



Termination for Cultural Misalignment: Setting up Contract Terms to Ensure Community Well-Being in the Development of AI

Lorenn P. Ruster¹  · Gavin Brown¹

Received: 1 February 2020 / Accepted: 2 October 2020 / Published online: 12 October 2020

© Springer Nature Switzerland AG 2020

Abstract

A contractual mechanism to protect and amplify the interests of Indigenous community well-being in the development of Artificial Intelligence (AI) that affects them is investigated. Our proposal explores the need for a legal mechanism that recognizes the importance of cultural knowledge and ways of being and doing, acknowledging that these can be in tension with the (potentially myopic) goals of AI development. We outline the pre-conditions for such a legal mechanism to be possible, including some of the core components that could give rise to a termination for cultural misalignment, as well as the supporting types of governance structures and operating principles such a legal mechanism may engender. We discuss how the establishment of such a mechanism in contracts forces procurers of AI technology development services, and therefore developers of AI technology systems themselves, to adopt and enact principles by which they will work to protect and enable community well-being, thereby instigating important behavior change. Consideration is given to the types of knowledge, skills and training that would be required to implement such a mechanism successfully. This essay has a particular emphasis on working to ensure Indigenous community well-being in the development of AI, however there are also applications for other communities.

Keywords Community well-being · Indigenous · Contracts · Governance · Collaboration · AI

✉ Lorenn P. Ruster
lorenn.p.ruster@pwc.com

Gavin Brown
gavin.brown@pwc.com

¹ PricewaterhouseCoopers Indigenous Consulting, Sydney, Australia

Artificial Intelligence (AI) has the potential to enable community well-being at scale (Walsh et al. 2019). Equally it has the potential to threaten community well-being, including the erosion of self-determination (Covles and Floridi 2018). The development and application of AI risks further embedding existing structures of inequality and further entrenching systems of disadvantage (Crawford et al. 2019). Populations considered vulnerable such as Indigenous populations, are most at risk of experiencing the negative impacts of AI relating to bias, stigma and accountabilities, both now and in the future (Walter and Kukutai 2018). There are many examples where AI is already threatening the well-being of Indigenous populations around the world through misrepresentation and bias (Oak 2016). Examples of negative consequences include policing algorithms being more likely to target areas where minorities are located or algorithms which predict higher rates of recidivism in Indigenous or African American offenders (Walter and Kukutai 2018).

For the purposes of this paper, Artificial Intelligence (AI) is considered in the context of technology development processes. Wang (2019) would use the term *Capability-AI* - a way of explaining AI for people interested in the potential applications of AI and who define the intelligence of a system by its problem-solving capability. In some cases, the development of AI can be viewed as a modern method of colonization (Kwet 2019). This argument stems from the centralizing and monopolizing characteristics of AI development as well as the lack of diversity in gender and ethnicity among AI developers who create technologies which perpetuate structural injustices which exist because of colonization (Crawford et al. 2019). Data colonialism refers to the ways in which data is extracted by large multinational corporations through surveillance and other means, resulting in the concentration of economic power (Kwet 2019). In the same way that corporations such as the Dutch East India Company undertook a conquest in Southern Africa from the 1600s onwards, seizing land, diamonds and gold and dominating the economy without consent of traditional owners (Kwet 2019), data is a resource exploited by multinational corporations. Data colonialization can be used as a term to describe the extractive and exploitative nature of the relationship between the developers of AI and wider society (Crawford et al. 2019). Ultimately, it encompasses the notion that data is extracted through means that do not conform with notions of free, prior or informed consent that are embedded in the *United Nations Declaration on the Rights of Indigenous Peoples* (2007) (referred to as the *Declaration* 2007).

Our proposal is about understanding and aligning views, values and priorities for technology development projects. We suggest that understanding and aligning views will provide for a shared understanding of the delivery environment and prioritize Indigenous community well-being. We envision scenario planning for particular types of situations that may arise, in order to understand the tensions that may exist between the different parties' interests and values. We believe such a process makes apparent the invisible drivers of behaviors and decision-making of the parties. As an output of this interaction, we suggest that a set of common operating principles are articulated and agreed upon. We also recommend that there is a strong grounding in the principles of The *Declaration* and that the principles of the *Declaration* (2007) are embedded in the common operating principles. We believe that articulating such common operating principles will enable each party to assess its ability to uphold common principles and provide an initial framing for accountability. While this essay uses the term *Indigenous*

in specific reference to Aboriginal and Torres Strait Islander peoples of Australia, our proposal also has a broader applicability to other Indigenous and non-Indigenous populations around the world.

