HUNGARIAN LABOUR LAW
E - J O U R N A L

The Dangers of Workplace Digitalisation for Collective Rights: Beware the Siren Songs

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Abstract

This paper examines the "siren songs" of workplace digitalization, challenging the narrative that technological advancement is inherently synonymous with progress. While digital tools like Artificial Intelligence and Big Data promise efficiency, they often mask intensified surveillance and the erosion of collective workers' rights. For example, by placing information almost exclusively in the hands of management, algorithmic management can shift from being defensive compliance mechanisms to offensive anti-union practices. Specifically, the study analyzes three critical impacts: the complications of digital union elections and reduced company sizes, the emergence of "technological strike-breaking" that neutralizes the effectiveness of strikes, and the risk of indirect algorithmic discrimination against union representatives through biased performance metrics. To mitigate these dangers, the research proposes a framework for "technological humanism," advocating for updated regulations on digital voting, an explicit ban on technological strike-breaking, and transparency in algorithmic management. Ultimately, collective action and trade unionism are presented as the essential means of preserving humanity and labour rights in the digital age.

Keywords: trade union freedom; algorithmic mangement; technological strike-breaking; guarantee of indemnity and non-discrimination; digitalisation; artificial intelligence

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1. Not every melody of progress will actually take us (collectively) to a safe harbour

When we use the expression *"siren songs"*, we go back to Greek mythology and one of its most powerful images: the sirens, those ambiguous creatures, part human and part animal, who lured sailors with a song of extraordinary beauty. A song both seductive and dangerous, for it led those who listened straight to ruin.

From that myth, Western culture has inherited a metaphor that remains very much alive today. Siren songs are a warning against false promises, against the seduction of what looks attractive but may, in reality, prove harmful. The expression is used in politics, in economics, in public debate more generally, to refer to offers that sound too good, too easy, too immediate. Offers whose strength lies in the fascination they create, but which conceal a hidden risk, an unseen cost, an unwanted outcome.

And it is here where this metaphor becomes especially useful for thinking about our present. Around digitalisation we hear songs that promise progress, efficiency and control. Artificial intelligence sings, presenting itself as the solution to every problem of management; algorithms sing, offering unlimited productivity; digital platforms sing, promising flexibility and autonomy. Yet behind these persuasive melodies lie dangers we cannot ignore: intensified surveillance, loss of privacy, the erosion of the boundary between work and personal life, and the worsening of working conditions. In this sense, to speak of the siren songs of digitalisation is to recognise that not every melody of progress will bring us safely to harbour.

With this in mind, the aim of this work is to stress how important it is to realise that we are hearing siren songs, to identify them, and to stay conscious of them in our everyday interaction with technology. More specifically, in the (unavoidable) interaction of workers and trade unions with digital technology in the workplace. In this way, we can respond to the discourse that only celebrates the virtues of digitalisation, remain alert to its negative impacts, and start thinking about how to prevent or address them.

Fortunately, there is already a wide range of research on the negative impacts of digital technology on individual labour rights. In this paper, however, the focus is on collective labour law – more precisely, on the negative impact on the exercise of trade union freedom and on workers' participation in the enterprise. But before presenting some of these impacts – found in my doctoral research, I suggest we take a step back to look at the evolution and the changes in labour relations, considering not only the new technological framework but also the underlying economic reality and the power relations it reveals.[1]

[1] Esteban Romero Frías: La transformación digital en perspectiva: 30 años de una economía digital conectada. In: Cristóbal Molina Navarrete – María Rosa Vallecillo Gámez (dirs.): *De la economía digital a la sociedad del e-work decente: condiciones sociolaborales para una industria 4.9 justa e inclusiva*. Cizur Menor, Thomson Reuters Aranzadi, 2021. 67–90.

2. Digitalisation beyond its literal meaning

What is digitalisation? Digitalisation is defined as the act or effect of digitising – that is, the process of converting any kind of information into digital format so that it can be processed by a computer.[2] Put more simply, it is the process of turning reality into data, under the assumption that this will generate new productive dynamics and provide a deeper and more effective understanding of the world than in the past.

