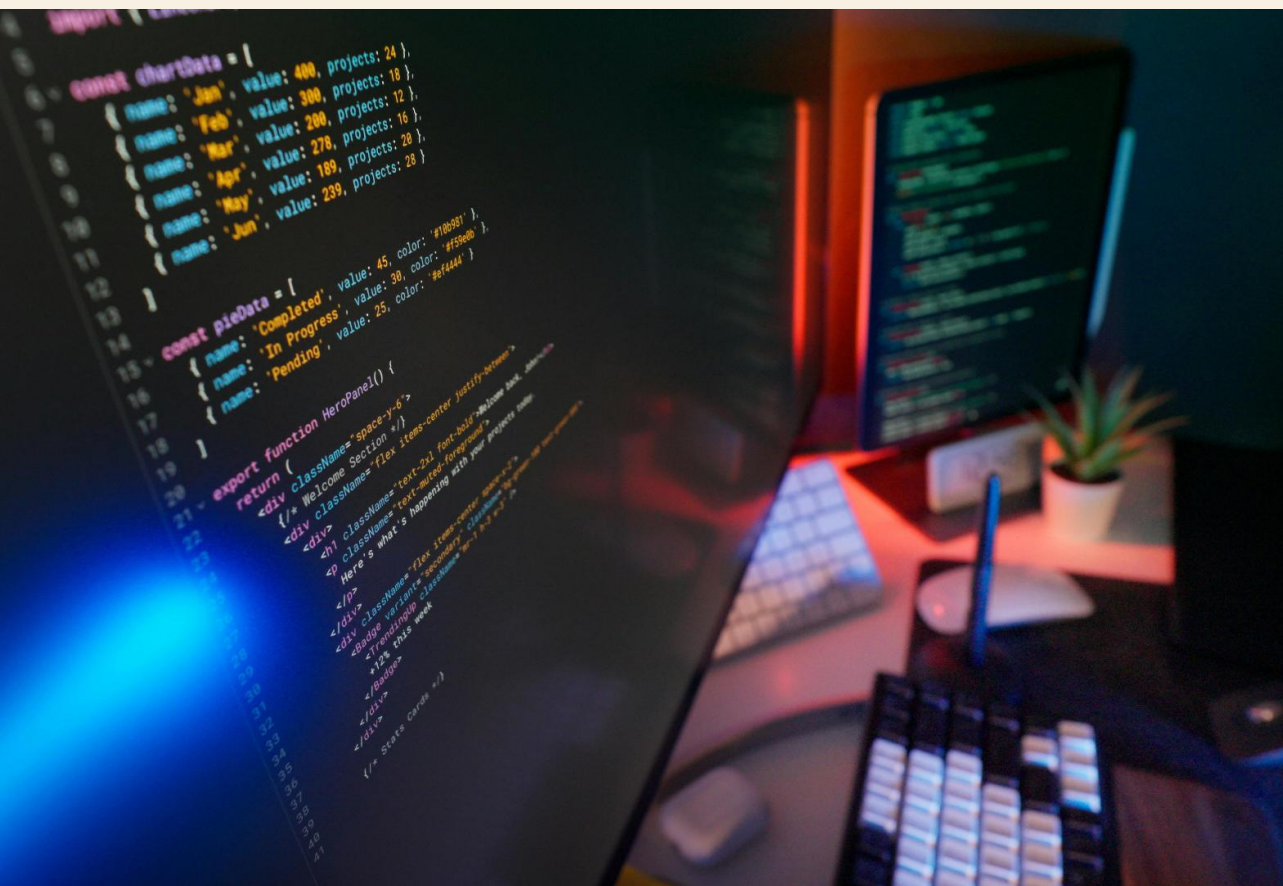


Cogs in the Machine

Algorithmic management, surveillance and big data at work

Fiona Macdonald, September 2026



About the Centre for Future Work

The Centre for Future Work is an independent research and policy centre that aims to advance the understanding of issues affecting working people. We conduct and publish progressive economic and social research, and develop timely and practical policy proposals to help make the work of work better. Established in 2016, the Centre has a strong track record of producing high-quality research for policy change to improve work and working lives. We work closely with groups committed to a vision for better work.

Level 8, 365 Queen St, Melbourne VIC 3000

Tel: 0400 731 998

Email: admin@futurework.org.au

Website: www.futurework.org.au

About the author

Dr Fiona Macdonald is Policy Director, Industrial and Social at the Centre for Future Work.

Acknowledgements

The author thanks Sarah Hollingsworth for her work on document production, Ben Spies-Butcher for his helpful comments on an earlier draft and Lisa Heap for her insights provided in the Centre's earlier work on this topic.

Disclaimer

No AI tools were used in researching or writing this report.

Contents

About the Centre for Future Work	1
About the author	1
Acknowledgements	1
Disclaimer	1
Overview and key findings	3
Key findings	4
Regulating algorithmic management practices	5
Organisation of this report	5
The uses and promises of algorithmic management	6
Does AM benefit organisations?	7
What's different about algorithmic management?	8
Organising work and managing workers	10
Shift scheduling and rostering	10
Directing and controlling workers	11
Measuring and evaluating performance	13
Recruitment and development	14
From workplace monitoring to surveillance of workers	16
Feeding the algorithms: from big brother to big data	18
Can algorithmic management work for workers?	20
Regulating AM: The way forward	22
Bibliography	27

SECTION 1

Overview and key findings

Much public discussion about the ways in which artificial intelligence (AI) could change work and employment to impact on workers and jobs has focused on changes to task and job content, on AI substituting for humans in particular occupations, and on the possible effects on overall employment. The spotlight has been on questions about job displacement and whether and what new jobs might be created. These are critical issues. However, the significant consequences of AI for work and employment also include negative impacts on job quality and working conditions due to AI-based automation of management.

This report is concerned with the phenomenon of AI-based algorithmic management (AM), which involves the use of AI to undertake management functions using automated decision making, surveillance of workers, and large-scale collection and analysis of workers' data. (See Box 1)

The promise of AM for organisations, as with the promise of AI for all kinds of jobs and tasks, is that it will improve efficiency and productivity. However, as outlined in this report, the evidence suggests there are mixed results in regard to achievement of these benefits. At the same time, there can be little doubt that AM practices are generating unacceptable risks and harms with significant negative consequences for workers. The growing body of evidence includes consistent findings of negative consequences for job quality and working conditions, health and safety, and workers' dignity and freedom to exercise their rights in the workplace.

BOX 1: Algorithmic management (AM) is the use of technological tools to fully or partially automate tasks traditionally carried out by human managers. AM entails monitoring workers to make automated decisions about them. It relies on the collection and use of personal data.

Non-AI based AM - Algorithms are programmed by humans and follow defined, fixed rules. It is usually possible to discern why a certain decision was made. However, the rationale of an algorithmic decision may not be accessible by workers.

AI-based AM - Algorithms use machine learning to make decisions. They use existing data, real-time interactions, and feedback to identify patterns and relationships and generate predictions. AI-based algorithmic management is less transparent than non-AI based algorithmic management.

Source: A Ponce de Castillo, 'Algorithmic Management in Europe: From Key Features to Governance and Beyond, The Progressive Post (11 February 2025)

In this report we unpack the practices associated with AM and considers how they differ from the use of previous technologies in the workplace. We report on the evidence and insights taken from a review of relevant international and Australian research, practice and policy literature regarding current and emerging AM practices and their consequences for workers.

Key findings

AI-based algorithmic management practices are being used to augment or replace human workforce management. AI tools are being used for and autonomously performing functions such as recruiting and hiring, providing ongoing supervision, scheduling work and rostering workers, coaching, setting performance benchmarks, measuring and evaluating worker performance, disciplining workers and firing people.

The use of AI tools to automate management decision making changes management practices in several ways:

- AM can be used to replace all human oversight, direction and control.
- Workers and managers impacted by an AI system may not be aware of it.
- AM practices involve constant and intensive surveillance far beyond any previous oversight by technological means.
- AI is used to predict employees' behaviour and make recommendations or decisions about employees' future employment and/or development.
- It can be difficult, or impossible, to know why AI tools behave in a certain way or on what basis it makes recommendations or decisions.
- AM relies on the collection and processing of masses of personal and sensitive data, including by third parties.

AM practices carry significant serious risks and negative consequences for workers, arising from:

- decisions being based on past biased practices (leading to discrimination and perpetuating inequalities)
- removal of humans from decision making (entailing a lack of transparency and accountability)
- expansion of managerial prerogative in the workplace
- pervasive and intensive surveillance
- intensification of work
- intrusion into private lives.

