Public, Australian AI

Submission to the Senate Inquiry on Adopting Artificial Intelligence (AI)

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percapita
FIGHTING INEQUALITY IN AUSTRALIA

The Centre of the Public Square
A Per Capita initiative

SUBMISSION TO THE SENATE INQUIRY ON ADOPTING ARTIFICIAL INTELLIGENCE (AI)

The Centre of the Public Square (CPS) at Per Capita thanks the Select Committee on Adopting Artificial Intelligence (AI) and welcomes the opportunity to provide a submission on this important inquiry.

Per Capita is an independent think tank, dedicated to fighting inequality in Australia. We work to build a new vision for Australia, based on fairness, shared prosperity, and social justice. The Centre of the Public Square works to create equity and fairness for Australians online by holding technology companies to account and building better models of citizen collaboration by imagining new methodologies and alternate technologies for the Australian public.

This submission outlines key risks and considerations for adopting AI in Australia, as well as recommendations for how to build AI that serves our democracy and our community.

Executive Summary

If AI is going to be as consequential and transformative as is being predicted, then we need to build AI infrastructure that is made in Australia, with a public good/not-for-profit imperative.

For over a decade, we've been content to allow private, foreign owned digital platforms to slowly infiltrate our public services, community forums and democratic processes. This has included critical areas such as news dissemination[1], information sharing during disasters[2], community consultations, public service provision[3] and even public trials[4].

Slowly, we transitioned our public communications infrastructure from publicly managed platforms to privately owned digital products and social media. Social media and digital platforms have created an atmosphere of distrust, with most Australians believing social media "causes more problems than it solves".[5]

The saturation of social media for our public services, and the distrust Australians have for it is worth noting for the development of AI. Already, the most dominant players in AI are shaping up to be only a small handful of overseas companies.[6] A report from the CSIRO which looks at AI foundation models found that the vast majority of AI models are from the US (73%), followed by China at 15%, with the rest from the EU and other countries.[7]

This is particularly concerning when we consider that AI will need to account for specifically local concerns and outputs – requiring local data sets, and local quality checkers. AI is meant to be reflective and representative of a particular region's culture and information, enough so that its recommendations are understood and tailored to that region's context. Why then, would we rely on foreign companies to decide this local context for us?

[1] Sora Park, Caroline Fisher et. al. *Digital News Report: Australia 2023*. Canberra: News and Media Research Centre, University of Canberra
[2] Stan Karanasios, *In disasters, people are abandoning official info for social media. Here's how to know what to trust*, 2022, University of Queensland
[3] Services Australia, *Social Media Services in Australia*, accessed April 2024, https://www.servicesaustralia.gov.au/social-media-services-australia?context=64107
[4] Federal Court of Australia, Federal Court of Australia Youtube channel, accessed April 2024, https://www.youtube.com/@FederalCourtAus/videos
[5] Roy Morgan Snap SMS survey, *'The Internet "solves more problems than it creates"; but Social Media "causes more problems than it solves".'* September 2022, https://www.roymorgan.com/findings/9056-social-media-internet-trust-distrust-september-2022
[6] Alex Hern, *AI race heats up as OpenAI, Google and Mistral release new models*, Guardian Australia, April 2024, https://www.theguardian.com/technology/2024/apr/10/ai-race-heats-up-as-openai-google-and-mistral-release-new-models?CMP=share_btn_url
[7] Stefan Hajkowicz, *Artificial intelligence foundation models: Industry enablement, productivity growth, policy lever and sovereign capability considerations for Australia*, 2024, CSIRO Canberra

In order to build AI that serves our local community and democratic needs, we recommend the following:

- **Tax tech companies appropriately**, **or develop special AI levies for tech companies**, as the companies who stand to benefit most from Australia's participation in AI, and given tech companies continue to find means of tax minimisation in Australia despite their large revenue streams locally.