But if we go a little further, and recall Ortega y Gasset's reflections on technology, we can see digitalisation as a form of technique, a kind of *"super-nature"*[3]: a transformation that humans impose on nature in order to satisfy their needs and interests. Above all, the interests of the major tech corporations which, for years now, have cultivated an almost religious devotion to Big Data and Artificial Intelligence.[4]

What is the problem? Here another powerful reflection comes to mind, this time from Neil Postman: "If to a man with a hammer everything looks like a nail, to a man with a computer, people are nothing but data."[5] This is what Yuval Noah Harari has called *"dataism"*[6]: the conviction that everything should be measured in data, and that this is the best tool for analysing reality. In this way, we drift from a human-centred reflection towards an *arithmocentric* vision of the world.[7] At the core of today's Industrial Revolution lies the power of data – and to reach it, a massive digitalisation of reality is required, as a first step before automation and the delegation of human functions and tasks to Artificial Intelligence.

The siren songs present digitalisation (and, in fact, any technological innovation) as a synonym for progress[8]. We are told that digitalisation is not an end in itself, but "a promising means to foster human prosperity, to improve individual and social well-being, to serve the common good, and to bring progress and innovation."[9] Yet what is often forgotten are the interests that lie behind this vision.

Indeed, alongside the dominant narrative that links digitalisation and Artificial Intelligence with progress and well-being, alternative discourses have emerged, pointing to the hidden interests and

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2 Pablo García Mexía: *Claves de inteligencia artificial y derecho.* Madrid, La Ley, 2022. 30.

3 José Ortega Y Gasset: *Meditación de la técnica y otros ensayos sobre ciencia y filosofía*. Madrid, Alianza Editorial, 2000 (1939). 17, 28, 42.

4 José Luis Goñi Sein: Innovaciones tecnológicas, inteligencia artificial y derechos humanos en el trabajo. *Documentación Laboral,* vol. 2., núm. 117. (2019) 57–72.

5 Neil Postman: *Tecnópolis. La rendición de la cultura a la tecnología.* Madrid, Ediciones El Salmón, 2018 (1992). 32.

6 Yuval Noah Harari: *Homo Deus. Breve historia del mañana*. Barcelona, Debolsillo, 2022 (2015). 400 ss.

7 Agustín Sánchez Cotta: Dataísmo y transhumanismo. La pugna por la supremacía ideológica de la nueva normalidad. In: Manuel Bermúdez Váquez (coord.): *Luces en el camino: Filosofía y Ciencias Sociales para tiempos de desconcierto.* Madrid, Dykinson, 2021. 851.

8 Postman op. cit. 60.

9 Directorate-General for Communications Networks, Content and Technology – High-Level Expert Group on Artificial Intelligence: Ethics Guidelines for Trustworthy AI. Luxembourg, Publications Office of the European Union, 2019. 5.

the harmful effects of this phenomenon. The apocalyptic perspective[10] focuses on the dangers of an unrestrained *accelerationism*[11] which views artificial intelligence as the solution to all the world's problems and advocates for technological development without any barriers that might slow down innovation.

It is within this debate that Luddism reappears. The term "Luddite"[12] is often associated with someone who not only rejects new technologies but even resorts to violence to destroy machines. Since the late twentieth century, there has been talk of a resurgence of this anti-technological stance. Neo-Luddism has been defined as "a critical movement, concerned about the impact of technology on societies, culture, labour and the environment, and which advocates for common sense in the responsible use of technology and scientific advances, limiting the abusive and senseless development of both."[13] If we think carefully, this does not seem so far removed from the stance taken by labour law academic environment.

3. Digitalisation and worsening imbalance of power

It is often said that artificial intelligence is a neutral technology, since it brings both opportunities and risks. It is neither good nor bad in itself, and it depends on how people use it. However, Neil Postman explained with great clarity that "the ways of using any technology are largely determined by the technology itself"[14] and that "embedded in every tool is an ideological bias, a predisposition of uses, a set of possibilities that make some futures more likely than others."[15] In other words, from the perspective of technological determinism, there would not have any chance to mitigate or avoid the negative effects of a technology that is designed precisely to intervene in that way.

