.<sup>1</sup> In order to be able to fulfil their role, they need to have adequate information on the functioning of AI.

## 2. The role of trade unions in ensuring transparency

Trade unions have crucial responsibilities, which play a role in regulating working conditions in areas where AI and algorithmic management are present (De Stefano, 2018). Unions concerned with the processes of an algorithmic rule should be able to take on new skills, in addition to their traditional competencies (such as the realisation of the right of employee participation and conducting collective bargaining and collective disputes), so that there is the possibility of performing social control of algorithmic management using AI technology (Nowik, 2022, p. 122).

It is important to agree on appropriate principles for trade unions and employers to work together on the introduction and use of AI systems. Therefore, any initiative that serves this purpose should be welcomed. One example is the European Social Partners Framework Agreement on Digitisation (EU Social Dialogue Resource Centre, 2020). Although this document is only a joint declaration, and AI issues are only

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1 Other institutions for representing the interests of employees, such as works councils or European works councils, should also be included in this group.

one element of it, it is nevertheless welcome that such an agreement has been reached. With regard to the implementation of AI, several conditions are highlighted; the use of AI systems:

- should follow the ‘human in control’ principle;
- should be safe, i.e. should prevent harm. A risk assessment, including opportunities to improve safety and prevent harm such as for human physical integrity, psychological safety, confirmation bias or cognitive fatigue, should be undertaken;
- should follow the principles of fairness, i.e. ensuring that workers and groups are free from unfair bias and discrimination;
- needs to be transparent and explainable, with effective oversight. The degree to which explanation is needed is dependent on the context, severity and consequences. Checks will need to be made to prevent erroneous AI output.

Regarding the transparency of AI systems, the Agreement states that ‘[i]n situations where AI systems are used in human resource procedures, such as recruitment, evaluation, promotion and dismissal, performance analysis, transparency needs to be safeguarded through the provision of information. In addition, an affected worker can make a request for human intervention and/or contest the decision along with testing of the AI outcomes.’

The fundamental condition for implementing the transparency principle is to provide trade union activists with access to reliable information about the AI model’s operation, including information on the training procedure, the training data, the machine-learning algorithms and testing methods for validating the system. The key issue is the scope of the information on algorithmic management processes that should be provided to trade unions.

### **3. The legal basis for ensuring transparency**

Transparency as a requirement for AI is indicated in almost every document on ethical and trustworthy AI. However, both at European and Member State level, there is no legal basis for verifying transparency. There are a number of legal instruments in EU law to help prevent the misuse of algorithmic management, the most important of which are the GDPR and Directive 2002/14/EC. Their role is important, but they seem insufficient given the specificity of algorithmic management. This problem has already been noticed by EU institutions; in the White Paper ‘On artificial intelligence: A European approach to excellence and trust’, announced in February 2020, the European Commission noted that workers and employers are directly affected by the design and use of AI systems in the workplace. It also recognised that the involvement of social partners will be a crucial factor in ensuring a human-centred approach to AI at work (European Commission, 2020). A similar position is expressed

in the European Parliament Resolution of 20 October 2020 with Recommendations to the Commission on a Framework of Ethical Aspects of Artificial Intelligence, Robotics and Related Technologies (European Parliament, 2020), which stresses that candidates and employees should be duly informed in writing when artificial intelligence is used in recruitment procedures and other human resources decisions, and how, in such a case, a human assessment can be requested to reverse the automated decision. The European Parliament also underlines that artificial intelligence, robotics and related technologies must not in any way affect the exercise of fundamental rights as recognised in the Member States and at Union level, including the right or freedom to strike or to take other action covered by the specific industrial relations arrangements in Member States, in accordance with national law and/or practice, or affect the right to negotiate, to conclude and enforce collective agreements or to take collective action in accordance with national law and/or practice.

The role of trade unions is also recognised in the European Declaration on Digital Rights and Principles for the Digital Decade, proclaimed by the European Parliament, the Council and the Commission (European Commission, 2023, pp. 1–7), which is the latest and most important European document on digital rights. The declaration highlights that trade unions and employers' organisations play an important role in digital transformation, particularly in relation to the definition of fair and just working conditions, including with regard to the use of digital tools at work. These documents reflect the views of European authorities and set the direction of EU policy on AI. For this reason, their importance and relevance for future legislative action should undoubtedly be recognised. However, they cannot be considered as standards of European law.

