'Technology managing people': an urgent agenda for labour law

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1. INTRODUCTION

Artificial intelligence (AI) technology is disrupting and transforming many aspects of society, including the organisation and performance of work.[1] Much of the focus and debate regarding this transformation has so far been on the effect of automation on the availability of jobs and work.[2] However, AI-based technologies are also increasingly being adopted by employers as a means of exercising their managerial functions and prerogative, a practice sometimes labelled 'algorithmic management'.[3] It is this second, often overlooked, impact of AI on the world of work that is the subject of the recently published Trade Union Congress' (TUC) report, '*Technology managing people, The worker experience*'.[4] The report aims to 'raise awareness of management by AI-powered technologies',[5] consider the effect of these technologies on workers, and identify objectives for ensuring that workers' interests are not overlooked or harmed by these emerging practices.

This article provides an overview of the TUC's findings on how employers are currently using AI in the workplace and the implications of these technologies for workers, as well as their recommended priorities for protecting workers. The report is significant for bringing greater attention to employers' use of AI technologies to govern the workplace, highlighting the challenges this raises for labour law, and helping to establish this as an urgent agenda for the discipline.

2. TECHNOLOGY MANAGING PEOPLE

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[1] See K. Schwab, *The Fourth Industrial Revolution* (Currency, 2017).
[2] See for example, D. Susskind, *A World Without Work: Technology, Automation and how We Should Respond* (Penguin, 2020).
[3] J. Prassl, *Humans as a Service,* (OUP, 2018)*,* 55.
[4] https://www.tuc.org.uk/sites/default/files/2020-11/Technology_Managing_People_Report_2020_AW_Optimised.pdf (accessed 21 January 2021)
[5] Ibid., 6.

The TUC's report is based on surveys of workers and trade union reps (n=940) and independent polling of labour market participants undertaken for the TUC (n=2133), as well as a literature review on employers' use of AI-powered technologies. Published in November 2020, it is the first output from the TUC's ongoing work on AI and the employment relationship.

Artificial intelligence is defined in the report as 'when computers carry out tasks that you'd (sic) usually expect to be completed by a human'.[6] AI technologies are based on computerised algorithms, which apply sets of rules to make decisions or perform tasks. The underlying body of rules that make up these algorithms may either be created and written directly by computer programmers or developed via 'machine learning' techniques, where computers operate with minimal human supervision and create algorithms and predictive models based on patterns they identify in historical data.

The report sets out the many ways AI technologies are being deployed by employers to manage workers throughout the course of the employment relationship, from recruitment and the exercise of core managerial functions through to decisions relating to disciplinary matters and dismissal.

One of the most common areas where technology and AI is being used is as part of the hiring process, with 40% of those responding to the TUC's survey having experienced the use of AI in this context. The most common instance of this is CV screening in the initial stages of recruitment (17% of respondents), but 'AI-powered tools are being used at all stages of the recruitment process, ranging from sourcing candidates, to screening, interviewing candidates and the formation of job offers based on a predictive model'.[7] Other common uses of AI for during recruitment included automated background checking (16%), 'AI-powered psychometric testing' (11%), and social media screening where 'software can scan a prospective employee's social media feed and flag up potential problematic behaviour' (11%).[8]

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[6] Ibid. [13].
[7] Ibid. [18].
[8] Ibid. [20].

The use of AI by employers to manage workers also extends to adopting these technologies to exercise, or help exercise, their managerial functions and prerogatives in respect of the allocation, monitoring, and evaluation of work performance. A substantial proportion of those surveyed had experience of technology being used to make or inform decisions at work, with the most common uses being to make decisions relating to annual leave (25% of survey respondents), manage absences (22%), schedule shifts (14%), and allocate work or set tasks (both 14%). Many of these technologies were originally developed and deployed in the context of managing workers on online platforms but are now being used more widely across the labour market.[9]

Employers' ability to use AI to analyse data and make decisions about how to manage the workplace has 'transformed monitoring tools into data sources',[10] and the use of surveillance and workplace monitoring technologies is becoming widespread. A substantial proportion of workers surveyed had their communications screened (27%) or their computer use monitored (13%). This is also broadly reflected in the independent polling conducted for the TUC, where 20% had their devices monitored and 11% had their phone calls monitored. The report demonstrates that technology is often used to track when workers arrive and leave work (26% of workers surveyed), the amount of time taken on breaks (13%), and their location (15%). Particularly intrusive examples of monitoring include technologies which take screenshots of employees' computers or photos of them via webcams at periodic intervals, with one company supplying these tools reporting its number of UK customers has increased fourfold in 2020.[11]

Although less prevalent, decisions relating to disciplinary matters and termination of the employment relationship are also being taken via technology. For example, one union representative reported an automated scoring system being deployed to conduct a redundancy selection with no human involvement at any stage of in the process.[12] However, only 6% of survey respondents had experienced technology making or informing a decision

[9] J. Prassl, n.3 above; U. Huws, N.H. Spencer, D.S. Syrdal, 'Online, On Call: The Spread of Digitally Organised Just-in-time Working and its Implications for Standard Employment Models' (2018) 33 *New Technology, Work and Employment* 113.
[10] TUC, n.4 above, 26.
[11] Ibid [28].
[12] Ibid [25].

to start a disciplinary process, and only 3% had experienced technology terminating or withdrawing their work. This practice therefore appears to be largely confined to platform work at present, where automated systems are routinely used to bar people from accessing work.

