

**Submission to the House of Representatives
Standing Committee on Employment,
Education and Training Inquiry into the
Digital Transformation of Workplaces**

**Dr Fiona Macdonald, Policy Director (Industrial and Social)
Dr Lisa Heap, Senior Researcher**

Centre for Future Work at the Australia Institute

June 2024

About The Australia Institute

The Australia Institute is an independent public policy think tank based in Canberra. It is funded by donations from philanthropic trusts and individuals and commissioned research. We barrack for ideas, not political parties or candidates. Since its launch in 1994, the Institute has carried out highly influential research on a broad range of economic, social and environmental issues..

Our Philosophy

As we begin the 21st century, new dilemmas confront our society and our planet. Unprecedented levels of consumption co-exist with extreme poverty. Through new technology we are more connected than we have ever been, yet civic engagement is declining. Environmental neglect continues despite heightened ecological awareness. A better balance is urgently needed.

The Australia Institute's directors, staff and supporters represent a broad range of views and priorities. What unites us is a belief that through a combination of research and creativity we can promote new solutions and ways of thinking.

Our Purpose – *'Research that matters'*

The Institute publishes research that contributes to a more just, sustainable and peaceful society. Our goal is to gather, interpret and communicate evidence in order to both diagnose the problems we face and propose new solutions to tackle them.

The Institute is wholly independent and not affiliated with any other organisation. Donations to its Research Fund are tax deductible for the donor. Anyone wishing to donate can do so via the website at <https://www.tai.org.au> or by calling the Institute on 02 6130 0530. Our secure and user-friendly website allows donors to make either one-off or regular monthly donations and we encourage everyone who can to donate in this way as it assists our research in the most significant manner.

About the Centre for Future Work

The Centre for Future Work is a research centre, housed within the Australia Institute, to conduct and publish progressive economic research on work, employment, and labour markets.

It serves as a unique centre of excellence on the economic issues facing working people: including the future of jobs, wages and income distribution, skills and training, sector and industry policies, globalisation, the role of government, public services, and more. The Centre also develops timely and practical policy proposals to help make the world of work better for working people and their families.

The authors acknowledge the assistance of Professor Emeritus David Peetz, Laurie Carmichael Distinguished Research Fellow, Carmichael Centre at the Australia Institute.

www.futurework.org.au



Level 1, Endeavour House
1 Franklin St, Manuka, ACT 2603
Tel: (02) 61300530
Email: mail@australiainstitute.org.au
Website: www.australiainstitute.org.au

Contents

Introduction	2
<i>AI, automated decision-making and algorithmic management</i>	3
The risks of AI work	4
<i>Algorithmic management</i>	4
<i>Data and privacy</i>	5
<i>Discrimination and bias</i>	6
<i>Monitoring and surveillance</i>	6
<i>Performance monitoring and work intensification</i>	7
<i>Automated rostering systems</i>	8
<i>Procedural fairness and the ability for workers to organise</i>	9
<i>Equality</i>	9
The regulatory response	10
<i>Current legal frameworks</i>	10
Worker participation in decision-making	10
Health and safety	11
Collective bargaining	12
Dismissal	13
Human rights and discrimination	13
Privacy and workers' data	13
<i>New regulatory frameworks</i>	14
Specific measures to be incorporated in regulation	15
Appendix	17
<i>Centre for Future Work reports</i>	17
<i>Centre for Responsible Technology reports</i>	17

Introduction

The shape and direction of technological innovation reflect the priorities and choices of those who control development and implementation of technologies. So, how automated decision-making and machine learning techniques are built and used in organisations will determine whether these innovations result in fewer or more, or better or worse, jobs. The final impact on workplaces and workers will depend on whose interests and priorities have shaped technology and its application.¹

There is no reason to believe that artificial intelligence (AI) deployed to increase productivity will result in net benefits for workers unless AI is developed and deployed with an explicit objective to ensure work and working lives are improved. Technology, including automated decision-making and machine learning, are not neutral processes. They can be designed and used to assist workers perform their jobs by augmenting worker capacity and freeing up time for more meaningful or creative work. They can also be designed and used to intensify work and to displace workers. They may also be directed to substitution of workers by technology, rather than to augmentation and upskilling. For example, the 2023 global survey of IT professionals for the *IBM Global AI Adoption Index 2023* found one of the main uses of AI by organisations is to automate customer services (47%), while far fewer organisations (34%) are training or reskilling employees to work together with new automation and AI tools.² Even when designed for benevolent purposes there can be unintended consequences that arise from the adoption of these technologies.

There is plenty of evidence that the growing use of AI is extending and intensifying long-standing efficiency-driven logics that in many workplaces and for many workers, result in work intensification, reduced autonomy and control, undermining job quality and worker wellbeing.³ International research reviews show that, to date, traditional organisations, as well as the newer digital labour platform companies, have mostly used algorithmic systems with an emphasis on controlling workers, rather than enabling them.⁴ With this in mind, our focus in this submission is on the risks of automated decision-making and machine learning techniques for workers and the nature of work, if current trends are allowed to continue.