The drive for constant surveillance and massive extraction of data – from processes, institutions, societies and individuals – under the banner of generating knowledge and advancing human progress, constantly collides with the suspicion of who has access to that knowledge and how it is used. This is what has been referred to as the "dark side of digitalisation."[16] The central role of data, information

10 Jordi Vallverdú: *¡Hasta la vista, baby! Un ensayo sobre los tecnopensamientos*. Barcelona, Anthropos, 2011. 29.

11 Daniel Soufi: Acelerar o morir, la controvertida ideología que defiende el avance sin límites de la inteligencia artificial. *El País,* 5 de enero de 2024. https://tinyurl.com/34r9k7ns

12 The name was chosen in reference to Ned Ludd, a British worker regarded as the leader of the movement in English industrial history for having set fire to textile machines during the protests that began in 1811. In earlier years, isolated cases of workshop destruction had already occurred in Great Britain, but at the beginning of the 19th century the destructive actions were explicitly directed against machines. Miguel Artola – Manuel Pérez Ledesma: *Contemporánea. La historia desde 1776*. Madrid, Alianza Editorial, 2005. 152.

13 César Santos Blázquez: Robots, máquinas y resistencias: el neoludismo y H.G. Wells (y viceversa). *Distopía y Sociedad. Revista de Estudios Culturales,* núm. 1. (2021) 140–153.

14 Postman op.cit. 25.

15 Ibid. 26.

16 Andrea Granelli: *Il lato (ancora più oscuro) del digitale. Nuovo breviario per (sopravv)ivere nell'era delle rete*. Milano, Franco Angeli, 2017. With this concept, he refers to the opaque construction of Big Data and its ability to absorb vast amounts of information

and communication technologies, and artificial intelligence systems, together with the near total interconnection of society, is what Shoshana Zuboff has called *"surveillance capitalism"*.[17]

We can also observe a strong tendency to make decisions purely on the basis of data science, leaving aside human judgement. And this is not a neutral practice. As Kate Crawford has clearly shown, the collection and labelling of data has often been presented as a neutral computational practice. However, the way in which data are captured, classified and named is a profoundly social and political act, shaping and constraining the way we see the world.[18]

To understand the transition from the study of something material, such as technology, to something more intangible, such as social and labour relations, it is essential to turn to the theory of Carlota Pérez. She argues that an industrial revolution is not simply a set of new technologies, but a new *techno-paradigm* that reshapes common sense and patterns of behaviour.[19] This shared new logic is a model of "best practice": using technology in the most efficient way known at the time, structured around knowledge and the information extracted from data – the new gold of the twenty-first century. As a result, the industrial society in which the protective principle of Labour Law was conceived and consolidated has gradually given way to a technological society.[20] The traditional conflicts of labour relations persist, but now in a digital context with its own particular features.

Digitalisation is the first step in digital transformation, followed by automation, since information must first be available and digestible in digital form before automated decisions can be programmed. With these two processes – together with immense supercomputing capacity – we arrive at the (strategically misnamed) artificial intelligence, the leading force of the Fourth Industrial Revolution.

However, what has been introduced into business management is not only new technological tools of production, but also new forms of internal organisation and business strategy. Algorithms are now applied to data drawn from the very being and presence of workers, and decisions are then made regarding their working conditions.

In other words, these material changes in the context where collective rights are exercised necessarily affect the way in which people organise collectively in this space. Indeed, some speak

and to profile citizens by analysing their behaviour on the internet.

17 Shosana Zuboff: *La era del capitalismo de la vigilancia. La lucha por un futuro humano frente a las nuevas fronteras del poder.* Barcelona, Paidós, 2020.

18 Kate Crawford: *Atlas de IA: poder, política y los costos planetarios de la inteligencia artificial*. Barcelona, Ned Ediciones, 2023. 186.

