

## Tikanga in Technology Brief #4

# Hapū data sovereignty: Tips for getting started

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## Purpose

This brief is a part of a series, produced for the Tikanga in Technology (TiNT) research programme, that provides a hapū perspective on data sovereignty, data governance and data privacy. The purpose of this brief is to provide practical advice for individuals, whānau, marae and hapū who are embarking on their own hapū data sovereignty kaupapa, with a particular focus on whakapapa data.

## Hapū data sovereignty

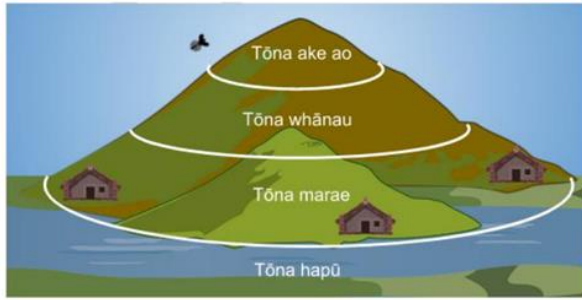
Māori data sovereignty has been written about at length and refers to the inherent rights and interests that Māori have in relation to the collection, ownership and application of Māori data (Te Mana Raraunga, 2018). Māori data refers to digital or digitisable data, information or knowledge that is about, from or connected to Māori, including data about people, place, culture and environment (Kukutai et al., 2023; Te Mana Raraunga, 2018). Hapū data sovereignty both acknowledges the importance of hapū as the primary kinship unit for marae and whānau and through which concepts such as ahi kā and kaitiakitanga endure (Taonui, 2005; Waitangi Tribunal, 1985). Most hapū lack the resources and infrastructure that larger iwi entities have; however, it is still possible to develop and progress data sovereignty initiatives at the hapū level, by starting small, involving whānau and affiliated marae, and having a plan.

## Practical advice for getting started

Like any new kaupapa, it can be daunting to take an idea and pursue it. This brief has been written with this challenge in mind. The advice provided here is intended to be broadly applicable to a range of hapū data sovereignty kaupapa. It is concerned with hapū data that is collective in nature as opposed to personal information (e.g., individual health

or income data). It draws from the experiences of Ngāti Tiipa, who has been engaged in their own hapū data sovereignty kaupapa since 2018 (Clark et al., 2020, 2024; Kukutai et al., 2020, 2022, 2023; Newbold et al., 2022). The advice below is framed as a series of key steps but the order of these steps may vary, depending on the context and focus.

Key steps	Recommendations and/or Resources
<p><b>Get oriented with the wider Indigenous data sovereignty and Māori data sovereignty kaupapa</b> to understand how it might relate to your hapū and whānau.</p> <p>Two Māori advocacy groups who are leading Māori data sovereignty are:</p> <p><a href="#">Te Mana Raraunga - Māori Data Sovereignty Network</a></p> <ul style="list-style-type: none"> <li>See, for example, <a href="#">Principles of Māori Data Sovereignty (2018)</a></li> </ul> <p><a href="#">Te Kāhui Raraunga - Data Iwi Leaders Group</a></p> <ul style="list-style-type: none"> <li>See, for example, the <a href="#">Māori Data Governance Model (2023)</a></li> </ul>	<p>A good place to start is the <i>Indigenous data sovereignty masterclass workbook</i> published by Ngā Pae o te Māramatanga in 2024.</p> <p>The workbook has five sections:</p> <ol style="list-style-type: none"> <li>Foundations of Indigenous data sovereignty</li> <li>Data for self-determination (case studies)</li> <li>Data governance models: From local to global</li> <li>Keeping our data sovereign</li> <li>Growing data ‘doers’</li> </ol> <p>Each section defines key terms and has a list of resources to watch, read and explore.</p> <p>The workbook can be downloaded at: <a href="https://www.maramatanga.ac.nz/media/7286/download?inline">https://www.maramatanga.ac.nz/media/7286/download?inline</a></p>
<p><b>Bring the kaupapa to marae hui</b> with whānau to gauge interest and support for the idea.</p>	<p>Hold a hui or series of hui to gauge interest for your kaupapa. Possible pātai that might be asked:</p> <ul style="list-style-type: none"> <li>– What is the overall vision for the kaupapa?</li> <li>– What is the purpose?</li> <li>– How will the hapū, whānau and marae benefit?</li> <li>– What is the impact of doing this?</li> <li>– How long will it take?</li> <li>– What are the possible risks?</li> <li>– What pūtea might we need to get started?</li> </ul>
<p>Create a version of your own <b>data ecosystem map</b></p> <p>By this we mean, for your kaupapa, identify the data that is most precious to your context (whānau, marae, hapū).</p> <p>We offer an example here used by Ngāti Tiipa to acknowledge different types of data as hapū, marae, whānau or individual (Newbold et al., 2022).</p>	<p>This is a key step because if you don’t know what data you have or what data is deemed precious or most important, it is difficult to develop a project or plan to collect, digitise and store the data, as well as put some data protections in place as kaitiaki.</p> <p>As a visual, this can aid in discussions with identifying what is deemed precious, a taonga.</p> <p>See also the Indigenous Data Activity in the <i>IDSov workbook</i> (p.3).</p>