In April 2021, the Commission presented its AI package, including *inter alia* a proposal for a regulation laying down harmonised rules on AI (European Commission, 2021) and a relevant impact assessment. In September 2022, the Commission adopted a proposal for a directive on liability for artificial intelligence (European Commission, 2022). In the first of these, it is indicated that AI systems used in employment, worker management and access to self-employment, notably for recruitment and selection, for making decisions on promotion and termination, for task allocation and for the monitoring or evaluation of persons in work-related contractual relationships, should be classified as high risk, since those systems may appreciably impact the future career prospects and livelihoods of these persons.

Despite the ongoing legislative work, the above proposals are still drafts and not binding law. Although changes in the field of artificial intelligence are progressing very quickly, the new European standards for it will not come into force immediately. It is expected that regulations at the EU level will not be issued before 2025 (Salis-Madinier, 2021, p. 10). At Member State level, it is difficult to see any legislative action to regulate AI in labour law and, in particular, to introduce transparency principles for algorithmic management. Many governments highlight the need

to evaluate the current legal framework and to adopt new EU-level legislation to guarantee a binding regulatory framework for the successful uptake and deployment of AI (Van Roy et al., 2021, p. 15).

Sometimes the opacity of algorithmic operations is equated with the threat of discriminatory practices – hence the idea of introducing anti-black-box solutions into anti-discrimination law. One example is the idea of introducing a presumption of algorithmic discrimination. In German legal doctrine, it has been suggested that the principle that the use of non-transparent algorithms should be sufficient grounds for discrimination should be introduced into the General Equal Treatment Act. In such a situation, it would be up to the party using AI to disprove this, e.g. by disclosing the technical and organisational measures taken to avoid discrimination (Martini, 2019, p. 361). Such solutions can be considered but should not be the only legislative activity in this area. The problem of lack of transparency is not only related to discrimination; other fundamental interests of workers are also at stake. Therefore, regulation to combat black boxes should be holistic and cover the entire field of labour law (as well as other areas of law). Other countries, such as Italy, are also attempting to strengthen worker protection in algorithmic management (Agosti et al., 2013).

One of the few regulations already in place to address the problem of AI's lack of transparency is the regulation adopted in 2021 in Spain (Gobierno de España, 2021). The provision states that '[t]he Council of Workers (of a company) shall have the right, at the appropriate interval, to: be informed by the company of the parameters, rules, and instructions on which algorithms or artificial intelligence systems that affect any decision-making that may have an impact on working conditions, access to and maintenance of employment are based, including profiling'. This regulation is the first step towards ensuring employees' right to information about the algorithms used by their employer. Despite its shortcomings, it has been highly praised in doctrine as a first and ambitious solution (Villarroel Luque, 2021, p. 27).

A similar solution is being considered in Poland. The draft amendment to the Trade Union Act stipulates that the information that an employer must provide to trade unions will include an item on 'parameters, rules and instructions on which algorithms or artificial intelligence systems are based, which influence decision-making and which may affect working conditions and remuneration, access to and retention in employment, including profiling' (Sejm, 2022). The Polish Parliament is currently working on this project. This provision seems to fit in with existing legal solutions on trade union powers. At the same time, it allows for the introduction of controls on the use of AI in employee management.

It is worth noting that the introduction of an information requirement is an important step, but not enough. At this point it is worth considering whether the introduction of the new regulation is consistent with employers' existing information obligations. Currently in Poland, the most general scope of an employer's informa-

tion obligation results from Art. 28 of the Trade Union Act 1991. The employer's obligation to provide specific information to the trade union has a strong axiological justification: it is the recognition that this obligation is one of the fundamental elements of the actual functioning of social dialogue in the workplace, i.e. the implementation of the constitutional principle. The limits of this obligation are determined by the scope of competences of trade union structures, which refers both to the necessary minimum of information that must be provided and to the indication of what information is not covered by this obligation (Szmit, 2019).

Art. 28 of the Trade Union Act stipulates the employer's obligation to provide trade unions with any important information at their request if it is necessary to conduct union activities. This information concerns working conditions and remuneration principles, the employer's activities and economic situation related to employment and expected changes in this respect, the status, structure and expected changes of employment, as well as activities aimed at maintaining the level of employment or activities that may cause significant changes in the organisation of work or the basics of employment. However, the legislation does not oblige the trade union to justify this application, although, if the requested information cannot be justified by any purpose of union activity and thus clearly exceeds the statutory obligation to inform the union, the employer may refuse to provide it. However, the employer runs the risk of incorrectly assessing the union's request. Therefore, it can be briefly stated that the employer is obliged to provide the trade union with all information necessary for the latter to conduct its activities and at the same time is not obliged to provide information that is not necessary for this activity (Florek, 2010). The legislation does not formulate a closed catalogue of information that the employer is obliged to provide to the trade union. The union may also request other information if it is necessary to conduct its activities; this may include, for example, information on the mechanisms of operation of company funds, mechanisms for regulating the social and welfare status of employees and retirees, or information on the employer's collection of trade union fees (Wujczyk, 2019, p. 208).

