AI and the Welsh Economy

TUC Cymru's written submission to a short exploratory inquiry by the Senedd's Economy, Trade and Rural Affairs Committee

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About TUC Cymru and this submission

TUC Cymru is the voice of Wales at work. We're creating a Wales where everyone has a voice through their union and an income they can build a life on. We believe that every worker has the right to be safe, valued and respected. When workers act collectively, we have the power to create positive change in society. We bring workers together through 48 unions to fight for better jobs and a more equal and prosperous country.

This document was prepared by TUC Cymru's AI Reference Group on behalf of all our affiliated unions. The group includes representatives of the following unions: CWU, FDA, GMB, PCS and UNISON; representatives of the following bodies: Connected by Data, Fairwork project, Institute for the Future of Work and Dr Philippa Collins.

Summary

The use of AI by businesses is increasing rapidly. AI offers opportunities to the Welsh economy, including potential productivity gains, but we must ensure that the benefits are shared equitably with workers and across Wales. It is clear that AI also entails some risks to the Welsh economy and the workforce particularly. Here, we focus on the inevitable transformation of many jobs – an estimated two-thirds of jobs could be impacted by AI automation – and the possibility of job displacement. In addition, TUC Cymru's research has already found evidence of management by AI leading to work intensification, surveillance and threats to human rights.

Introducing a regulatory framework that strikes a balance between enabling organisations to take advantage of AI and other emerging technologies and guaranteeing an effective range of safeguards, rights and responsibilities for working people is urgently needed. Wales – with our structures of social dialogue – can make a significant contribution to realising this need. The Workforce Partnership Council has already demonstrated our potential through its recent adoption of important guidance: *Managing Technology that Manages People: A Social Partnership Approach to Algorithmic Management Systems in the Welsh Public Sector.*

The roll out of AI requires significant investment in skills and capability building to enable workers from across Wales to interact responsibly with AI and share in its benefits. However, research indicates that traditional skills in customer service, office management and communication will remain vital.

To mitigate against the risks that AI generates when deployed in the work context, we call for:

1. Limits to be placed on the development and use of systems, including those based upon AI, that infringe upon the fundamental rights of working people.
2. Enhanced rights to information and consultation for workers and their representatives from the earliest stages of decision-making regarding AI.
3. Guarantees that new technologies will not infringe upon the rights of working people.
4. Updates and amendments to existing regulatory frameworks to take into account the capacities and risks of new technologies.

To what extent are businesses in Wales making use of AI and planning to do so in the future?

The use of AI by businesses to support, enhance or conduct aspects of their work is increasing rapidly. An ONS survey undertaken in April 2023 reported that 16% of businesses across the UK were using artificial intelligence technologies. Uses such as spam filters (11%), chatbots (4%) and facial recognition (3%) were highlighted. 13% of businesses reported at least one planned use of artificial intelligence. This survey, as well as others that relate to the UK, indicate that AI use is very dependent upon the size of a business and its sector. A 2022 DCMS survey highlighted IT and tele-communications and legal sectors showing high adoption rates (close to 30%) and hospitality, health and retail the lowest at around 11% of firms. This UK-wide evidence shows that the use of AI has increased within organisations and will continue to do so. Establishing safeguards and responsibilities that protect the rights and values that we hold in Wales in this fast-moving context is a pressing concern. is a pressing concern.

Recent research by TUC Cymru supports these UK-wide findings. TUC Cymru spoke to groups of workers across Wales who reported that some sectors are already deeply affected by the use of AI. For example, Generative AI has a strong effect on journalism; education and creative industries such as TV, film, drama and photography. AI can also be deployed to manage the performance of work or to support a variety of worker-management functions (for example, setting targets or deadlines, or allocating workloads). Respondents to our focus groups from the following sectors had experienced this: logistics and retail, manufacturing, call centres and the civil service.

What are the potential economic opportunities and risks that AI may present for Wales, and how might these vary across different parts of Wales and across different sectors?

There are various levels at which AI presents economic opportunities or potential to create prosperity in Wales, although – we would argue – only if this process is managed inclusively and with the participation of a range of stakeholders, including workers. For example, investment from major technology firms could be attracted into Wales. Recently, the Prime Minister announced a US company will invest in an AI data centre in the North East of England. In this case, the deal secured included a commitment to training and skills development in the local area although scepticism has been expressed about the effect of this form of investment upon local economies. Generally, however, AI could lead to investment, new jobs and the creation of different types of jobs and opportunities in Wales.