It could simply be a drawing on a sheet of paper or the whiteboard using sticky notes.

Consider developing a **Hapū Data Sovereignty Statement** for your kaupapa

Having a sense of what is deemed precious, kōrero and wānanga about developing a data statement on behalf of the collective.

This is an example of a hapū data sovereignty statement used by Ngāti Tiipa in their closed access book *Te Pūahatanga o Ngāti Tiipa*.

“The whakapapa information published in this taonga book is subject to Ngāti Tiipa hapū data sovereignty. Hapū data sovereignty recognises that hapū and whānau data are a taonga and that taonga belong to the collective. This means that individuals should not copy, digitise, or distribute the whakapapa information contained in this book, either wholly or in part, including on social media and genealogy websites. If you are unsure about what this means, you can contact one of the team at: [insert email].”

These next TWO kaupapa go hand in hand.

**Early technology decisions**

Review the underlying technology and software options you have available to start storing documents, collating information, etc. Even at this early stage of the kaupapa, your data footprint will grow very quickly.

Technology choices can change and will evolve over time based on the kaupapa; the trick is to know as much as possible about the consequences of these choices.

Questions to ask when considering your early **technology options**:

- Where will the data we collect be stored? If I use this platform, where does the data get stored? In what country or countries will the data be stored? Do we really care at this stage?
- Are there options for local data storage? It is possible to store information on a laptop or desktop and/or consider using an external hard disk drive. For both options, where would the data back up to and how often would that back-up occur? Alternatively, consider using the laptop/desktop option to store the data and back up to an external drive (pricing for 1TB is in the \$130–\$300 range).
- If considering a free option, what is the initial storage allocation (e.g., 1 TB) so that the whānau