19 Carlota Pérez: *Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages.* Cheltenham, Edward Elgar, 2002. At the same time, it draws on Kuhn's notion of paradigm, understood as a vision that defines both the model and the ground for 'normal' innovative practices, promising success to those who follow the principles, rules, and standards for scientific practice embodied in the core industries of the revolution. Thomas S. Kuhn: *La estructura de las revoluciones científicas.* México, Fondo de Cultura Económica, 1971 (1962). 33.

20 Américo Plá Rodríguez: *Los principios del derecho del trabajo.* Buenos Aires, Editorial De Palma, 2015.

of the "disintegrative potential of traditional institutional structures",[21] the erosion of the pillars that supported a model of trade unionism, and the "decline of the trade union as a collective actor."[22]

In conclusion, the siren songs tell us that big data and artificial intelligence, as part of digitalisation, are valuable tools for solving today's problems and for advancing progress. And they are indeed very valuable for companies, not only for the financial benefits they bring, but also for the power they confer. These tools reinforce managerial authority and control,[23] as they allow business power to be exercised more easily, more quickly, more intensely and more efficiently. While the managerial prerogative recognised in law is, in essence, always the same, what grows are the forms and the intensity with which it is exercised[24]. Information is power – and digitalisation places information almost exclusively in the hands of employers. In this way, digitalisation contributes to the imbalance of power by deepening the asymmetry of information.

In fact, the conclusions of my thesis[25] led me to affirm that algorithmic management of work accentuates this imbalance of power between the parties to the employment relationship. It shifts from being a defensive tool for the employer – to ensure compliance with the contract – to becoming an offensive one,[26] by which I mean a form of anti-union practice.

4. Hidden dangers: three impacts of digitalisation on certain collective rights

4.1. Election of representatives: trade union elections

In Spain, trade union presence within companies follows what is known as a "dual channel of institutional expression"[27]: the unitary representation and the trade union representation. Both are, of course, affected by the material changes companies undergo as a result of digitalisation. But here I will focus only on the first one, the unitary representation. Unlike the union channel, this is not based on freedom of association, even though it is connected to it, but rather on the workers' right to take part in the company (Article 129.2 of the Spanish Constitution). Still, it is heavily "unionised" in

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21 José María Goerlich Peset: Innovación, digitalización y relaciones colectivas de trabajo. *Revista de treball, economia i societat,* núm. 92. (2019) 1–26.

22 Antonio Martín Artiles – Alberto Pastor Martínez: Nuevas formas de representación colectiva. Reacción a la digitalización. *Cuadernos de Relaciones Laborales,* vol. 40., núm. 2. (2022) 345–366.

23 Antonio Baylos: La larga marcha hacia el trabajo formal: el caso de los riders y la ley 12/2021. *Cuadernos de Relaciones Laborales,* vol. 40., núm. 1. (2022) 95–113.

24 Wilfredo Sanguineti Raymond: El poder de dirección ante el cambio económico y productivo y la emergencia de la inteligencia artificial. *Trabajo y Derecho,* núm. 109. (2024).

25 Ana García García: *Artificial intelligence and trade unions. The impact of algorithmic management on trade union freedom and collective rights*. Directed by Wilfredo Sanguineti Raymond. University of Salamanca, February 2025.

26 Adrián Todolí Signes: *Algoritmos productivos y extractivos. Cómo regular la digitalización para mejorar el empleo e incentivar la innovación*. Cizur Menor, Aranzadi, 2023. 20.

27 M. Carlos Palomeque López – Manuel Álvarez De La Rosa: *Derecho del Trabajo*. 24.ª ed. Madrid, Areces, 2016. 355.

practice, since trade unions participate directly in the electoral process (Article 2.2.d of the Spanish Law on Trade Union Freedom).

The election of these representatives follows a specific electoral procedure: the so-called union elections (Articles 69 to 76 of the Workers' Statute). These elections can only be held in companies – or more precisely, workplaces – with more than 10 employees, or with more than 6 if the workforce agrees to it. The number of representatives depends on the size of the workforce. Voting, as established in the Workers' Statute, must be done in person, using a paper ballot placed in a ballot box.