This submission primarily addresses the Committee's **terms of reference c, d, e and f**:

¹ Stanford, J and Bennett, K (2021) *Bargaining Tech: Strategies for Shaping Technological Change to Benefit Workers*, Centre for Future Work Canada, centreforfuturework.ca/powershare

² IBM Newsroom (2024) 'Data suggests growth in enterprise adoption of AI is due to widespread deployment by early adopters ...' IBM Newsroom. <https://newsroom.ibm.com/2024-01-10-Data-Suggests-Growth-in-Enterprise-Adoption-of-AI-is-Due-to-Widespread-Deployment-by-Early-Adopters>

³ Giermindl, L M, Strich, F, Christ, O. et al. (2022) The dark sides of people analytics: reviewing the perils for organisations and employees, *European Journal of Information Systems*, 31:3, 410-435; Juego, B, Østbø Kuldova, T and Oosterwijk, G R (2024) *Algorithms by and for the Workers*, The Foundation For European Progressive Studies (FEPS) and Nordic partners Digital Programme on Algorithms at the Workplace; Noponen, N, Feschenko, P, Auvinen, T et al. (2023) Taylorism on steroids or enabling autonomy A systematic review of algorithmic management, *Management Review Quarterly*, online 5 April

⁴ Juego, B et al. *Algorithms by and for the Workers*; Noponen et al (2023) *Taylorism on Steroids*

- c. the risks, opportunities, and consequences for the nature of work, including effects on hiring, rostering, work intensity, job design, wage setting, monitoring, surveillance and job quality;
- d. the effects of these techniques on the scope of managerial prerogative, labour rights, ability for workers to organise, procedural fairness, equality, discrimination, and dignity at work; and
- e. appropriate safeguards or regulatory interventions to guide responsible implementation in the workplace, including the digital skills and resources necessary for employers to appropriately utilise these technologies.
- f. the effects on gender equality, job security, small businesses, Closing the Gap and disadvantaged and vulnerable cohorts of workers.

The Centre for Future Work, along with the Centre for Responsible Technology, at the Australia Institute, has researched and published extensively work on technology and work, including on the impacts of intensive workplace surveillance. This submission draws on this research work. Our most relevant recent publications are listed at Appendix A.

The first part of this submission examines the risks and effects of the rapid development and uptake of automated decision-making in the workplace, addressing the Inquiry's terms of reference c. d and f. The second part of the submission considers the regulatory interventions required, addressing the Inquiry's term of reference e.

AI, AUTOMATED DECISION-MAKING AND ALGORITHMIC MANAGEMENT

In this submission we use the broad term **artificial intelligence** (AI) to describe:

an engineered system that uses various computational techniques to perform or automate tasks. This may include techniques, such as machine learning, where machines learn from experience, adjusting to new [data inputs] and potentially performing tasks previously done by humans.⁵

AI may include **automated decision-making**, a process of decision-making by technological means without human involvement, either in whole or in part.⁶

Algorithmic management refers to 'the management of labour by machine'⁷, encompassing the deployment of AI – including the application of automated decision-making – to perform management functions including recruitment and hiring, ongoing job supervision, rostering, setting performance benchmarks, performance monitoring and evaluation, and making

⁵ International Association of Privacy Professionals (2023) Key terms for AI Governance, IAPP, <https://iapp.org/resources/article/key-terms-for-ai-governance/>

⁶ International Association of Privacy Professionals (2023) *Key terms*

⁷ Kaine, S and Josserand, E (2019) The organisation and experience of work in the gig economy, *Journal of Industrial Relations* 61(4)L 479-501

hiring and firing decisions. Software systems incorporating algorithms may replace humans to perform entire functions or they may be used to augment traditional human management.⁸

The risks of AI at work

ALGORITHMIC MANAGEMENT

Algorithmic management is being used in Australia for recruitment and hiring, ongoing job supervision, rostering, setting performance benchmarks, performance monitoring and evaluation, and making development and promotion decisions. Algorithmic management may perform entire functions or it may be used to augment traditional human management. Using AI to augment, rather than replace, human decision-making does not remove the potential for harms that AI in the management of work processes and workers brings.

The use of AI in management decision-making can lead to unfair decision-making and it can perpetuate and deepen discrimination and inequality. These harms can arise from the automation of management processes and choices based on biased practices, the complete removal of humans from decision-making entailing a lack of accountability for decisions, and/or the expansion of managerial prerogative and intrusion into private lives.⁹

AI systems can analyse ‘hitherto unimaginable quantities of data’ including detailed information about individual employees to guide or make decisions about how to treat employees.¹⁰ One of the key uses of AI in management decision-making is so-called ‘people analytics’ where increasingly AI is used to *predict* worker behaviour through ‘predictive intelligence’.¹¹ Rather than judgements and decisions being based on explanation, they are based on prediction. Statistical modelling is used to identify patterns and correlations in very large datasets. For example, the widely-used Workday system offers employers ‘augmented analytics’ enabling them to ‘discover unexpected insights about their people’.¹² Using a tool such as Workday, an individual employee’s patterns of behaviour can be compared with historic and current organisation-wide behaviour and performance data. These comparisons are used to predict employees’ behaviour, such as their likely future performance or how long they might stay in the organisation. On the basis of the comparison, a prediction might

⁸ Aloisi, A and De Stefano, V (2022) *Your Boss is an Algorithm*, Bloomsbury Publishing; Adams-Prassl, J, Abraha, H, Kelly-Lyth, A, Silberman, M S, & Rakshita, S. (2023). Regulating algorithmic management: A blueprint. *European Labour Law Journal*, 14(2), 124-151, p 125.