	<p>can collaborate in one place? What are the barriers to getting online and organised digitally?</p> <ul style="list-style-type: none"> <li>– Finally consider the range of security issues such as securing devices (laptop/desktop), passwords for software applications, passwords to lock documents and spreadsheets, etc.</li> </ul>
<p><b>Create a list of data of interest</b></p> <p>This initial list should include all the data of interest, whether you have it in your possession or not.</p> <p>This document has the potential to become the master, source or foundation document – hei tūāpapa – and part of all future data classification, indexing, metadata tagging and provenance kōrero.</p>	<p>You’ve made some decisions about the technology and software to be used and are ready to put it into practice.</p> <p>A spreadsheet with multiple tabs can be used to organise this initial list of data. For example, data could be organised under the following categories (tabs):</p> <ul style="list-style-type: none"> <li>– Hapū [name]</li> <li>– Tūpuna [names]</li> <li>– Marae [names, location, key contacts]</li> <li>– Papakāinga [names, locations]</li> <li>– Awa/puna [names, locations]</li> <li>– Maunga [names, locations]</li> <li>– Wāhi tapu [names]</li> <li>– ...</li> </ul> <p>This is for your kaupapa. Make it work for you.</p> <p><a href="#">Ngā Upoko Tukutuku</a> was developed by Te Rōpū Whakakahau, LIANZA and the National Library. As a resource, it provides a structured path to a Māori world view within library and archival cataloguing and description.</p>
<p><b>Create a pathway for whānau to engage</b> in the kaupapa</p> <p>The Ngāti Tiipa mahi has demonstrated that knowledge of whakapapa (‘mana whakapapa’) is a powerful enabler in everyday life (Newbold et al., 2022).</p>	<p><b>Host wānanga to do whakapapa research</b> kaupapa at the marae or across various marae. This is a natural space for kōrero and wānanga as whare tūpuna are often adorned with whakairo, kōwhaiwhai, and tukutuku. These are the carriers of kōrero tuku iho.</p> <p>There will likely be a need for multiple hui. Giving some thought to how many across a time frame helps interested whānau to plan ahead.</p> <p>Some level of organisation is recommended. For example, create starter pānui, prepare a high-level agenda with objectives for the hui, provide kai, and provide resources (A3 flipcharts, markers, sticky notes, etc.) to support the kaupapa.</p> <p>The report by Newbold et al. (2022) describes the process undertaken at Ngāti Tiipa in more detail.</p>

<p><b>Data collection and digitisation</b></p>	<p>Start with data that is readily available, rather than data that has restricted access, or that has to be purchased.</p> <p>Once you have identified the data that you wish to collect and have an idea of where it is held, you can make a plan to digitise or download it. It might be paper records in an archive that need to be digitised (using a phone camera), or information that has already been digitised and is available online (e.g., Papers Past historical newspapers).</p> <p>If you are visiting a library or archive, we recommend you search the online catalogue <u>before</u> visiting, so that you can make the most of your time there. Make sure to label your digital files in a way that enables you to identify the provenance.</p> <p>You may also be able to make an appointment to talk with a Māori librarian or information specialist.</p>
<p>For a <b>digital pātaka</b>, consider developing a conceptual Layer Cake</p> <p>At a bare minimum, the layers should enable the goals and vision of the kaupapa – not technology for technology's sake.</p>	<p>On a blank A3 flipchart, create an <b>initial conceptual layer cake for your kaupapa</b>. It might include visualising the following:</p> <ul style="list-style-type: none"> <li>– <b>Applications</b> (via website, app or both?)</li> <li>– <b>Tikanga</b> (access permissions)</li> <li>– <b>Pātaka</b> (where the digitised data will be stored; e.g., In the Cloud? In Aotearoa? Is there a preference?)</li> <li>– <b>Digitised data</b> (what types of data will be collected?)</li> </ul> <p>The report by Clark et al. (2024) describes the process undertaken at Ngāti Tiipa in more detail.</p>
<p>Develop a <b>Privacy Statement</b> for your kaupapa</p>	<p>Link to the <b>Office of the Privacy Commissioner Privacy statement generator</b>:</p> <p><a href="https://privacy.org.nz/tools/privacy-statement-generator/">https://privacy.org.nz/tools/privacy-statement-generator/</a></p>
<p>Develop a <b>Privacy Policy</b> for your kaupapa</p> <p>In 2016, the European Union developed the GDPR (General Data Protection Regulation), which is one of the most robust mechanisms around data protection.</p> <p>The Ngāti Tiipa Privacy Policy was developed from a GDPR perspective and has a global outlook,</p>	<p>Link to the <b>Termly Privacy Policy generator</b>:</p> <p><a href="https://app.termly.io/builder/documents/new?template_id=12">https://app.termly.io/builder/documents/new?template_id=12</a></p> <p>Recommend signing up for a free account to be able to save your Privacy Policy throughout the creation process. You can delete your account once you finish.</p>

