Welsh Government Board meeting: Agenda item 2 paper

'Artificial Intelligence in the Welsh Government' from the Board meeting held on 26 January 2024.

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Contents

Details

Title of paper

Artificial Intelligence in the Welsh Government

Purpose of paper

To provide the Board with information on the rapid development of Artificial Intelligence (AI) tools and technologies. The paper also describes the potential benefits and risks associated with AI and how the Welsh Government is approaching AI operationally, financially and culturally.

Action required by the Board

The Board is asked to consider and discuss the issues raised in this paper.

Officials presenting the paper

- Glyn Jones, Chief Digital Officer
- Janine Pepworth, Deputy Director, Digital Strategy and Policy

Paper cleared by

- Tim Moss, Chief Operating Officer

TUS engagement/viewpoint

While we have not consulted TUS on this paper, the Chief Digital Officer has regular dialogue with Trade Unions on plans around deployment of AI and digital tools.

The TUS has also been consulted on a similar paper about embedding digital into service transformation and modernisation, to be discussed by ExCo on 25 January.

Date submitted to Secretariat

19 January 2024

1. Background

1.1 Artificial Intelligence (AI) is the science and engineering of creating machine and systems that can perform tasks that normally require human intelligence. AI is a diverse field, encompassing a range of technologies, methods, and applications. There are three broad types of AI:

- Perception – understanding or interpreting a situation, detecting or sensing.
- Prediction – analysing a situation, forecasting an outcome.
- Generation – using AI to create new content.

1.2 AI is no longer an emerging technology. It is a key global enabler that has the potential to create significant societal benefits and to act as a catalyst for wider economic growth, prosperity, and public service improvements. Interest in the implications of AI for all sectors has exploded over the past twelve months

since the launch of new generative AI tools such as ChatGPT, leading to a global debate on the risks of AI and the impact on workforce and human rights.

2. Issues for consideration

2.1 While AI creates a massive opportunity to improve public service delivery, the Welsh Government is also alert to the risks it poses and therefore we must ensure that it is used ethically and safely.

2.2 Paragraph Redacted

Operational

2.3 The Welsh Government has already started to use AI technologies, albeit with a limited scope. We are currently testing Microsoft365 Copilot Early Access Programme (EAP) with 290 staff. This involves using AI and natural language interactions to help staff manage their day-to-day workloads and potentially generate content. Copilot can also summarise and create documents or presentations.

2.4 This M365 Copilot initiative will enable us to evaluate the benefits, understand the technology and resource dependencies, and assess the risks and challenges around any future broader deployment. We launched the M365 Copilot as a cross organisational "AI Challenge" which, as well as developing some momentum and interest in the possibilities of generative AI for our work, also developed an understanding of other business problems which could be supported by an AI deployment.

2.5 As well as rolling out the technology, we have run drop-in support sessions and established Communities of Practice. Early feedback suggests that staff are

finding Copilot useful and that it has assisted with productivity, particularly for those who are disabled or neurodivergent.

2.6 Paragraph Redacted

2.7 In 2020 we established a small Data Science Unit. Over the past few years this has helped establish a data science function in the Welsh Government and supported the development of better infrastructure to support data science application. It has worked in some areas of the business to support business problems and has capability for developing natural language processing and automating certain activity (such as statistical production).

2.8 Paragraph Redacted

2.9 Paragraph Redacted

2.10 Paragraph Redacted

2.11 The UK Government has released training on generative AI for all civil servants and published the Generative AI Framework in January 2024 to provide detailed guidance, resources and tools for the safe and secure usage of all generative AI tools across government.

2.12 Paragraph Redacted

Financial

2.13 Embedding digital transformation and new AI technologies has the potential to yield great financial and other benefits. In a report by PwC, UK GDP is estimated to be 10.3% higher in 2030 as a direct result of AI. In a specific Wales context, this potentially equates to an impact of £7.9bn (9.8% of GDP) by 2030. A Made Smarter Review - an industry-led review exploring how UK manufacturing can maximise the benefits of digital technologies - suggests that

AI in manufacturing alone could be worth an extra £198.7 billion to the UK economy by 2027.

2.14 AI and data-driven innovation have the potential to have profound effects on our economy and public service delivery. The global consultancy McKinsey & Company estimates countries fully embracing these opportunities could gain an extra 20-25% in economic growth and productivity over the next decade.

