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Welsh Parliament

Economy, Trade, and Rural Affairs Committee

Inquiry: AI and the Welsh Economy

Ref: AI12

Evidence from: Centre for Digital Public Services



Centre for Digital Public Services response to the [Economy, Trade and Rural Affairs Committee](#) exploratory inquiry into AI and the Welsh economy.

We are the Centre for Digital Public Services (CDPS), set up and funded by Welsh Government, we help the public sector in Wales to

- Learn digital skills (for example user centred design, agile ways of working, user research, service design)
- Understand and meet the [Digital Service Standard](#)
- Connect with other digital professionals
- Design and delivery better digital public services

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

At the end of 2023, CDPS and the Chief Digital Officer for Local Government worked together to explore the maturity and readiness for automation and AI across the Welsh public sector. We spoke to 11 public sector organisations. These consisted of local authorities, arm's length bodies and 1 housing association.

This was to better understand what further help we can provide to ensure this technology is used to improve public services in a secure, ethical, and transparent way.

The report explores the use of Robotic process automation (RPA) and AI and can be found [here](#). Here's a short summary:

Appetite

A strong appetite for using AI is reflected in the fact that all respondents are actively exploring or experimenting with it. Many have AI-powered instances live now. These are mostly internal, but some are public facing. All are excited by the possibilities. This is also tempered by caution for many.

Organisations' situations and stances in terms of AI is varied. Some hint that the 'hype' might be premature and that the space is insufficiently mature. One mentioned the lack of commercially available products. Another was open-minded about using AI but was content to wait



and see whether AI offers practical solutions for any problems identified during current service reviews.

Some are mostly focused on establishing robust governance, policies, and guidance to manage the adoption of AI technologies and the disruption it may cause for their organisations. These have a lesser focus on potential use cases at this stage, although they are giving this some consideration.

Some smaller organisations described a deliberately slow and steady strategy initially, with a view to speeding up later. These were more likely to be researching how other organisations in their sector are applying AI. Others have a strong focus on potential use cases. These are more likely to have live AI instances already or be running proofs-of-concept. Many of these organisations have quite concrete plans for applying AI across a range of use cases.

Use cases

We heard about a range of current applications for AI:

Personal productivity: this is the use of publicly available tools like ChatGPT by individual members of staff. This appears to be fairly widespread. Staff use AI for things like content generation. This has led to many putting guidance in place for the use of these tools. Several also mentioned that their developers used these tools for coding support.

Cyber security: several organisations mentioned the sheer volume of threats their networks experience. They described how AI-powered threat detection allows them to handle this in a way that would not be viable with a human-only team.

Analysis of large qualitative data sets: some organisations are using AI to help them process large quantities of data, for example consultation responses. For example, AI is used for sentiment analysis, summarisation, or the extraction of common themes.

Automatic Welsh translation: many are experimenting with this. Those who are also use human translators for final editing and quality assurance.



Staff-facing chat bots to act on queries: at least one organisation uses a chat bot that understands natural language requests and takes action in response, although this is limited to a narrow domain.

Public-facing chat bots: several organisations – local authorities and arm’s length bodies – are using public-facing chat bots. However, they were explicit about these being fairly basic, rule-based bots. The implication is that these aren’t considered to be ‘real’ AI. Some accept natural language input and attempt to extract meaning from it, but then return a pre-programmed response.

Computer vision: 2 organisations mentioned the use of computer vision, in which the system can identify and understand objects in images or video feeds. One example was attached to CCTV and only reached proof-of-concept stage, while the other is in live use for remote sensing.

Some recurring themes emerged when exploring planned use cases:

Using AI-powered chat bots to simplify services for users: several organisations described ambitions in this space, both internally for staff and externally for customers. These bots would take natural language input and then take action in response; for example, provide information, carry out simple transactions or guide the user through completing more complex transactions.

Predictive analysis: several organisations described using AI analysis of a data stream to make predictions and support pre-emptive action. 2 organisations described explorations with academic institutions into applying this to internet-connected sensors in people’s homes.

Centrally coordinated personal productivity: most are interested in introducing personal productivity tools in a more structured way across their organisations, through the licencing of specific software for staff.

Managing public-facing email inboxes: one local authority with a high number of inboxes is considering using AI-powered RPA to read incoming emails, understand the gist of what the email is about, decide what the next stage should be and then move it to the correct back-office team to be acted on.