- **Develop a Public AI Commission office to charge AI companies for use of any Australian data sets,** A special Public AI Commission could be set up to facilitate compensation or agreements between the AI providers and data holders/copyright owners, among other things. A body dedicated to public AI will ensure AI model owners and builders are using data appropriately, while also checking that AI practices are safe and are in the community's best interests.

- **Regulate that foundation models and LLMs (large language models) and datasets are to be open source and made publicly available, especially to universities and researchers,** so that LLMs and foundation models are publicly available, in particular to provide access to universities, government departments and researchers so that they're able to build non-for-profit or public service applications from these models.

- **Build explicitly not-for-profit, for good, community driven AI products via the public service and NFP sector,** it is clear that commercial interests are well represented in the burgeoning AI space. What's underrepresented is public, for-good applications and public service capabilities, who are at risk of being left behind with AI innovation and capability development.

Risks and Issues

The Australian public generally sees AI as having more risks than opportunities, with an Essential poll showing 45% of people believe it to carry more risk, 33% believing the risks and opportunities are about the same, and only 21% believing it to have more opportunities than risks.[8] The public believes it carries more risk even among the younger demographic, who are generally more tolerant and accepting of new technology.

One of the key risks posed by AI is that we're increasingly reliant on private, foreign companies for our critical infrastructure. As software eats the world, we're increasingly ceding control to the largest digital platforms for our national services – from data processing, to national security initiatives to climate and disaster planning, and more. The COVID pandemic alerted the country to the hazards of a global supply chain, and what an overreliance on foreign products and services meant locally, as we experienced critical mask and PPE (personal protective equipment) shortages[9], and delays with vaccines and vaccine distribution[10].

Australian academics and researchers are among some of the most recognised in the world. However, while our share of global research on AI is notable, our ability to convert that research

[8] Essential Media, *AI opportunities and risks Jan 2024*, accessed April 2024, https://essentialreport.com.au/questions/ai-opportunities-and-risks
[9] Medo Pourander, *More Transparency Needed in PPE Supply Chains*, August 2020, University of Melbourne, https://pursuit.unimelb.edu.au/articles/more-transparency-needed-in-ppe-supply-chains
[10] Deborah Gleeson, *Why is vaccine supply so limited*, March 2021, Latrobe University, https://www.latrobe.edu.au/news/articles/2021/opinion/why-is-vaccine-supply-so-limited

into products and services is much lower. This is a trend that has persisted for over 20 years.[11] This means that we rely on overseas technology for products and innovation despite strong research and insights in those same technologies.

During the Black Summer bushfires in 2020, when we needed real time satellite imagery to try and manage the speed and movement of the fires, the satellite system for this became subject to a 24-hour delay, rendering them "useless"[12]. The satellites also did not have the same level of detail on Australian areas as they did with the US, where the technology was developed and managed.

Another significant example of our overreliance on critical technology from overseas companies was a sensitive cloud service. After Microsoft pulled out of negotiations with no warning[13], it impacted several sensitive projects, including a data integration scheme which began to unravel after Microsoft's departure[14].

This vulnerability is worth remembering given the recent announcement of Microsoft's $5 billion investment in cloud services and artificial intelligence in Australia[15]. This announcement is reminiscent of Google's $1 billion pledge for Australian AI earlier in 2021[16].

While these investments are significant and welcomed by many, it's important to remember that Microsoft and Google are both one of the small handful of companies who are in an AI 'arms race'[17], trying to gain first mover advantage in the burgeoning commercial AI industry.

Even if we take these investments at face value, these companies' ultimate objectives remain competitive advantage. Gaining critical footholds and gatekeeper status, particularly with large governmental contracts and with service provision to countries and nation states, will place them in very strategically beneficial positions.

Social media of the last decade should have taught us a valuable lesson – that it is dangerous to overly rely on private platforms for democratic systems and processes[18]. We are still reeling from and dealing with social media harms such as increased disinformation, the weakening of journalism and news media, tribalism and polarisation of populations, the decrease of trust in government and democratic institutions and more[19]. These were the result of ceding many important functions – like news dissemination, public service communications and community consultations to private social media platforms.

