

Human Rights and Technology

Australian Human Rights Commission

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Introduction

We would like to thank the Australian Human Rights Commission for holding this inquiry on Human Rights and Technology, and for accepting our submission.

Emerging technologies and systems driven by artificial intelligence (AI) have the potential to revolutionise our lives in positive ways. Still, they also have the potential to exacerbate biases and social inequality. Oversight is clearly warranted for these new systems but also the data they require to operate.

This inquiry is timely and essential, as outlined in the Australian Human Rights Commission Discussion Paper on Human Rights and Technology, and we welcome the opportunity to make four recommendations. We suggest that the commissioning of an independent body and assessment of existing ethical frameworks should reflect the global ethical AI landscape and movement of AI-driven technologies across domestic and international borders. The independent body must be receptive to Australia's diverse society and actively engage with Aboriginal and Torres Strait Islander communities. We support the establishment of an independent body that is responsive to international data flows. Finally, we recommend that data protection should be part of the role of this independent body, and we suggest that this independent body should be guided by international consensus, treaties, and conventions where possible.

This submission was written by researchers situated in the [Centre for Policy Futures](#) and the [School of Biological Sciences](#) at the University of Queensland.

This submission represents the opinions of the contributing authors listed in this document. It does not necessarily represent an official position of The University of Queensland.

Summary and recommendations

The recommendations provided in this submission directly relate to our work as researchers, grappling with issues around digital human rights, responsible innovation, and the future of policy and legislation. Understanding the intersection between innovative technologies and human rights has never been more critical. In Australia, understanding the social impacts of new and emerging technologies is integral to facilitating economic, social and health benefits, without further entrenching inequality for vulnerable individuals. Understanding how the adoption of technology facilitates or limits the human rights of diverse populations is integral to creating institutions that support health equity, safety, and data security in Australia and internationally.

The application of new and emerging technologies is highly dependent on social acceptance and regulatory outcomes, and this requires public debates around ethics, regulation, and responsible innovation. This inquiry is particularly timely with the enactment of the Queensland *Human Rights Act 2019* in January 2020.

Recommendations outlined in this document are:

1. The commissioning of an independent body and assessment of existing ethical frameworks should reflect the global ethical AI landscape and be responsive to the movement of AI-driven technologies across domestic and international borders.
2. The independent body must reflect Australia's multicultural society, and actively engage with Aboriginal and Torres Strait Islander communities to ensure ethical and equitable deployment of new technology.
3. The Australian independent body should consider data protection as part of the ethical frameworks for new and emerging technologies.
4. The Australian independent body should use international consensus as a guiding principle in the evolving ethics of the deployment of new and emerging technologies.

Terms of Reference

Proposal 2: The Australian Government should commission an appropriate independent body to inquire into ethical frameworks for new and emerging technologies to:

- a) Access the efficacy of existing ethical frameworks in protecting and promoting human rights

In an increasingly globalised world, with increasingly rapid developments in technology, ethical frameworks must be continually re-assessed. We support the commissioning of an independent body for new and emerging technologies that is responsive to the movement of AI, digital technologies and data across domestic and international borders. This body must assess the efficacy of existing ethical frameworks that protect and promote human rights. We strongly recommend for the use of clear and concise definitions of ethical principles and values as they relate to AI-driven technologies.

A 2019 global survey identified 84 ethical frameworks for the development and deployment of AI-driven technologies.¹ Jobin *et al.* illustrated that of these 84 ethical AI frameworks “no single ethical principle appeared to be common to the entire corpus of documents, although there is an emerging convergence around the following principles: transparency, justice and fairness, non-maleficence, responsibility and privacy.”² Despite this convergence of principles, they further highlighted that there were “significant semantic and conceptual divergences” regarding the interpretation and definition of key principles and values between ethical AI frameworks.³

This lack of definitional clarity between ethical AI frameworks could have implications for the development of AI-driven technologies in Australia. An independent body that assesses the efficacy of ethical frameworks for new and emerging technologies needs to recognise the different ways in which commonly used ethical principles and values are interpreted and developed in the global landscape.

We also strongly recommend that the development of an independent body reflects Australia’s diverse population. An independent body needs to be inclusive and reflect Australia’s multicultural society, where Aboriginal peoples, Torres Strait Islander peoples, and Aboriginal and Torres Strait Islander peoples represent 2.8% of the population. Nearly half (49%) of Australians had either been born overseas (first generation Australian) or one or both parents had been born abroad (second generation Australian).⁴⁵ It is also integral that the Australian Government actively engages with Australian Indigenous peoples in the development and deployment of ethical frameworks for new and emerging technologies.

Practical strategies that can be implemented include:

- Being responsive to a globalised world: Any assessment of ethical AI frameworks should be sensitive to definitional divergences regarding the application of principles and values on a global scale.
- Individual and collective rights: The efficacy of existing ethical frameworks need to recognise both the individual and collective rights of Australia’s diverse society.

Recommendation: The commissioning of an independent body and assessment of existing ethical frameworks should reflect the global ethical AI landscape and be responsive to the movement of AI-driven technologies across domestic and international borders.

Recommendation: The independent body must reflect Australia’s multicultural society, and actively engage with Aboriginal and Torres Strait Islander communities to ensure ethical and equitable deployment of new technology.

