**Minutes of Cross-Party Group on Digital in Wales:**

**21.6.23**

**Attendees:**

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| Rhun ap Iorwerth MS (Chair) | Carwyn Edwards |
| Pryderi ap Rhisiart (Secretariat) | Beth Whitney |
| Dewi Jones (speaker) | Deian ap Rhisiart |
| Arfon Smith(Speaker) | Brandon Ristow-Wilson |
| Glen Robinson(Speaker) | Cai Gwinnutt |
| Andrew McStay (Speaker) | Delyth Prys |
| Pete Burnap (speaker) | Drew Thomas |
| Mike Hedges MS | Emily Roberts |
| Gareth Davies | Huw Ynyr |
| Meurig Thomas | Jack Rigby |
| Simon Scarle | James Finney |
| Sophie Douglas | Glyn Jones |
| Mike Thomas | Josh Smith |
| Victoria Southam | Peter Williams |

**Apologies:**

Cefin Campbell MS

Natasha Asghar MS

# *Beginning of meeting:*

**Rhun:**

- Opens the meeting by reviewing the previous meetings and presenting apologies to the group from Natasha Asghar MS and Cefin Campbell MS.
- He announces that, regrettably, he will have to leave the meeting early due to prior commitments with the Welsh youth parliament

**Annual General Meeting:**

**Chair:**

- Mike Hedges MS nominates Rhun ap Iorwerth MS as chair of the group
- Rhun accepts the nomination
- That nomination is seconded by Cefin Campbell MS and Natasha Asghar MS via proxy vote as read out by Rhun.
- The group is in agreement and Rhun is re-elected as chair of the cross-party group.

### Secretariat:

- Rhun ap Iorwerth MS nominates Pryderi ap Rhisiart as Secretariat
- Pryderi accepts the nomination
- That nomination is seconded by Cefin Campbell MS and Natasha Asghar MS via proxy vote as read out by Rhun.
- The group is in agreement and Pryderi is re-elected as secretariat of the cross-party group.

### Rhun:

- Introduces the first speaker, Dewi Jones from Bangor University

### Dewi Jones:

- Begins by discussing large language models such as ChatGPT 3&4 that provide users with quick answers and even writes essays, and the vast media attention that's received in recent months.
- He mentions how the Welsh language has often struggled to be at the forefront of technological advancement, but that this case may be slightly different, with plans already in place for the Welsh language to be in the next 5 years of advancement in the field already
- But he alludes that the job is far from done. Wales, he says, need a plan and that Welsh Government have to support these ambitions if the Welsh language is to thrive in AI
- He alludes to the excellent work already undertaken by program lice Macsen,  but that 2 key issues need to be solved:
- 1-Erros in current systems need to be improved and reduced
- 2-That Wales needs to embrace open source AI models in collecting a large amount of Welsh language data

### Rhun

- Thanks Dewi for his contribution and his presentation, and points out how far this technology has come so far in such little time, and recalls a time where google Translate wasn't reliable for the Welsh language, but that now we have the potential to see the language being understood by these sophisticated models
- Rhun conclude by introducing the next speaker, Arfon Smith from GitHub.

### Arfon:

- Begins by introducing co-pilot and how it uses generative AI.
- He points out that in Wales currently around 70,000 people use Github, which is a place where people can share work and develop projects in an open space, but that it can also be used as a private tool for companies
- He introduces one of its projects, 'they work for you' which allows people to find out who their local Senedd member is by typing in their postcode

- Moves on to co-pilot, which is a tool that allows developers to write codes effectively, as if it were an auto-complete for software.
- He mentions how much this tool has boosted productivity among developers who now have more time to consider the more complex elements of their work, whilst co-pilot deals with the more mundane elements.
- He mentions how this also has been seen as a bridge between different coding languages

**Rhun:**

- Thanks Arfon for his contribution and points out just how transformative this tool could be before he opens the floor up to questions

**Pryderi:**

- Asks Arfon whether generative AI should be seen as a key tool to closing the skills gap in Wales, and  whether it should be considered as part of a skills strategy?

**Arfon:**

- Mentions how it's too early to say with confidence, and that Ai is still capable of making many mistakes.
- He mentions how this is a tool for people that already know what they're doing, rather than a tool for training people as they cannot spot the mistakes.
- He also mentions how companies are aware of this problem and are working on this, for example, Microsoft.

**Rhun:**

- Says that we know that AI can be 100% reliable when needed to be, for example in self-driving cars, and questions how long it'll be before this AI model is 100% reliable?

**Arfon:**

- Says that this model is correct around 45% of the time at the moment, and that there's still much work to be done.

**Beth:**

- Questions how these tools previously mentioned by speakers will eventually impact sectors such as hers in genealogy?

**Rhun:**

- Adds to the question by asking when will we see Ai in sectors we wouldn't expect it play a big part?

### Dewi:

- Dewi points out that a model like ChatGPT has knowledge up to September 2021 and is right about 80% of the time.

### Arfon:

- Mentions that there's a lot of work happening in creating AI that understands it doesn't know the answer, before reaching out to a 3rd party, known as Plug-in spaces

### Carwyn:

- Carwyn asks how we can use this technology to our advantage whilst also maintaining the privacy of individuals' data?