⁹ Aloisi, A & Gramano, E (2019) Workers without workplaces and unions without unity: Non-standard forms of employment, platform work and collective bargaining, Ch. 4 in Hendridkx, F and V Pulignano (eds) *Employment Relations in the 21st Century*, Wolters-Kluwer, p 98.

¹⁰ Prassl, J (2018) *Humans as a Service*, Oxford University Press, p 135

¹¹ Moore, P. V. (2019). The mirror for (artificial) intelligence: In whose reflection? *Comparative Labor Law and Policy Journal* 41, 48. See also Garcia-Arroyo, J., & Osca, A. (2021). Big data contributions to human resource management: a systematic review *The International Journal of Human Resource Management*, 32(20), 4337-4362

¹² Workday (2021) Workday user manual, Workday, np

be made that an employee is likely to leave the organisation after a certain time period. This prediction made by the system could then be used to inform a management decision not to provide the employee with promotion or development opportunities.¹³

Decisions made about a person's employment on the basis of such comparisons are potentially unfair and biased decisions.¹⁴ Problems include that the decision can be made without human judgement or consultation and the individual's future employment is determined on the basis of unknown processes. Further, datasets are likely to contain systematic biases that reflect pre-existing power asymmetries.¹⁵

Many AI systems used in work contexts are off-the-shelf products purchased from privately-owned businesses. Those who deploy and use these products in organisations may have no clear understanding of how they work and what data they are based on.¹⁶ It is highly likely that most managers do not have, a deep understanding of the workings of algorithmic management systems, with this knowledge mostly held by analytics and programming experts. Given this there is a risk that the lack of transparency and objectivity of algorithmic management systems will be overlooked by those deploying systems at work.¹⁷

DATA AND PRIVACY

Organisations are collecting a huge amount, and diversity of, information on workers that is used to feed algorithms. Data gathering begins at the stage of recruitment and continues throughout the time a worker is engaged with the organisation whether as an employee, a labour hire worker or as a contractor. This systematic collection and processing of data are essential to algorithmic management. Thus workers are treated as data subjects and 'captive' data sets.¹⁸

Increasingly, the data gathered from workers include sensitive biometric data including blood samples, fingerprints, facial features, and other personal characteristics. There are many concerns about whether the collection of sensitive data is reasonably necessary for business functions or activities and whether genuine informed consent has been gained from workers to provide this information.¹⁹ The data may be used in the workplace context

¹³ Moore, P V (2019). The mirror for (artificial) intelligence

¹⁴ Prassl 2018 *Humans as a Service*

¹⁵ Barati, M, & Ansari, B (2022). Effects of algorithmic control on power asymmetry and inequality within organizations. *Journal of Management Control*, 33(4), 525-544

¹⁶ Guaio, J (2023) No 'Responsible AI' without transparency and accountability. Submission to the Consultation on Safe and Responsible AI in Australia, Centre for Responsible Technology. <https://australiainstitute.org.au/report/no-responsible-ai-without-transparency-and-accountability/>.

¹⁷ Barati and Ansari *Effects of Algorithmic Control*

¹⁸ Atkinson J and Collins P (2024) *Algorithmic Management and a New Generation of Rights at Work*, Institute of Employment Rights, Liverpool U.K; Coombs E (2024) Submission 121: Senate Standing Committee on Adopting Artificial Intelligence (AI), Submissions – Parliament of Australia

¹⁹ Australian Government - Attorney General's Department (2022) Privacy Act Review: Report 2022, Commonwealth of Australia

for purposes that workers never contemplated and/or are not aware of, even where they have consented to the collection of the data.

Data collected through AI-based applications at work that are assumed to be private data such as employees' pay data, health data, household data, and potentially sensitive data around personal identity may be accessed and used by the firms that provide the products to businesses. These data may be used to train AI systems or on-sold to other private companies without workers' consent.²⁰ Managers may be unaware of what data is accessed by product providers and how it is used by these providers, making it impossible to gain workers' informed consent.

DISCRIMINATION AND BIAS

Risks of AI at work can result from a misconception that data are objective, whereas data contain built-in biases, reflect existing and past discriminatory practices based on gender, culture and other demographic and socio-economic indicators.²¹ It is easy to see how this occurs when AI is used for predictive purposes entailing the use of historical data in large data sets to model relationships between variables. This can identify correlations—assumed to signify relationships between variables—that are undetectable through standard descriptive methods. The actual basis on which forecasts are made may not be discernible. Automated decisions can include hiring and employment termination decisions that may be made based on unknown factors, with the basis for the decisions not recorded, and maybe not even explainable.²²

One concern is that data is taken out of the surrounding context and can be used for purposes other than that for which it was collected. So, decisions may be made on the basis of relatively poor quality data – for example, where imperfect measures (such as emails sent or websites visited) are taken as indicators of performance or misconduct and used for decision making by HR or managers. A large international survey found most organisations adopting AI do not take steps to ensure processes are bias-free, with over 70% of AI-using organisations reporting they did not take steps to reduce unintended bias in their systems.²³

MONITORING AND SURVEILLANCE

The application of AI technologies extends and intensifies monitoring and surveillance of workers and work processes in ways that tighten management control and undermine workers' autonomy, and intensify work. Privacy threats arise from constant surveillance and

²⁰ Guiao, J (2023) No 'Responsible AI' without transparency

²¹ Aloisi and De Stefano (2022) *Your Boss is an Algorithm*

²² Moore, P V, Upchurch, M, & Whittaker, X (2018). *Humans and machines at work: monitoring, surveillance and automation in contemporary capitalism* (pp. 1-16). Springer International Publishing

²³ IBM (2023) *IBM Global AI Adoption Index 2022*, IBM. <https://www.ibm.com/downloads/cas/GVAGA3JP>

from the collection and use of enormous amounts of diverse data including use of data for purposes other than those for which it is collected.