3. AN URGENT AGENDA

After detailing how AI technologies are being used to manage the workplace, the report draws out key themes from this research and proposes objectives for ensuring workers interests are adequately protected from the threats posed by employers use of AI.

The themes, which emerge from 'worker and trade union rep accounts of their lived, working experience of AI systems',[13] are as follows:

- *Transparency and consent* – workers have little knowledge or understanding of the technologies used by employers and how they operate, and new technology is often introduced without asking for employees' consent.
- *Consultation* – there was a similar lack of consultation about the introduction of new workplace technologies.
- *Difficulty challenging decisions* – only a minority of workers (20%) felt they could effectively challenge decisions made by technology at work, in part because of the lack of information about the technology, and employers' belief that algorithms and technology cannot be wrong.
- *Data* – employers' access to data can amplify the inequality of power that exists in the employment relationship, and the data collected about workers is itself an asset for employers which workers see no benefits from.
- *Discrimination and unfairness* – workers feel that, unless regulated, decisions taken by technology could increase unfair treatment in the workplace. AI technologies often have the effect of embedding and intensify existing inequalities and patterns of injustice, and there are also equality concerns surrounding access to technologies and how they are deployed in the workplace.

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[13] Ibid. [36].

- *Health and wellbeing* – AI management technologies may detrimentally affect workers' physical and mental wellbeing, by intensifying workloads, increasing stress and anxiety levels, and blurring the boundary between work and personal life.

- *Privacy* – the use of employee data in workplace decision-making and AI-based surveillance tools may threaten workers' privacy.

- *Insecure and low paid work* – AI may suppress wages by deskilling jobs and exacerbate the problem of precarious work by allowing employers to match the amount of work offered to precisely forecasted levels of demand.

- *Opportunity* – AI may present an opportunity as well as a threat to workers, for example if tools can be developed which improve managerial practices or help hold employers accountable for their decisions.

- *Trust* – most workers are uncomfortable with AI making decisions about them at work (71%) and believe that workplace monitoring damages trust (56%).

A particularly striking issue from the labour law perspective that emerges from the report is the current absence of worker voice over the use and operation of AI in the workplace. Another significant point is the potential for AI tools to harm workers' interests; either by having discriminatory or unfair effects, infringing their rights, or detrimentally affecting their health and wellbeing.

In response, the report proposes a series of objectives for trade unions and the labour movement to prevent workers' interests from being harmed by employers' use of AI. The most relevant for labour lawyers are the goals of establishing collective bargaining and consultation over the deployment and operation of AI at work, ensuring that AI does not lead to discriminatory outcomes at work, that AI is deployed lawfully and that relevant legal frameworks are effectively enforced. Labour law therefore has a valuable role to play here, in making sure that employers' use of AI is consistent with their legal obligations such as those contained in health and safety legislation, the Data Protection Act 2018, the Equality Act 2010, the law of dismissal, and the common law rules that govern the employment relationship. Understanding how these legal frameworks apply to employers' use of AI and assessing the

effectiveness of the protection they provide in this new context is an important agenda for labour law.

In addition, by setting out how AI is being used to manage workers, the TUC's research also highlights some of the challenges for labour law raised by this emerging practice. This includes, for instance, questions about who should be responsible for managerial decisions that are taken (solely or jointly) by AI systems, and whether employers can be held accountable where they do not understand or cannot foresee the results of AI. Ensuring employer accountability for management-by-AI, and that they act consistently with their legal obligations, is also complicated by the 'black box problem', meaning the lack of transparency and understanding about the internal processes and functioning of AI technologies. Finally, if existing legal frameworks cannot safeguard workers against the potential harms of AI then new protective mechanisms must be found or developed. These issues will only continue to become more acute as more employers adopt AI technologies, and finding adequate responses should now be a high priority for labour lawyers.

Stepping back, the report is also valuable for helping to demonstrate the fundamental threat that the rise of management-by-AI poses to labour law's ability to achieve its underlying normative goals. First, it amplifies the inequality of bargaining power between labour and capital that the discipline exists to counteract. Second, by intensifying and extending employers' control over workers, AI technologies increase the potential for exploitation, domination and rights infringements at work; all of which are harms to workers that labour law seeks to prevent and redress. Finally, employers' use of AI to govern the workplace makes it harder to secure meaningful worker voice and industrial democracy, as it is significantly more difficult for workers and unions to participate in managerial decisions or processes that are undertaken via AI.

44. CONCLUSION

The TUC report provides an excellent overview of how technology is being used to manage workers, the implications of these practices for workers, and its significance for labour law. It serves as a warning of the emerging practices we are likely to see more of in future. With the

use of AI technologies by employers only set to increase, understanding this phenomenon and responding to the many questions and challenges it raises represents an urgent new agenda for labour law, and the labour movement more broadly. Labour lawyers must be at the forefront of debates regarding the use and governance of AI technologies in the workplace, and confronting the issue of 'technology managing people' must be a priority if labour law is to be capable of achieving its worker-protective goals in the age of artificial intelligence. The TUC's report, and their ongoing work on AI and the employment relationship, represents an important step towards this.

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