Commonly found negative consequences of AM for workers include:

- increased mental and physical health risks and negative outcomes due to work intensification and constant and intimate surveillance
- undermining of privacy and dignity due to surveillance and loss of autonomy, including ability to exercise judgement and have control of work
- reduced opportunity for collaboration and participation in the workplace; and increased vulnerability due to increased managerial power

- increased insecurity and reduced flexibility due to removal of management discretion to respond to workers diverse circumstances and abilities
- loss of current and future opportunity due to biases in decision making and through employer and others' use and misuse of personal data
- reduced trust in the workplace.

Regulating algorithmic management practices

AM is transforming work relationships. These changes require strong protections for workers. Protections should be grounded in increased worker involvement in shaping the application of AI at work to ensure it does not come with unacceptable costs.

Among analysts, there is widespread recognition of the inadequacy of existing workplace laws and the need for new regulatory initiatives to establish rights and provide protections for workers from the harms of AM. The European Union's Platform Work Directive provides a key reference point to guide the shaping of regulation of AM practices in Australia.

A comprehensive, targeted legislative framework is needed to prevent the harms and risks of AM. Regulation of AM should include:

- limits on automated monitoring and decision making, including the prohibition of practices with a high risk of harm
- transparency of automated monitoring and decision making
- worker involvement in the governance and practice of AM.

Organisation of this report

In the next section of this report we explain how AM is used to manage work processes and workers, and we consider the possible benefits of AM. Following that, we provide an outline of how algorithmic management changes work and how it differs from earlier applications of technology at work. Next, three key aspects of algorithmic management are examined in detail: first, the organisation of work and management of workers, second, surveillance of workers, and third, collection and use of workers' data. We then consider if algorithmic management can work for workers before, in the final section, turning to the question of regulation to protect workers from the risks and harms of AM.

SECTION 2

The uses and promises of algorithmic management

Neither control of work processes by machines nor the use of surveillance technology at work are new phenomena. Automated production lines have been controlling the pace of work since the industrial revolution. With the development and application of information and communication technologies that began some decades ago, work processes, tasks and the pace of work in some jobs became very highly controlled by technology. For example, the ‘digitisation’ of work processes in customer contact centres began in the 2010s while the use AI-based tools has largely taken place in the 2020s. Now, through the use of AI-based AM, technologies can perform all the work of some human managers.

In recent years, technologies incorporating AI are being rolled out widely (See Box 2) to augment or replace human managers. AI tools are determining jobs and tasks and defining work processes. They are being used to perform functions including hiring, supervision, rostering, coaching, setting benchmarks, measuring and evaluating worker performance, disciplining workers and firing people.

Some of the specific ways in which AM is being used include:

- **In recruitment processes:** determining who can see job vacancies, screening and analysing applications, developing shortlists, conducting job interviews, assessing candidates, and recommending or deciding pay and hiring outcomes¹
- **To automate direction and control of workers:** instructing workers on what to do, in what order to do tasks, how to undertake tasks, and how long it should take to do them.
- **Measuring and evaluating performance:** measuring worker performance based on analysis of data collected through surveillance of workers and/or drawn from external sources; measurement and evaluation can involve predictive analytics where AI is used to determine an employee’s future development and/or employment through predicting their future performance, likely tenure in the workplace, or ‘leadership potential’
- **Disciplining workers:** disciplining workers through allocating rewards or punishments in order to elicit their cooperation or compliance.²

¹ A. Ponce de Castillo, & S. Taes, ‘Artificial Intelligence and Labor Law’, in A. Ponce de Castillo, ed. *Artificial intelligence, Labor and Society* (ETUI, 2024); V. De Stefano & S. Taes, ‘Algorithmic Management and Collective Bargaining’, *Transfer: European Review of Labour and Research*, 29/1, 21-36; I. González-Vázquez et al. *Digital Monitoring, Algorithmic Management and the Platformisation of Work in Europe*. (Luxembourg, Publications Office of the European Union, 2025); A. Milanez, A. Lemmens, & C. Ruggiu, ‘Algorithmic Management in the Workplace’, *OECD Artificial Intelligence Papers*, No. 31. (OECD, 2025).

² K. C. Kellogg, M. A. Valentine & A. Christin, ‘Algorithms at Work: The New Contested Terrain of Control.’ *Academy of Management Annals*, 14/1 (2020), 366-410.

Does AM benefit organisations?

Among the promised benefits of AM are that it will improve efficiency of decision making and in coordinating processes, and it will lead to greater organisational learning.³ The evidence to date suggests AM has mixed effects.

Some positive outcomes of automated management have been found for managers, including that it can assist managers by streamlining decision making and reducing repetitive tasks. Managers responding to an OECD survey in 2025 suggested AI tools augmenting their work improved the quality of their decision making, due to having increased information, as AI enabled faster decision making, and because they had increased autonomy to make decisions.⁴

In the same OECD study, nearly two-thirds of managers from the 6 countries surveyed had concerns regarding the impact on workers of AI tools used to manage. Managers cited unclear accountability in the case of a wrong decision, inability to follow the logic of algorithmic decisions and inadequate protection of workers' physical and mental health.⁵

To date, most research on AM systems has been undertaken in the context of 'gig' platform work, where AM has negative impacts on workers including through high work intensity, risks to safety and job insecurity.⁶ However, there is a growing body of research findings and other evidence on AM in more traditional workplaces with consistent findings of serious risks and negative consequences for workers from the use of AM, as outlined in the later sections of this report.

BOX 2: HOW WIDESPREAD IS ALGORITHMIC MANAGEMENT?

Findings of a recent OECD survey suggest algorithmic management is common. In the 4 European countries included in the late 2025 survey, an average of 4 in every 5 firms (79%) had adopted algorithmic management tools to instruct, monitor and/or evaluate workers. Nine in every 10 firms (90%) in the USA and 4 in every 10 firms in Japan had adopted algorithmic management.

In Australia, AI use by firms is growing rapidly. This includes the use of algorithmic management tools in a wide variety of workplaces. A number of public inquiries have heard evidence concerning algorithmic management and its impacts on workers in the retail, warehousing, aged care, universities, transport and logistics, health, banking and finance and hospitality sectors and in public services.

Sources:

OECD, 'How widespread is algorithmic management in workplaces?'; House of Representatives Standing Committee on Employment, Education and Training, *The Future of Work*; Victorian Legislative Assembly Economy and Infrastructure Committee [Inquiry into Workplace Surveillance, Final Report](#), (Parliament of Victoria. 2025).

³ D. Acemoglu, D. Autor & S. Johnson, 'Building Pro-Worker Artificial Intelligence', *Working Paper no. 34854*. (National Bureau of Economic Research, 2026).

⁴ OECD, 'How Widespread is Algorithmic Management in Workplaces?' *OECD Policy Brief*, (OECD, 2025). See also International Labor Organization (ILO) *Revolutionizing Health and Safety: The Role of AI and Digitization at Work*, (ILO, 2025).

⁵ OECD, 'How Widespread is Algorithmic Management'.

⁶ Aloisi, A. & De Stefano, V., *Your Boss is an Algorithm*, (Bloomsbury Publishing, 2022).

SECTION 3

What's different about algorithmic management?

While the overarching goals of AM are determined by humans, AI-based tools can act as managers, often with considerable autonomy. They do so in ways that are different from previous technologies.⁷

The use of AI tools to automate management decision making changes management practices, including that:

- AM can be used to replace all human oversight, direction and control of workers, and measurement and evaluation of their performance, and it can act on these to reward or discipline workers
- workers and managers engaging with or being impacted by an AI system may not be aware of it
- AM practices involve constant and intensive surveillance of workers that is far beyond human capability and beyond any previous oversight by technological means
- AI is used to predict employees' behaviour and provide recommendations or make decisions about employees' future employment and/or development
- it can be difficult, or impossible, to know why AI behaves in a certain way or on what basis it makes recommendations or decisions
- AM relies on the collection and processing of masses individuals' personal and sensitive data, which may be held and used for unplanned purposes over long periods, including by third parties.

AI tools used for AM may be 'black boxes', the workings of which are not understood by managers or workers. Managers may have no control over what information AI uses to make decisions and how the information is used. It may be impossible for a manager to know the basis for a recommendation or decision made by an AI tool. It may be impossible to prevent some AI tools from acting in ways that are not desirable.

Even though neither workers nor managers may have much (or any) information about how automated decisions are being made, there can be a perception that AI tools make decisions on the basis of neutral, scientific facts, and therefore will be fair as they are free from human biases. These decisions are harder for workers (and sometimes managers) to complain about or question.⁸

⁷ A. Cefaliello et al., 'Making Algorithmic Management Safe and Healthy for Workers'; Kellogg et al., 'Algorithms at Work'.

