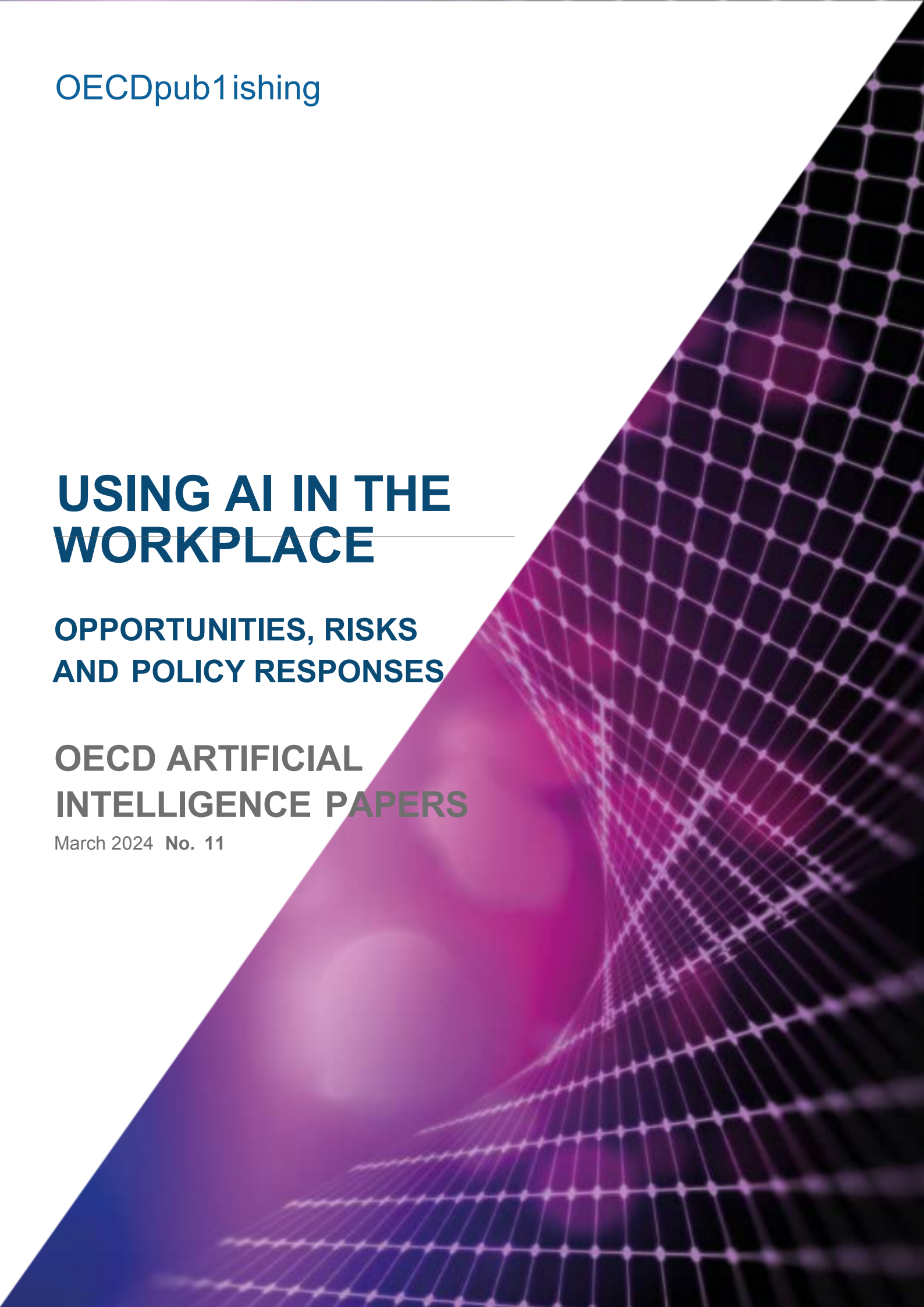OECDpub1ishing

USING AI IN THE WORKPLACE

OPPORTUNITIES, RISKS AND POLICY RESPONSES

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Using AI in the workplace: Opportunities, risks and policy responses

Introduction and purpose

Policy makers across the globe are grappling with the rapid developments in artificial intelligence (AI) technologies and their adoption in the workplace. Even before the advent of generative AI, impressive progress had been made in a range of domains, including computer vision, reasoning, problem solving, as well as reading comprehension and learning. Employers are beginning to use AI applications to sift through CVs, interact with customers, allocate, direct, and evaluate work, and to identify and provide training. Workers are using AI in an increasing number of tasks. The advent of generative AI has resulted in a shift and acceleration in the use and impact of AI, which is now a general purpose technology that is likely to affect every occupation and sector of the economy.