The embedding of technologies in work systems and processes to gain information about employees' performance is a long-standing practice of employers. However, the use of diverse forms of electronic monitoring and surveillance in the workplace has grown at an exponential rate in recent years. Developments in AI and communications technologies allow monitoring of workers and gathering and processing of data on a much larger scale than previously imagined.²⁴ Workers are surveilled by multiple systems in and out of work time and spaces, and online and offline, including monitoring of their speech, facial expressions, eye movements, key strokes, emails, web browsing, interactions with clients, customers, co-workers and personal social networks, including social media.

The harms to workers of this monitoring and surveillance are multiple.²⁵ Surveillance is being used to increase work intensification, to shift risks to workers through minimising paid work time, and to strengthen management control.²⁶ Intensive monitoring carries significant work health and safety risks through threats to privacy and dignity. Monitoring and surveillance is experienced as demeaning and creates anxiety and stress, posing risk to mental as well as physical health.²⁷ Multiple studies of call centre workers have shown that monitoring and surveillance practices contribute to high levels of employee stress (compared with population levels), including on measures of emotional strain, sleep difficulties, repetitive stress injuries, depression and anxiety. Intensive electronic monitoring and surveillance have been found to increase employee stress and burnout because they reduce autonomy and discretion at work. Workers feel that data gathered are primarily used to discipline them and they believe performance metrics set on the basis of monitoring are unreasonable.²⁸ Workers in many more occupations are now being subjected to similar heavy use of electronic monitoring.

Digital forms of monitoring are widely used in Australian workplaces. In 2018, before the Covid-19 pandemic which facilitated more widespread adoption of electronic surveillance, 70% of workers responding to a national survey by the Centre for Future Work said their workplace used one or more methods of electronic or digital surveillance. Almost one in five (18%) of all workers experienced digital surveillance by their employers outside of their workplace. There was overwhelming agreement (92%) amongst survey respondents that employers should notify employees when any form of surveillance is being used, and almost

²⁴ De Stefano, V (2019) "Negotiating the Algorithm": Automation, Artificial Intelligence, and Labor Protection *Comparative Labor Law and Policy Journal* 14: 15-46

²⁵ Nahum, D (2021) *Working from Home*

²⁶ Doellgast, V and O'Brady, S (2020) *Making Call Center Jobs Better: The Relationship between Management Practices and Worker Stress, A Report for the CWA*, Cornell University and McMaster University.

²⁷ Henderson et al (2018) *Under the Employer's Eye: Electronic Monitoring and Surveillance in Australian Workplaces*, Centre for Future Work at the Australia Institute, <https://futurework.org.au/report/under-the-employers-eye-electronic-monitoring-surveillance-in-australian-workplaces/>; Nahum (2021) *Working from Home*; Stanford, J (2018) *The Future of Work is What We Make It. Submission to the Senate Select Committee on the Future of Work and Workers*, Centre for Future Work. <https://futurework.org.au/report/the-future-of-work-is-what-we-make-it/>

²⁸ Doellgast and O'Brady (2020) *Making Call Center Jobs Better*

three in four respondents (73%) thought there should be legal restrictions limiting how employers can use these technologies.²⁹ Most respondents (71%) believed these technologies reduced privacy for workers (71%) and reduced trust between workers and employees (60%).³⁰

Surveillance technology can serve positive functions, and it can bring benefits for workers such as contributing to safety and security of the workplace. However, regardless of the benefits some harms are unacceptable. For example, the harms caused by intensification of work (discussed below) are not made acceptable by any advantages of constant oversight of work. In any case, potential benefits such as increased productivity and safety are likely to be undermined or negated by the negative impacts on workers' health and wellbeing.

PERFORMANCE MONITORING AND WORK INTENSIFICATION

Within the work day, omnipresent systems of monitoring, performance measurement, and surveillance intensify time pressures on workers, reinforcing an expectation that every moment of work time must be used for productive purposes. Increasingly, systems monitor how long and in what ways workers undertake work tasks, travel between locations, and interact with clients, customers and co-workers. Vast amounts of data from monitoring systems are collected and used to intensify work. Employee knowledge of monitoring can lead to new forms of 'anticipatory conformity' whereby individuals' self-discipline.³¹ Algorithmic management enables a wide range of control mechanisms including the control of employees' behaviours through the use of automated ratings, incentive-based 'nudge' mechanisms and gamification.³² Efficiency may actually be reduced where monitoring and other mechanisms lead to stress or adverse reactions by employees including where there is low trust or lack of transparency.³³