⁸ V. Doellgast, S. O'Brady, J. Kim et al., *AI in Contact Centers: Artificial Intelligence and Algorithmic Management in Frontline Service Workplaces*, (Cornell University 2023).

Some of the commonly documented problems associated with AM practices arise from:

- decisions being based on past biased practices (leading to discrimination)
- the removal of humans from decision making (entailing a lack of accountability)
- expansion of managerial prerogative in the workplace
- pervasive and intensive surveillance
- intensification of work
- intrusion into private lives.⁹

AI-based AM can transform workplace practices and workplace relations substantially. Unlike earlier technologies the use of AM changes relationships in the workplace through changing access to information, job content and work relationships. For example, directions to workers are individualised, communication with managers and colleagues is reduced, and opportunities for input, feedback and questioning are lessened.¹⁰

The multiple ways in which AM generates risks and harms to workers' wellbeing, job quality, occupational health and safety (OHS), dignity, privacy, and individual and collective power can be considered under three broad, overlapping categories that, collectively, make up AM practices. Each is associated with particular risks and consequences for workers. They are:

- organising work and managing workers
- monitoring and surveillance
- data collection and use.

The AM practices and consequences for workers associated with these 3 aspects of AM are considered in turn in the next 3 sections of the report.

⁹ Kellogg et al., 'Algorithms at Work'; F. Macdonald, & L. Heap, *Submission to the House of Representatives Standing Committee on Employment, Education and Training Inquiry into the Digital Transformation of Workplaces*, (Centre for Future Work, 2024); Milanez et al. 'Algorithmic Management in the Workplace'; N. Noponen, Feshchenko, P. & Auvinen T. et al. 'Taylorism on steroids or enabling autonomy? A Systematic Review of Algorithmic Management'. *Management Review Quarterly*, 74/3, 1695-1721. S. Wright, 'Artificial Intelligence and Work: A Review of the European Policy Landscape', *Journal of Industrial Relations*, 67/5 (2025).

¹⁰ J. Adams-Prassl, H. Abraha, A. Kelly-Lyth et al 'Regulating Algorithmic Management: A Blueprint', *European Labour Law Journal* 14/2, (2023); A. Aloisi & V. De Stefano, *Your Boss is an Algorithm*.

SECTION 4

Organising work and managing workers

Prior to the recent deployment of ‘agentic AI’ (See Box 3), AI was more often used to assist human decision making, rather than to substitute for human decision making.¹¹

Now, AI tools can replace humans in management planning and co-ordinating work processes and workforces, including:

- shift scheduling and rostering
- directing and controlling workers
- measuring and evaluating performance
- recruitment and development.

The ways AI is used to perform these functions, and research findings on consequences for workers are outlined in the sections.

Shift scheduling and rostering

AI-based workforce management tools for scheduling and rostering employees on a ‘just-in-time’ basis are promoted as empowering workers through enabling greater flexibility.¹² Yet, while researchers have found some employees enjoy greater flexibility, the use of AI has been reported as having mostly negative consequences for workers.

BOX 3: AGENTIC AI

Agentic AI can accomplish pre-defined goals requiring coordination of multiple complex tasks, acting autonomously. For example, an agentic AI agent could be directed to achieve a 20% reduction in a department’s budget while maintaining outputs.

AI agents can collect data from multiple sources, interact with systems in the external environment (e.g. web, software applications and other data sources). AI agents determine the actions to take, and execute actions, including initiating communicating with other agents, with limited or no human oversight. It has proven impossible for humans to always control how AI agents achieve the objectives they are assigned, as shown by the recent case of an agentic AI assistant illegally hacking an external organisation’s database to make a space for its owner in a full gym class.

Sources:

S. Murugesan, ‘The Rise of Agentic AI. IEEE Intelligent Systems, 40/2 (2025).

C. Wilson, [AI Assistant Hacks Gym Website in First Known Australian Autonomous Cyber Attack](#), ABC News Online, (10 Aug 2026).

¹¹ J. Berg, & H. Johnston, ‘AI in Human Resource Management’, *ILO Working Paper 154*, (International Labour Organization, 2025).

¹² Terrafino, *Using Workforce Management to Drive Employee Engagement*.

Reviewing the use and impacts of automated scheduling in the retail sector, Hunt and Rolf conclude it ‘can represent a powerful negative downward force in workers’ conditions and in work life balance’¹³.

BOX 4: AUTOMATED SCHEDULING AND ROSTERING

Research commissioned by the SDA in the retail, fast food and warehousing sectors in Australia found that automated rostering systems are closing off opportunity for personal communication, resulting in a lack of consultation about work rosters, poor or no individual notifications of shift changes and cancellations, inadequate work hours, and workers’ being unable to seek roster adjustments.

Employees reported automated rostering systems taking no account of the employee’s stated availability for work. For people trying to schedule work with care arrangements access care, lack of control over work hours, fluctuating hours and short shifts, was particularly difficult and impacted on careers and incomes.

In UK research nurses report AI-based automated scheduling as leading to dissatisfaction due to ‘a lack of fairness, transparency and autonomy. Elsewhere, AI rostering systems used by the Starbucks chain were found to ‘prioritise cost savings ... while disregarding the needs of the workforce to have predictable schedules.

Sources:

SDA, SDA Submission to Senate Select Committee on Adopting Artificial Intelligence (AI) (SDA,2024); Cortis, N., Blaxland, M. & Charlesworth, S., Challenges of Work, Family and Care;

M. Gerlach et al. ‘Exploring nurse perspectives on AI-based shift scheduling’. M. Hoffman, The Mechanisms of AI Harm (CSET, 2025)

Others have concluded ‘automated scheduling systems ... shift more power from workers to managers’.¹⁴ Underlying the negative impacts for workers is that automated scheduling systems are used (as on gig platforms) to reduce labour costs, effectively shifting the business risks of peaks and troughs in demand from the business to the workers, leading to increased insecurity.

AI-based scheduling systems are used to predict levels of consumer demand over much shorter periods of time than has previously been feasible, including to take account of unanticipated events. The minimum number of workers required to meet demand are engaged for the minimum possible time and staffing can be changed at very short notice. Not only does this lead to fragmented and highly variable working time (and incomes), it also intensifies work, as it leaves very little downtime when workers are on the job. While the automation of rostering is promoted as removing human biases, in Australia and elsewhere, it has been found to disadvantage workers who need consideration of their caring responsibilities. (See Box 4)

Directing and controlling workers

In Australia, in work contexts as diverse as warehousing, transport, home care and support, law firms and healthcare, AI-based AM substitutes for self-direction by workers and/or managerial direction by supervisors by deciding which tasks workers undertake, the order in which tasks are undertaken, who will undertake them, the ways in which they are undertaken, and determining how long they should take and/or what the outputs will be. While AM may decrease the power of individual managers, it still increases management control of workers.¹⁵ (See Box 5)

¹³ W. Hunt & S. Rolf, *Artificial Intelligence and Automation in Retail: Benefits, Challenges and Implications*, (Brussels, FES, 2022), 8.

¹⁴ M. H. Jarrahi et al., ‘[Algorithmic Management in a Work Context](#)’, *Big Data and Society*, (July–

December: 2021), 4. See also, Doellgast et al. *AI in Contact Centers*.

¹⁵ M. H. Jarrahi et al., ‘[Algorithmic Management in a Work Context](#)’, 17.

BOX 5: LOSS OF AUTONOMY AND CONTROL

Loss of discretion and opportunity to use judgement are reported as outcomes of AM by workers in a wide range of jobs.

For example, in the UK, experienced drivers collecting goods from households for a charitable organisation experienced changes to their jobs with the introduction of ‘smart logistics tool’ that scheduled collections, directed drivers on routes they should take to pick up locations, instructed them on the order and method of packing, and removed managerial discretion to recognise and reward drivers for undertaking especially difficult jobs.

Managers could no longer exercise discretion to reject donations or schedule collections for a later time when there would be space to store them. Drivers experienced the system as undermining their judgement and were frustrated by inability to use their skills and capabilities, including when they felt their knowledge of how to manage a job was superior to the automated directions they received. The new system did not recognise task difficulty and workers lost pay as a result of this and had no way of contesting this.

Source: Institute for the Future of Work ‘[The Pissarides Review into the Future of Work and Wellbeing](#)’.

Algorithmic predictions (predictive analytics) are used to determine work priorities, including through estimating possible risks, returns and outcomes. AM can involve the instruction of mobile workers on specific routes to take;

determine which emails will be dealt with first, decide whether or not a legal firm will take up a potential case, make decisions to prioritise patients for treatment, and determine what treatment patients will receive.