[11] Stefan Hajkowicz, *Artificial intelligence foundation models: Industry enablement, productivity growth, policy lever and sovereign capability considerations for Australia*, 2024, CSIRO Canberra
[12] Linton Besser, *The insidious creep of US and Chinese technology has left a cold, hard reality for Australia*, Feb 2024, ABC Australia, https://www.abc.net.au/news/2024-02-20/australia-loss-relying-on-us-china-technology/103484844
[13] Joseph Brookes, *Microsoft walks away from Top Secret cloud negotiation* Jue 2022, InnovationAus, https://www.innovationaus.com/microsoft-walks-away-from-top-secret-cloud-negotiation/
[14] Linton Besser and Andrew Greene, *$100m Defence contract with KPMG rife with governance failures, review finds,* Dec 2023, ABC Australia, https://www.abc.net.au/news/2023-12-20/defence-data-contract-kmpg-weak-indefensible-review-finds/103247476
[15] Office of the Prime Minister of Australia, *Microsoft investment in Australian innovation*, October 2023, https://www.pm.gov.au/media/microsoft-investment-australian-innovation
[16] CSIRO, *Google Australia announces $1 billion Digital Future Initiative investing in Australian infrastructure, research and partnerships*, November 2021, CSIRO Canberra, https://www.csiro.au/en/news/all/news/2021/november/google-australia-announces-1-billion-digital-future-initiative
[17] Alex Hern, *AI race heats up as OpenAI, Google and Mistral release new models*, Guardian Australia, April 2024, https://www.theguardian.com/technology/2024/apr/10/ai-race-heats-up-as-openai-google-and-mistral-release-new-models?CMP=share_btn_url
[18] Jordan Guiao and Peter Lewis, *The Public Square Project*, 2021, The Australia Institute's Centre for Responsible Technology, https://australiainstitute.org.au/wp-content/uploads/2021/04/210428-public-square-paper-WEB.pdf
[19] United Nations, *Our Common Agenda Policy Brief 8 Information Integrity on Digital Platforms*, June 2023, United Nations, https://www.un.org/sites/un2.un.org/files/our-common-agenda-policy-brief-information-integrity-en.pdf

Regulatory capture

Currently the most popular concept for AI regulation is 'Responsible AI'. This has been welcomed by major AI players like Google[20], Microsoft[21] and Meta[22]. The concept of 'Responsible AI' overly anthropomorphises AI as an independent agent, capable of being accountable and self-monitoring. We know that this is not the case. Notwithstanding possible future versions, current AI systems are not able to self-reflect and apply concepts of 'responsibility' or 'accountability'.

Generalising around 'Responsible AI' fails to clarify who in vast context of AI systems should be accountable. There are those who initially developed AI like machine learning engineers, their managers and executives, those who license that software and adopt it for their own uses, those who deploy the technology, or those who use it. The complex value chain of AI systems involves several layers of potentially responsible persons.[23] Who then would be held accountable in the event of consequences for any harms or wrongdoing?

There is a danger that large technology companies use the concept of 'responsible AI' as a form of 'ethics washing', creating vague and unenforceable guidelines on their AI products, using it as a way of side-stepping more formalised, mandatory and designated legislation. Or promoting a façade of participating in 'ethical' or 'responsible' initiatives, while largely continuing with business-as-usual behaviour.[24]

There are other tactics, like drawing out negotiations while not slowing down on any product development. 'Ethics lobbying' such as advocating for a self-regulating regime rather than overt regulation[25], or 'ethics shopping' – cherry-picking regulations that serve their purpose[26], while advocating for deregulation for those that don't[27].

Further, the largest AI companies are more than happy to promote their efforts in the 'Responsible AI' space, all the while ignoring current pressing issues, around privacy, worker displacement and copyright.