AI can bring significant benefits to the workplace. In the OECD AI surveys, four in five workers said that AI had improved their performance at work and three in five said it had increased their enjoyment of work (Lane, Williams and Broecke, 2023[1]). Workers were also positive about the impact of AI on their physical and mental health, as well as its usefulness in decision making (Lane, Williams and Broecke, 2023[1]). Not investing in AI and not adopting it in the workplace would be a missed opportunity to boost productivity and improve job quality, amongst others. Unequal access to and use of AI in the workplace could lead to increased disparities between firms and workers as well as across countries.

To realise these opportunities, it is however necessary to address the risks raised by AI for the labour market. The OECD AI surveys show that 3 in 5 workers are worried about losing their job to AI in the next 10 years, and 2 in 5 expect AI to reduce wages in their sector. Workers also express concerns around increased work intensity and the collection and use of data, amongst others (Lane, Williams and Broecke, 2023[1]). Other risks include: bias and discrimination, unequal impact on workers, lack of human oversight, as well as lack of transparency, explainability and accountability, amongst others.

Box 1. The OECD AI surveys

Wishing to capture workers' and employers' own perceptions of the current and future impact of AI on their workplaces, the OECD surveyed a total of 5 334 workers and 2053 firms in the manufacturing and financial sectors in Austria, Canada, France, Germany, Ireland, the United Kingdom and the United States. The surveys examine how and why AI is being implemented in the workplace; its impact on management, working conditions and skill needs; its impact on worker productivity, wages and employment; what measures are being put in place to manage transitions; and concerns and attitudes surrounding AI. The most frequently reported uses of AI include data analytics and fraud detection in the finance sector, and production processes and maintenance tasks in manufacturing.

> The survey reveals that both workers and employers are generally very positive about the impact of AI on worker productivity and working conditions. Around 80% of AI users said that AI had improved their performance at work, and AI users were more than four times as likely to say that AI had improved working conditions as to say that AI had worsened them.
>
> However, there are also concerns, including about job loss – an issue that should be closely monitored. The surveys also indicate that, while many workers trust their employers when it comes to the implementation of AI in the workplace, more can be done to improve trust. In particular, the surveys show that both training and worker consultation are associated with better outcomes for workers.
>
> Source: Lane, M., M. Williams and S. Broecke (2023[1]), "The impact of AI on the workplace: Main findings from the OECD AI surveys of
>
> employers and workers", https://doi.org/10.1787/ea0a0fe1-en.

A risk-based approach has been common in thinking about the policy and regulatory response to AI. In December 2023, the European Parliament and Council reached a provisional agreement on the Artificial Intelligence Act, which will establish rules for AI based on its potential risks and level of impact, with some applications being banned and obligations imposed for applications that are deemed to be high risk – such as many uses in the workplace. In the United States, the Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence issued in October 2023 directs "the most sweeping actions ever taken to protect Americans from the potential risks of AI systems" including, for example, developing principles and best practices to mitigate the harms and maximise the benefits of AI for workers. The Bletchley Declaration by countries that attended the AI Safety Summit at Bletchley Park (United Kingdom) in November 2023 focused on identifying AI safety risks and building risk-based policies. In many cases, AI does not operate in a regulatory vacuum and that there are already laws that regulate its use and impact. However there are gaps in the existing regulatory and policy frameworks, and urgent policy action is needed.

As policy makers implement these measures, there is a need for specific guidance on risks and measures linked to the use of AI in the workplace. This note uses the OECD Principles on trustworthy AI and draws on the substantial body of work done by the OECD in this field (OECD, 2023[2]) to **identify key risks posed by the use of AI in the workplace, to identify the main policy gaps and offer possible policy avenues specific to labour markets**. The note presents the risks and the associated policy responses individually, but these risks interact among each other and measures to address one risk will often contribute to addressing others as well.