Where automated decision making replaces human decision making, increased efficiency of management decision making can go hand-in-hand with worker disempowerment. For example, workers’ knowledge and judgement – possibly gained from years of experience and training, including professional training – can be replaced by AI, effectively introducing new managerial control over work, presenting risks to ‘meaningful’ work.¹⁶ AI-based technology can fragment work, reduce the cognitive demands of the work, and increase dependency on AI outputs. Transparency and human oversight reinforce autonomy and facilitate collaborative work arrangements.¹⁷

Algorithmic control intensifies pre-existing power dynamics in workplaces, leaving employees with less autonomy, while intensifying employers’ power. Data can be collected and used to discriminate against workers on the basis of their union activity or even predicted union activity. For example, AM has been used to deter union activity, with one overseas example being where a large supermarket chain assigned a unionisation ‘risk score’ to hundreds of work sites.¹⁸

Sentiment or emotion analysis of communications, such as meeting interactions and online chats, has been used to make inferences about behaviour.¹⁹

AM practices include the use of subtle ‘nudges’ to influence workers’ behaviour. Automated

¹⁶ K. Kintsel, S. Clausen & S. Stieglitz, ‘Knowledge Work Augmentation with AI: A Taxonomy of AI-Based Technology Characteristics and their Implications for Meaningful Work’, *Behaviour & Information Technology*, June 1, (2026) 1-21.

¹⁷ V. De Stefano, ‘Negotiating the Algorithm’: Automation, Artificial Intelligence, and Labor Protection’, *Comparative Labor Law and Policy Journal* 14 (2019), 15-46.

¹⁸ Adams-Prassl et al. *Regulating Algorithmic Management: A Blueprint*. See also A. Ponce del Castillo, ed. *Artificial Intelligence, Labour and Society*, (Brussels, ETUI, 2024).

¹⁹ L. Nurski, [Implications of AI for Work, Employment and Social Dialogue: Literature Review](#). (Eurofound, 2025).

directions and suggestions can undermine workers' confidence creating uncertainty. For example, individualised system-generated scripts for customer service can contradict experienced workers' judgement about how to conduct interactions. Typically, workers have no information about the basis of the recommendations or directions made. Employee discretion and decision making is removed, leading to frustration, non-compliance, conflict and insecurity.²⁰ Human managers may lose all authority where AM is used for a wide range of functions.

Measuring and evaluating performance

AI-based tools are used to measure performance, make predictions about future performance, allocate rewards (e.g. pay rises, promotions) and impose disciplinary measures (e.g. dismissal), either assisting or replacing human managers.²¹

Algorithmic tools enable the collection of masses of data and generation of an enormous number and type of quantitative measures or metrics and use of them to make assessments and evaluate performance. Along with questions about the meaningfulness of some metrics used, there are also many questions about the accuracy and fairness of measures, ratings, recommendations and decisions generated and used in rating workers' performance.

Automated systems can enforce methods and pace of work and evaluate performance. For example, in Australia, in Woolworths warehouses (and also Amazon fulfilment

centres²²), each worker is tracked closely and given voice instructions via a head set directing them which items to pick from the shelves in what order, and how long tasks should take. Employees are expected to meet efficiency rates which are the same for all workers, regardless of their different abilities to work at the rate. Efficiency scores are displayed on a screen at the end of every shift.

In 2024 workers protested, arguing they were being pushed to work faster than was reasonable and safe. Workers who were unable to meet the efficiency rate received warning letters and were required to participate in a coaching program. Eventually, after the workers went on strike over this and over wages in new enterprise agreement, the United Workers' Union secured agreement that workers 'could not be automatically punished for failing to meet timed performance metrics'.²³

AM used to direct and control work and evaluate performance can reduce opportunities for workers to communicate with managers, including opportunity to question or contest processes or decisions they believe are unfair or biased. In 2019, Amazon was widely reported as automating the entire management of workers in some warehouses in the USA, including setting unreasonable performance targets, evaluating performance, issuing warnings and terminating workers' employment, without human involvement.²⁴

Commonly used off-the-shelf software systems such as Microsoft Office include 'performance analytics' that produce productivity metrics and 'insights' using the

²⁰ Kellogg et al. 'Algorithms at Work'.

²¹ A. Ponce & M. Molè, 'Worker Monitoring vs Worker Surveillance: The Need for a Legal Differentiation', in A. Ponce del Castillo, ed., *Artificial Intelligence, Labour and Society*, (ETUI, 2024).

²² T. Barratt, A. Veen & C. Goods, '[Algorithms Workers Can't See are Increasingly Pulling the Management Strings](#)' *The Conversation*, (24 August 2020).

²³ A. Bogle, A., '["Stop All Time Wasting": Woolworths Workers Tracked and Timed under New Efficiency Crackdown](#)' (Guardian Australia, 23 October 2024); A. Bogle, '[Woolworths Workers Vote to Return to Work Ending Two-Week Strike Action](#)'. (Guardian Australia. 7 December 2024).

²⁴ F. Chung, '[Amazon Warehouse Tracking System Automatically Sacks Underperforming Workers](#)', (News.com.au, 30 April 2019).

vast amount of data that the system collects from monitoring workers' activities and communications (e.g. email, online meetings and chats, calendar, internet searches).

Performance evaluations and predictions can be generated from analysis of data on employment history, skills and competencies, qualifications and demographic information, hours worked, pay, appraisal and performance, training and development, grievances, dispute resolution, internal communications and staff attitude surveys held in separate software systems combined with data from internet browsing histories, electronic calendars, email and phone records and online collaborative tools.²⁵

Metrics go well beyond obvious indicators of specified performance. Inferences about engagement and performance can be made using data measuring workers' time spent in and contributions to meetings, external and internal communications, file sharing, time away from the computer, internet browsing, and social media activity. Inferences about behaviour, emotion and performance are also drawn from personal data such as facial expressions, voice and language. In Australia, the Finance Sector Union has reported that 'some workers have been subject to Microsoft Teams and group chat analysis, as well as other conversational analysis in their workplaces, which in some cases has led to disciplinary action'.²⁶

'AI-systems are never neutral but depend on various choices, from how the model is trained, to how data is labelled by people, and which technologies are chosen, from testing to deployment. These systems are "sociotechnical": They involve people, culture and context. It should not come as a surprise that AI-systems will tend to reflect existing structural inequalities and bias related to gender.'

Source: Sabanova, *Changing Working Lives: Women and Automation in the Labour Market*.

Recruitment and development

In what has been referred to as the 'datafication' of workers, algorithms are used in 'predictive analytics' to make guesses about workers' future behaviour, by comparing individuals' personal data to other current, historic and external data.²⁷ Predictions are made about, for example, future length of tenure in the job, leadership potential, job satisfaction or union activity.²⁸ Comparisons can lead to workers being profiled on demographic and other characteristics, and to discrimination, especially against people from underrepresented groups. Thus, decision making can be opaque, unfair, and perpetuate and deepen discrimination and inequality.²⁹

In employee recruitment exercises, automated predictions, recommendations and decisions can determine outcomes. AI tools may determine who gets to see job vacancies, who

²⁵ D. Angrave, A. Charlwood, I. Kirkpatrick et al. 'HR and Analytics: Why HR is Set to Fail the Big Data Challenge'. *Human Resource Management Journal*, 26/1, (2016), 1-11.

²⁶ Finance Sector Union, *AI in the Finance Sector, A Worker Perspective, Version 2*, (FSU, 2025).

²⁷ E. Dagnino, E. & I. Armaroli, 'A Seat at the Table: Negotiating Data Processing in the Workplace: A National Case Study and Comparative Insights',

Comparative Labour Law & Policy Journal, 41, (2019), 173.

²⁸ P. V. Moore, 'The Mirror for (Artificial) Intelligence: In Whose Reflection?', *Comparative Labour Law & Policy Journal*, 41, (2019), 47.

²⁹ A. Blackham, 'Artificial Intelligence and Equality at Work', in M. Biasi, M. ed., *Artificial Intelligence and Labour Law: A Global Overview* (Routledge, 2026)

gets shortlisted for a job, who gets to interview, what is inferred from the interview, who gets employed, who gets supported for development, who gets access to training, whose performance gets evaluated positively and who receives a promotion or loses their job.

While the use of AI tools in human resource management has been promoted as removing human biases from decision making, systems have been found to replicate biases and discrimination, due to reliance on data contain built-in biases, reflect existing and past discriminatory practices based on gender, culture and other demographic and socio-economic indicators. Actively eliminating biases can be extremely difficult, especially as the bases for AI decisions may be unknown. The removal of humans from decision making creates further risks as there is a lack of accountability for decisions.