A tension exists between the worldviews of Indigenous peoples and government reporting frameworks when it comes to well-being (Yap and Yu 2016a). A variety of Indigenous-led movements for data sovereignty and self-determination have emerged in an attempt to resist harms caused by data abstraction (Crawford et al. 2019). Indigenous data sovereignty is generally defined as “the right of a nation to govern the collection, ownership, and application of its own data” (Native Nations Institute 2019) and can be achieved by leveraging instruments such as the *Declaration* (2007). Indigenous data sovereignty means that Indigenous peoples would have the power and authority to make rules and decision-making around collection, interpretation, validation, ownership, access and use of data and in doing so, exert self-determination over the narratives told about themselves and their communities (Smith 2016). Data sovereignty is an equity-building practice that is in stark contrast to colonial practices that seek to standardize and simplify Indigenous populations into Western categorizations reflecting Western values (Smith 2016). An example of this would be attempts to simplify Indigenous family structures which include kin relationships into a Western nuclear family structure (Smith 2016). Well-being indicators need to be based on Indigenous measures rather than western values for self-determination to be upheld (Yap and Yu 2016a).

One way to manage the potential threat of AI on the well-being of Indigenous communities is to ensure that AI development and implementation upholds and centers on the *Declaration* (2007). In particular, the key principles which underpin the *Declaration* (2007), such as self-determination, cultural rights, ownership, and free prior and informed consent, are significant considerations for the implementation of AI in Indigenous communities. These considerations are important both in relation to the way in which the design of AI is conceptualized as well as in assessing its impacts once deployed, for example through human rights impact assessments. Co-design and participatory methods, as well as prioritizing mutual capability building, are practical ways to ensure the principles enshrined in the *Declaration* (2007) are actioned (Yap and Yu 2016a).

Governments around the world such as New Zealand (Graham-McLay 2019) and the United Kingdom via the *Wellbeing for Future Generations (Wales) Act* (2015) as well as in other countries (Exton and Shinwell 2018), are increasingly focused on moving away from gross domestic product (GDP) as a measure of societal progress and moving towards measurements of well-being. The State Government of New South Wales in Australia is committed to utilizing evidence-based indicators of well-being to measure the impact of its services on Australian citizens (New South Wales Department of Communities and Justice, Family and Community Services Insights Analysis and Research (FACSIAR), 2019). New Zealand recently expressed their national budget around the concept of well-being (Government of New Zealand 2019).

As governments around the world look for ways to facilitate the well-being of their citizens, a key objective is to get closer to citizens in order to develop better-informed and better-targeted policies. One way in which this is often achieved is through processes where citizens and public servants co-design a future policy, program or service. For this increasingly common practice of co-creation to yield the desired

results, technology will be required in order to provide relevant and timely data to participants. AI is one mechanism by which governments might seek to leverage technology to accelerate co-design efforts.

In our view, a data-driven, highly collaborative practice is likely to require an increasing number of complex partnerships involving governments and technology developers in order to build bridges between community needs, government or third party-held data, and solutioning. We propose that it is important in this context to ensure the principles of the *Declaration* (2007) are upheld. This essay addresses partnerships involving multiple stakeholders with different motivations and worldviews.

The principles of the *Declaration* (2007) need to be at the forefront of AI development and deployment in Indigenous communities. Adopting and embedding the principles of the *Declaration* (2007) may lead to issues of cultural misalignment as different parties navigate their conflicting priorities and obligations. We posit the introduction of a legal mechanism that seeks to educate both the procurers of services (for example government) and the technology developers about the importance of the *Declaration's* (2007) principles. The legal mechanism proposed enables termination of a contract for reasons of 'cultural misalignment'.

If cultural misalignment is contemplated during the drafting of a contract, it is possible that the contract terms can be aligned to the *Declaration* (2007). This could include for example references to the role and importance of the cultural knowledge and intellectual property of Indigenous peoples, and the need for well-being to be at the center of decision-making. In order for the termination for cultural misalignment mechanism to be effective, we propose a number of necessary conditions within a partnership. We also propose a range of operational governance considerations. The essay also considers the types of knowledge, skills and training that would be required to implement such a mechanism successfully. Finally, two hypothetical scenarios are outlined with two different pathways available, one with and one without a termination for cultural misalignment, to demonstrate the potential application and value of a legal mechanism that enables termination for cultural misalignment.

Existing Contract Termination Mechanisms in Australian Contracts

Commercial contracts in Australian law can contain a range of termination clauses, including termination for default (the right to terminate if a party does not perform the contract in accordance with their obligations under the contract), and termination for convenience (the right for a party to terminate at any time, providing notice and acting in good faith) (Australian Government Solicitor (AGS), 2018). Generally, there is also provision for *force majeure* clauses that permit termination due to an event beyond control of the contract parties, for example a natural disaster (AGS 2018). In addition, rights to terminate are covered under general law (AGS 2018).