Privacy will be critical to the development of AI in Australia. Currently the Privacy Act review has some important recommendations at play – including data minimisation, data limitations and a privacy tort for serious breaches[28]. Strong privacy protections around data will have a serious impact given AI requires massive amounts of data for their models to function.

AI is set to disrupt many industries, resulting in job losses or job displacements. While some are counting on AI also creating a host of new jobs, we need to develop programs and initiatives that account for these in a real, tangible way, not just as a hopeful premise. There should also be training programs that help transition potentially displaced workers to ready them for more AI related roles.

[20] Google AI, *Responsible AI practices*, accessed April 2024, https://ai.google/responsibility/responsible-ai-practices/
[21] Microsoft AI, *Empowering responsible AI practices*, accessed April 2024, https://www.microsoft.com/en-us/ai/responsible-ai
[22] Meta, *Facebook's five pillars of Responsible AI*, June 2021, https://ai.meta.com/blog/facebooks-five-pillars-of-responsible-ai/
[23] Qinghua Lu, Liming Zu et. al. *Responsible AI Pattern Catalogue: A Collection of best practices for AI governance and engineering,* September 2023, Data61 CSIRO Canberra
[24] Ori Freiman, *Making Sense of the Conceptual Nonsense 'Trustworthy AI'*, 2022, University of Toronto
[25] John Davidson, *Big tech urges government to go slow on AI rules,* August 2023, AFR, https://www.afr.com/technology/big-tech-urges-government-to-go-slow-on-ai-rules-20230828-p5dzzz
[26] Josh Taylor, *Google calls for relaxing of Australia's copyright laws so AI can mine websites for information*, April 2023, Guardian Australia, https://www.theguardian.com/technology/2023/apr/19/google-calls-for-relaxing-of-australias-copyright-laws-so-ai-can-mine-websites-for-information
[27] Madeline Garfinkle, *Google CEO Sudar Pichai says there is a need for governmental regulation of AI: 'There has to be consequences'*, April 2023, Entrepreneur, https://www.entrepreneur.com/business-news/google-ceo-on-ai-regulation-there-has-to-be-consequences/449820
[28] Australian Government Attorney-General's Department, *Privacy Act Review Report 2022*, https://www.ag.gov.au/sites/default/files/2023-02/privacy-act-review-report_0.pdf

One of the biggest battles around AI is around copyright[29] and compensation for the datasets used to train AI models[30]. Without a massive amount of data, AI models and their applications will be stunted, limited and not be very useful. The largest AI models were trained on a colossal amount of data – using news websites, videos, forums, millions of book manuscripts, and thousands of websites that are publicly available[31]. None of these original authors and copyright owners were compensated. None of these copyright owners were even notified or asked for consent on whether they were happy to have their original works to be used in this way. In fact, these companies are actively lobbying to weaken copyright laws[32] so that they can continue to harvest data and copyrighted original works without notice, consent or compensation to the original authors.

Recommendations

We propose several ways that a locally managed, public AI capability could be developed:

Tax tech companies appropriately

The largest tech companies like Google and Meta with aspirations for AI dominance here in Australia continue to apply tax minimisation strategies.

Despite generating over a billion dollars in revenue locally, tech giants only declare a small percentage of their income to be taxable in Australia. Microsoft only declared 6.4% and 6.7% of their income in Australia as taxable in the last 2 financial years, while Google declared only 18.2% and 21.5%, and Facebook 8.8% and 9.5%.[33]

Create special AI levies from the largest companies

If the tax minimisation strategies are not able to be addressed, we could at least create special levies that the largest AI players have to pay to help develop sovereign capability in Australia given the large amounts of revenue they already make in Australia, and the projected profits from AI technologies.

According to a report by the Tech Council of Australia, Australia's AI opportunity by 2030 is valued at between $45 billion for a 'slow-paced adoption' and $115 billion for a 'fast-paced adoption'.[34] Without local sovereign capability, this infrastructure will be supplied by private tech companies, who would stand to benefit most.