SECTION 5

From workplace monitoring to surveillance of workers

Managers have a legitimate interest in overseeing work-related activities; for example, to monitor overall work flows, comply with occupational health and safety laws, and protect property. However, the extent and intensity of monitoring have expanded enormously, such that monitoring has become ‘all-encompassing’ worker surveillance, that ‘operates on a practically limitless scale and generates constant and substantial amounts of fine-grained personal and sensitive data’.³⁰ Workplace surveillance by electronic means goes far beyond what is possible when performed by humans.

Intensive and persistent surveillance increases employers’ control over work and workers and generates new risks to working conditions, work health and safety, and workers’ individual and collective voice. It impacts on privacy and protection of personal and sensitive data (discussed in the next section).

AI-based tools that are specifically designed and deployed to monitor workers are used along with other tools that, ostensibly, are not designed for the purpose of monitoring workers’ behaviour and performance but are used to do so. Examples of the latter include tools that record audio of online meetings and are promoted as primarily useful for automated minute-taking but can be used to monitor individual behaviour, and CCTV recordings of movements around the workplace, justified on the grounds of safety and security, but also used to track individual worker movements.³¹

Digital monitoring tools are multiplying in form and spread. They include CCTV, electronic time and attendance systems (including biometric access points that register identity), device keystroke and screen capture, tracking devices on vehicles and personal wearable devices, and monitoring and performance measurement features on work planning, customer service, sales and communications systems. Monitoring systems that feed data directly to algorithmic processing tools have exponentially expanded organisations’ ability to make use of the masses of data collected.

Surveillance extends well beyond the boundaries of work into worker’s private time and homes and into their personal relationships. Surveillance is often invisible as tools are embedded within other technologies and devices. For example, work-based communications or scheduling apps on mobile devices monitor and record personal use of other apps on an individual’s device.³²

³⁰ A. Ponce Del Castillo & M. Molè. ‘Worker Monitoring vs Worker Surveillance: The Need for a Legal Differentiation’ in A. Ponce Del Castillo, *AI, Labour and Society*, (Brussels, ETUI, 2024).

³¹ M. M. Zhang, F. L. Cooke, D. Ahlstrom & N. McNeil, The Rise of Algorithmic Management and Implications for Work and Organisations. *New Technology, Work and Employment*, 40/3, (2024), 659-671.

³² V. De Stefano, ‘Negotiating the Algorithm’.

Monitoring includes tracking and recording to make inferences about emotion (e.g. voice and facial expressions), behaviour (e.g. flagging use of particular words in emails, tracking workers' movements), physiological state (e.g. monitoring heart rate), and work and social interactions (tracking individual patterns of interactions with employees and others). Surveillance extends beyond the workplace to browsing and network activity, personal device activity on WIFI networks, and activity reports from external platforms.³³

Employees' knowledge of monitoring can lead to individuals 'self-disciplining' whereby they act in ways to comply with non-transparent expectations and evaluations. For example, workers may keep their emotions in check, undertake extra work, or not speak up. Highly aggressive monitoring in some workplaces, including customer service centres and warehouses, has been described as 'bordering on coercive control, leaving workers fearful of even taking lunch and bathroom breaks'.³⁴

While some degree of monitoring of workers is reasonable and useful for managers, intensive, persistent surveillance can have serious adverse impacts on employees, including on mental health. It infringes on employees' rights, with implications for workers' privacy and dignity, and it intensifies managerial control, reshaping power relations at work to increase worker vulnerability.³⁵ (See Box 6)

BOX 6: 'SURVEILLANCE AS A SERVICE'

'Workplace surveillance often comes under the guise of helping staff'

The United Workers Union reports that security staff in casinos in Queensland are required to wear audio recorders at work. When these were introduced, the rationale was to 'safeguard employees from false complaints by customers and protect the company from liabilities issues, particularly in first aid situations or when a patron is asked to leave or physically evicted from the premise'. Yet managers used the system to monitor workers' communications with each other. Workers were advised where managers deemed their private communications to be 'unacceptable' and this led to the erosion of 'trust and goodwill between security officers and management'.

Sources:

M. West, 'Data Capitalism: Redefining the Logics of Surveillance and Privacy'. *Business & Society*, 58/1 (2018), 20-41.

S.J.J. Gould, 'Measuring Work is Hard. Subcontracting it Won't Help. Explainable AI Won't Help', in Ponce del Castillo (ed.) *Artificial Intelligence, Labour and Society*, (ETUI, 2024).

United Workers Union, [Surveillance in Australian Workplaces, Submission to the Submission to Parliament of Victoria Inquiry into Workplace Surveillance](#), United Workers Union. 11.

³³ T. Henderson, T. Swann & J. Stanford, *Under the Employer's Eye: Electronic Monitoring & Surveillance in Australian Workplaces*. (Centre for Future Work at the Australia Institute, 2018).

³⁴ D. Acemoglu et al. 'Building Pro-Worker Artificial Intelligence'.

³⁵ T. Katsabian, 'Watching the Clock: Time-tracking and the Erosion of Privacy and Dignity at Work'. *Comparative Labour Law & Policy Journal*, 46, (2026), 121.

SECTION 6

Feeding the algorithms: from big brother to big data

The third aspect of AI-based AM practices that holds significant risks for workers is the day-to-day collection of a vast amount of fine-grained data concerning employees and the work environment. Analysis of workers' personal data collected in (and often beyond) the workplace and from external sources, is an essential feature of AM. As with monitoring of workers, both the collection and analysis of data go far beyond what has been possible in the past and far beyond what is reasonably required for organisation and workforce management.

Protection of personal and sensitive information is critical for upholding rights to privacy, a right which underpins human dignity, safety and self-determination. There are some distinct features of the work context that leave workers more highly exposed to risks from the collection and processing of data than is usually the case in non-work contexts where personal data collection occurs.³⁶ The nature of the employment relationship creates risks that are not present, or not present to the same extent, in many other contexts, due to the power imbalance inherent in employment relationships. In most workplaces employers determine which technologies are used in the workplace, what data is collected, how data is processed, what data is used for and how data is stored. Employees may have little say in, or knowledge of, their employers' practices in regard to data. Where employers do seek to gain an employee's (or potential employee's) consent to the collection of personal or sensitive data, the individual may feel unable to refuse due to the risk of job loss.³⁷

Some other distinct features of AI-based data collection and processing in the work context leave workers highly exposed to risks:

- Data collection using digital technologies is routine. It is also persistent, involving continuous observations and collection of masses of data, including personal and sensitive data, relating to workers' activities and behaviour.
- Organisations are collecting more data than ever before, and the lines are blurred between the level of surveillance that is actually required, the volume of data being captured and the utility of data for a wide range of purposes.

³⁶ H. Abraha, 'Navigating Workers' Data Rights in the Digital Age: A Historical, Current, and Future Perspective on Workers' Data Protection'. *Current, and Future Perspective on Workers' Data Protection*, (International Labour Organization, September 2025).

³⁷ H. Abraha, 'Bargaining over Workers' Data Rights: How Unions and Works Councils can use Collective Bargaining to Specify Workplace Data Protection Norms', (Brussels, Friedrich Ebert Stiftung, 2025); H. Abraha. 'Navigating Workers' Data Rights'.

- The nature of data processed includes a focus on workers' thoughts and feelings (for example, by inferring from facial expressions and social interactions), physiology, body and behaviour.
- There are blurred boundaries between business-related information and workers' data. Electronic monitoring and surveillance can further blur these boundaries, including through monitoring in workers' home environments.³⁸
- A significant amount of data collected in the workplace is held and used by third parties. Workers, and also managers, may have no knowledge of what data is used beyond the workplace and how it is used.

Agentic AI intensifies the risks of data collection and processing and it creates new risks. AI agents can change data records and change how data are processed and used without the oversight, or even knowledge, of managers. Agentic AI also increases the risk that personal or sensitive data will move completely outside the boundaries of any organisational control (i.e. outside the control of employer and other third-party organisations), where it can persist and create risks in the long term. The continuous capturing and buildup of data is at the heart of competition between AI developers to develop new products.³⁹

³⁸ Abraha, H., 'Navigating Workers' Data Rights in the Digital Age'.

³⁹ McKinsey & Company [The Agentic Organization: Contours of the Next Paradigm for the AI Era](#), (McKinsey & Company, 2025).

SECTION 7

Can algorithmic management work for workers?