Contract termination refers to a premature end of a contract (AGS 2018). There are a variety of different situations in which a contract termination can unfold. A right to terminate under general law may occur under four main circumstances. Firstly, a right to terminate under general law may occur when there is a breach of an essential term (AGS 2018). In this circumstance, the other party can usually terminate the contract and

claim damages. Secondly, a right to terminate under general law unfolds when there is repudiation (AGS 2018). Repudiation is when one party renounces its obligation by acting as if it is no longer bound by the contract (or fulfils the contract in a way that is inconsistent with their contractual obligations). Thirdly, a right to terminate under general law may arise when the contract is frustrated (AGS 2018). A frustrating event could include the outbreak of war or the compulsory use of a property by a government. Finally, a right to terminate under general law can be induced by fraud (AGS 2018). In addition to the circumstances discussed above under general law, common law can also invoke a contract termination under the doctrine of executive necessity (AGS 2018). Termination due to executive necessity gives the government the option to terminate the contract because it deems it would be in the public interest to do so (AGS 2018).

Termination clauses can result in power dynamics in a partnership by enabling or restricting behaviors (Courtney 2019). For example, some parties in a contractual relationship may be able to terminate for convenience whilst others cannot. Usually rights to termination for convenience are associated with government contracts. In Australia, governmental bodies entering into a contract must use the standard terms in the Commonwealth Contracting Suite (Australian Government Department of Finance 2020). The government entity has a right to terminate for convenience clause whereas the supplier (for example a technology developer), may not have an equivalent clause.

In our view, there is a need for mechanisms that better reflect Indigenous community aspirations and worldviews in ways that uphold the *Declaration* (2007) principles of self-determination, participation, cultural rights, land rights, ownership, control and free prior and informed consent. Mechanisms which reflect Indigenous aspirations and worldviews in turn impact Indigenous well-being (Yap and Yu 2016b).

Termination for Cultural Misalignment

Accountability mechanisms for upholding the *Declaration* (2007) may be informal and are generally not considered within typical commercial contract conditions because the *Declaration* (2007) is not binding in international law (Australian Government Attorney General's Department, n.d.). Embedding principles of the *Declaration* (2007) in an organization's code of conduct, or specific policies such as a copyright policy, or an Indigenous Cultural and Intellectual Property Policy (ICIP), in part guides the way toward protecting Indigenous community well-being, but often does not extend to a formal contractual mechanism that holds all parties accountable (Kearney et al. 2018). Further, data captured for the purposes of analyzing or assessing Indigenous well-being is often based on the mistaken premise that Indigenous people adopt the values and practices of mainstream western society (Yap and Yu 2016a). A termination for cultural misalignment would be a legal mechanism that allowed for termination, thus providing a formal contractual lever for seeking to enforce an Indigenous view of well-being. It is proposed that this is achieved by aligning the termination clause to the principles of the *Declaration* (2007).

Pre-Conditions We suggest that a number of pre-conditions are necessary for termination for cultural misalignment clauses in contracts between governments and other parties. First, due diligence of the parties involved in the development of AI would be required. An

understanding of the interests of the different players in the partnership is needed in order to clarify prioritization of interests and understand where parties' interests may be at odds, and where conflicting views threaten Indigenous community well-being.

Second, understanding the relative levels of cultural competency of the partners is important (Bainbridge et al. 2015). Cultural competency refers to an understanding of Indigenous history and cultures and the effect history and culture has on the circumstances and worldviews of Indigenous peoples today. Parties holding mature cultural competency capability will need to make an assessment of the authenticity of the commitment and growth mindset of the other parties before continuing in the partnership. We propose that the parties with relatively more mature cultural competency capability consider embedding capacity building of the other parties as part of the contracted activities.

Governance Considerations Governance considerations are important for making sound decisions, aligned to a set of desired objectives (Australian Indigenous Governance Institute, n.d.). In order to ensure that the rights of Indigenous peoples are protected within AI technology development processes, we propose that governance mechanisms need to allow for self-determination in practice (Bauman et al. 2015). For this reason, a governance mechanism that enables Indigenous communities to be heard and deeply considered as part of the decision-making process is needed. Ideally, we propose that a culturally competent organization is involved in contract negotiations and ensures all parties are adequately represented in the governance of a contractual arrangement. If this is not possible, determination of who plays a role in the governance mechanism should be conducted by parties who have a deep understanding and care for Indigenous cultural dynamics.

One way to do this is through the establishment of a Cultural Advisory Committee. In establishing such a Cultural Advisory Committee or similar group, we suggest the use of following guiding questions and criteria:

- Who needs to be a part of this Cultural Advisory Committee? Parties included should be people from communities that will be impacted, cultural leadership, elder groups and Indigenous peoples with expertise in technology development, AI and well-being.
- What are the terms of reference of the Cultural Advisory Committee? This should include elements regarding how the group will work, how long people will serve on the group, what conflicts (real or perceived) need to be managed, what the rhythms and machinations of the group are and the decisions over which the group is permitted to have control and influence.
- What happens if the advice of the Cultural Advisory Committee is not adhered to? A contractual termination for cultural misalignment clause could provide one accountability avenue.