General findings

The research gathered some insights that apply to both automation and AI. Most organisations emphasised the importance of being user centred and using these technologies to improve the user experience for both staff and the public.

Most also stressed that they wanted to avoid being technology led, i.e. focusing too much on seeking out problems to apply RPA and AI to. Their preference is to be service, or problem led, i.e. identifying issues within a service, and then selecting the appropriate way to mitigate that issue based on the service context and the user needs.

Many reported the importance of gathering case studies and using them to tell the story to support the case for change within their organisation. We heard repeatedly about the power of case studies to demystify the technology, demonstrating both what's possible and the measurable value that can be achieved.

CDPS AI and automation Community of Practice:

As a result of the discovery, we have set up an AI and automation community of practice for the public sector in Wales. It has been running since April 2024. We have 157 members, with an average attendance of 40 per community meeting.

The meetings have focused on giving community members the chance to share what they are doing, their approaches, barriers and lessons learned. We've also had experts such as the Turing Institute come to speak to the community around topics such as ethics. We will develop and grow the community in 2025, providing a safe space for people to share, learn and collaborate.

Workforce Partnership Council

We also sit on the [Workforce Partnership Council AI](#) working group and have worked in partnership to develop two reports on AI for the workforce. These are the 'Managing Technology that Manages People - Social Partnership Approach' document which provides a series of definitions, case studies, and a risks/benefits analysis for using AI; including overarching guidance principles as well as pre and post implementation advice.

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The second document, 'Using AI at Work - A Benchmarking Report on the Awareness and Understanding of AI in the Welsh Public Sector' assessed the understanding of AI among public sector workers based on original research conducted by the group.

Included within this, was a series of recommendations and findings highlighting key aspects of AI awareness. Both documents will be submitted to the Senedd by the Welsh Government who provide the secretariat for the group.

CDPS' own use of AI

In August, CDPS initiated a pilot program for the implementation of MS Copilot, commencing with a limited distribution of 10 licenses. Participants were tasked with integrating Copilot into their daily activities and providing feedback on its enhanced functionalities, as well as identifying areas where it was less effective.

Following a comprehensive three-month review of the pilot, it was concluded that Copilot is a secure and reliable solution that substantially increased productivity among all users across various MS Office products. Moreover, staff leveraged the Large Language Model (LLM) to develop and refine interview questions for recruitment purposes and to ensure appropriate tone in user research inquiries.

However, during this initial phase, Copilot has not been directly employed in user research interviews. The retrospective analysis revealed that nearly all users expressed satisfaction with Copilot as a solution, with the majority indicating they were either likely or very likely to recommend its use to colleagues in their professions.

CDPS currently plans to commence the second three-month phase of the trial in January 2025. This phase will focus on understanding the experiences of individuals for whom AI is a novel concept and who have not utilised it in their personal lives, as well as assessing its impact as a support and enabling tool for neurodiverse individuals. With this additional insight, we will be able to evaluate the opportunity cost and estimate the number of users the platform will assist.



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?

The following insights have also come from the AI and automation discovery, which we carried out at the end of 2023.

Benefits

Broadly, organisations are hoping to realise the same benefits that they are from automation. However, with AI, this is for tasks that are not just effort intensive, but that also require analysis, judgement and decision making.

Accuracy or reduction in errors is one area where doubts remain about AI. However, in domains with sufficiently large and well-formed data sets to learn from, AI is outperforming humans in this respect.

Barriers

- Many organisations spoke of a desire to use Microsoft Copilot – due to the widespread use of the Microsoft Technology Stack – but find the cost of the minimum licence requirement prohibitive.
- Some point out that the lower quality of AI-generated Welsh in comparison to English may be a barrier in a bilingual country to the adoption of public-facing generative AI, in which the AI directly produces outputs for public consumption (e.g. for use in intelligent chat bots).
- Some acknowledge that AI instances will need data to train with and that the data quality in their organisations may not be good enough. This is due to differences in data standards across organisational boundaries.
- Some say their senior leaders are nervous about the risks of AI and that this may slow adoption.
- Some acknowledge that simply knowing where to start and what to apply AI to is an initial hurdle they need to overcome.
- Finally, the usual barriers of funding it and having the capacity to resource it applies to AI as much as any other technology.