The negative impacts on workers and the increase in workforce turnover arising from work intensification facilitated by intensive electronic monitoring and algorithmic management techniques can be seen in the experience of call centre workers. These workers are subject to omnipresent electronic monitoring that is used to intensify. There is a considerable body of research attesting to the negative impacts on call centre workers and job quality.³⁴ Research has shown that intensive electronic monitoring and surveillance practices contribute to high levels of employee stress (compared with population levels), including emotional strain, sleep difficulties, repetitive stress injuries, depression and anxiety. These practices have been found to increase employee stress and burnout because they reduce autonomy and discretion at work. Workers feel that data gathered are primarily used to

²⁹ Henderson et al (2018) *Under the Employer's Eye*

³⁰ Henderson et al (2018) *Under the Employer's Eye* 2018, p. 11; Nahum (2021) *Working from Home*

³¹ De Stefano, V (2019) *Negotiating the Algorithm*

³² Prassl (2019) *Humans as a Service*

³³ Moore et al (2018) *Humans and machines at work*

³⁴ Doellgast and O'Brady (2020) *Making Call Center Jobs Better*

discipline them and that performance metrics are unreasonable.³⁵ Increased work intensity and performance pressure can create incentives for workers to ignore safety standards.³⁶

The techniques and approaches applied in call centres, including tightly controlled task schedules, minimisation of ‘unproductive’ time, and intense performance pressure are now being applied to many other workers, especially those in lower-paid jobs. Monitoring and surveillance is now more intensive, and more pervasive, and the data collected are feeding AI systems that may be relied on to ‘oversee’ work processes, apply pressure on workers, determine work pace and outputs, and assess performance.

With workers experiencing surveillance mechanisms as disciplining, it appears that electronic surveillance, monitoring and performance assessment shifts the management approach away from positive incentives and towards negative punishments. This increased focus could impact negatively on workers’ wages as employers may feel there is less need to motivate and retain employees through providing positive incentives such as wage increases.³⁷

AUTOMATED ROSTERING SYSTEMS

Automated rostering incorporating AI can be based on finely grained demand forecasting. They can also remove all human judgement. Automated rostering can lead to workers’ experiencing increased variability and unpredictability of working time. The increase of ‘on-demand’ scheduling of workers leads to more insecure, variable and unpredictable shift rosters as businesses aim to minimise less productive or unfunded work time, shifting the risks and costs of variable demand from businesses to workers. Automated roster systems can increase managerial prerogative by reducing or removing opportunity for consultation with workers and for workers to raise questions or concerns about their rosters. At the same time, anecdotal reports from the retail, banking and care sectors indicate managers themselves may feel unable to question decisions made by automated systems.

As an example, in the retail sector, projections of customer demand can be very finely tuned through monitoring of customer behaviour. Customer tracking now includes sensors that track customers’ locations and activities in a retail store, as well as systems that can draw data on customers’ behaviours from external systems and platforms.³⁸ In care and support services, app-based systems support increased flexibility of services provision and support rostering that minimises any ‘free’ time between client appointments. Systems are programmed to minimise labour time, and this is done by transferring the costs of ‘unproductive’ time from enterprises to workers.

³⁵ Doellgast and O’Brady (2020) *Making Call Center Jobs Better*

³⁶ OECD (2024) Using AI in the workplace, *OECD Artificial Intelligence Papers*, OECD

³⁷ Stanford (2018) *The Future of Work is What We Make It*

³⁸ Levy, K, & Barocas, S (2018) Privacy at the Margins. Refractive surveillance: Monitoring customers to manage workers. *International Journal of Communication*, 12, 23

PROCEDURAL FAIRNESS AND THE ABILITY FOR WORKERS TO ORGANISE

AI applications in the workplace carry significant risks for workers as workers may not be able to exercise their rights if they are not aware of whether and how AI systems are impacting on them. It is likely to be extremely difficult for workers to gain insight into AI decision-making. It is difficult to gain workers' consent for the use of data as it is also likely that many managers do not have access to the information about how decisions are made as this is not disclosed by product developers.³⁹

AI increases managerial power in relation to workers through increasing information asymmetries. In addition there are risks that data collection and surveillance will be used to undermine effective organising and bargaining by workers. This includes through profiling and hiring workers who may be less likely to members of unions, and identifying and infringing on union activity in the workplace to infringe on the rights of workers to collectively organise.⁴⁰

EQUALITY

The risks of algorithmic management, and of automation more generally, fall unevenly on different population groups. Workers in lower-paid and skilled jobs may be more exposed to job loss, as well as to harms resulting from intensive surveillance and monitoring. Particular groups of workers including Aboriginal and Torres Strait Islander peoples, migrants and LGBTIQ+ workers who have experienced discrimination and bias in the past will be more vulnerable to bias and discrimination in automated decision-making. Thus, existing inequalities are likely to be deepened as AI systems 'replicate and systematise human biases that have historically existed in the labour market'.⁴¹

Progress towards gender equality requires flexibility and adaptation in workplaces to achieve gender-equitable work arrangements. It has also been shown that how well workplaces do this is often highly dependent on how proactive and responsive line managers are to ensuring the availability of decent flexible work options that support work and care. Where there is less human decision-making and control, for example, where there is automated rostering or performance assessment, there is likely to be less opportunity for this to occur.