Example Clause: Termination for Cultural Misalignment

We propose the following model clause for termination for cultural misalignment. It could be used within a contract's termination clauses as an additional route for

termination. It also serves as a point of conversation between the parties to ensure that the principles of the *Declaration* (2007) are understood in the context of the project.

“The Parties have entered into this contract for the purposes outlined in <contract schedule>. Each party has agreed to enter into this contract in good faith, and pursuant to the terms outlined in the Recitals to this contract, including consideration of the key principles of the United Nations Declaration of the Rights of Indigenous Peoples (2007) (‘the Declaration’). Either party may terminate this contract by notice in writing, should they have evidence of cultural misalignment to the agreed values and operating principles of this agreement, including actions which could reasonably lead to adverse outcomes for community well-being.” (This clause would be followed by operational clauses stating practical actions for this termination.)

Hypothetical Scenarios

In this section we provide two hypothetical scenarios that examine contractual agreements for the development of an AI technology project. The first scenario (Pathway One: Business-as-usual contract) is an example of a standard contract that does not attend to cultural misalignment, while the second scenario (Pathway Two: Contract that embeds termination for cultural misalignment) proposes integrating a legal mechanism and associated governance mechanisms that enable a termination for cultural misalignment. These scenarios are intended to illustrate how a termination for cultural misalignment clause might be used to protect Indigenous community well-being.

Contract Context A well-being focused chatbot is developed to tackle behavior change in an Indigenous community with regard to smoking. A government-funded chatbot for smoking cessation was implemented in a non-Indigenous community in a different part of Australia with success. The same governmental department would like to initiate a similar program for Indigenous populations in a region where smoking is five times the national average.

In order to tackle designing and implementing an Indigenous adaptation of the program, a contract between the government department and a consulting company is executed. The consultancy procures technology development expertise via a subcontract. There is a partnership between the government, the consultant, and a subcontractor. The consultant acts as a cultural broker and co-designer. The subcontractor is an AI technology development company.

A core reason for the consulting company’s success in the tendering process is its proposed depth of understanding of the factors for successful co-design with Indigenous communities. Their understanding of these factors allows for long term sustainable outcomes to be achieved. Underpinning the approach detailed in the consulting company’s proposal is a strong understanding of the *United Nations Declaration on the Rights of Indigenous Peoples* (2007). The consulting company is also guided by an Indigenous Cultural Intellectual Property Policy, majority Indigenous staff on its projects and an approach that is highly influenced by Indigenous methodologies.

Indigenous Methodologies Indigenous methodologies are informed by Indigenous worldviews. Martin and Mirraboopa (2003) share an example of how the worldview of the Quandamooka people of Queensland, Australia can be framed as “Ways of Knowing, Ways of Being and Ways of Doing”. Indigenous worldviews are based on a relational ontology (Martin and Mirraboopa 2003). Far broader than a methodology or approach, a relational ontology is centered around the relationships between entities, as much as it is about the entities themselves (Martin and Mirraboopa 2003).

Ways of Knowing establishes what is known about different entities through Aboriginal law and is “learned and reproduced through processes of: listening, sensing, viewing, reviewing, reading, watching, waiting, observing, exchanging, sharing, conceptualizing, assessing, modelling, engaging and applying” (Martin and Mirraboopa 2003, p. 209). *Ways of Knowing* incorporate contexts and processes: there is a recognition that certain information is taught and learned at certain times, in certain contexts and in certain ways to certain people, thus the interconnection of relationships is crucial. *Ways of Being* evolve as contexts change; for example, relations change amongst people, places, flora, fauna, astronomy, the weather, and other bodies, at particular times.

As Martin and Mirraboopa (2003, p. 210) note, “Ways of Doing are a synthesis and an articulation of our Ways of Knowing and Ways of Being”. *Ways of Doing* refers to how, based on context and the relationships between entities, people are expected to go about the tasks for which they are responsible. *Ways of Doing* go some way to defining individual, family, kin and group identities. From one perspective this might be considered a circular way of operating – in that people may, through having proven themselves through their *Ways of Knowing, Being and Doing*, ‘graduate’ to being afforded more secret or sacred knowledge, which in turn provides them with greater insight into these *Ways*. The role of the individual is then to use this knowledge for the betterment of their community – both now, and into the future (through their own actions, and through the teaching of worthy future generations).

Yunkaporta (2019, p.149) also highlights the importance of relationships in Aboriginal worldviews, specifying that no exchange or dialogue is possible until the protocols of establishing relationships have taken place:

Who are you? Where are you from? Where are you going? What is your true purpose here? Where does the knowledge you carry come from and who shared it with you? What are the applications and potential impacts of this knowledge on this place? What impacts has it had on other places? What other knowledge is it related to? Who are you to be saying these things?