Now, in a digitalised context, this procedure undergoes at least two main changes.

The first is the reduction in company size. Digitalisation allows the same amount of work – or even more – to be done with fewer employees. Jobs are cut as workers are replaced by technology, which reduces the size of both companies and their workplaces.

The problem here is that smaller workforces make it harder to hold union elections. This leads to less collective activity within companies and, in turn, a weaker union presence. Some even speak of a "weakening of traditional representative forms",[28] since the blurring of the workplace as a physical space for providing services "throws into crisis an entire system of collective representation in the company" that has traditionally been based on people sharing the same place of work.[29]

Apart from the numbers requirement, the second major change is the fading of the workplace itself, given the possibility of remote work. This raises an obvious question: how can elections be held in digital companies, virtualised ones, or those with staff dispersed across multiple workplaces?

One proposed solution is digital voting: workers would simply connect online using a computer, mobile phone or tablet to cast their vote.

The supposed advantages – what I like to call the siren songs – of this voting method are the following: saving both money and time in preparing and running the election, since material costs and human resources are reduced, given that the electoral board must otherwise be physically present to organise, safeguard and count the votes.[30] It also shortens downtime for the company, both for the board members throughout the day, and for workers who only need the time to cast their ballot.[31] Supporters also claim it would increase participation by making it easier to exercise collective rights in digital companies, and by removing the inconveniences of in-person voting such as commuting, meeting colleagues at the polling place, or dealing with postal voting paperwork .

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28 Goerlich Peset op. cit. 1–26.

29 Antonio Baylos Grau: Las relaciones colectivas de trabajo en el cambio de época. *Revista de Derecho Social,* núm. 88. (2019) 17–38.

30 Directorate General for Internal Policies, Policy Department E: Legislative Coordination and Conciliations, Science and Technology Options Assessment: *E-public, e-participation and e-voting in Europe – prospects and challenges. Final report.* Brussels, European Parliament, 2015. 115.

31 Lourdes López Cumbre: Elecciones sindicales online. In: Juan José Fernández Domínguez – Roberto Fernández Fernández (eds): *Seminario Internacional sobre nuevos lugares, distintos tiempos y modos diversos de trabajar: innovación tecnológica y cambios en el ordenamiento social*. Cizur Menor, Thomson Reuters Aranzadi, 2021. 355.

However, there are also serious problems. First, the technology itself may become a barrier, excluding workers who lack digital devices or the skills – or the confidence – to use them properly. In other words, the digital divide must be considered, and the workforce's level of digital literacy is key. It is very different if we are talking about a digital-native company than about a manual work factory. Second, there is widespread distrust in using digital tools in democratic processes, due to fears of fraud or errors, the lack of transparency in verifying whether a vote was actually counted, doubts about confirming voters' identities and ensuring results are reliable, or even the risk of not being able to guarantee the absence of coercion or intimidation. Third, personal data protection rules must be considered, since workers' data would be processed by a third-party company providing the software for online elections. Fourth, this method would also require members of the electoral board to have a minimum level of technological knowledge, which may add an extra burden to the exercise of collective rights, possibly discouraging workers from taking part. And finally, there is the symbolic issue of transferring a public act into a private environment, which could alter the way elections are perceived and change the very nature of the process, since voting at a ballot box is a symbol of equality in the act of choosing.[32]

On top of all this, online voting currently lacks explicit legal recognition. Its legality is therefore contested. In fact, the Spanish National Court ruling 165/2022, of 12 December 2022, partly upheld a claim brought by UGT, CCOO and CGT, which sought to annul an agreement between several Iberdrola Group companies and the unions USO, SIE, ATYPE-CC and ELA-STV to use digital voting in union elections. The agreement was ultimately declared illegal.

