

Submission by Consumer Policy Research Centre to Australian Human Rights Commission – Artificial Intelligence: governance and leadership White Paper

8 March 2019

By email: tech@humanrights.gov.au

Dear Mr. Santow,

The Consumer Policy Research Centre (CPRC) would like to thank you for the opportunity to respond to the Artificial Intelligence: governance and leadership White Paper (White Paper).

The CPRC is an independent consumer research organisation which undertakes research to inform policy reform and business practice change. Our goal is to achieve a fair outcome for all consumers. We conduct research across a range of consumer markets, with a focus on consumer decision-making, housing, consumer data and the online marketplace. We work collaboratively with academia, industry, government and the community sector.

Artificial Intelligence (AI) has potentially beneficial and harmful social and economic implications that are only beginning to be discussed. The harms, including discrimination, exclusion and data errors influencing outcomes, are not new. However, the velocity and volume of data exchange – driven by increasing computer power - means harms will occur at a size and scale not seen before. International bodies are recognising the importance of formulating policy responses to AI. In the US, the Subcommittee on Information Technology Committee on Oversight and Government Reform has urged a range of policy responses to AI, including a review of privacy laws, and working towards an agreed upon standard for the safety and security of AI products.¹ Australian policymakers are thus far lagging behind these developments. This White Paper is an important first step in formulating policy responses to AI, the use of algorithms and algorithm decision-making.

CPRC strongly supports a joined-up approach to policy development and regulation governing AI, this could include the establishment of an Australian Responsible Innovation Organisation (RIO) that promotes responsible innovation in AI and related technologies. CPRC has strongly urged governments to better fund independent non-profit and academic research undertaking work in data and AI. In 2018 CPRC established the Consumer Data Research Network (CDRN) of Australian academics working across the fields of privacy, competition law, consumer protection, machine-learning and AI to better support connection of research to key policy processes. This network is yet to receive any funding from the policy and regulatory bodies that in turn benefit from greater access to evidence-based consumer research into AI and data. Australia may also learn from existing models internationally, where entities have been established and supported to provide research, advice and ethical governance to AI developments.

¹ Hurd W and Kelly R. (September 2018). Risk of the Machines. Artificial Intelligence and its Growing Impact on U.S. Policy.

Data as the fuel for AI

The regulation of data is intertwined with ethical AI innovation. AI systems are dependent on data as an input. Any errors or biases present in data will influence AI outcomes.² At the same time the 'black box' nature of AI algorithms challenges identification and correction of discriminatory or exclusionary outcomes. It also makes it difficult to identify errors or bias in the datasets. Consequently, policy responses to encourage ethical AI developments should incorporate consideration of the data governance framework. For example, European data protection law is considered an integral part of its AI regulatory safeguards. The law affirms consumers rights around their data and places obligations – including transparency – on those entities processing that data.³

Australia does not have the data protections in place at present to support ethical AI developments. Data collection, use and sharing practices are opaque. Consumer research conducted on behalf of CPRC found that consumers do not fully understand the level of information being collected about them and that consumers want greater transparency and more control over how companies collect, use and share their data.⁴ The ability to promote responsible innovation in AI will be restricted if the arrangements governing its fuel – data – remain unclear. For example, consumers may find it difficult to trust the operations and outcomes of systems that depend on suspect data collection practices, limiting full take-up of services. As CPRC has advised in submissions to the ACCC Digital Platform Inquiry and the Consumer Data Right consultations, we would advocate for a full review of our competition, consumer protection and privacy frameworks to introduce economy-wide reforms to give consumers more protection and agency in the collection, sharing and use of their data. A modern data policy framework would provide a base on which to consider optimal policy approaches for regulating AI systems.

What should be the main goals of government regulation in the area of artificial intelligence?