Yunkaporta refers to such notions of relationships and connectedness in Aboriginal worldviews as *kinship-mind*. He also introduces notions of *story-mind* – which is about the role of narrative and memorization in knowledge transmission, *dreaming-mind* – working with knowledge through metaphors, *ancestor-mind* – connecting with a timeless state of mind, and *pattern-mind* – seeing entire systems and the patterns within them (Yunkaporta 2019).

Relationality and kinship are also present in Indigenous worldviews of countries outside Australia, such as Canada. In *n hiyaw nisitohtamowin* (Cree understanding) “all things have a place in our circle of kinship or *wahkohtowin*” (Lewis et al. 2018, p. 7).

Lewis et al. (2018) also discuss the possibility of accepting AI as kin and including AI in cultural processes and thereby highlight how important the cultural values and assumptions of developers become in this context.

The consulting company inherently draws upon these principles and Indigenous worldviews to embody a relationships-first perspective to consulting to build deep trust, a highly collaborative, consensus-building approach, as well as a high emphasis on context-specificity which influences design and stakeholder engagement. There is also a Cultural Advisory Committee established as part of the proposed governance arrangements.

Pathway One: Business-as-Usual Contract The contract between the consulting company and the government is standard for government practice and contains a termination for convenience clause for government use only. A *force majeure* standard clause based on common law is included to account for an event beyond the control of the contracted parties that causes at least one party to be unable to perform their contractual obligations (AGS 2018). Examples of such events include natural disasters.

The contract is executed without common operating principles. It is assumed by the consulting company that the principles and methodology set out within the proposal will be adhered to throughout the contract life. The methodology and principles outlined in the proposal are chosen in order to uphold Indigenous community well-being. However, Indigenous human rights are slowly eroded by conflicting priorities of the government party. A lack of cultural understanding by the government customer regarding timeframes for meaningful engagement and progress compounds the negative impact on community well-being.

Contractual governance mechanisms are poorly established, with accountability pathways unknown and dysfunctional. The Cultural Advisory Committee that is established is a tokenistic gesture and is not within the power of the consulting company to influence or change.

Eventually the power exerted by the government's priorities means that the methodology stipulated cannot be carried out. Consequently, upholding the tenets of the *Declaration* (2007) cannot be effected. The contractual obligations are potentially achievable, but only in a manner that harms community well-being.

Mediation is required. The consulting company is at risk of being served with a termination and is potentially liable for damages. The consulting company wishes to end the contract in order to ensure the best possible outcomes for Indigenous Australians and protect their well-being. The contract does not include a means for the consulting company to act in the best interests of the Indigenous community and in alignment with their values. There are also insufficient governance mechanisms to adequately address the challenges of fulfilling the contract in a way that protects Indigenous well-being.

Resolving the challenges to fulfilling the contract via non-contractual routes are attempted but prove futile, as there is not a common set of principles to hold each party accountable and common cultural competency to give rise to the challenge at hand is lacking. The consulting company does not have the right to terminate for convenience and other contract termination routes are not viable. Eventually the governmental party decides to terminate for convenience, after mutual agreement between the two parties.

Indigenous communities have been engaged in part of the process, with expectations raised and then disappointed. The AI technology is only partially developed and all project materials such as research, frameworks, partially developed models and user interface designs are given back to the government per the contractual obligations. The initiative is never implemented, and the potential benefits to communities never realized.

Pathway Two: Contract that Embeds Termination for Cultural Misalignment The government and consulting company agree to include a termination for cultural misalignment clause which either party can trigger.

Inclusion of this clause prompts conversation between the parties. There is a recognition that, whilst the contract is between the government and the consulting company, there is a range of stakeholders involved, including the technology developer who will be a subcontractor to the consulting company. There is also a recognition of the importance of the Cultural Advisory Committee. All of these parties collectively design a set of principles for their work together. A discussion and understanding of the importance of the tenets of the *Declaration (2007)* ensues and principles of the *Declaration (2007)* are included as common principles for the project. Cultural competency training is included within the contract activities to adequately prepare the mindsets of all parties involved wherever there are identified gaps. Community well-being is a central tenet for project operations and delivery.

The terms of reference of the Cultural Advisory Committee are co-designed by government and the consulting company. The consulting company's advice regarding the makeup of the governance committee is given equal weight to the government suggestions. Clear escalation pathways and boundaries of decision-making for this group are documented and reviewed on a regular basis. This takes significant time and energy upfront to establish.

When an important, difficult or potentially contentious decision needs to be made, the common principles serve as a sense-check and decisions are adjusted accordingly. All parties take the decision-making processes and their adherence to the common principles seriously as any deviation from these principles that cannot be resolved by the parties could be grounds for termination for cultural misalignment.

