



REIMAGINING KNOWLEDGE SYSTEMS: THE POLITICS OF DATA

2. Integration of Indigenous
Values into Data Access Protocols

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A COMMITMENT TO INDIGENOUS DATA SOVEREIGNTY (IDS) SPANS THE GLOBE

NATION-STATE BASED, INDIGENOUS LED COMMUNITIES OF PRACTICE

- TE MANA RARAUNGA MAORI DATA SOVEREIGNTY NETWORK in Aotearoa/New Zealand
- UNITED STATES INDIGENOUS DATA SOVEREIGNTY NETWORK
- MAIAM NAYRI WINGARA ABORIGINAL AND TORRES STRAIT ISLANDER DATA SOVEREIGNTY COLLECTIVE in Australia
- NASCENT: FIRST NATIONS, INUIT AND MÉTIS in Canada, SAMI/SÁPMI in Sweden, Mexico

RDA INTERNATIONAL INDIGENOUS DATA SOVEREIGNTY INTEREST GROUP

INTERNATIONAL DATA WEEK 2018



Six Principles for Open Science

- a. Open Data
- b. Open Source
- c. Open Methodology
- d. Open Peer Review
- e. Open Access
- f. Open Educational Resources

Five Enormous Transformations

- a. The new knowledge revolution
- b. Big Data and the Internet Explosion
- c. Social connectivity
- d. Evolutionary programming
- e. Artificial intelligence

Keynote speech – Prof Ismail Serageldin, Bibliotheca Alexandria

THE CHALLENGE OF COMPETING INTERESTS

1. 'Indigenous' support for open data and open science
2. Increasing 'Indigenous' participation in cutting edge science and technology
3. 'Indigenous' aspirations for Indigenous Data Sovereignty

Goal: for Indigenous communities to benefit from innovation and development via greater control of Indigenous knowledge and indigenous data

INDIGENOUS DATA SOVEREIGNTY

TOWARD AN AGENDA

Edited by TAHU KUKUTAI
and JOHN TAYLOR



'A debate-shaping book . . . it speaks to a fast-emerging field; it has a lot of important things to say; and the timing is right.'

— Stephen Cornell, Professor of Sociology
and Faculty Chair of the Native Nations Institute,
University of Arizona



PRESS

ISBN 9781760460303 (Print) ISBN 9781760460310 (Online) CAEPR RESEARCH MONOGRAPH NO. 38

This book is available to download for free or hard copies are available to purchase from:
press.anu.edu.au/publications/series/centre-aboriginal-economic-policy-research-caepr/indigenous-data-sovereignty

GOAL OF PUBLIC SECTOR: TRUSTED USE OF DATA

The **secondary use of data** is the key issue in the data use context as individuals will have agreed to its collection for its primary purpose.

Subsequent uses, without explicit permission, through data linkage, data sharing, or data aggregation, create the potential for misuse and (mis)appropriation (**kaiātanga**).

Individuals should **consent** for their data to be included in aggregated data resources.

Collectives should **govern** how those data resources are then used. This can be thought of as supporting processes of collective consent.

Collective concerns about privacy, benefits and harms can't be addressed through individually focused consent mechanisms.