Proposal 2: The Australian Government should commission an appropriate independent body to inquire into ethical frameworks for new and emerging technologies to:

- b) Identify opportunities to improve the operation of ethical frameworks, such as through consolidation or harmonisation of similar frameworks, and by giving special legal status to ethical frameworks that meet certain criteria

It is integral that the commissioning of an independent body on ethical frameworks for new and emerging technologies is transparent about how AI systems are used and for what specific purpose they will be deployed in Australia.⁶ This transparency will act as a buffer for the development of any splitting problems that may arise in the deployment of AI-driven technologies. A splitting problem being “the capacity for a technology to rapidly proliferate into new applications in ways that are hard to anticipate”.⁷

Genetic data provides a good example of unexpected uses of new technologies and highlights some of the issues with data governance as it is incorporated into AI-driven systems. AI systems feed on data, so regulating AI also means protecting data. Genetic data is increasingly being incorporated into AI-driven systems, in the reconstruction of faces from DNA left at a crime scene, for example. Genetic data is also highly personal, identifiable, predictive of health traits (including mental health), and is often generated overseas, highlighting the need for international protection and harmonisation of international regulations. The European General Data Protection Regulation (GDPR) does show how this kind of international data protection might work. Genetic data also has the unusual characteristic of revealing sensitive information not only about you but also your family members. We have argued for a “*Genetic Data Protection Act*” for these reasons, and we propose that these kinds of data protections be investigated in Australia as part of the independent body on ethical frameworks for new and emerging technologies.⁸

In the case of genetic data, an international consensus was reached by the International Bioethics Committee of UNESCO, which has created three Declarations: the Universal Declaration on Human Genome and Human Rights;⁹ the International Declaration on Human Genetic Data;¹⁰ and the Universal Declaration on Bioethics and Human Rights,¹¹ but these recommendations have not been enacted into local law. These declarations would be a great place from which to base Australian policy and regulation because there is already an international set of agreed principles. Other aspects of AI governance have less international consensus; however, we urge the independent body to integrate as much as possible with the international agreement – this should be a guiding principle for the new proposed body.

Practical strategies that can be implemented include:

- Transparency: An independent body needs to be transparent regarding the application and purpose of AI-driven technologies in Australia. For example, the creation of a website about the use and purpose of AI-driven technologies currently deployed in Australia.
- Verifiability: Trust by design, exploring ways to identify and recognise the specific ethical framework that was used to create and deploy a specific technology, including means to create a “seal of approval” regarding the ethical frameworks that underpin a specific technology, built into the algorithm in a way that is transparent and resistant to manipulation.

Recommendation: The Australian independent body should consider data protection as part of the ethical frameworks for new and emerging technologies.

Recommendation: The Australian independent body should use international consensus as a guiding principle in the evolving ethics of the deployment of new and emerging technologies.

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Endnotes

- ¹ Jobin, A., Lenca, M. and Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence*, vol 1, 389-399. doi:10.1038/s42256-019-0088-2
- ² Jobin, A., Lenca, M. and Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence*, vol 1, 389-399. doi:10.1038/s42256-019-0088-2. Page 391.
- ³ Jobin, A., Lenca, M. and Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence*, vol 1, 389-399. doi:10.1038/s42256-019-0088-2. Page 391.
- ⁴ Australian Bureau of Statistics (ABS). (2017). 2016 Census shows growing Aboriginal and Torres Strait Islander population. *Census: Aboriginal and Torres Strait Islander Population*. Accessed April 10, 2020.
<https://www.abs.gov.au/ausstats/abs@.nsf/MediaReleasesByCatalogue/02D50FAA9987D6B7CA25814800087E03>
- ⁵ Australian Bureau of Statistics (ABS). (2017). Census reveals a fast changing, culturally diverse nation. *2016 Census: Multicultural*. Accessed April 10, 2020.
<https://www.abs.gov.au/ausstats/abs@.nsf/lookup/Media%20Release3>
- ⁶ West, S.M., Whittaker, M. and Crawford, K. (2019). Discriminating Systems: Gender, Race and Power in AI. *AI Now Institute*. Retrieved from <https://ainowinstitute.org/discriminatingystems.html>
- ⁷ Hussey, K., Yarnold, J., McEwan, C., Maher, R., Henman, P., Radke, A., Curtis, C., Fidelman, P., Vickers, C. and Brolan, C. (2019). *Policy futures: regulating the new economy*. Brisbane: University of Queensland. Page 3.
- ⁸ Curtis, C, Hereward, J, Mangelsdorf, M, Hussey, K, and Devereux, J. (2019). Protecting trust in medical genetics in the new era of forensics. *Genetics in Medicine*, vol 21, no 7, 1483-1485. doi:10.1038/s41436-018-0396-7.
- ⁹ United Nations Educational, Scientific and Cultural Organization (UNESCO). (1997). Universal declaration on the human genome and human rights (revised draft). *Bulletin of Medical Ethics*, vol March, no 126, 9-11.
- ¹⁰ United Nations Educational, Scientific and Cultural Organization (UNESCO). (2003). *International Declaration on Human Genetic Data*. UNESCO: Paris, France.
- ¹¹ United Nations Educational, Scientific and Cultural Organization (UNESCO). (2005). *Universal Declaration on Bioethics and Human Rights*. UNESCO: Paris, France.