Difficult decision-making occurs within the project. This is expected by all parties involved and is respectfully tackled upholding the common principles and thereby ensuring Indigenous community well-being is at the center. The initiative undertakes many changes to align with community needs. An outcomes focus remains at the center of the work undertaken by all parties. After much hard work the initiative is implemented in the community. It is based on the understanding that a human rights impact assessment is carried out periodically to ensure that the *Declaration (2007)* is upheld in practice as well as in design. The termination for cultural misalignment is never triggered due to the upfront planning, guiding principles for the work, and the governance structures in place.

Discussion

The two hypothetical scenarios serve to highlight how termination clauses could come into effect in partnerships today. The two pathways described are employed to

emphasize different approaches and their implications. In the case of Pathway One, the balance of power is overwhelmingly within the government's control, which means that should something go wrong or competing priorities overtake the government's agenda, the well-being of the Indigenous community could be at risk. To compound this, the consulting company could also become complicit in an agenda that they know does not uphold the *Declaration* (2007). In this situation, the consulting company faces a dilemma where its legal obligations under the contract and its obligations to community well-being and cultural knowledge are in conflict. With little formal power of its own to change the course of the project trajectory, a major discrepancy in approach is difficult to adequately address. In this situation, the best-case scenario is that the government party triggers its termination for convenience clause. From a community perspective, expectations are raised and then disappointed as the partnership waxes and wanes and eventually dissolves, further entrenching a sense of mistrust in government-funded services to Indigenous communities.

A way to level the power dynamics and also relieve the tension where there is a conflict of principles is outlined in Pathway Two, where a termination for cultural misalignment is included within the contract. Its inclusion in the contract signals a different type of conversation upfront between the parties, and enables a depth of understanding regarding cultural competency of the parties. In doing so, the value of the consulting party's cultural knowledge is recognized in a deeper way. The conversations reveal a level of common understanding that is needed in order for the relative priorities of each party to be met. This sets a very different tone upfront and minimizes the risk of the partnership being set up on terms that are unshared, largely unbalanced between the parties or misunderstood. Throughout the implementation, the consulting party has a reference point that can be raised with the government supplier should there be any deviation from the principles-based approach to upholding community well-being. If there is a major discrepancy, the consulting party can terminate the agreement for cultural misalignment. The likelihood of this being required is reduced due to the improved communication between all parties involved.

Conclusion

Technology advancements, including through AI, have positive life-changing potential for communities around the world. Too often however, development occurs that is too fixated on technological advancement for its own sake, or overly bureaucratic so that AI projects do not remain mindful of the intended outcomes for communities. This is despite the positive intentions of both technologists, and procurers of AI technology development services.

As explored in this essay, there is an opportunity to begin to embed the concept of Indigenous community well-being into AI technology projects, by holding parties accountable to principles contained within the *United Nations Declaration on the Rights of Indigenous Peoples* (2007) such as self-determination, cultural rights, ownership, and free prior and informed consent. At the heart of this approach is a legal mechanism that enables termination for cultural misalignment and an associated governance mechanism, the Cultural Advisory Committee. Although this approach is relevant for all technology development projects, it has a particular relevance to the

stewardship of the development of complex AI technologies with a high potential for harming well-being.

To explore the potential benefits of a legal mechanism that enables termination for cultural misalignment, a situation is presented where a government department enters into a contract with a consulting company (and their technology development sub-contractors) in order to design and implement a well-being focused chatbot to tackle behavior change in an Indigenous community regarding smoking cessation. The consulting company is driven by Indigenous methodologies that value upholding the *Declaration (2007)* in practice and are focused on context, trusted relationships and collaborative and consensus-building decision-making.

Two hypothetical scenarios are presented to illustrate how the contractual terms could be set up between the government department and the consulting company. The first scenario (Pathway One: Business-as-usual contract) shares an example of a standard contract that does not attend to cultural misalignment, while the second scenario (Pathway Two: Contract that embeds termination for cultural misalignment) proposes integrating a legal mechanism and associated governance mechanisms such as a Cultural Advisory Committee that enable a termination for cultural misalignment.

The implications of these pathways are explored. In Pathway One: Business-as-usual contract, the contract is executed without common operating principles and without sufficient governance. When the timelines stipulated in the contract come into conflict with meaningful engagement and upholding the tenets of the consulting company's methodology, based on principles of self-determination, cultural rights, ownership, and free prior and informed consent of the *Declaration (2007)*, the nature of the contract and its governance mechanisms expose the challenges of fulfilling the contract in a way that protects Indigenous well-being. This scenario ends with a termination for convenience by the government party with expectations raised and disappointed in the Indigenous communities it seeks to serve.