³⁹ OECD (2024) *Using AI in the workplace*

⁴⁰ Atkinson J & Collins P (2024) *Algorithmic Management and a New Generation of Rights at Work*, Institute of Employment Rights, Liverpool UK; Coombs E (2024) Submission 121: Senate Standing Committee on Adopting Artificial Intelligence (AI), Submissions – Parliament of Australia (aph.gov.au); Mendonca, P and Kougiannou, N 2023. *Disconnecting labour: The impact of intraplatform algorithmic changes on the labour process and workers' capacity to organise collectively* *New Technology, Work and Employment*. Vol. 38, pp. 4-5

⁴¹ OECD (2024) *Using AI in the workplace*, p 9

For example, automated rostering in the retail sector has led to this being a significant problem for workers who are combining work with caring responsibilities.⁴²

The regulatory response

CURRENT LEGAL FRAMEWORKS

Current work-related legal frameworks are not sufficient to provide the protections necessary to address the risks presented from the use of AI in the workplace. One overarching limitation is the extent to which, notwithstanding recent amendments to the Fair Work Act, workplace rights are linked to the employment relationship, thus failing to offer protections to workers who do not fall into the category of employee. Thus, it is important that protective legislative and regulatory measures address the risks to all workers regardless of employment status.

Here we provide a summary of some of the key limitations in Australia's existing work-related legal frameworks. It not intended to be a comprehensive assessment of all these limitations. It provides the context for reform proposals set out in the latter part of this submission.

Worker participation in decision-making

As set out in this submission the use of AI in the workplaces has the potential to lead to many negative and unacceptable consequences for workers, including for workers' rights, and for fairness and equality. It may also lead to the substitution and job loss, deskilling and the need for training and re-skilling workers.

Under the Fair Work Act modern awards and enterprise agreements contain requirements to consult with employees about major changes in the workplace and changes to working hours. There is also a provision within the Fair Work Act requiring employers to notify and consult with a union if they decide to dismiss 15 or more employees for economic, technological, structural, or similar reasons.

There are several reasons why these general provisions to consult with employees may not provide adequate protections. Where AI has been applied. First, these requirements to consult generally apply after a decision to make change has been determined and when the employer believes the changes are major. This does not allow employees to be involved in consultation about the appropriateness and risks of any proposed changes and to investigate alternatives. There is also the potential that businesses do not see deployment of AI as major change. There are examples in Australia of employers deciding to implement automated rostering systems without contemplating obligations under awards, collective

⁴² Cortis, N, Blaxland, M, and Charlesworth, S (2021) *Challenges of work, family and care for Australia's retail, online retail warehousing and fast food workers*. Sydney: UNSW Social Policy Research Centre

agreements or occupational health and safety laws to consult regarding changes to systems of work.⁴³

Further the 'black box' nature of software incorporating AI means that it is almost impossible to determine the criteria used to make decisions arising from the application of this software therefore limiting the capacity of workers and unions to understand and challenge these decisions. There is also limited capacity to determine whether personal or sensitive information about workers has been used in decision making processes.

These limitations demonstrate that current provisions within the Fair Work Act regarding consultation about the introduction of technology and major change are insufficient to provide an appropriate framework for worker engagement around the use of AI at work.

Health and Safety

The use of AI has the potential to cause physical and psychological injury as outlined earlier in this submission. WHS laws should be part of the regulatory picture, however this cannot manage all the risks associated with the use of AI at work.

Work health and safety (WHS) laws in Australia place a primary duty on employers, or persons conducting a business undertaking (PCBUs) to ensure, as far as reasonably practicable, health and safety at work by eliminating risks. Where this is not possible the duty is to minimise these risks so far as is reasonably practicable.⁴⁴ The broad duties in legislation are supplemented by regulations (enforceable) and codes (unenforceable) whilst further details and guidance can be elaborated in guidance materials.⁴⁵ The duties under WHS laws include identifying and assessing risks. They also include duties to consult those who may be impacted. These provisions could, in theory, provide some avenues for mitigating some risks associated with the use of AI at work.

To date limited attention has been given to the WHS impacts of AI by Australian WHS regulators. The rise of AI has been identified as an emerging challenge by Safe Work Australia.⁴⁶ New model regulations and codes should be considered. The capacity of regulators, WHS representatives and unions to address the WHS risks associated with AI will also need to be addressed through information sharing and skills development. The 'black box' effect of AI makes it difficult to establish causation and responsibility for harmful outcomes. Organisations may dispute that introducing these technologies will have

⁴³ SDA (2024) Submission 41: SDA Submission to Senate Select Committee on Adopting Artificial Intelligence (AI), Submissions – Parliament of Australia.

⁴⁴ Rozens P (2019) Innovative legislation and OSH, ILO https://www.ilo.org/global/topics/safety-and-health-at-work/events-training/eventsmeetings/world-day-for-safety/33thinkpieces/WCMS_681612/lang--en/index.ht; Safe Work Australia (2019a) Guide to the Work Health and Safety Act, Safe Work Australia website, accessed 13 October 2023. <https://www.safeworkaustralia.gov.au/system/files/documents/2003/guide-to-the-model-whsact.pdf>

⁴⁵ Johnstone R (2008) Harmonising occupational health and safety regulation in Australia: the first review of the national OHS review, *Journal of Applied Law and Policy*, 1: 35-58

⁴⁶ Safe Work Australia (2023) Australian Work Health and Safety (WHS) Strategy 2023–2033, Safe Work Australia, Canberra

detrimental impact on health or safety. WHS regulators, due to lack of resources or skills and capacity, may not be effective regulators.