I will just highlight two arguments made by the court. First, the Workers' Statute has never included any reference to digital voting, not even in its many amendments. The Court therefore understood this omission as a deliberate decision by the legislator not to allow this type of voting. Second, the Court reminded us that the rules regulating union elections are "a matter of public order, mandatory law and non-negotiable legal nature." In other words, they are fundamental for the general interest and may only be changed by the legislator – not by agreements or collective bargaining between companies and unions.

So, all in all, the supposed advantages of technology do not really hold up when we think about the technical and legal complexity of its implementation, the not-so-obvious savings compared to traditional voting – one company offering these services, conveniently enough, estimated the average cost of in-person voting at €32,000[33] – and, above all, the need to safeguard against fraud, illegality or violations of the right to vote as a fundamental expression of democracy.

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32 Directorate General for Internal Policies, Policy Department E: Legislative Coordination and Conciliations, Science and Technology Options Assessment: *E-public, e-participation and e-voting in Europe – prospects and challenges. Final report.* Brussels, European Parliament, 2015. 115.

33 KUORUM, Informative document on its services: Your solution for secure electronic voting with legal validity. https://www.kuorum.org/elecciones-sindicales?_

4.2. Protest actions: some points about the strike

The Spanish Constitution enshrines in Article 28.2 the right of workers to strike in defence of their interests. This makes it another tool of trade union action within the company and therefore inseparably linked to freedom of association (Article 2.2.d of the Spanish Law on Trade Union Freedom). The strike is, in fact, the trade union tool par excellence. Yet, although it has historically faced resistance as a "nineteenth-century weapon of struggle",[34] the digital company paradigm adds fresh difficulties. Calling and coordinating collective action without the physical coincidence of workers proves much more challenging , even though, at first sight, connectivity should make it easier.[35]

The classic model of strike action involves the cessation of work without occupying the workplace or any of its premises (Article 7.1 of Royal Decree-Law 17/1977, of 4 March, on labour relations). Instead, workers carry out actions connected with the strike, such as peaceful picketing to publicise it or collecting funds without any form of coercion (Article 6.6 RDLRT).

When we try to transfer this right into a digital reality, many questions arise: how can one "not occupy the workplace" when this workplace is so undefined that it lies wherever a worker connects through an internet-enabled device? How can work be stopped when part of a worker's functions have already been transferred to digital tools or automated software? How can one even specify the suspension of work in companies without worker representation, where the workforce does not coincide in time and space? And how can one avoid the label of an "abusive strike" when, given the potential interconnection and technological hyper-dependence, its disruption may cause a "multiplier effect" far beyond the immediate workplace?

Digitalisation therefore shapes and constrains the exercise of the right to strike in several ways.

First, there is a problem of communication security. Digital channels – chats, emails, apps – do not guarantee privacy. Employers can monitor them, tracking inappropriate language, the spread of confidential information, frequency of access to informal communication tools, communication patterns, and even linguistic tone, all under the banner of ensuring compliance with company policy or safeguarding cybersecurity. But what would happen if, in the process, the algorithm tasked with enforcing company rules effectively prevented the exercise of the right to distribute and receive trade union information?

Second, the right to strike also includes the right to disseminate information about the action itself. Traditionally, this has been done by strikers at the gates of the workplace. If the company becomes virtual, then logically there should also be a virtual space for these same actions. Yet can digital

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[34] Fernando Fita Ortega – José María Goerlich Peset: Sindicalismo y acción sindical en el siglo XXI: Crisis económica y transformación del modelo productivo. *Arxius de Ciències Socials,* núm. 36–37. (2017) 37–47.