acknowledging there are uri of Tiipa who live outside Aotearoa.	
For technology decisions and procurement, consider drafting your own pātai or develop a more formal Request for Proposal (RfP)-type document for potential technology suppliers to respond to, so that you can be confident that the data remains in Aotearoa rather than stored overseas.	<p><b>Possible pātai for technology suppliers</b></p> <ol style="list-style-type: none"> <li>1. Supplier’s knowledge and experience working with Māori</li> <li>2. Supplier’s understanding of and commitment to Te Tiriti, including practical examples of this</li> <li>3. Supplier’s understanding of key concepts like taonga, data as taonga, WAI 262, etc.</li> <li>4. Supplier’s approaches to access, and security settings</li> <li>5. Graphic of supplier’s global operations showing data warehouses, locations, redundancy, etc.</li> <li>6. Request a copy of the supplier’s service level agreement (SLA). What does this look like for any given technology partner? For example, if you are using a free service, then support may not be readily available. Likewise, if you are using an open source, then you may be reliant on connection with the open-source developer community. Conversely, support may be available more readily if you are using a paid subscription service.</li> </ol>

## Conclusion

We hope that this brief provides a way forward for those interested in research involving hapū data. The key steps outlined in the table largely reflect the journey started in 2018 by Te Tira Ranghau o Ngāti Tiipa involving hau kāinga, rūruhi, koroheke, pakeke and rangatahi who all brought different strengths and expertise. The kaupapa did not happen overnight and many lessons were learned along the way. It represents mahitahi, mahi rangahau and mahi aroha. In 2025, the mahi continues.

## Tikanga in Technology

Supported by the Endeavour Fund (UOWX2003), Tikanga in Technology (TiNT) is a research programme that supports Indigenous approaches to transforming data ecosystems. The TiNT team collectively has expertise in Māori data sovereignty and governance, data privacy, cybersecurity, te Tiriti o Waitangi and mātauranga Māori. For more about our TiNT research theme, visit: <https://www.waikato.ac.nz/research/institutes-centres-entities/institutes/te-ngira/research/tikanga-in-technology/>

## Glossary

ahi kā	continuous occupation
atua	influential ancestors, gods
hapū	sub-tribe, or clan, usually containing a number of whānau and marae with a common ancestor or ancestors

hau	vital essence, cosmic breath
iwi	tribe
kāhui kaumatua	advisory group of elders
kaitiakitanga	guardianship
karakia	traditional ritual chant done to acknowledge atua Māori or the environment
kaupapa	topic, policy, matter for discussion, plan, purpose, scheme, proposal, agenda, subject, programme, theme, issue, initiative
kawa	immutable protocols, usually associated with the marae
kōrero tuku iho	oral traditions
koroheke	elderly man
mana	prestige, influence; spiritual power, supernatural force in a person, place or object
mātanga	experts
mātauranga	knowledge, wisdom, understanding, skill; education, Māori knowledge system
mauri	life force
mokopuna	grandchildren, future descendants
Papatūānkuku	Earth Mother
pātai	query, question, enquiry
pātaka	storehouse, digital repository or archive OR storehouse raised upon posts, pantry, larder
purakau	historic narratives
Ranginui	Sky Father
rūruhi	elderly woman
tapu	sacred, restricted, set apart
taonga	those things and values that we treasure, both intangible and tangible; usually collectively held
tautoko	to support, prop up, verify, advocate, accept (an invitation), agree
tikanga	custom, rules for proper conduct
tino rangatiratanga	self-determination, sovereignty, autonomy
uri	offspring, descendant, relative, kin, progeny, blood connection, successor
waiata	song, chant, psalm
whakapapa	genealogy
whenua	land; placenta

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## Cite

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