Risks, policy gaps and policy avenues

Automation and job displacement

Risks: AI is an automating technology that differs from previous technologies in at least three important aspects. First, AI extends the types of tasks that can be automated to many non-routine cognitive tasks, and therefore exposes workers who were previously relatively protected from automation (e.g. the high-skilled) to the risks of displacement. Second, all occupations and sectors are likely to be affected by AI (as opposed to, for example, robots which primarily impacted the manufacturing sector). Third, the speed of AI development and adoption in the labour market leaves little time for adjustment and could raise frictional unemployment. So far, there is little evidence of a net negative impact of AI on the number of jobs, but the risk of automation remains substantial: the OECD estimates that occupations at the highest risk of automation account for about 27% of total employment. It will be important to help workers move from declining sectors and occupations into to new and growing ones.

Figure 1. Percentage of employment in highly automatable jobs, 2019

Source: OECD (2023[2]), *OECD Employment Outlook 2023*, https://doi.org/10.1787/08785bba-en.
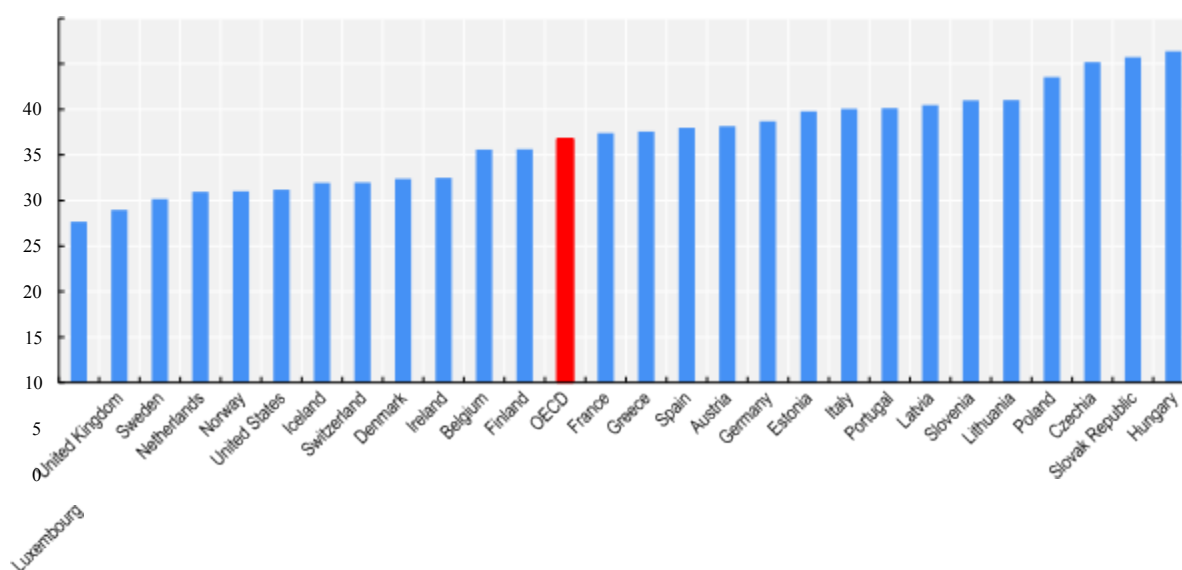
Policy gaps: Most countries recognise the importance of skills and training to adapt to AI-related automation, but few have proposed concrete action plans, and few are prepared for the quantum leap in training that will be required. Existing programmes tend to focus on digital or AI skills, but few recognise the importance of complementary skills (e.g. communication, creativity, or working with others), and only a minority have developed an integrated approach for AI skills development. Social dialogue will also be important in managing these transitions, but faces its own challenges (see section on social dialogue below).

Possible policy directions that countries may consider:

- Monitoring the impact of AI on the labour market to identify jobs most at risk of automation.

- Anticipating future skill needs related to AI adoption in the workplace.

- Skills development programmes at all levels of education, to develop skills needed to work with and develop AI.

- Training for workers and managers to support the adoption and use of trustworthy AI.

- Employment support measures, including targeted training programmes and career guidance, for workers at direct risk of automation by AI.

- Adequate social protection for workers displaced by AI.

- Supporting social dialogue (see below).