At this point, a practical problem arises regarding the lack of any clarification of the limits of this obligation, which means opening a wide field for conflict, because it can be safely assumed that the employer will strive for the narrowest possible understanding of the concept of 'information necessary to conduct trade union activities, while trade unions will interpret the same phrase as broadly as possible' (Szmit, 2019, p. 39). Information is necessary if it enables trade union structures to represent and defend the rights and the professional and social interests of working people (which is the purpose of trade union activity, resulting from Art. 1 of the Trade Union Act), within the framework of specific powers and competences granted to them (Wujczyk, 2007, pp. 135–136).

The question that needs to be answered is: What if the information is covered by a trade secret? If this information is provided as part of negotiations on the content

of a collective labour agreement, the matter seems clear. Pursuant to Art. 241(4)(2) of the Labour Code of 1974, representatives of trade unions are obliged to not disclose information obtained from the employer that constitutes a trade secret within the meaning of the provisions of the Act on Combating Unfair Competition of 1993. However, there is no express regulation that would entitle the employer to refuse to provide the information or even prohibit trade unionists from disclosing it to the staff. The solution is to apply by analogy the provisions of the Act on Informing and Consulting Employees of 2006, which regulates the principles of transferring secret business data to the works council. This would mean that trade union members would be obliged to not disclose information obtained in connection with their function, pursuant to Art. 28 of the Trade Union Act, if that information constitutes a trade secret, in respect of which the employer has stipulated the obligation to keep it confidential. This obligation would also exist after ceasing to hold office, but for no longer than three years. Additionally, a similar application of the provisions governing the supplying of information to a works council would allow the employer, in particularly justified cases, to not provide the trade union with information the disclosure of which could, according to objective criteria, seriously disrupt the activities of the enterprise or plant concerned or expose it to significant damage (Wujczyk, 2019, pp. 208–209).

The obligation of confidentiality for trade union activists as employees may result from Art. 100(2)(4) of the Labour Code, the obligation to keep information confidential if its disclosure could expose the employer to damage. Disclosure of such information may result in the act being considered a serious breach of employee duties, which may constitute the basis for immediate termination of the employment contract due to the employee's fault. The employer may also treat the disclosure of a secret as an act of unfair competition, which is considered to be the transfer, disclosure or use of someone else's information constituting a business secret or its acquisition from an unauthorised person if it threatens the significant interests of the entrepreneur. Committing such an act may give rise to criminal liability, because whoever discloses to another person or uses in his/her own business information constituting a trade secret, contrary to his/her obligation towards the employer and if he/she causes serious damage to the entrepreneur, is subject to a fine, restriction of liberty or imprisonment for up to two years. An employer who has suffered damage as a result of the disclosure of trade secrets by an employee may also seek compensation from the employee for the damage suffered (Żołyński, 2014).

## Conclusions

The obligation to provide information on algorithmic management should not be objectionable. However, there are concerns about the implementation of this ob-



litigation. Employers using algorithms very often point out that the design and operation of algorithms are covered by trade secrets or copyright. Algorithms used in human resource management can lead to more efficient work, better collaboration between employees and their teams, and increased quality and productivity. All this can affect a company's market position and should be kept secret, therefore legislation should take this into account. One solution could be to oblige trade union activists to keep secret information that could have a negative impact on the company's situation. It seems that the solution adopted in Article 241(4) of the Labour Code can be applied here, obliging trade union representatives not to disclose information received from the employer that constitutes a trade secret within the meaning of the provisions on combating unfair competition.

Another problem is the quality of the information provided. It is clear that not all users, including trade unions, have the knowledge to understand how the algorithms work. However, the information provided to trade unions does not have to be about the technical features of the software; the employer should give them feedback that allows them to understand the decisions made by the AI. This will enable workers to draw the appropriate conclusions and possibly appeal the outcome, if separate legislation provides for a right of appeal (Nowik, 2022, p. 131). The explanation should be provided in an understandable written or visual form, adapted to the stakeholder's level of knowledge. For a non-expert user, the explanation is best presented using natural language – both verbal and written – and indicating which data features and algorithmic functions led to the decision. The drafters of the Polish law are therefore to be commended for having identified the black box problem in the working environment. However, during the parliamentary process, it would be worthwhile refining the provisions that have been drafted.

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