At an organisational level, AI provides opportunities if it is developed, adopted and implemented fairly and responsibly, for example by new firms or existing businesses developing AI-related products and services to increase customer base and revenue. Within organisations, AI has the potential to boost productivity, by automating repetitive tasks, processing large quantities of data very quickly or detecting patterns in data that would be imperceptible to humans. Some research and analysis argues that generative AI could have a levelling effect, by enabling wider access to knowledge and skills that is currently reserved for elite professions, such as law, computer programming and professional services.

However, the benefits of AI must not be assumed and AI adoption must not be undertaken at the expense of workers' pay, terms or conditions. Data should be made available to unions about the intended – and actual – impact of automation and AI upon jobs and workers to inform unions' response and employers and unions should work together to ensure that any gains are shared with workers through – for example – shortened working hours and an improved work-life balance. The Welsh Government's economic strategy will need to consider how the potential productivity gains of AI are shared equitably between companies and workers.

The impact of AI is also likely to be highly specific to sectors and types of work, as mentioned above. This creates the possibility that the advantages and benefits of working with AI will be seen in a small section of the Welsh economy, whereas the negative effects will be felt more strongly elsewhere. For example, a technology company and its workers will benefit from the profit gained by developing and marketing a new AI tool for resolving customer queries but the use of this tool in organisations would have a negative effect on the job qualities and quantities available to customer-facing administrative staff. For example, in 2023 BT announced plans to cut 55,000 jobs by 2030 with the intention to reduce headcount through the use of AI.

The main economic risks that AI presents for Wales are:

- Transformation of jobs and job displacement (discussed below).
- Risks associated with particular uses of AI, e.g. to manage workers (discussed below).
- Poor working conditions of those doing upstream data work, primarily in the Global South but also in the UK.
- High levels of concentration of power and resource in the advanced AI market, which may reduce competition and lead to a small number of large firms dictating the terms of service, prices and functionality of AI systems to firms, workers and public authorities.

Navigating this will require developing public sector capabilities to challenge tech companies and uphold the public interest, rigorous policy and practise within the private and public sectors as indicated in the skills section below.

How is AI likely to affect jobs and workers in Wales, and what actions might the Welsh and UK governments need to take in response?

AI has the potential to transform how jobs are performed. There are two main consequences of this transformation, dependent upon the sector, job role and AI adopted. One consequence of AI adoption is full automation of tasks, or aspects of processes, leading to the loss of roles entirely. The second consequence is a fundamental change in how a person performs their work, relying on AI to enhance their decision making or undertake processes on their behalf. The extent and speed of these transformations is very difficult to predict and there are differing views.

In a recent report, The Tony Blair Institute for Global Change estimated

> "that full and effective adoption of AI by UK firms could save almost a quarter of private-sector workforce time – equivalent to the annual output of 6 million workers …occupations and sectors that involve complex manual work such as the skilled trades or construction are likely to be less exposed to AI. By contrast, those workers who perform routine cognitive tasks, particularly in administrative occupations, and those who work in data-intensive industries where it is easier to train new AI models (such as banking and finance), are likely to be more exposed."

In contrast, however, experts observe that any predictions must be taken with 'a pinch of salt'. Carl Benedickt Frey (Oxford University) told the BBC: "The only thing I am sure of is that there is no way of knowing how many jobs will be replaced by generative AI… Consider the introduction of GPS technology and platforms like Uber. Suddenly, knowing all the streets in London had much less value - and so incumbent drivers experienced large wage cuts in response, of around 10% according to our research. The result was lower wages, not fewer drivers."

As an automation technology, AI can lead to deskilling of workers, and therefore their replaceability. This can reduce the individual and collective bargaining power of workers, which may lead to a greater share of economic gains from AI adoption gravitating to the already wealthier sections of the population and deepening inequality.

TUC Cymru's report shows that workers in Wales are already experiencing change in their work and workplaces as a result of the use of AI. Respondents reported the following consequences of the integration of AI into their work processes:

- Office workers experiencing monitoring and intensification of work through a new approach to scheduling.

- Drivers and delivery workers managed by AI systems, including systems that establish unrealistic targets for performance that workers struggle to meet.
- Creative workers fear their work will be used to generate supposedly new work by generative AI without their consent.
- Energy sector workers being made redundant after decisions made by AI.

Research into the use of AI, particularly in the context of managing staff, has shown that a wide range of risks are created. Recent work by Philippa Collins highlights that the use of AI and other technologies to support or undertake management functions generates three central concerns:

1. a threat to a range of human rights (privacy, data protection, freedom of association) and workers' rights where systems are not implemented responsibly and fairly;
2. difficulties in enforcing rights and achieving transparency, consultation and accountability regarding the use of AI/algorithmic management, and
3. the sidelining of human connection between managers and staff, as well as the decline in the exercise of human judgment and decision-making in the management relationship.