Collective Bargaining

New workplace rights regulating the adoption and use of AI in the workplace would provide an opportunity to set standards for employees at the enterprise level. These rights could be established through collective bargaining. This approach would provide a level of agility that could allow for adaptation as technologies and their applications continue to evolve.⁴⁷

The current framework for bargaining under the Fair Work Act includes many technical hurdles that could limit the capacity of workers and unions to effectively bargain to achieve rights in relation to the use of AI. This is particularly the case if employers are hostile to including provisions of this kind in agreements and withhold their consent to these provisions. For example, employers may dispute that claims by workers and unions are related to the employment relationship. Although it is difficult to see how these claims would stand up given the potential impacts of AI applications on workers and worker processes set out in this submission, technical arguments can delay the incorporation of AI-related provisions in agreements.

In addition to difficulties related to employer opposition to provisions being included in enterprise agreements the capacity of workers to bargain for effective provisions governing the use of AI may be limited. This is particularly true where there is not a union presence involved in negotiations. Even where unions are present in bargaining the lack of transparency around these systems, and limited knowledge about how they may operate in practice could impact the effectiveness of bargained provisions.

Dismissal

Australia's legal frameworks for regulating termination of employment are set out in the Fair Work Act. Termination of employment should not be unfair – that is it should not be done in a harsh, unjust, or unreasonable manner. Termination should also not be unlawful. Considerations of whether a termination is unfair takes account of both the why and how of employee dismissals. The use of AI processes can impact in both the why and how of dismissals.

Unlawful terminations consider whether a decision has been made for a purpose that it is prohibited by law. This includes for protected attributes under the Fair Work Act and those related to discrimination law. Claims of adverse action or unlawful termination under the Fair Work Act consider the reasons behind employer decisions making. Given organisations themselves may not necessarily be aware or in control of how software has operated, and decisions have been unpacking decision making and attributing responsibility may be difficult. Organisations should not be able to use decision making by technology as a defence to claims seeking to address the harm caused by its application.

⁴⁷ Atkinson, J and Collins, P (2024) *Algorithmic Management and a New Generation of Rights at Work*, Institute of Employment Rights, Liverpool, UK

Human rights and discrimination

Australia's anti-discrimination laws apply in the work context. The 'black box' effect described above could also make it difficult for claims of discrimination related to work related decisions to be substantiated under anti-discrimination laws.

Privacy and workers' data

Organisations collect a large amount of data about potential employees, employees, and other workers. Some data are sensitive and personal in nature. An organisation,⁴⁸ is exempt from the operation of the Privacy Act if an act or practice is directly related to its employment relationship with an individual, and an employee record it holds relating to that individual.⁴⁹ Small business is also exempt from the application of Privacy Act.

There are many gaps in privacy laws related to the work context. For example, the Privacy Act does not regulate all aspects of how data can be collected, used, and disclosed by AI systems. For workers who are not employees or for matters that do not pertain to the employment record, there is no right under the Privacy Act not to be subjected to automated decision making. Also, in the Australian Privacy Principles there is no requirement to disclose the use of an AI system. Nor is there any need to gain consent to the use of an AI system in the collection of data other than sensitive information.⁵⁰

The handling of employee records for national system employees is covered by the Fair Work Act.⁵¹ There are limited protections about employee information in the Fair Work Act. The Fair Work Act and Regulations focus on the content of the records employers are required to keep and the accuracy of these records. The focus of the Fair Work Act is on record keeping and compliance with workplace laws rather than protection of privacy.⁵² These protections do not countenance how employee data may be used in processes associated with the application of AI by employers. Nor do they countenance the possible uses of data by providers of AI systems and the potential for on-selling the data to other parties.

NEW REGULATORY FRAMEWORKS

In their current form, and even with targeted amendments, Australian work related legal frameworks cannot adequately address the risks associated with the application of AI at work. Given the potential for decisions made using AI to impact on workers and their livelihoods, and because of the asymmetrical power relationship both at work and in

⁴⁸ Other than agencies as defined in the Privacy Act which includes Commonwealth government departments and bodies established by Commonwealth statutes which are not exempted from the Privacy Act provisions; Privacy Act s 7B(3)

⁴⁹ Privacy Act s 7B(3). The scope of this exemption has been contested. See Australian Government - Attorney General's Department (2022) Privacy Act Review: Report 2022 Commonwealth of Australia

⁵⁰ Blackman, A (2024) Submission 75: Submission to the Select Committee on Adopting Artificial Intelligence (AI), [Submissions – Parliament of Australia \(aph.gov.au\)](https://aph.gov.au/submissions)

⁵¹ See s.535 of the FWA and Regulations 3.31-3.48.

⁵² Australian Government - Attorney General's Department (2022) Privacy Act Review: Report 2022, Commonwealth of Australia p 69

relation to AI, all uses of AI in the world of work should be considered high risk. This includes the use of these mechanisms in recruitment, promotion, termination, for the purpose of the allocating tasks or organising work or evaluating performance. Applications for the optimisation of business processes must be assumed to be high risk until it is demonstrated that their application has no potential for negative consequences for workers.

Given the risks associated with the application of AI in the work context 'soft' law mechanisms and self-regulation approaches should not be the primary form of regulation. Industry standards or codes could be used and developed to supplement (but not replace) specific legislative provisions regarding the regulation of the use of algorithmic management and automated decision making.