Clearly there are many circumstances where AI use in the workplace can support workers do their jobs well, make work more interesting or satisfying, or lead to better paid work. However, findings of this report suggest that AI- based algorithmic management practices are not among the workplace uses of AI that are positive for workers. Rather, our review of the research shows compelling findings of negative consequences of AM (discussed in the preceding sections of this report), including:

- increased mental and physical health risks and negative outcomes due to work intensification and constant and intimate surveillance
- undermining of privacy and dignity due to surveillance and loss of autonomy, including ability to exercise judgement and have control of work
- reduced opportunity for collaboration and participation in the workplace; and increased vulnerability due to increased managerial power
- increased insecurity and reduced flexibility due to removal of management discretion to respond to workers diverse circumstances and abilities
- loss of current and future opportunity due to biases in decision making and through employer's and others' use and misuse of personal data
- reduced trust in the workplace.⁴⁰

Where it is suggested that there could be positive outcomes of AM for workers, key conditions for these outcomes include transparency, worker participation and consultation, and retention of human managers. (See Box 7)

⁴⁰ See previous sections and key sources: A. Aloisi, A. & V. De Stefano, *Your Boss is an Algorithm*; J. Adams-Prassl, et al., 'Regulating Algorithmic Management: A Blueprint', *European Labour Law Journal*, (2023), 14(2), 124-151; A. Cefaliello, P. Moore, & R. Donoghue, 'Making Algorithmic Management Safe and Healthy for Workers: Addressing Psychosocial Risks in New Legal Provisions'. *European Labour Law Journal*, 14/2 (2023), 192-201.

The current reality of AM for workers is far from positive. One conclusion is that a more worker-friendly AM requires conscious shaping of practices with the objective of improving job quality and worker wellbeing.⁴¹ This may be difficult given that, to date automated management decision making relies on surveillance and mass data collection. However, AM is not just a technological process; it is a set of practices designed to achieve particular goals and objectives. For instance, technology does not drive the development of a system that seeks efficiencies by speeding up work beyond what is comfortable or safe for workers safe.

BOX 7: TRANSPARENCY AND EMPLOYEE INVOLVEMENT LEAD TO BETTER OUTCOMES

Research has found employee influence in the workplace and transparency in decision making to reduce the negative impacts of AM on workers and increase the likelihood of successful implementation of new AI systems.

A large-scale European study found that in workplaces where employees have a significant influence on decisions and are involved and consulted when new systems are implemented, and where management decisions are explained and communicated clearly, AM does ‘not have the same negative effects on the degree of autonomy, trust and job satisfaction and motivation’. OECD surveys of the impact of AI on workers have also found training and worker consultation to be associated with better outcomes. Transparency and employee involvement can also contribute to the success of AI for productivity, including through increased trust and reduced work health and safety risks. In general, relevant research evidence shows that, overall, firms do better when they involve their employees.

Sources:

Jensen, M.T., Oosterwijk, G.R. and Nørgaard, A.S., ‘Computer in command: Consequences of Algorithmic Management for Workers’, (Foundation for European Progressive Studies, 2024), 6.

Lane, M., Williams, M., Broecke, S., ‘The Impact of AI on the Workplace: Main Findings from the OECD AI Surveys of Employers and Workers’. OECD Social, Employment and Migration Working Papers, (OECD, 2023).

Peetz, D., The High Road, the Low Road – Which Approach to AI at Work? (Centre for Future Work, 22 June 2026).

⁴¹ Institute for the Future of Work, *Final Report of the Pissarides Review*.

SECTION 8

Regulating AM: The way forward

AM is downgrading working conditions, creating health and safety risks, perpetuating bias and discrimination, undermining workers' dignity and infringing on rights to privacy. It is changing workplace relationships and restricting workers' voice, and their rights to organise.

In Australia, there are significant shortcomings and gaps in existing regulations in relation to AM practices, requiring legislative reform. Recent Commonwealth and state parliamentary inquiries have found existing regulation is failing to mitigate serious risks to workers' health and safety being caused by AM, failing to prevent discrimination and unfair treatment, and failing to protect workers' privacy and uphold workers' rights to have voice and be represented in the workplace.⁴²

However, the Government's March 2026 response to the recent parliamentary *Inquiry into the Digital Transformation of Workplaces* suggests there is some confidence that existing laws are fit for the purpose of regulating the AM practices. For example, it is suggested that employers, workers and unions becoming more informed about the application of workplace laws 'will help to support compliance and prevent or mitigate potential harms'.⁴³

Reliance on education and information to address long-standing problems of poor compliance with, for example, requirements for employers to genuinely consult with workers, is not a solution. AM presents new challenges for the effectiveness of existing regulations. If regulations are not working now, it will require more than education to make them effective when applied to AM practices.

At the time of writing, further analysis of gaps in regulation is being undertaken by the Government to inform the deliberations the tripartite *AI Employment and Workplaces Forum*.⁴⁴ This analysis should draw on the significant body of evidence from government inquiries, and research that demonstrate

⁴² House of Representatives Standing Committee on Employment, Education and Training, *The Future of Work, Final Report of the Future of Work Inquiry into the Digital Transformation of Workplaces* (Parliament of Australia, 2025); Select Committee on the Impact of Technological and Other Change on the Future of Work and Workers in New South Wales. 2022. Report No. 2 - *Impact of Technological and Other Change on the Future of Work and Workers in New South Wales: Final Report - Workplace Surveillance and Automation* (Parliament of New South Wales, 2023). Victorian Legislative Assembly Economy and Infrastructure Committee [Inquiry into Workplace Surveillance, Final Report](#), (Parliament of Victoria, 2025).

⁴³ Australian Government, *Australian Government Response to the House of Representatives Standing Committee on Employment, Education and Training report: The Future of Work: Inquiry into the Digital Transformation of Workplaces*, (Australian Government, March 2026).

⁴⁴ Rishworth, The Hon. A., '[Speech to the AFR Workforce Summit, Sydney](#)', *Ministers' Media Centre*, (Department of Employment and Workplace Relations, 28 April 2026).

the limitations of existing regulation for regulating AI in the workplace, including for regulating to protect workers from the harms of AM.

The regulatory frameworks most relevant to AM are workplace relations, privacy and work health safety laws. Some specific shortcomings of these regulations include that:

- Fair Work Act requirements for employers to notify and consult with employees apply only after a decision has been made.
- Consultation requirements rely on employers identifying changes in workplace management as major change.
- Federal privacy legislation does not contain specific provisions to regulate workplace surveillance.
- The federal Privacy Act includes an exemption for small businesses and another for employee records held by employers.⁴⁵
- Privacy laws rely on the idea of voluntary consent, which is not appropriate in an employment context. The power imbalance between workers and employers means voluntary, freely given consent may not be possible, as has been recognised by regulatory bodies and legal analysts.⁴⁶
- Work regulation for work health and safety relies heavily on risk assessment at the point of design. While placing responsibility for safety on the designers and deployers of AI systems is necessary, many risks of AM may only emerge once an AI system is in place. WHS laws do not currently provide sufficiently for risk assessment in the workplace or for employee involvement in this.
- Many of the risks of AM are psychosocial risks which may not be adequately addressed by existing WHS laws.⁴⁷

In July 2026, the Prime Minister announced the creation of national standards for AI regulation, investment and infrastructure. The proposed AI standards are to provide a ‘single, clear, consistent and mandatory regulatory framework’. A bill to establish the standards is expected to be taken to parliament before mid-2027.⁴⁸

Australia has a solid foundation for the establishment of standards for AI based on ethical principles. In 2019 Australia adopted a set of *Artificial Intelligence (AI) Ethics Principles* (see Box 8) to guide businesses and governments to responsibly design, develop and implement AI. The ethics principles, developed through public consultation, were part of the government’s commitment made at that time to ‘make Australia a global leader in responsible and inclusive AI’.⁴⁹ Principles such as these provide a good basis for standards and regulation; they align well with international principles⁵⁰, and they set out

⁴⁵ A 2022 review of the Privacy Act recommended reforms or removal of employee records exemption). However, a second tranche of reform proposals released in August 2026 did not include any changes.

⁴⁶ Abraha, H., ‘Navigating Workers’ Data Rights in the Digital Age’.

⁴⁷ SafeWork Australia, [Best Practice Review of the Model Work Health and Safety Laws, Discussion Paper](#), (SafeWork Australia, September 2025).

⁴⁸ Albanese, The Hon. A., ‘AI in Australia’s interests’, Prime Minister’s speech to the University of Sydney, (Prime Minister of Australia, 15 July 2026).

⁴⁹ Department of Industry, Science and Resources (DISR), [Australia’s AI ethics principles](#), (DISR, 2019).

⁵⁰ See OECD, Recommendation of the Council on Artificial Intelligence, (OECD, 2019).

clearly our collective expectations for the safe and responsible use of AI which benefits all Australians. Regulation and guidance must be underpinned by ethics principles and standards.

BOX 9: AUSTRALIA'S AI ETHICS PRINCIPLES

Human, societal and environmental wellbeing: AI systems should benefit individuals, society and the environment.

Human-centred values: AI systems should respect human rights, diversity, and the autonomy of individuals.