[35] Roberto Fernández Fernández: Nuevas formas de exteriorización del conflicto colectivo: las huelgas TIC. In: Juan José Fernández Domínguez – Roberto Fernández Fernández (eds.): *Seminario Internacional sobre nuevos lugares, distintos tiempos y modos diversos de trabajar: innovación tecnológica y cambios en el ordenamiento social*. Cizur Menor, Aranzadi, 2021. 395–418.

pickets ever be as effective as physical ones? The use of digital and media tools does not ensure the same level of commitment or solidarity as traditional, face-to-face methods.[36] These online actions may be highly visible on social networks, but they might still amount to little more than "a collection of likes on a post."[37]

Above all, however, the real issue lies in the effectiveness of the strike itself. As we have already said, digitalisation strengthens employer power, and this is especially clear here. Employers now have an expanded capacity to maintain control of production during a strike in two main ways[38]: primarily by replacing workers who join the action in order to minimise the impact of the strike, but also by exploiting the workforce's sense of constant hyper-surveillance, which deters them from supporting the strike out of fear of reprisals.

On the one hand, all the data relating to the strike can be collected – leaders, publicity, participation, effects on production, public opinion, and so on – with the expectation that algorithmic correlations will provide insights that further increase employer power. Of course, gathering information about strike leaders and participants for later use in decision-making is nothing new (blacklists come to mind), but what was once analogue now carries the full potential of digital technology.

On the other hand, there is the issue of "technological strike-breaking[39]", defined as "the employer's use of the technical means available to continue production during the strike",[40] which drains the right to strike of its substance.

4.3. Trade union guarantees: indemnity and non-discrimination

Trade union freedom is not limited to the mere recognition of rights; it also requires the means to exercise them effectively and protection against possible reprisals. For this reason, there is a specific legal framework that guarantees workers' representatives protection against employer actions that fail to respect their freedom of action, and which also grants them the necessary means to exercise within the company the rights and functions entrusted to them: both defensive guarantees and active facilities.

Although these guarantees are numerous and vary in form, we will focus here on the guarantee of indemnity and the discriminatory potential of big data and automated decision-making.

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36 Goerlich op. cit. 1–26.

37 Ibidem 1–26.

38 Eduardo Talens Visconti: Esquirolaje tecnológico: Interrogantes abiertos. *Revista Doctrinal Aranzadi Social*, vol. 6., núm. 5. (2013) 173–192.

39 Carmen Grau Pineda: *Los difusos contornos de la prohibición del esquirolaje.* Valencia, Tirant Lo Blanch, 2021.

40 Antonio V. Sempere Navarro – Ana I. Pérez Campos: *Las garantías de los representantes de los trabajadores*. Cizur Menor, Thomson Aranzadi, 2004. 21.

Article 68(c) of the Workers' Statute establishes the right not to be dismissed or sanctioned while carrying out representative functions, nor within the year following the expiry of the mandate, whenever such measures are based on the worker's representative activity. It also enshrines the right not to be discriminated against in terms of economic or professional promotion for carrying out such functions.

It is evident that an employer will not expressly identify trade union activity as the cause of a dismissal or sanction, since this would make the nullity of the decision obvious. However, in the context of digitalisation, the opportunities to circumvent such guarantees increase.

Every step a worker takes becomes data. big data enables the extraction of vast amounts of workforce data, which is then processed by artificial intelligence. Particularly relevant here is algorithmic discrimination arising from biases in statistical correlations or from proxy variables used by algorithms.[41] For example, AI-based software for selection or promotion decisions in companies might assess candidates on the basis of parameters such as the number of hours worked, productivity measured by targets achieved, compliance with deadlines, participation in projects, or time devoted to professional training. If a worker devotes a significant portion of their time to representation duties, these parameters may be negatively affected, since inevitably their hours worked or strictly task-based productivity could be lower than that of other workers without trade union responsibilities.

The problem arises if the algorithmic system is not programmed to account for the nature of absences or the cause of lower performance according to such criteria. In that case, the decision not to select or promote the trade union representative could amount to indirect economic or professional discrimination, as the system would be penalising a worker for exercising their representative functions.

This reasoning was upheld in the well-known judgment of the Ordinary Court of Bologna of 31 December 2020, which ruled on a claim brought by several trade unions against Deliveroo for discrimination in relation to access conditions for booking working time slots on the platform. The Court considered that the situation created by the so-called "Frank algorithm" constituted indirect discrimination against Deliveroo riders, as the platform adopted a deliberate "blindness and indifference" towards certain causes of absence from reserved work sessions by treating different situations in the same way. A rider who goes on strike cannot be penalised for exercising a right.