A report by Fairwork, based on case-study research at UK-based Amazon warehouses, supports this analysis. Harms are associated with algorithmic management and AI-integrated robotics, including work-intensification; pervasive workplace surveillance; an inability to change rigid labour process systems set by omnipresent and opaque algorithms; and a greater loss of control in the ability of workers to understand and intervene in the decision-making processes that affect and govern their day-to-day work.

Dr Collins argues that introducing a regulatory framework that strikes a balance between enabling organisations to take advantage of AI and other emerging technologies and guaranteeing an effective range of safeguards, rights and responsibilities for working people is urgently needed. The UK is well-placed to devise such a framework.

In addition, Wales – with its unique structures of social dialogue – can make a significant contribution to the process of regulation by gathering evidence from social partners and seeking agreement on shared principles regarding the fair and responsible design, development and adoption of AI across Wales. The Workforce Partnership Council has already undertaken important steps here by adopting guidance entitled *Managing Technology that Manages People: A Social Partnership Approach to Algorithmic Management Systems in the Welsh Public Sector* on 18 November 2024.

To mitigate against the risks that AI generates when deployed in the work context, we call for:

1. Limits to be placed on the development and use of systems, including those based upon AI, that infringe upon the fundamental rights of working people.
2. Enhanced rights to information and consultation for workers and their representatives from the earliest stages of decision-making regarding AI, throughout adoption, and during oversight and evaluation of AI/automated decision-making systems. This should include a statutory duty to consult worker representatives where an organisation intends to use technology (including AI) to undertake or support tasks in the workplace.
3. Guarantees that new technologies will not infringe upon the rights of working people, including their workplace rights and their human rights, or be implemented in a manner that leads to a deterioration in their terms and conditions at work. Employers should be required to undertake a detailed risk assessment, in consultation with workers and their representatives, before introducing new technology or making changes to any existing technology.
4. Updates and amendments to existing regulatory frameworks to take into account the use of new technologies, particularly in relation to the Equality Act 2010, trade union regulation, data protection law, health and safety regulations, working time, minimum wage and unfair dismissal law.

These recommendations draw upon the TUC's proposals, as well as research conducted by Collins and the Institute for the Future of Work.

Further, the Welsh Government should consider how other policy tools and institutional arrangements can be used to incentivise the development of socially useful AI. The Welsh Government could, for example, encourage universities and research institutions to collaborate with workers, trade unions and communities in the design and development of AI and incentivise businesses to adopt best practice in terms of worker participation and AI governance.

What skills are likely to be needed as a result of increased use of AI in the workplace, and how well placed is Wales to deliver these?

Recent research conducted by the Workforce Partnership Council, as well as by the Institute for the Future of Work, show a significant need for investment in the development of skills and capability regarding AI. Without this investment, three consequences are likely. First, the Welsh economy will not be well-positioned to take advantage of the economic opportunities outlined above. Second, where AI is used, it will not be used responsibly and fairly with a full understanding of its operation and its limits. Third, existing inequalities between groups and regions in Wales will be further entrenched as some communities continue to be disadvantaged by a lack of access to education, capability and skills development opportunities.

The Institute for the Future of Work reports that competencies in IT and data analytics are commonly required by businesses, but they must be combined with other skills such as communication, client service, office management and customer relations. There is a need for 'continuous skill development in this constantly evolving market', but this must be matched with capacity in these other areas to lead to success in an organisation.

It is vital to ensure that other aspects of the labour market and its regulation are sufficiently equipped. For example, employers, managers, directors and corporate boards often do not have adequate knowledge, skills and processes to introduce or appropriately manage AI systems. This is particularly pertinent given the 'hype' and aggressive marketing of AI tools and a resultant rush to introduce AI. If managers and executives are not appropriately skilled, there may be negative impacts for workers, the business and the wider economy.

Relatedly, trade union representatives and officials play a key role in identifying and redressing potential harms and other negative impacts of AI in the workplace. As such, continued and expanded support for workers and unions to understand and negotiate AI is an investment in the skills needs to enable a positive AI future.

Similarly, a lack of resource or skills for the Welsh Government and public agencies to understand and uphold best practise and legal requirements on the use of AI may lead to negative legal, economic and social outcomes. This includes leveraging the power of public sector procurement as envisioned within the Social Partnership and Procurement Act to apply to data and AI systems. TUC Cymru currently has a project underway with Connected by Data on incorporating worker voices into these systems as a means to advance work quality, protect rights and effective AI implementation in public service delivery.