Rising inequality

Risks: Workers face different risks of automation - for example depending on their skills, occupation, firm size. They have also different exposure to risk of bias and discrimination, privacy breaches, and health

and safety. On the other hand, workers that do not have access to AI in the workplace cannot benefit from the opportunities it offers, for example to be more productive, to overcome obstacles linked to disability, or access new jobs created by AI. Emerging evidence shows that AI can also increase productivity of low- skilled workers in certain occupations, reducing productivity gaps with higher-skilled workers. There is therefore a concrete risk that the adoption of AI in the workplace leads to increased inequality in the labour market.

Figure 2. Percentage of employers who think AI helps/harms groups of workers, finance and manufacturing

Source: OECD (2023[2]), *OECD Employment Outlook 2023*, https://doi.org/10.1787/08785bba-en.
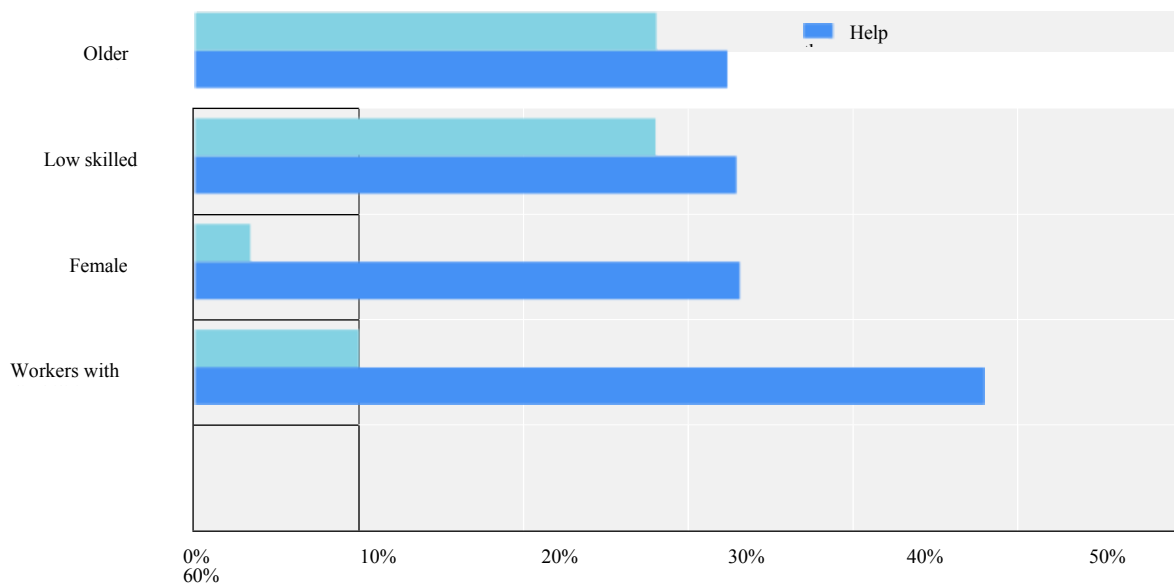
Policy gaps: While some countries already have policies in place such as training or subsidies for AI adoption, they may be poorly targeted and there is a need to better understand which groups face the highest risk so that public resources are used efficiently. Where AI offers opportunities for reducing inequalities, governments can do more to foster their development and adoption, especially among smaller firms which have less means to access good quality AI tools. For example, eventhough many AI solutions exist to help people with disabilities overcome labour market barriers, there are challenges with funding, certification and quality standards for such tools, as well as a lack of accessibility training among developers. Policies to address the other risks discussed in the rest of this brief will help address inequalities.

Possible policy directions that countries may consider:

- Identifying the groups most exposed to AI-related risks in the labour market.
- Training and support targeted to disadvantaged workers prior to and during AI adoption.
- Targeted grants or subsidies for SMEs to facilitate their adoption of trustworthy AI.
- Tackling risks in AI systems related to bias and discrimination and autonomy (see below).
- Involving vulnerable and underrepresented groups in the development and adoption of AI systems for the workplace.