In short, the digitalisation of recruitment and promotion processes can result in discrimination on trade union grounds. This can occur if an algorithm is instructed to identify the "ideal candidate" and, in doing so, interprets that the suitable profile must exclude any form of trade union or activist activity – either by replicating past patterns of company "success", or by correlating workforce unionisation levels with company conflict. In other words, the intersection of predictive analytics, candidate

41 Anna Ginés I Fabrellas: Algoritmos sesgados en el trabajo. Consideraciones en torno a su tratamiento jurídico. *Trabajo y Derecho,* núm. 19. (2024).

profiling, and the autonomously selected criteria of an algorithm, following pattern recognition and statistical inferences, could lead to the systematic exclusion of any worker who might become a potential focal point of conflict within the company for exercising their collective rights.

5. Proposals for resisting the siren songs

In conclusion, technology-based management techniques are not only advantageous in terms of improving organisational efficiency; they also provide the employer with strategic knowledge about employees (or potential employees), which can then be used to neutralise, weaken, or dismantle collective power.

Once we recognise that what we are hearing are sirens songs, the question is: how can we avoid succumbing to temptation? Either through self-control or by deploying strategies that place limits on these songs, in order to prevent a complete loss of control.

In the Odyssey, Homer describes in detail how Ulysses, warned of the danger, devised a way of listening to the sirens without succumbing: he ordered his companions to block their ears with wax and to tie him firmly to the ship's mast. This way, he could experience the fascination without being carried away by it.

Drawing inspiration from his strategy, the following concrete proposals in response to the challenges outlined above could keep us closer to a form of technological humanism:

- Designing a regulatory framework for digital voting that updates trade union elections in line with new business realities. This must, of course, include technical support provided by the employer, since the employer is obliged to ensure the means necessary for the proper conduct of the ballot and the entire electoral process.
- Updating the legal framework governing strikes and other forms of collective action, expressly recognising that wherever the virtual company reaches, collective demands must also reach, and ensuring their legality and effectiveness.
- Introducing an explicit ban on employer control of collective action and on technological strike-breaking. In other words, what an employer cannot lawfully do in the analogue world should not be permitted by technological means either.
- Applying the principle of reversal of the burden of proof[42] in cases of breaches of labour regulations relating to algorithmic management. In other words, rejecting the argument of *"black boxes"* and claims that technology is too complex to explain. A black-box algorithm – or one that is impossible to explain – should not be permitted in the field of labour relations.

[42] Adrián Todolí Signes: El principio de transparencia algorítmica en su dimensión individual y colectiva: especial referencia a la Directiva de plataformas digitales y al Reglamento de IA. *Trabajo y Derecho*, núm. 19. (2024).

– Systematically bringing legal action in labour disputes associated with algorithmic management, with the expectation that this strategy will act as a form of pressure on companies and public authorities alike.

Ultimately, the challenge is not to say *"no"* to technology (which is not a realistic option) but rather to say *"not like this"* to the power that stands behind it.

And if I am concerned about the impact of digitalisation on trade union activity and collective rights, I also see in them the solution to resisting the sirens' call. A trade union approach of critical, tolerant and constructive vigilance should not aim to hold back technological progress in itself, but rather to ensure that its development and application take place within a framework that prioritises workers' rights and their capacity for collective organisation. This requires confidence both in labour law – as a "valuable lens through which to interpret and channel the transition"[43] – and in trade unionism as the only means of preserving our humanity in the age of artificial intelligence, ensuring that "no one is left behind".[44]

43 Stefano Bini: *La dimensión colectiva de la digitalización del trabajo.* Albacete, Bomarzo, 2022. 125.

44 Daniel Pérez Del Prado: *Derecho, economía y digitalización: el impacto de la inteligencia artificial, los algoritmos y la robótica sobre el empleo y las condiciones de trabajo*. Valencia, Tirant Lo Blanch, 2023. 45.