2.15 The UK Government has calculated that a face-to-face transaction costs £10.54, a telephone transaction £4.26 and a digital transaction costs £0.25. Using digital and AI technology to reduce manual processes and human error across the Welsh public sector could bring enormous savings. It is these potential savings which will enable us to ensure staff remain in essential roles, continuing effective public service provision to future generations within tight budget settlements. In the health sector, for example, AI technologies can shorten diagnostic waiting times, improve accuracy of tests and strengthen workforce resilience.

2.16 Furthermore, high level analysis across the health sector indicates a range of £300m to £600m efficiency improvements can be gained by deploying technology including automation, sharing information and AI.

Cultural

2.17 A key theme of our emerging policy position on AI is the need to embed ethical considerations, responsible AI use, and social partnership from the outset. The Welsh Government needs to show leadership across the public sector and, while AI offers significant benefits, it also poses significant challenges and risks for our workforce and that in the wider public sector workforce in Wales.

2.18 That is why we have committed to working in partnership with Trade Union

colleagues as we seek to develop our use of AI tools and services. Teams have also been asked to produce short Impact Assessments concerning their specific uses of MS365 Copilot.

2.19 Paragraph Redacted

2.20 Paragraph Redacted

3. Resource implications

Financial Implications

3.1 There are no direct financial implications associated with this paper.

3.2 Paragraph Redacted

3.3 There would also be financial benefits for the successful digital transformation and modernisation of services in Wales using technologies such as AI. Digital is the only alternative to the expensive human and resource intensive way in which we currently deliver many services.

Implications for staff

3.4 There are no direct implications for staff arising from this paper; however, the increased use of AI technologies will impact the public service workforce in Wales, and the Welsh Government, in both positive and potentially negative ways. It is essential, therefore, that adoption of AI is taken forward through a social partnership approach.

3.5 While AI can help reduce the burden of repetitive tasks, we remain mindful of the risks that AI can bring in terms of potential job displacement or losses, as

well as its impact on workforce rights and human rights. The ethical and responsible use of AI is paramount. Equality, inclusivity, safety and social justice will continue to be central to our thinking in how we use data and digital.

3.6 The Workforce Partnership Council recognises this and updated its Partnership and Managing Change agreement in 2021 to include a set of principles for managing and supporting the workforce due to increasing digitalisation.

3.7 In addition, the Workforce Partnership Council considered a paper on in November 2023 on the opportunities and threats of AI for the public sector in Wales. As a result, it established a Working Group to develop principles, information, advice, and guidance on workforce issues related to the introduction and use of AI in public services.

3.8 Paragraph Redacted

4. Risks

4.1 Some of the potential risks and issues that need to be addressed in deploying and using AI and data-driven technologies include:

- Potential harm, discrimination, or injustice caused by biased, inaccurate, or unfair AI systems, especially for the most vulnerable and marginalised groups.
- Potential loss of privacy, security, or autonomy due to the misuse, abuse, or hacking of AI systems, or due to the lack of consent, control, or awareness of the users.
- Potential disruption, displacement, or inequality caused by the impact of AI on the labour market, the economy, and the society, especially for the low-skilled, low-paid, or underrepresented workers.

- Potential conflict, tension, or mistrust due to the ethical, legal, or social implications of AI, or due to the lack of alignment, coordination, or cooperation among the stakeholders.

4.2 There is also a risk that not prioritising digital transformation, modernisation and the use of AI technologies will make delivery of public services in Wales increasingly unaffordable in the longer term. If we do not engage and embed digital and AI technologies in all our strategies, policies and delivery mechanisms, we will not be serving our citizens well and providing them with truly safe, modern and meaningful public services.

5. Communication

5.1 There are no communication issues associated with this paper.

5.2 Paragraph Redacted

6. General compliance issues

6.1 Using AI as part of modernising and transforming our organisation provides a huge opportunity to support the ways of working described in the Future Generations Act. Joined-up digital public services will be delivered through collaboration and integration. Good engagement will support the design of user-facing services that prevent inefficiencies and inconsistent experience for the citizen. Designing services in an iterative, agile and user-focused way will ensure services are designed for the long-term.

7. Recommendation

7.1 The Board is asked to consider and discuss the issues raised in this paper.