Making AI systems intelligible and accountable is a key lever to minimise potential harms of AI while encouraging ethical innovation.⁵ Goals to support intelligibility and accountability could include:

- **Requiring Transparency.** Ensuring the algorithms within AI can be checked. Any discriminatory, exclusionary or otherwise socially negative outcomes for consumers contained in the system could be identified, assessed and removed or altered as necessary; and
- **Ensuring Trust.** Engendering an environment where consumers can trust AI processes – particularly given their data is the fuel for those processes – to support ethical AI innovations and ensure a functioning market.
- **Minimum protections.** Unsafe or risky data sharing and AI practices could be banned or restricted – for example the processing of minors data in the EU.

² Ibid. p.10

³ Zuiderveen Borgesius, F. (2018). Discrimination, artificial intelligence, and algorithmic decision-making. Council of Europe.pp.21

⁴ Nguyen, P. and Solomon, L. (2018) [Consumer data and the digital economy](#). CPRC. (p. 3-4)

⁵ Kleinberg, J., Ludwig, J., Mullainathan, S. and Sunstein, C. (5 February 2019) Discrimination in the age of algorithms.

Would there be significant economic and/or social value for Australia in establishing a Responsible Innovation Organisation?

A RIO or a joined up policy approach could create significant social value for Australia. Unintended negative consequences of AI, that exacerbate existing social inequities or prey on vulnerable consumers, are already here.⁶ A RIO that ensured algorithmic decision-making intelligible and accountable, would be of significant social value in identifying AI systems that were producing poor social outcomes. Transparent AI systems that allow the interrogation of its inputs, outputs and processes can potentially provide more information on possible discrimination than potentially other human-based processes.⁷

There is also significant economic value in a joined-up approach to policy or establishing a RIO. AI is driving the Fourth Industrial Revolution⁸ and will be an increasingly important part of the Australian economy. Approaches that encourage and support the development of ethical AI systems within Australia is likely to be of significant economic benefit. Promoting ethical AI systems will encourage trust in those systems that will drive further innovation.⁹

CPRC would caution that the real social and economic value of this organisation could only be fully realised if an economy-wide data governance framework has been established. As discussed above, regulating the operation of AI and other related technologies has limited value without the wider consideration of the treatment of its fuel – data.

If Australia has a Responsible Innovation Organisation:

(a) What should be its overarching vision and core aims

The overarching vision of the joined-up policy approach or RIO should be to encourage the development of ethical AI systems that are intelligible and accountable.

Its core aims could include:

- Encouraging development and deployment of ethical AI systems.
- Ensure transparency. The inputs, process, and outputs of algorithms and algorithm decision-making should be transparent and accountable.
- Improve consumer comprehension and agency. To ensure consumers are able to comprehend the use of their data in AI, and the consequences of the use that data, and have the autonomy to make informed consent to the use of that data in an AI.
- Establishing minimum protections. This may include safety standards or the restriction of certain types of data processing or decision-making practices.
- Monitoring for inequality. One of the key risks for the community is a growing divide between the technology haves and have-nots. Sufficient attention needs to be paid by policymakers as to growing inequality as a result of machine-learning capabilities, microtargeting or access to the technology itself.

⁶ For example, see O'Neill, C. (2016) *Weapons of Math Destruction*. Crown Books. United States.

⁷ Kleinberg, J., Ludwig, J., Mullainathan, S. and Sunstein, C. (5 February 2019) *Discrimination in the age of algorithms*. p.1-45

⁸ World Economic Forum. 2019. *Artificial Intelligence and Machine Learning*. Retrieved from:

<https://www.weforum.org/communities/artificial-intelligence-and-machine-learning>

⁹ Department for Digital, Culture, Media and Sport. 20 November 2018. *Consultation outcome. Centre for Data Ethics and Innovation Consultation*. Retrieved from:

<https://www.gov.uk/government/consultations/consultation-on-the-centre-for-data-ethics-and-innovation/centre-for-data-ethics-and-innovation-consultation#the-centres-role-and-objectives>

(b) What powers and functions should it have?

The powers and functions of a Responsible Innovation Organisation should support its core aims.