The goal of regulating AI in the work context should be focussed on, and directed to, protections of workers and a desire to achieve decent work. The promotion of AI innovation must not overshadow the objectives and principles for decent jobs and fairness at work.

Given the 'black-box' problem AI presents, regulation should extend to all actors in the 'value chain' to ensure that design and deployment of all AI applications takes account of legal requirements and the principles that apply at work.⁵³

To achieve this, we propose that the regulatory framework should include the following:

Principles

These are the minimum principles that should apply in any regulation of work related AI. These provisions would sit above and inform, any specific work-related legal frameworks. They include

All decisions regarding the application of AI at work should be treated as potentially high risk and thus subject to regulation.

There should be no use of AI regarding potential and current employees and workers unless decisions made can be fully explained and understood by those employees and workers.

Organisations should have a primary duty to ensure that the processing of worker data (including job applicants) is not discriminatory in accordance with the provisions of Australian law.

No worker should be subjected to automated decision making where a decision significantly affects people's lives (as per European General Data Protection Regulation (GDPR)). Thus, a requirement for 'human in command' decision making.

⁵³ Allen, R and Masters, D (2021) *Technology Managing People – the legal implications. A report for the Trades Union Congress by the AI Law Consultancy, TUC*
https://www.tuc.org.uk/sites/default/files/Technology_Managing_People_2021_Report_AW_0.pdf

Employees, workers, and their representatives should be part of the decision-making process undertaken by organisations when determining whether to introduce AI and in determining how it is to be used.

Existing and potential employees and workers should be aware where AI is being used in the workplace; this information should be available in easily accessible and intelligible form.

Existing and potential employees and workers should have access to sufficient information about the way in which AI at work operates to be able to satisfy themselves that the technology is being used in a way which is accurate, rational, non-discriminatory, proportionate, lawful, and ethical.

Specific measures to be incorporated in regulation

The crafting of measures and decisions as to where measures are located (which jurisdiction etc.) should be determined subject to research and consultation. However, specific measures in line with the above principles should include:

Bipartite (and at the sector and national levels, tripartite) forums at workplace, sector and national levels that conduct rights impact assessments that are undertaken before AI is introduced in the work context. This assumes a right for unions to be involved in these forums.

Limits on which data can be collected and when, and limits on when AI technologies can be used.

Restrictions on collection of data from workers and requirements for workers to consent to the collection of data.

Mechanisms to address disputes about the application of AI at work. Mechanisms should not be reliant on individual complaints but rather allow for collective disputes over these matters.

A primary duty on organisations to address and mitigate the discriminatory, and health and safety, risks posed by the application of AI.

Effective enforcement mechanisms that include workers' and unions' access to inspect systems (see below under transparency) and substantial sanctions for breaches to deter inappropriate use of workers' data, AI at work.

Transparency mechanisms that include a requirement to share data with workers and their representatives.

The right for workers and unions to bargain over decisions about whether and how to utilise AI, data collection and use, and monitoring and evaluation of the use of AI.

Appendix

CENTRE FOR FUTURE WORK PUBLICATIONS

Henderson, T, Swann, T and Stanford, J (2018) *Under The Employer's Eye: Electronic Monitoring & Surveillance in Australian Workplaces*, <https://www.tai.org.au/content/under-employers-eye-electronic-monitoring-surveillance-australianworkplaces>.

Macdonald, F (2023) *Unacceptable Risks: The Dangers of Gig Models of Care and Support Work* <https://futurework.org.au/report/unacceptable-risks/>

Nahum, D (2021) *Working From Home, or Living at Work? Hours of Work, Unpaid Overtime, and Working Arrangements through COVID-19*. <https://futurework.org.au/report/working-from-home-or-living-at-work/>.

Nahum, D and Stanford, J (2020) *Technology, Standards and Democracy. Submission to: Select Committee on the Impact of Technological Change on the Future of Work and Workers in New South Wales*. <https://futurework.org.au/report/technology-standards-and-democracy/>.

Stanford, J (2020) *The Robots are NOT Coming (And why that's a bad thing)*. <https://futurework.org.au/report/the-robots-are-not-coming/>.

Stanford, J (2018) *The Future of Work is What We Make It. Submission to the Senate Select Committee on the Future of Work and Workers*. <https://futurework.org.au/report/the-future-of-work-is-what-we-make-it/>.

Stanford, J and Bennett, K (2021) *Bargaining Tech: Strategies for Shaping Technological Change to Benefit Workers*, Centre for Future Work Canada, centreforfuturework.ca/powershare.

Stanford, J and Pennington, A (2019) *Turning 'Gigs' into Decent Jobs. Submission to the Inquiry into the Victorian On-Demand Workforce* <https://futurework.org.au/report/turning-gigs-into-decent-jobs/>.

CENTRE FOR RESPONSIBLE TECHNOLOGY PUBLICATIONS

Guiao, J (2023) *No 'Responsible AI' without Transparency and Accountability: Submission to the Consultation on Safe and Responsible AI in Australia*. <https://australiainstitute.org.au/report/no-responsible-ai-without-transparency-and-accountability/>.

Lewis P (2020) *Workplace Surveillance: Submission to the Select Committee on the Impact of Technological Change on the Future of Work*. <https://australiainstitute.org.au/wp-content/uploads/2020/12/P954-Responsible-Tech-Workplace-Surveillance-Submission-Web.pdf>.