HOME ABOUT US



ACTIVITIES JOIN US

MĀORI DATA SOVEREIGNTY NETWORK

HOME

Our Data, Our Sovereignty, Our Future

<https://www.temanararaunga.maori.nz>

IDENTIFIED VALUES RELEVANT TO DATA USE

Uses the Takarangi to reflect the duality that informs Te Ao Māori

Assessment of the Data

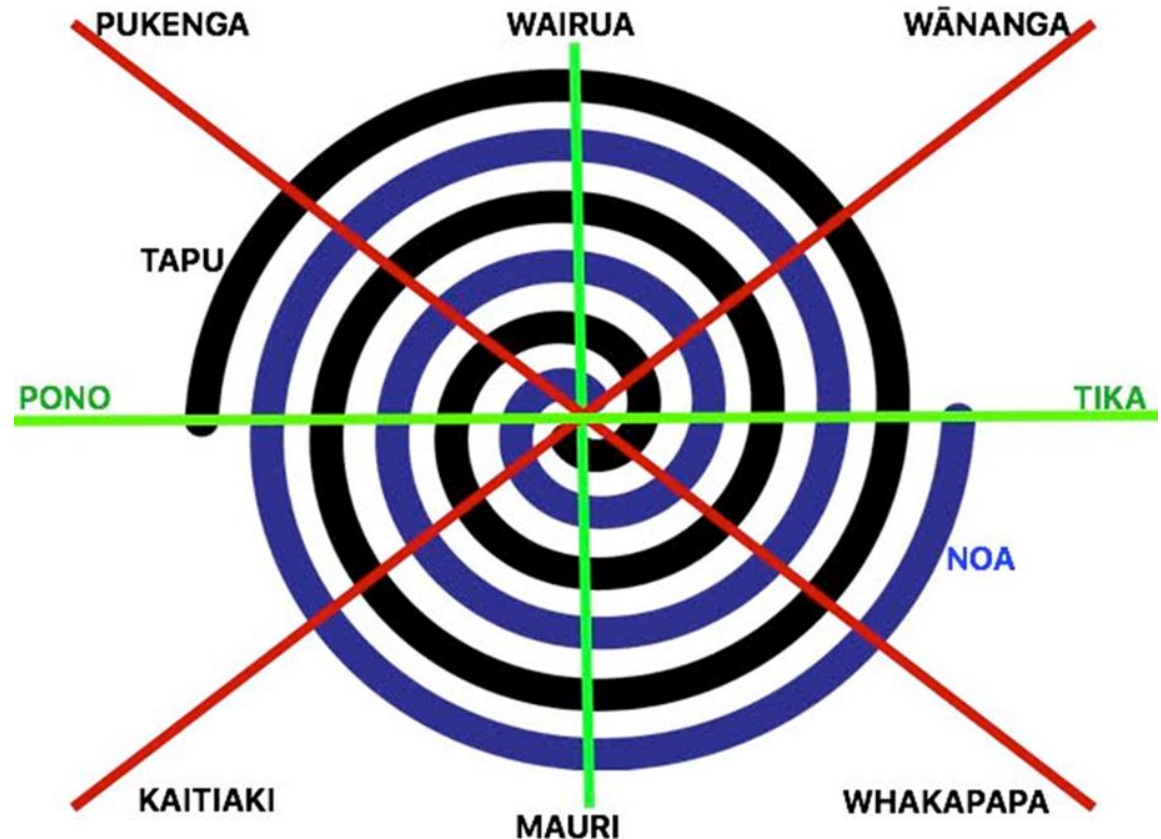
- Sensitivity - Tapu / Noa

Assessment of the Data Use

- Integrity - Tika / Pono
- Authenticity - Mauri / Wairua

Assessment of the Data Users

- Mandate - Whakapapa / Pukenga
- Stewardship - Kaitiaki / Wānanga



ADAPTED TO THE CONTEXT OF DATA

Concept	Characteristic	Assessment Question	High	Med	Low
Tapu	Level of sensitivity	“How sensitive is the data?”	Red	Yellow	Green
Noa	Level of accessibility	“How accessible should this data be?”	Green	Yellow	Red
Tika	Level of value	“How does the use of this data add value to the community?”	Green	Yellow	Red
Pono	Level of trust	“Will the community support this use of the data?”	Green	Yellow	Red
Mauri	Level of originality	“How unique is the data?”	Red	Yellow	Green
Wairua	Nature of the application	“Is the data being used in the same spirit as its original purpose?”	Green	Yellow	Red
Whakapapa	Level of relationship	“Does the user have an existing relationship with the data?”	Green	Yellow	Red
Pukenga	Level of expertise	“Does the user have the expertise and experience to use data in a culturally appropriate manner?”	Green	Yellow	Red
Kaitiaki	Level of authority	“Will the data be protected from inappropriate use?”	Green	Yellow	Red
Wananga	Level of responsibility	“Does the institution have the necessary infrastructure to ensure the use of the data in a culturally appropriate and ethical manner?”	Green	Yellow	Red



