Te Kete Tū Ātea: Towards claiming Rangitīkei iwi data sovereignty

Abstract

This article overviews the Te Kete Tū Ātea research project, which aimed to identify and address the iwi (tribal) data needs of the Rangitīkei Iwi Collective (Collective) thereby contributing to their establishment of iwi data sovereignty. This four-year study, carried out in two phases, adopted a Kaupapa Māori approach meaning that it was Māori led, Māori controlled, and privileged a Māori world view. The research drew on participatory action research methods under the broader umbrella of a Kaupapa Māori approach. The iwi information framework, also named Te Kete Tū Ātea, was developed during phase one of the research. The need for the framework was highlighted by the challenges Collective members face in planning for future iwi development in the frequent absence of access to coherent sets of iwi population-level data. Though the data needs of each iwi differ, common data needs also exist. Te Kete Tū Ātea iwi information framework has been designed to support the iwi making up the Collective to address their own specific data needs using five framework domains. In phase two of the study an element of the framework, the economic domain, was tested with iwi resulting in better positioning them to access and draw on population-level economic data.

Keywords: Māori data sovereignty, iwi development

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Background and Rationale

Te Kete Tū Ātea was implemented in two phases, in 2013 - 2017, to address the iwi (tribal) development data needs of the Rangitīkei Iwi Collective (Collective) made up of Ngā Wairiki - Ngāti Apa, Ngāti Tamakōpiri, Ngāti Whitikaupeka, Ngāi Te Ohuake, and Ngāti Hauiti. Growing the Collective’s control over iwi-related data was an intended outcome of the study. That control was expected to better position iwi leaders and governors to use information and make evidence-informed decisions in support of whānau ora (family wellbeing). Tino rangatiratanga, or sovereignty, is a
core Māori development principle. Often articulated in terms of self-determination and control, the concept of sovereignty underpins Māori aspirations across multiple domains of development. The explicit assertion of Māori data sovereignty\(^1\), by the recently formed Te Mana Raraunga Māori Data Sovereignty Network, is underpinned by the rights articulated in Te Tiriti o Waitangi (the Treaty of Waitangi) and further supported by the United Nations Declaration on the Rights of Indigenous Peoples.

Māori data sovereignty is reflected in iwi use of official sources to generate information for their own purposes, in national Māori organisations conducting national surveys, and in challenges to improve the inclusivity along with the quality of Indigenous data within the official statistics system. Iwi development, in tandem with an exponential growth in Māori health and social services provider numbers in recent years (Boulton, Simonsen, Walker, Cumming & Cunningham, 2004), has generated a demand for data that is specific to the needs, values, and aspirations of Māori. The demand within the Māori community for better information, on a wide range of measures of collective Māori wellbeing, is already well recognised by Aotearoa New Zealand’s official data agency, Stats NZ Tātaranga Aotearoa (Stats NZ; Statistics New Zealand, 2009).

During 2011, representatives of the five iwi making up the Collective decided to collaboratively source good quality information about their individual iwi populations. They recognised that effective leadership, investment, and the optimal development of iwi and hapū required ready access to relevant, robust data. The Collective consulted Ngāti Hautī-owned research entity, Whakauae Research for Māori Health and Development (Whakauae), around how it might best determine the specific data needs of each of its constituent iwi.

Recognising the scale and potential of the iwi data work, Whakauae proposed carrying out a research project which would investigate the Collective’s data needs along with practical ways of addressing these through accessing and using or improving existing data sets. In partnership with the Collective, Whakauae prepared a research development funding proposal and submitted it to the Health Research Council (HRC) of New Zealand’s 2012 Ngā Kanohi Kitea research development grant round. Research development funding was subsequently awarded by the HRC (12/431). On completion of that development work later the same year, a full research proposal was submitted to the full research project grant round. Te Rūnanga o Ngāti Apa, leading the data sovereignty work on behalf of the Collective, was successful in being awarded a grant to carry out the study entitled, Te Kete Tū Ātea: Iwi pathways to understanding need and measuring success (12/841). The study commenced late in 2012, with the ongoing support of Whakauae, and concluded in mid-2014.