### Risks to occupational health and safety

Risks: AI systems can be used to improve workers' health and safety at work, for example by automating dangerous tasks, detecting hazards, or monitoring worker fatigue. The OECD AI Surveys show, for

example, that the adoption of AI at work increased enjoyment at work for 3 in 5 workers (Lane, Williams and Broecke, 2023[1]). At the same time, the use of AI creates new risks from an Occupational Safety and Health (OSH) perspective. For instance, some AI-powered monitoring systems may increase time and performance pressure to the extent that they cause stress and/or create incentives for workers to ignore safety standards. Stress may also result from decisions that are unfair, lack transparency and explainability, and where there is no easy opportunity for redress. The disappearance of routine tasks

through AI may deprive the worker of the respite provided by these tasks, leading to more mentally taxing shifts and possibly increasing the risk of physical injury. Increased use of AI in the workplace may also decrease human contact to the detriment of mental health.

Figure 3. Number of incidents causing physical or psychological harm to workers, 2023
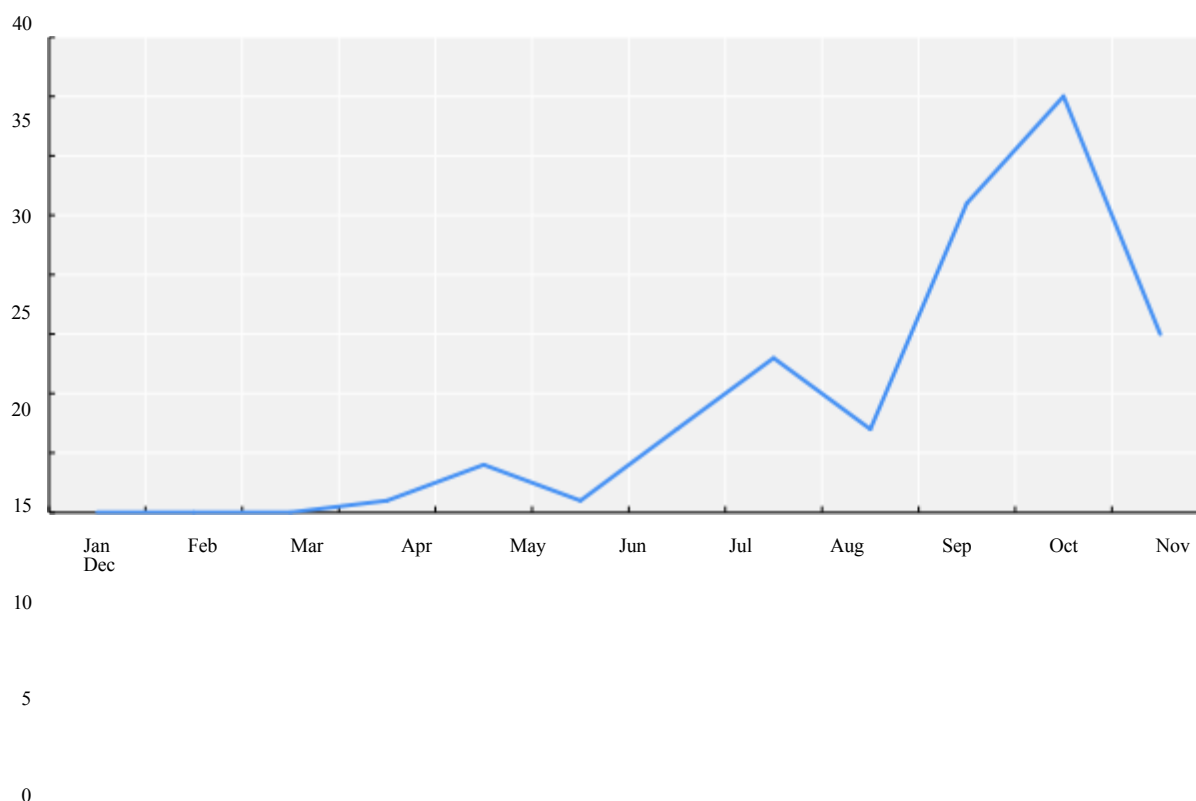
Source: *OECD AI Incidents Monitor (AIM)*, https://oecd.ai/en/incidents.

Gaps: Most countries have regulations that set out employers' obligations towards employees concerning their occupational safety and health. While the details vary from country to country, employers usually have to assess risks, and eliminate or reduce them with preventative and protective measures, and inform workers about the risks and train them. While in theory such regulations should also cover AI, there may be gaps, particularly in mental health. Also, while most countries have product liability regulations, they likely will need to be adapted to the use of AI systems. Finally, labour inspectorates may lack the knowledge and/or capacity to address new risks posed by AI.