Develop a local Public AI Commission office to charge AI companies for use of any Australian datasets

[29] Megan Morrone, *Copyright law is AI's 2024 battlefield,* January 2024, Axios, https://www.axios.com/2024/01/02/copyright-law-violation-artificial-intelligence-courts
[30] Brian Fung, *Thousands of authors demand payment from AI companies for use of copyrighted works,* July 2023, CNN, https://edition.cnn.com/2023/07/19/tech/authors-demand-payment-ai/index.htmlsora
[31] Lauren Leffer, *Your personal information is probably being used to train Generative AI models*, October 2023, Scientific American, https://www.scientificamerican.com/article/your-personal-information-is-probably-being-used-to-train-generative-ai-models/
[32] Josh Taylor, *Google calls for relaxing of Australia's copyright laws so AI can mine websites for information*, April 2023, Guardian Australia, https://www.theguardian.com/technology/2023/apr/19/google-calls-for-relaxing-of-australias-copyright-laws-so-ai-can-mine-websites-for-information
[33] Rachel Clun, *Tech giants claiming as little as 5 per cent of their revenue as taxable*, March 2024, Sydney Morning Herald, https://www.smh.com.au/politics/federal/some-tech-giants-claim-as-little-as-5-per-cent-of-their-earnings-are-taxable-20240321-p5fe6g.html
34 Tech Council of Australia, *Australia's Generative AI opportunity* July 2023, Tech Council of Australia and Microsoft, https://techcouncil.com.au/wp-content/uploads/2023/07/230714-Australias-Gen-AI-Opportunity-Final-report-vF4.pdf

We must ensure there are bargaining arrangements for news and media, creative and artistic works, and population-wide statistical data which large AI models require. Given that AI technologies cannot function properly without the vast datasets that they've been trained on, compensation should be sought for the original, copyrighted works that existing AI technologies have already used from Australian owners.

A special Public AI Commission could be set up to facilitate compensation or agreements between the AI providers and data holders/copyright owners, among other things. A body dedicated to public AI will ensure AI model owners and builders are using data appropriately, and acknowledging and compensating data owners sufficiently, while also checking that AI practices are safe and are in the community's best interests.

Regulate that foundation models and LLMs (large language models) and datasets are to be open source and made publicly available, especially to universities and researchers

Many LLMs and foundation models that include Australia datasets have already been harvested and processed. There should be regulation in place to make sure these data sets and models are publicly available, in particular to universities, government departments and researchers so that they're able to build non-for-profit or public service applications from these models. While compensation for datasets facilitate a more commercial interaction between data owners and tech companies, an open-source model for LLMs could facilitate for-good, non-profit research applications that will benefit the whole community rather than individual rights holders.

Build explicitly not-for-profit, for good, community driven AI products via the public service and NFP sector

The Australian government and the Australian public service should develop AI technologies specifically for community and public use, that's not reliant on private platforms. We should also incentivise product innovation and AI product building in the NFP sector through special grants and initiatives. It is clear that commercial interests are well represented in the burgeoning AI space. What's underrepresented is public, for-good applications and public service capabilities, who are at risk of being left behind with AI innovation and capability development.

Conclusion

With AI set to transform our digital future, impacting many areas of society, it's not enough to allow the technology status quo to persist. If we take lessons from recent history with social media platforms, a structure that only has a few dominant companies will cause significant harms and inequality. Already we are starting to overly rely on foreign, private owned technologies for critical public services.

If we continue at this rate, Australia's critical infrastructure will ultimately be outside of our control. We must invest in sovereign capability in AI, with a public, for good imperative to service our community's needs ongoing. Taxing large technology companies appropriately, and generating special levies, or charging them for the datasets they use, could contribute towards developing a sovereign, public AI infrastructure in Australia.