ALIGNED TO THE 5SAFES FRAMEWORK

5Safes	Māori Concept	Characteristic
Safe People	Whakapapa Pukenga	Relationship Expertise / Experience
Safe Projects	Pono Tika	Accountability Value for Community
Safe Settings	Wananga Kaitiaki	Cultural infrastructure Cultural authority
Safe Data	Wairua Mauri	Application Originality
Safe Output	Tapu Noa	Sensitivity Accessibility

Tikanga framework

Jacinta Paranihi
Senior Advisor, Māori

Maui Hudson
Te Mana Raraunga



IDI Tikanga framework (DRAFT Scoring system)

Safe people	Pūkenga	Whakapapa	Scores /4
Researchers can be trusted to use data appropriately	Researchers have experience researching Te Ao Māori topics	Researchers have existing relationships with the communities the data comes from (2pts)	Pūkenga = X/2 Whakapapa = X/2
Safe Projects	Pono	Tika	Scores /6
The project has a statistical purpose and is in the public interest	Level of accountability to community of research is explained (3pts)	Use of data will add value to Māori and improve outcomes for Māori and NZ (3pts)	Pono = X/3 Tika = X/3
Safe Settings	Kaitiaki	Wānanga	Scores /10
Ensuring the data is secure and preventing unauthorised access to the data	Decision-makers of the project are identified and Māori are involved in decision-making (5pts)	Institutions have established systems, policies and procedures to ensure data is used in culturally appropriate and ethical ways (5pts)	Kaitiaki = X/5 Wānanga = X/5
Safe Data	Wairua	Mauri	Scores /10
Personal information is not identified	Māori community objectives align with project research objectives (5pts)	Level of transformation of the data from its original collection purpose is explained (5pts)	Wairua = X/5 Mauri = X/5
Safe Output	Noa	Tapu	Scores /10
Stats NZ results do not contain identifying results. Outputs must be confidentialised.	Accessibility of data and awareness of the impact on Māori (5pts)	Sensitivities in the use of data are identified including privacy issues for individuals and communities (5pts)	Noa = X/5 Tapu = X/5

0 to 9 pts	10-20 pts	21 to 29 pts	30 to 40 pts
Application is declined	Application requires further work prior to final approval	Application is satisfactory. Recommendations will be provided before final approval.	Application is excellent. Final approval recommended.

0 to 9 pts: Project application has not met the requirements of the tikanga framework. Final approval to the Committee is declined.

10 to 20pts: Project application requires further information to align with the tikanga framework. ID Analyst and Māori Advisor to provide further advice to applicants to help progress their application to an acceptable standard for review and final approval by the Committee. Application will be deferred to the following Committee Review meeting.

21 to 29 pts: Project application meets most of the tikanga framework requirements but needs clarification in parts or amendments made. Application may be deferred to the next Committee Review. Approval is granted and some recommendations may be made for the applicants when working with microdata.

30 to 40pts: Project application meets the requirements of the tikanga framework. Final approval to the Committee is recommended.





Be FAIR and CARE
Draft Principles of Indigenous Data

Collective Benefit. Data ecosystems shall be designed and function in ways that enable Indigenous Peoples to derive individual and collective benefit.

Authority and Control. Indigenous Peoples have inherent rights to exercise control over Indigenous data and to make decisions that enhance control for current and future generations.

Responsibility and Accountability. Those working with Indigenous data have a responsibility to work with Indigenous Peoples to create meaningful evidence that supports self-determination.

Ethics. Indigenous ethical considerations should be a primary concern at all stages of the data life cycle.

INTERNATIONAL DATA WEEK 2019

International Indigenous Data Sovereignty Interest Group

"DIGITAL FRONTIERS OF GLOBAL SCIENCE"

EXERCISE: THINK ABOUT THE DATA WITHIN YOUR ORGANISATION

1. What data sets are you sharing with other organisations?
2. Does the dataset include Māori/Indigenous data?
3. How are decisions about access made?
4. Can Māori/Indigenous groups access the data?
5. Are Māori/Indigenous peoples involved in decisions about access to data?
6. What would Māori/Indigenous Data Governance look like for your data sharing activities?
7. What are the opportunities for Māori/Indigenous Data Governance to enhance trust in your organisation?
8. What are the challenges for operationalising Māori/Indigenous Data Governance in your organisation?