> *Possible policy directions that countries may consider:*

- Reviewing and, if necessary, updating labour laws and OSH regulations to address the AI use in the workplace.

- Health and safety risk assessments, audits and certifications for AI systems to ensure workers' health and safety from the design stage.

- Strengthening labour inspectorate's capacities to inspect and enforce compliance with the law.

- Involving managers, workers, and their representatives in the design and adoption of AI systems in the workplace.

- Informing employers, workers and their representatives about the possible OSH risks of AI systems used in the workplace.

Privacy breaches

Risks: The increased use of AI in the workplace will likely result in the greater collection and analysis of data on workers and job candidates to train and use these systems. Data may or may not be personal, and could include information such as: worker movements, biometric data, like heart rates and blood pressure, as well as digital activities. Workers may feel that this is an invasion of their privacy, in particular

if they gave no consent to the collection and use of the data. Workers might also worry that the data are used for purposes other than for which it was intended. Moreover, data collection may result in increased monitoring and surveillance, which could lead to stress.

Gaps: The protection of workers against privacy risks varies considerably across OECD countries but, even in those with the strongest protections, gaps remain. For example, in EU countries, the General Data and Privacy Regulation (GDPR) strengthens individuals' control and rights over their personal information but there are significant enforcement gaps. The GDPR also leaves data protection in the employment context to be addressed at the Member State level, so these rules are still far from being harmonised across countries, consistent and comprehensive. Protections are even weaker in other OECD countries. For example, in most US states, there are very limited protections when it comes to the collection and use of data on workers by employers.

Figure 4. Percentage of workers who are worried about their privacy, manufacturing and finance employers who use AI
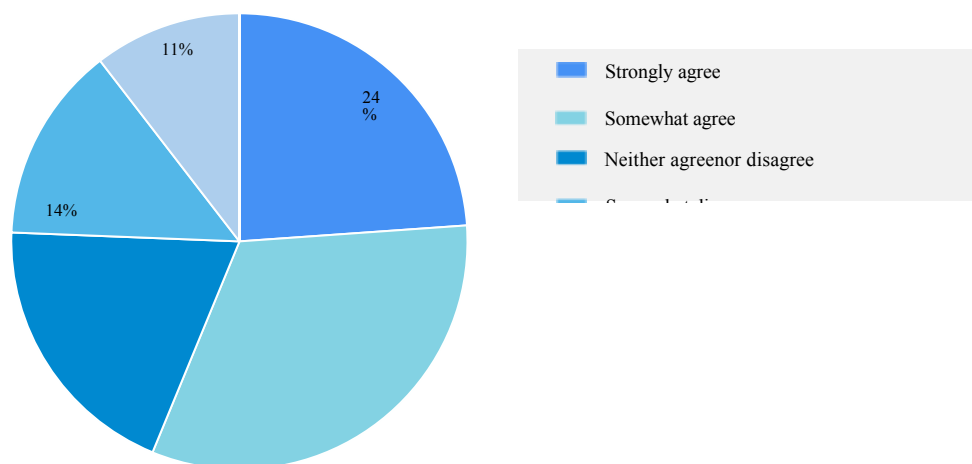
Note: Workers who report that their employers' use of AI involved the collection of data on workers or their work were asked: "To what extent do you agree or disagree with the following statements? I worry about my privacy when my data is collected".

Source: Lane, M., M. Williams and S. Broecke (2023[1]), "The impact of AI on the workplace: Main findings from the OECD AI surveys of employers and workers", https://doi.org/10.1787/ea0a0fe1-en.

Possible policy directions that countries may consider:

- Impact assessments and quality labels to evaluate privacy and security of personal information in the AI systems.

- Restricting the collection, use, inference, and disclosure of workers' personal information.

- Requirements to safeguard workers' personal information and appropriate handling of data.

- Providing information to workers about data collected by employers and purpose of use (see also Transparency).

- Rights for workers to correct, delete, opt-out of, or limit the use of sensitive personal information, including through workers' representatives.

- Quality labels and certifications for AI systems with good data protection.

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