Risks and challenges

- Most organisations are finding establishing adequate governance, policies, and guidance a challenge.
- Many are concerned about the ethical risks, whether AI will exhibit bias, and how to be transparent with the public about an organisation's use of AI. However, several don't believe the ethical risk is any greater than it already is with more established technologies such as search engines.
- Many are concerned about the accuracy of any AI-generated output and foresee needing to test applications thoroughly to feel confident in what is passed back to the service user.
- Some are worried about protecting personal data when AI is used to manipulate or process it, and the risk of sensitive information being inadvertently passed to users. Some directly referenced information governance as a barrier.
- Some foresee challenges in preparing their organisations for both the level and pace of change that this transformational technology may bring with it. Others are concerned with the temptation to move too fast in order to not be 'left behind.'

Public Sector AI Steering Group

We have set up an AI Steering group to support our work in this area, with representatives from health and care, local government, Welsh Government, Arm's length bodies, housing and the third sector.

They have just commissioned guidance on the use of AI and this will be published as a Minimum viable product (MVP) in December and added to and iterated throughout 2025.

We also have a [Digital Standards Group](#). This group is chaired by Dyfed Alsop, CEO of the Welsh Revenue Authority and again made up of representatives from health and care, local government, Welsh Government, Arm's length bodies, housing and the third sector.

Their role is to champion the [Digital Service Standard for Wales](#) - which includes several technology related principles such as using scalable



technology, considering ethics, privacy and security throughout and using data to make decisions.

The group are also responsible for curating guidance and standards from across other sectors, countries and government departments and making the relevant to Wales.

They've recently endorsed the **Algorithmic Transparency Recording Standard** (ATRS), which provides a standardised way of recording and sharing information about the algorithmic tools organisations are using in an open, understandable, easily accessible, and free format.

The Standards working group and AI Steering group will continue to support the public sector to explore the opportunities and help mitigate associated risks.

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?

As mentioned above, we have inputted into the WPC's research and report, and they will be submitting these as part of this consultation.

We are very clear that the adoption of AI isn't about taking people's jobs, it's about freeing people up from the repetitive jobs and giving them time to do more meaningful work. It's also not about supporting work intensification – leaving humans do 'all the hard work all the time'.

For example - we discussed this at our recent AI community meeting where one of the speakers talked about using AI to help with translation, with the role of the translator as the person with the final set of eyes on any output to ensure quality. This could free them up to use their skills by getting involved in developing and creating the original content and not just used at the end of the process to translate something they've not had the context for.

This is a process called trio writing, bringing together a content designer, a subject matter expert and a translator. The quality of the bilingual output is better when the translator is involved at the start of the process. We're written more about this on our website.



<https://digitalpublicservices.gov.wales/blog/producing-bilingual-content-through-trio-writing>

Upskilling the public sector

In addition to our community of practice and related webinars, we have also launched a 'leading modern public services' leadership academy. The first cohort graduated in November and one of the modules on their course was about AI and emerging technologies.

We have also been working with Cardiff University to test a course they have developed around Generative AI and we are investigating how to roll this out to the wider Welsh Public Sector next year.

Looking outside of Wales, and something we could replicate in Wales - the Finnish government's strategy provides the following policy recommendations towards education and training in AI:

- Guaranteeing AI literacy across the Finnish population (including elderly) to ensure that all citizens have a basic understanding of AI applications. This can be achieved through MOOCs to ensure elementary knowledge on AI:
- [Elements of AI](#) course: the Elements of AI is a series of free online courses created by Reaktor and the University of Helsinki. The course series aims to demystify AI by offering a basic ([Introduction to AI](#)) and more advanced ([Building AI](#)) course on AI methods. With the objective to reach as many people as possible, the basic course is being translated in [all languages](#) of the European Union;
- Online introduction course to [Python](#);
- Introducing Masters and Bachelors programmes at university providing courses in AI. Examples:
- Master's programme on [machine learning, data science and AI](#) at Aalto university;
- Master's programmes on [data science or digital humanities](#) at University of Helsinki.
- Incentives and training mechanisms for teachers to use AI in their courses and teaching methods.



If you would like further information on any of the above, please contact Peter Thomas, peter.thomas@digitalpublicservices.gov.wales