### Dewi:

- Dewi advises that we follow the Open Government License regulations.

### Rhun:

- Thanks everyone for their contributions and discloses that it's time for him to leave the meeting
- He hands chairing duties over to Pryderi and introduces the next speaker, Glen Robinson from Microsoft UK

### Glen:

- Begins by looking back at how we reached this moment and that data processing efficiency has shot up in recent years, allowing them to process large amounts of data quickly
- Points out that the quality improvement sin technology and reduction in errors has caught the public eye in the last year
- Mentions the real economic benefits that can come from AI, and how AI will be the biggest technological shift we've ever seen in terms of impacting our everyday lives.
- Points out a practical example of how features like co-pilot can be used to receive updates and summaries on projects, or to provide briefings ahead of meetings.
- Discloses that this technology is being rolled out incrementally
- Discusses the importance of natural language eventually in AI.

### Pryderi:

- Thanks Glen for the contribution and mentions the remarkable progress in the field and the potential going forward.
- Asks Glen whether co-pilot is accessible?

## Glen:

- Answers by stating that only 600 Microsoft users are currently in possession of the feature, but that this will be expanded in the future
- He says that a key feature for them is that it's safe and manageable

## Pryderi:

- Thanks Glen for the answer and introduces Andrew Mcstay from Bangor University

## Andrew:

- Begins by giving an overview of the potential influence on tech in society
- Suggests the short term challenge is truthfulness and human influence in AI
- Mentions that whilst ethics is an important thing to strive for, rushing there isn't the solution
- Mentions that Welsh Government's Wellbeing of Future Generations Act (WFGA) could be a catalyst in making Wales a leader in this field, but how more support and resource is needed.
- In the Long term, he acknowledges the fear of human extinction, but that this fear has been around for so long and that it's still unclear, and that focus should be on the short term for now in improving the truthfulness of AI, and that it can't be used for scamming, for instance
- Mentions the importance of consider the environment in all this and how vast amounts of energy is consumed
- Also discusses how chatbots are also becoming more popular as loneliness rates increase in the UK
- Again discusses how Welsh Government could lead in this sector and use the WFGA as 'moral North star', and how academics can play a key part in advising Welsh Government.

## Pryderi:

- Thanks Andrew for his contribution and agrees that Wales can play such a key role in this global matter.
- Introduces the final speaker, Pete Burnap, from Cardiff University.

## Pete:

- Discusses the safety side of AI and how AI has developed so quickly that we now have to think quickly and practically about safety measures.
- Mentions how important checks and balances are for AI, as if it were a vehicle needing an MOT

- Mentions that AI can go wrong or degrade over time, this is known in the field as a concept Drift.
- The models in their current form are rather easy to manipulate to give wrong answers, which needs to be solved
- Mentions the important psychological work needed to be done in regard to human ability to work alongside AI
- Concludes buy suggesting that there's a gap in which Wales could be renowned for having safe and secure models of AI, but how regulation may be difficult.

### Pryderi:

- Thank Peter for his contribution and suggest that Wales could lead in all sectors of AI
- Questions the speakers on: Now that the cat is out of the bag with Ai, how do we prevent this in the future?

### Carwyn:

Adds to the question by mentioning how AI has become an arms race, and how do we therefore protect the environment in all this?

### Glen:

- Labels them as critical questions, and that AI programs must be assessed on their environmental sustainability
- Mentions how Microsoft aim to be net zero by 2030, which is done by investing billions into carbon capture and green energy
- But that they also include all carbon emissions from users of their products, so for instance the carbon emissions of every Xbox in the world.

### Pryderi:

- Questions of that data will then be shared with the users of those devices?

### Glen:

- Confirms that it will.

### Daniel:

- Questions Peter if the AI 'MOT' idea can still be performed by humans given the advancement in AI?

**Pete:**

- Points out that this is all about keeping AI manageable and safe
- Also mentions earlier points about how, if AI makes mistakes, are we to know if they're correct and the issues surrounding that.

**Gareth Davies:**

- Mentions how Generation Z have been able to adapt to this technology, but questions if Ai is opening up a digital divide?

**Andrew:**

- Believes that the younger people aren't in a completely advantageous position and that those older generations have greater experience in understanding shifts in how things work

**Glen:**

- Thanks Gareth for raiding this important point
- Mentions that this has been a key consideration for Microsoft
- Says that Ai is actually reducing that digital divide, due to its simplicity with voice control activation etc
- The important step in his opinion is to have the fundamental access to technological devices in homes and offices

**Dewi:**

- Raises the point of condensing open-source model down to a tenth of their size, lowering emission but maintaining efficiency
- Mentions how open-source allows everyone to make a difference, as it cannot be eft to the big corporations alone

**Pryderi:**

- Questions Dewi on how difficult is it to get large language models into GPT?

**Dewi:**

- Mentions the need for a lot of hardware, but that it's slowly becoming simpler and that the open-source models have fired up to this challenge in recent times

**Pryderi:**

- Thanks everyone for their contributions and questions.
- Discusses with the group how this can be taken forward in the future and how he plans to discuss with the chair what steps can be made in the Senedd to raise awareness to this topic.
- Ends meeting.