Fairness: AI systems should be inclusive and accessible, and should not involve or result in unfair discrimination against individuals, communities or groups.

Privacy protection and security: AI systems should respect and uphold privacy rights and data protection, and ensure the security of data.

Reliability and safety: AI systems should reliably operate in accordance with their intended purpose.

Transparency and explainability: There should be transparency and responsible disclosure so people can understand when they are being significantly impacted by AI, and can find out when an AI system is engaging with them.

Contestability: When an AI system significantly impacts a person, community, group or environment, there should be a timely process to allow people to challenge the use or outcomes of the AI system.

Accountability: People responsible for the different phases of the AI system lifecycle should be identifiable and accountable for the outcomes of the AI systems, and human oversight of AI systems should be enabled.

[**Australia's AI ethics principles**](#) (Department of Industry, Science and Resources 2019)

The regulation of AM at work could be achieved a single piece of legislation, the adaptation of existing legislation such as workplace laws, or a mix of the two. While it might seem that the simplest option would be to amend existing laws, AM presents some significant challenges for current regulation and regulatory approaches.

Internationally, while approaches to the regulation of AI at work vary, there is widespread recognition researchers, legal analysts and worker representatives of the inadequacy of existing workplace laws and the need for new regulatory initiatives to establish rights and provide protections for workers from the harms of AM. This includes acknowledgement of the need for specific, targeted regulation of AM practices, due to the unique features of the workplace context, and the ways in which these practices transform workplace relationships.⁵¹

⁵¹ A. Cebulla, 'AI and Workplace Relations: A WHS Framework for Managing Relational Risks in Workplaces'. *Journal of Industrial Relations*, 67/5, (2025) 743-761. A. P. Olimid, C.M. Georgescu, D.A. et al.,

Drawing on the PWD provisions, key principles in privacy laws, recent research on regulatory initiatives, and the recommendations of recent government inquiries we identify some broad requirements that should be included in regulation.⁵² A tailored, employment-specific regulatory framework (whether as amendment to existing laws or entirely new legislation) should include:

Limits on automated monitoring and decision making

- There must be limits and restrictions on the use of AM practices in some particular contexts and for some purposes, including limits and prohibitions on the collection and use of certain types of data and for certain purposes.
- Practices should adhere to *data minimisation principles* limiting collection and processing to the bare minimum necessary to accomplish a given purpose. In addition, data collection and processing must be limited to collection and use for specific, necessary and justifiable purposes connected to the performance of the work. Workers and unions should be given notice before AM is used.
- ‘Red lines’ should be drawn, prohibiting practices with a high risk to workers’ human rights, dignity, safety and security, such as:
 - monitoring and collection, processing and use in decision making of data collected via highly intrusive forms of surveillance, including surveillance of workers outside of work (including when on breaks), and monitoring of private conversations
 - the collection of data relating to workers’ emotional or psychological state
 - the manipulation of workers emotional or psychological state
 - the processing of data to infer union activity and the use of AI to predict or dissuade workers from exercising their legal rights⁵³
 - the sale of personal data to third parties.

An advantage of these types of measures is that they do not place the burden of enforcement on those affected by AM. This is an extremely important consideration given the power imbalances between workers and employers.

Transparency of automated monitoring and decision making

- Employers must inform workers and unions about the deployment and function of algorithmic systems and tools, including monitoring systems. Automated decisions that affect workers must be reasonable, fair and fully justified.

‘Algorithmic Governance at Work: A Legal-Sociological and Policy Analysis of AI Regulation, Institutional Power and Labour Rights’. *Frontiers in Sociology*, 11 (2026) 1-15.

⁵² In formulating our list of inclusions for an employments-specific framework, we have drawn on in particular Adams-Prassl et al. ‘Regulating Algorithmic Management: A Blueprint’. A. Aloisi, A. Joppe, & H. Abraha, ‘From “General” to “Context-Specific” Data Protection for Workers: Insights from the EU Rules on Platforms, Algorithmic Management and AI Systems’. *European Labour Law Journal*, 16/4, (2025) 538-564; M. Guglielmetti, ‘Automated Work and Workers’ Rights: Platform Work and AI Work Management Systems’ in A. Ponce de Castillo (ed.) *Artificial Intelligence, Labor and Society* (ETUI, 2024), 127-140. Macdonald et al., [Submission to the Inquiry into the Digital Transformation of Workplaces](#); D. Peetz, [The High Road, The Low Road – Which Approach to AI at Work?](#) (Centre for Future Work, 22 June 2026).

⁵³ Adams-Prassl ,et al. ‘Regulating Algorithmic Management: A Blueprint’.

- Critical employment-related decisions must not be made without meaningful and direct human intervention.
- Workers must have the right to challenge decisions that affect them.

Worker involvement in the governance and practice of AM

- Workers must have a voice in the governance and practice of AM. This should be guaranteed through mandatory requirements for the establishment of consultative mechanisms that include consultation prior to deployment of AM systems and tools. Workers and union must be involved in mandatory, ongoing evaluation and impact assessments.
- Consultative mechanisms must be established that provide for non-unionised workers and workplaces.
- Workers and their unions must be provided with adequate information and resources and supported with digital literacy education initiatives to enable them to exercise their rights effectively.

The requirements outlined above are not an exhaustive list, but they do indicate what is needed as a base for a comprehensive, targeted legislative framework to ensure AM does not downgrade work. As a priority, the Australian government should review and amend existing regulation as necessary to build in these requirements and introduce new regulation where existing regulation is not fit for purpose. This must include stronger protections for workers grounded in requirements for increased worker involvement in shaping the application of AI at work to ensure it does not come with unacceptable costs, and that any benefits are shared.

SECTION 9

Bibliography

Abraha, H., 'Navigating Workers' Data Rights in the Digital Age: A Historical, Current, and Future Perspective on Workers' Data Protection'. *Current, and Future Perspective on Workers' Data Protection, ILO Working Paper 149*. (Geneva, International Labour Organization [ILO], 2025).

Abraha, H., 'Bargaining over Workers' Data Rights: How Unions and Works Councils can use Collective Bargaining to Specify Workplace Data Protection Norms', (Brussels, Friedrich Ebert Stiftung, 2025).

Acemoglu, D., Autor, D. & Johnson, S. 'Building Pro-Worker Artificial Intelligence', *Working Paper no. 34854*, (National Bureau of Economic Research, 2026).

Adams-Prassl, J. Abraha, H. Kelly-Lyth, A. et al 'Regulating Algorithmic Management: A Blueprint', *European Labour Law Journal* 14/2, (2023), 124-151.

Albanese, The Hon. A., 'AI in Australia's interests', Prime Minister's Speech to the University of Sydney, (Prime Minister of Australia, 15 July 2026).

Aloisi, A., Joppe, A. and Abraha, H., 'From "General" to "Context-Specific" Data Protection for Workers: Insights from the EU Rules on Platforms, Algorithmic Management and AI Systems'. *European Labour Law Journal*, 16/4, (2025).

Aloisi, A. & De Stefano, V., *Your Boss is an Algorithm*, (Bloomsbury Publishing, 2022).

Angrave, A. Charlwood, A. & Kirkpatrick, I. et al. 'HR and Analytics: Why HR is Set to Fail the Big Data Challenge'. *Human Resource Management Journal*, 26/1, (2016), 1-11.

Australian Government, [Australia's AI Ethics Principles](#), (Department of Industry, Science and Resources, 2019).

Australian Government, *Australian Government Response to the House of Representatives Standing Committee on Employment, Education and Training report: The Future of Work: Inquiry into the Digital Transformation of Workplaces*, (Australian Government, March 2026)

Berg, J. & Johnston, H. 'AI in Human Resource Management', *ILO Working Paper 154*, (International Labour Organization, 2025).

Blackham, A. Setting the Framework for Accountability for Algorithmic Discrimination at Work. *Melbourne University Law Review*, 47/1, 63-113.

Bogle, A., ' "[Stop All Time Wasting](#)": Woolworths Workers Tracked and Timed under New Efficiency Crackdown' (Guardian Australia, 23 October, 2024).