Pathway Two: Contract that embeds termination for Cultural misalignment, presents an alternative way forward. Through the inclusion of a termination for cultural misalignment contract clause, different types of conversations between the parties are triggered upfront which enables a collectively-designed set of principles for their work together. A Cultural Advisory Committee is also co-designed and given greater power in this pathway, which proves important in embedding community well-being in the actions and decisions of the project. These factors allow an outcomes focus and enable the consulting company's intention to apply Indigenous methodologies to the project. Indigenous methodologies extend to Indigenous *Ways of Knowing, Ways of Being, and Ways of Doing* – which include crucial precepts such as respect, collective good, and reciprocity. In this scenario, the termination does not need to be triggered and a chatbot that upholds the *Declaration (2007)* is delivered.

It is hypothesized that the presence of a termination for cultural misalignment clause prompts different types of conversations between parties. These conversations promote the discussion of potential implications and harm to Indigenous well-being, which help to aid the government's practical understanding of this different worldview, and in doing so, increases their cultural competence or understanding. This precipitates a more nuanced consideration of Indigenous well-being in the framing of the *Declaration's (2007)* principles, and more open communication channels that minimize the risk that project changes will have adverse impacts on community well-being, as the

government party is now more aware of, and has agreed to, operating in a way that is mindful of these conditions.

It is possible that other mechanisms could achieve a similar result, for example a focus on cultural competency capacity building of all parties without a legal mechanism prompt could have flow-on impacts on the genesis and implementation of future AI projects. In this context, cultural competency could be interpreted as taking the time to properly consider the adverse ramifications of development on any under-represented or marginalized groups. A further hypothetical scenario where a legal mechanism is replaced by deep capacity building in cultural competency could also be considered. Challenges with this approach include that building cultural competency can be a long journey that may not be taken with sufficient seriousness without a legal mechanism or other governance mechanisms to hold parties to account. Further, it is often unclear who would pay for such capacity building. In addition, personnel changes are common, particularly within government contracting entities, and consequently cultural competency can also be changing. Nevertheless, cultural competency capacity building could serve as another mechanism for maximizing the potential benefits and minimizing the potential harms of AI technology on the well-being of Indigenous communities. The relationship between cultural competency capacity and policy-making for long-term, sustained well-being of Indigenous communities would be a promising future exploration.

This essay, with its two hypothetical scenarios, shows that with aligned values and operating principles, and clear contractual mechanisms in place, there are opportunities to improve the stewardship of AI development for the well-being and betterment of Indigenous communities.

Authors' Contributions Not applicable.

Funding Not applicable.

Availability of Data and Material Not applicable.

Compliance with Ethical Standards

Conflicts of Interest/Competing Interests On behalf of all authors, the corresponding author states that there is no conflict of interest. Gavin Brown and Lorenn Ruster are Co-CEO and Director respectively of an Aboriginal business focused on consulting in Indigenous affairs, PricewaterhouseCoopers Indigenous Consulting.

Code Availability Not applicable.

References

- Australian Government Attorney-General's Department. (n.d.) right to self-determination. Public Guidance Sheets. Retrieved from <https://www.ag.gov.au/RightsAndProtections/HumanRights/Human-rights-scrutiny/PublicSectorGuidanceSheets/Pages/RighttoSelfdetermination.aspx>
- Australian Government Department of Finance. (2020). Mandatory use of the commonwealth contracting suite for procurement under \$200,000. Resource Management Guide No 420. Retrieved from: <https://>