Te Kete Tū Ātea (phase one) resulted in the completion of a detailed iwi data needs analysis and the subsequent development of a comprehensive iwi information framework (Mikaere, 2017). That framework encapsulated an overview of the information needs of the Collective’s populations. It identified potential data sources and gaps in current information along with strategies to address those gaps. The positive response to the research, of participating iwi, of iwi more widely, and of Government, highlighted the enormous information potential of the framework. Recognising that potential, Whakauae independently funded and led the second phase of Te Kete Tū Ātea research focusing on framework implementation. Te Kete Tū Ātea: Iwi pathways to understanding need and measuring success (phase two) commenced in 2015 and concluded early in 2017. In phase two, a key information gathering domain from the framework was prioritised and implemented with

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1 The concept of sovereignty, in relation to Māori data, recognises that Māori data should be subject to Māori governance. Māori Data Sovereignty supports tribal sovereignty and the realisation of Māori and iwi aspirations (Te Mana Raraunga, 2016).
a statistical evaluation of current iwi data being conducted.

The aim of this article is to document the development of Te Kete Tū Ātea iwi information framework and to explore the early phase of its implementation. The challenges encountered and some of the gaps that remain to be addressed are additionally considered, with a view to informing the work of those seeking to better address the data needs of their own iwi.

**Research Design and Methods**

A *Kaupapa Māori* approach to the research was adopted meaning for us that the study was Māori led, Māori controlled, privileged a Māori world view, and was framed around questions identified by Māori as being of relevance to Māori (Curtis, 2016). An advisory group comprising representatives from each of the iwi under the umbrella of the Collective and including two iwi academic advisors was established. The role of the Te Kete Tū Ātea Advisory Group was to guide and safeguard the research process from an iwi perspective.

A research ethics application was submitted to the Health and Disability Ethics Committees (HDEC), in the early stages of the research, and approved (Ethics reference:12/CEN/32).

The research drew on concepts unique to *Te Ao Māori* (Māori culture). It additionally drew on both qualitative and quantitative Western methods and analytical tools as necessary. Participatory action research practices (Patton, 2015) were used to support the inclusive and iterative conduct of the study with iwi taking part as active research partners throughout. The direct involvement of iwi in the study was prioritised, from problem identification through to analysis of the data and collective action. The participatory action research orientation, in seeking to stimulate the critical consciousness of participants, sits comfortably with the social transformation goal of a Kaupapa Māori research approach (Coombes, 2017). In both phases of the study, mixed research methods were utilised with both quantitative and qualitative data being collected and analysed.

In phase one, Te Kete Tū Ātea aimed to identify the data needed by the Collective to assist their members achieve *whanau ora* (family wellbeing) as well as to develop an iwi-owned information framework to assist in gathering robust iwi information. In phase two, Te Kete Tū Ātea research aims were to apply the iwi information framework, developed in phase one, by conducting initial testing of one framework component. Reflecting on the implementation process and its impact on iwi governors as well as iwi members more widely was a part of that work. A question from the economic domain, one of the five domains comprising the framework, was the focus of the phase two study.

During phase one, a total of 21 *kanohi ki te kanohi* (face to face), semi-structured, key informant interviews were conducted with 23 selected iwi stakeholders drawn from across the iwi making up the Collective. These stakeholders were identified by the advisory group based on stakeholder knowledge of their iwi development pathways (past, present, and future), their *mahi* (work) within their iwi, and their understanding of the current as well as the future needs of their people. Stakeholders were asked a series of interview questions concerning the current information needs of their iwi as well as questions around the future aspirations of their iwi and its members.

Interviews were recorded with the data gathered being thematically analysed by the lead researcher. During phase one, a document review was also carried out. Documents reviewed were the strategic plans of each iwi along with additional material including iwi histories, in some instances, and iwi development records. The analysis of these documents complemented the key informant interview data analysis contributing to ensuring that the information framework would reflect the values (*tikanga* and *whakaaro*) of each iwi. The results of the analysis were reviewed with the advisory group, to test their resonance and allow fine-tuning, before being used to inform the development of the information framework.

Following framework development, the lead researcher carried out a review of statistical information available to the iwi through official sources. Detailed and customised statistical
information requests were lodged with Stats NZ and the Ministry of Education (MoE), and a customised report on iwi populations was produced for each participating iwi. Māori health and social service providers in the rohe (region) were additionally canvassed to gain a better understanding of the information they gather and the types of data they would be able to make available to the iwi to use, whilst maintaining the confidentiality of service users. As both Ngāti Apa and Ngāti Hauiti are included on the Stats NZ iwi classification list, some specified tables from the most recent census were available along with several from the MoE. Ngāti Whātikaepēka, Ngāti Tamakōpiri, and Ngāi Te Ohuake were not included on the Stats NZ iwi classification list which is also the list that the MoE uses to produce iwi education statistics. A very limited set of data relevant to these iwi was accessed, late in phase one of the study, following a special request for code file data from the census and a rigorous sign-off process.