Functions of the RIO could include:

1. Assessment

Assessing the Ensuring intelligibility is a key concern. Opaque processes used to determine outcomes can reinforce existing structural inequities that are replicated in the inputs and processes that govern an algorithm's operation. The algorithmic decisions may result in an imbalance in gender, racial or other characteristics that is unfair.¹⁰ Assessment of the fairness and accuracy of algorithms and algorithmic decision-making could therefore be key function of the RIO.

2. Monitoring

It is vital to understand the effect of AI on consumers, society and the economy when designing policy or regulatory responses.¹¹ A monitoring function would provide valuable information on the AI market and the data collection, sharing and use arrangements that underpin AI developments.

CPRC established a Consumer Data Research Network (CDRN) in collaboration with CDRN advisory group members who have expertise across key disciplines relating to consumer data, including AI and machine learning. This network would be a valuable resource for the latest academic research across the technical, social and legal implications of AI. CPRC would be happy to connect the Responsible Innovation Organisation with relevant CDRN members and research.

3. Education

Ensuring the intelligibility of AI operations – for consumers, industry and government – will also entail an educational function:

- For consumers: consumer rights in terms of the use of their data, as well as information on AI operations and outcomes
- For industry: ethical responsibilities when development and deploying AI and the principles that can guide an assessment of whether an AI is 'fair'.
- For government and regulators: guide on responsible deployment of AI.

Providing guidance on ethical AI systems would also be a key function. The notion of ethical use of or 'fair' outcomes from AI systems can be subjective.¹² A set of principles to guide understanding of fair outcomes in AI for consumers, government and industry would be useful. For example, Centre for Data Ethics and Innovation in the UK will develop best practice guidance for ethical and innovative uses of data.¹³

¹⁰ Kleinberg, J., Ludwig, J., Mullainathan, S. and Sunstein, C. (5 February 2019) Discrimination in the age of algorithms. p.21

¹¹ Santos Rutschman, A. (19 October 2018). Congress takes first steps towards regulating artificial intelligence. The Conversation. Retrieved from: <https://theconversation.com/congress-takes-first-steps-toward-regulating-artificial-intelligence-104373>

¹² Spielkamp, M. Inspecting algorithms for bias. MIT Technology Review. Retrieved from: <https://www.technologyreview.com/s/607955/inspecting-algorithms-for-bias/>

¹³ Department for Digital, Culture, Media and Sport. 20 November 2018. Consultation outcome. Centre for Data Ethics and Innovation Consultation. Retrieved from:

The powers of the Organisation to support these functions could include:

1. Investigatory powers

The ability to investigate and assess the inputs, process and outputs of algorithms as requested would allow the function and outcomes of algorithms to be interrogated. This could be done on a confidential basis for commercially sensitive information. This would require the ability to request the following information on algorithmic design:

- The outcome to be predicted
- The inputs that are used by the algorithm and
- The training procedure used.¹⁴

Investigative powers could also be applied to assessing the allocation of different products and services to different segments of the community. In this sense, an organisation that can closely monitor the growing risk of inequality arising between those with access to machine-learning and AI and those without will be crucial to inform appropriate regulations and complementary social policy reforms.

2. Enforcement powers

Some form of enforcement – such as the ability to require changes to algorithms to ensure accuracy or unbiased outcomes – would encourage more ethical AI development. The appropriate enforcement would depend on the functions and activities of the RIO. We would also strongly recommend a thorough analysis of existing enforcement capabilities within regulatory bodies prior to a RIO adopting any new role in this regard.

We would welcome any opportunities for further discussions during the consultation process. If you have any questions or would like further information regarding this submission, please don't hesitate to contact Senior Research & Policy Officer, Brigid Richmond on 03 9639 7600 or brigid.richmond@cprc.org.au.

Yours sincerely,


Lauren Solomon

Chief Executive Officer

Consumer Policy Research Centre

<https://www.gov.uk/government/consultations/consultation-on-the-centre-for-data-ethics-and-innovation/centre-for-data-ethics-and-innovation-consultation#the-centres-role-and-objectives>

¹⁴Kleinberg, J., Ludwig, J., Mullainathan, S. and Sunstein, C. (5 February 2019) Discrimination in the age of algorithms. p. 31