- www.finance.gov.au/publications/resource-management-guides/mandatory-use-commonwealth-contracting-suite-procurement-under-200000-rmg-420
- Australian Government Solicitor (AGS). (2018). *Termination of Commonwealth contracts: Commercial Notes No.42*. Retrieved from <https://www.ags.gov.au/publications/commercial-notes/ComNote-42.html>
- Australian Indigenous Governance Institute. (n.d.). Understanding Governance. Retrieved from <https://toolkit.aigi.com.au/toolkit/1-0-understanding-governance>
- Bainbridge, R., McCalman, J., Clifford, A., Tsey, K. (2015). Closing the gap clearinghouse: Issues paper no.13: Cultural competency in the delivery of health services for indigenous people. Retrieved from <https://apo.org.au/sites/default/files/resource-files/2015-07/apo-nid56408.pdf>
- Bauman, T., Smith, D., Quiggin, R., Keller, C. & Drieberg, L. (2015). Building aboriginal and Torres Strait islander governance: Report of a survey and forum to map current and future research and practical resource needs. Retrieved from Australian Institute of Aboriginal and Torres Strait Islander Studies: https://aiatsis.gov.au/sites/default/files/products/research_outputs/bauman_building-indigenous-governance_web.pdf
- Courtney, W. (2019). Good faith and termination: The English and Australian experience. *Journal of Commonwealth Law*, 1(1), 185–226.
- Cowls, J., & Floridi, L. (2018). Prolegomena to a white paper on an ethical framework for a good AI society. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3198732>.
- Crawford, K., Dobbe, R., Dryer, T., Fried G., Green B., Kaziunas, E., Kak, A., Mathur, V., McElroy, E., Nill Sanchez, A., Raji, D., Rankin, J. L., Richardson, R., Schultz, J., West, S. M. & Whittaker, M. (2019). AI now 2019 report. Retrieved from AI Now Institute website: https://ainowinstitute.org/AI_Now_2019_Report.html.
- Exton, C., & Shinwell, M. (2018). OECD statistics working papers, no. 2018/07: Policy use of well-being metrics: Describing countries' experiences. <https://doi.org/10.1787/d98eb8ed-en>.
- Government of New Zealand (2019). *The Wellbeing Budget*. Retrieved from <https://treasury.govt.nz/sites/default/files/2019-05/b19-wellbeing-budget.pdf>
- Government of United Kingdom. (2015). Well-being of Future Generations (Wales) Act 2015. Retrieved from <http://www.legislation.gov.uk/anaw/2015/2/contents/enacted>
- Graham-McLay, C. (2019). New Zealand's next liberal milestone: A budget guided by 'well-being'. *New York Times*. Retrieved from <https://www.nytimes.com/2019/05/22/world/asia/new-zealand-wellbeing-budget.html>.
- Kearney, J., Intern, A. & Janke, T. (2018). Rights to culture: Indigenous cultural and intellectual property (ICIP), *Copyright and Protocols*. Retrieved from Terri Janke and Company website: <http://www.terrijanke.com.au/post/2018/01/29/rights-to-culture-indigenous-cultural-and-intellectual-property-icip-copyright-and-protoc>
- Kwet, M. (2019). Digital colonialism: US empire and the new imperialism in the global south. *Race & Class*, 60(4), 3–26. <https://doi.org/10.1177/0306396818823172>.
- Lewis, J.E., Arista, N., Pechawis, A. & Kite, S. (2018). Making kin with the machines. *Journal of Design and Science*. <https://doi.org/10.21428/bfafd97b>.
- Martin, K., & Mirraboop, B. (2003). Ways of knowing, being and doing: A theoretical framework and methods for indigenous and indigenist re-search. *Journal of Australian Studies*, 27(76), 203–214. <https://doi.org/10.1080/14443050309387838>.
- Native Nations Institute (2019). Indigenous Data Sovereignty and Governance. Retrieved from <https://mii.arizona.edu/programs-projects/policy-analysis-research/indigenous-data-sovereignty-and-governance>.
- New South Wales (NSW) Department of Communities and Justice, Family and Community Services Insights Analysis and Research (FACSIAR). (2019). *Evidence to Action Note October 2019*. Retrieved from <https://www.facs.nsw.gov.au/download?file=725924>
- Oak, E. (2016). A minority report for social work? The predictive risk model (PRM) and the Tuituia assessment framework in addressing the needs of New Zealand's vulnerable children. *British Journal of Social Work*, 46(5), 1208–1223. <https://doi.org/10.1093/bjsw/bcv028>.
- Smith, D. (2016). Governing data and data for governance: The everyday practice of indigenous sovereignty. In T. Kukutai & J. Taylor (Eds.), *Indigenous Data Sovereignty: Toward an Agenda*. Canberra, Australia: Australian National University Press.
- United Nations. (2007). *United Nations Declaration on the Rights of Indigenous Peoples, A/61/295*. Retrieved from <https://undocs.org/A/RES/61/295>
- Walsh, T., Levy, N., Bell, G., Elliott, A., Maclaurin, J., Mareels, I.M.Y., Wood, F.M. (2019) The effective and ethical development of artificial intelligence: An opportunity to improve our wellbeing. Retrieved from Australian Council of Learned Academies website: <https://acola.org/hs4-artificial-intelligence-australia/>.

- Walter, M., & Kukutai, T. (2018). The effective and ethical development of artificial intelligence: An opportunity to improve our wellbeing – Artificial intelligence and indigenous data sovereignty: An input paper. Retrieved from Australian Council of Learned Academies website: https://acola.org/wp-content/uploads/2019/07/acola-ai-input-paper_indigenous-data-sovereignty_walter-kukutai.pdf
- Wang, P. (2019). On defining artificial intelligence. *Journal of Artificial General Intelligence*, 10(2), 1–37. <https://doi.org/10.2478/jagi-2019-0002>.
- Yap, M., & Yu, E. (2016a). Community wellbeing from the ground up: A Yawuru example. *Bankwest Curtin Economics Centre Research*, 3/16, (August) Retrieved from <https://www.curtin.edu.au/local/docs/bceec-community-wellbeing-from-the-ground-up-a-yawuru-example.pdf>.
- Yap, M., & Yu, E. (2016b). Data sovereignty for the Yawuru in WA. In T. Kukutai & J. Taylor (Eds.), *Indigenous data sovereignty: Toward an agenda* (pp. 233–251). Canberra, Australia: Australian National University Press.
- Yunkaporta, T. (2019). *Sand talk: How indigenous thinking can save the world*. Melbourne, Australia: HarperOne.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.