- Bogle, A., [‘Woolworths Workers Vote to Return to Work Ending Two-Week Strike Action’](#). (Guardian Australia, 7 December, 2024).
- Cebulla, A. ‘AI and Workplace Relations: A WHS Framework for Managing Relational Risks in Workplaces’. *Journal of Industrial Relations*, 67/5, (2025), 743-761.
- Cefaliello, A., Moore, P. & Donoghue, R. [‘Making Algorithmic Management Safe and Healthy for Workers: Addressing Psychosocial Risks in New Legal Provisions’](#), *European Labour Law Journal*, 14/2 (2023), 192-201.
- Chung, F., [‘Amazon Warehouse Tracking System Automatically Sacks Underperforming Workers’](#), *News.com.au* (News.com.au, 30 April 2019).
- Cortis, N., Blaxland, M. & Charlesworth, S., *Challenges of Work, Family and Care for Australia’s Retail, Online Retail Warehousing and Fast Food Workers*, (UNSW Social Policy Research Centre, 2021).
- Dagnino, E. & Armaroli, I., ‘A Seat at the Table: Negotiating Data Processing in the Workplace: A National Case Study and Comparative Insights’. *Comparative Labour Law & Policy Journal*, 41, (2019), 173.
- Department of Industry, Science and Resources (DISR), [Australia’s AI ethics principles](#), DISR webpage, (DISR, 2 December 2025).
- De Stefano, V. ‘Negotiating the Algorithm”: Automation, Artificial Intelligence, and Labor Protection’, *Comparative Labor Law and Policy Journal* 14 (2019), 15-46.
- Gerlach, M. et al. ‘Exploring Nurse Perspectives on AI-Based Shift Scheduling for Fairness, Transparency, and Work-Life Balance’. *BMC Nursing*, 24, (2025). 1161.
- Goldenfein, J. [Evaluating AI at work: how would you know if productivity increases and cost cutting claims are true?](#) (Centre for Future Work, 22 June 2026).
- Gonzalez Vazquez, I. et al., *Digital Monitoring, Algorithmic Management and the Platformisation of Work in Europe*. (Luxembourg, Publications Office of the European Union, 2025).
- Gould, ‘S.J.J., Measuring Work is Hard. Sub-contracting it Won’t Help. Explainable AI Won’t Help’, in Ponce del Castillo (ed.) *Artificial Intelligence, Labour and Society*, (ETUI, 2024).
- Guglielmetti, M. ‘Automated Work and Workers’ Rights: Platform Work and AI Work Management Systems’ in A. Ponce de Castillo (ed.) *Artificial Intelligence, Labor and Society* (ETUI, 2024), 127-140.
- Henderson, T., Swann, T. & Stanford, J., *Under the Employer’s Eye: Electronic Monitoring & Surveillance in Australian Workplaces*. (Centre for Future Work, 2018).
- House of Representatives Standing Committee on Employment, Education and Training, *The Future of Work, Final Report of the Future of Work Inquiry into the Digital Transformation of Workplaces* (Parliament of Australia, 2025).
- Hunt, W. & Rolf, S. *Artificial Intelligence and Automation in Retail: Benefits, Challenges and Implications, A Union Perspective*, (Brussels, FES, 2022).
- Institute for the Future of Work, *Final Report of the Pissarides Review into the Future of Work and Wellbeing*, (London, Institute for the Future of Work, 2025).
- International Labor Organization (ILO) *Revolutionizing Health and Safety: The Role of AI and Digitization at Work*, (ILO, 2025).

- Jarrahi, M. H. et al., '[Algorithmic Management in a Work Context](#)', *Big Data and Society*, July–December (2021), 1-14.
- Jensen, M.T., Oosterwijk, G.R. & Nørgaard, A.S., *Computer in Command: Consequences of Algorithmic Management for Workers*, (Foundation for European Progressive Studies, 2024).
- Katsabian, T., 'Watching the Clock: Time-tracking and the Erosion of Privacy and Dignity at Work'. *Comparative Labour Law & Policy Journal*, 46, (2026).
- Kellogg, K. C., Valentine, M. A., & Christin, A., 'Algorithms at Work: The New Contested Terrain of Control.' *Academy of Management Annals*, 14/1 (2020), 366-410.
- Kintsel, K., Clausen, S. & Stieglitz, S. 'Knowledge Work Augmentation with AI: A Taxonomy of AI-Based Technology Characteristics and their Implications for Meaningful Work', *Behaviour & Information Technology*, June 1, (2026) 1-21.
- Lane, M., Williams, M., Broecke, S., 'The Impact of AI on the Workplace: Main Findings from the OECD AI Surveys of Employers and Workers'. *OECD Social, Employment and Migration Working Papers*, (OECD, 2023).
- McKinsey & Company [The Agentic Organization: Contours of the Next Paradigm for the AI Era](#), (McKinsey & Company, 2025).
- Milanez A., Lemmens, A. & Ruggiu, C., 'Algorithmic Management in the Workplace: New Evidence from an OECD Employer Survey', *OECD Artificial Intelligence Papers*, No. 31. (OECD, 2025).
- Moore, P. V. 'The Mirror for (Artificial) Intelligence: In Whose Reflection?', *Comparative Labour Law & Policy Journal*, 41, (2019), 47.
- Murugesan, S. 'The Rise of Agentic AI: Implications, Concerns, and the Path Forward', *IEEE Intelligent Systems*, 40/2 (2025), 8-14.
- Nagall, H. W., *Gender & AI at Work; Strengthening OSH to Address Algorithmic Risk*, (Bonn, Friedrich Ebert Stiftung [FES], 2025).
- Nurski, L., [Implications of AI for Work, Employment and Social Dialogue: Literature Review](#). (Eurofound, 2025).
- OECD, Recommendation of the Council on Artificial Intelligence, (OECD, 2019).
- <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449>.
- OECD, 'How Widespread is Algorithmic Management in Workplaces?' *OECD Policy Brief*, (OECD, 2025).
- Olimid, A.P., Georgescu, C.M., Olimid, D.A. et al., 'Algorithmic Governance at Work: A Legal-Sociological and Policy Analysis of AI Regulation, Institutional Power and Labour Rights'. *Frontiers in Sociology*, 11, (2026).
- Peetz, D., *The High Road, the Low Road – Which Approach to AI at Work?* (Centre for Future Work, 22 June 2026).
- Ponce de Castillo, A. '[Algorithmic Management in Europe: From Key Features to Governance and Beyond](#)', *The Progressive Post* (11 February 2025).
- Ponce de Castillo, A. & Taes, S., 'Artificial Intelligence and Labor Law', in A. Ponce de Castillo (ed.) *Artificial Intelligence, Labor and Society* (ETUI, 2024).

Ponce Del Castillo, A. & Molè, M 'Worker Monitoring vs Worker Surveillance: The Need for a Legal Differentiation' in A. Ponce Del Castillo, *AI, Labour and Society*, (Brussels, ETUI, 2024).

Rishworth, The Hon. A., '[Speech to the AFR Workforce Summit, Sydney](#)', *Ministers' Media Centre*, (Department of Employment and Workplace Relations, 28 April 2026).

Sabanova, I., *Changing Working Lives: Women and Automation in the Labour Market. Scoping Review*. (Brussels, FES, 2025).

SafeWork Australia, [Best Practice Review of the Model Work Health and Safety Laws, Discussion Paper](#), (SafeWork Australia, September 2025).

SDA, *SDA Submission to Senate Select Committee on Adopting Artificial Intelligence (AI)* (SDA, 2024).

Select Committee on the Impact of Technological and Other Change on the Future of Work and Workers in New South Wales. 2022. *Report No. 2 - Impact of Technological and Other Change on the Future of Work and Workers in New South Wales: Final Report - Workplace Surveillance and Automation* (Parliament of New South Wales, 2023).

Terrafino, A., *Using Workforce Management to Drive Employee Engagement: Best Practices for Improving the Retail Employee Experience with Technology*, (Ultimate Kronos Group (UKG) Advisory Services, 2021).

United Workers Union, [Surveillance in Australian Workplaces, Submission to the Submission to Parliament of Victoria Inquiry into Workplace Surveillance](#), United Workers Union.

Victorian Legislative Assembly Economy and Infrastructure Committee [Inquiry into Workplace Surveillance, Final Report](#), (Parliament of Victoria, 2025).

West, M. 'Data Capitalism: Redefining the Logics of Surveillance and Privacy'. *Business & Society*, 58/1 (2018), 20-41; M. West, 'Data Capitalism: Redefining the Logics of Surveillance and Privacy'. *Business & Society*, 58/1 (2018), 20-41.

Wilson, C., [AI Assistant Hacks Gym Website in First Known Australian Autonomous Cyber Attack](#), *ABC News Online*, (10 Augusts 2026)

Wright, S.' Artificial Intelligence and Work: A Review of the European Policy Landscape. *Journal of Industrial Relations*, 67/5 (2025), 794-805.

Zhang, M. M., Cooke, F. L., Ahlstrom, D. & McNeil, N. 'The Rise of Algorithmic Management and Implications for Work and Organisations'. *New Technology, Work and Employment*, 40/3, (2024), 659-671.

Centre for Future Work

Contact Us

Office: +61 400 731 998

Email: admin@futurework.org.au

Level 8, 365 Queen Street

Melbourne VIC 3000

futurework.org.au