Phase two of the study saw the implementation of the information framework to test utility, focusing on one priority area, the economic domain. The early stages of phase two coincided with Regional Economic Development Programme activity for the Manawatū-Whanganui region, led by the Ministry of Business, Employment and Innovation (MBIE). Iwi leaders from the Collective were selected to participate in advisory and governance roles for the MBIE project. The lead researcher, in consultation with the Te Kete Tū Ātea Research Advisory Group, determined that the Regional Economic Development Programme activity in the region provided a unique opportunity to test the utility of the framework, through contributing to the population of the economic domain.

Methods used in phase two of the study included one on one interviews with three iwi leaders, representing the Collective, during which iwi economic subject matter experts were identified. These iwi leaders had also previously participated in phase one key informant interviews. The lead researcher subsequently facilitated a workshop, with the experts identified by the iwi leaders, to refine the economic domain questions, measurement dimensions, and data sources for inclusion in the information framework. Meetings were then held in Wellington with MBIE data analysts and Stats NZ analysts from the National Accounts, Households Economic Survey, and Customised Data Services teams. The purposes of these meetings were to establish in-depth understanding of relevant data availability and to identify opportunities for further data development through linking datasets in the newly established Integrated Data Infrastructure (IDI). Rūnanga hui (meetings with tribal members) were also held during which resonance with the framework implementation process was tested with interested iwi members.

**Results**

Phase one study results identified common information needs across the participating iwi along with the unique information needs of each. The interdependence of the iwi groupings was highlighted by the data, with some individual iwi members being connected and registered with two or more of the five iwi. Common information needs identified across the Collective included understanding how whānau (families/tribal members) were engaging in education and the level of te reo Māori (Māori language) speaking capability across the iwi. As the Collective iwi were in different states and stages of development their data priorities differed according. Unique data needs identified by iwi at the post-settlement development end of the spectrum included increasing understanding of the specific support whānau needed from their iwi. For those iwi in the pre-settlement phase, it was generally more useful to be able to clearly identify which other entities were investing in their rohe and in their people. For example, often Māori land trusts were investng directly in whānau independent of the iwi. Similarly, it was useful to be able to identify additional potential sources of funding that could benefit iwi members.

Informed by the analysis of the phase one study combined data, an information framework was developed by the lead researcher highlighting the information priorities for iwi about their populations. The tool was designed to help identify the key variables to be collected in response to those information needs. The framework developed is intended to guide iwi data gathering across a range of domains in the
short to medium term. Five domains; namely the peoples, cultural, social, environmental, and economic domains; provide the foundations of the Collective’s information framework, Te Kete Tū Ātea. The peoples’ domain recognises the most important information needs across the iwi groupings making up the Collective; specifically, who are the members of the iwi, where are they and how are they connecting to their iwi identity and therefore to the iwi? The social, cultural, environmental, and economic domains collectively constitute the domains of iwi, hapū (subtribal grouping), and whānau wellbeing.

Three goal dimensions are woven across the five domains of Te Kete Tū Ātea information framework. The kaitiakitanga (guardianship), strengthening identity and connection, empowerment and enablement goal dimensions (see Figure 1) represent the enduring elements of iwi development. These dimensions will remain a critical focus of information gathering and of measuring the progress of iwi development overtime.

Kaitiakitanga is used in Te Kete Tū Ātea to refer to iwi having the information needed to exercise their kaitiakitanga and rangatiratanga (autonomy) over their area, people, and future. Empowerment and enablement refer to iwi having the information to better lead iwi communities and future proof iwi members. Strengthening identity and connection means iwi having the information to continue strengthening engagement with, and contributions from, iwi members.

Within each domain of Te Kete Tū Ātea, three sectors are identified. These sectors represent the most relevant or important information needs currently prioritised by the iwi (see Figure 1, above). For example, the social domain sectors identified are iwi education, health, and housing. The higher priority placed on these sectors does not preclude others from being added or replacing the current sectors at a later stage as the information needs and priorities of the iwi change going forward. The framework poses a series of key questions in relation to the three sectors included in each domain. These key questions have been formulated to guide the gathering of relevant information and the translation of that information back to the people. Each key question has measurement dimensions or prompts around “what to measure” to assist in answering the question most...
usefully for iwi decision-making purposes. A data sources column is included in *Te Kete Tū Ātea*, with the intention that this will be progressively populated and refined over time. A draft version of the framework was reviewed by the advisory group, in the closing stages of phase one of the study, with the peoples’ domain being a focus. That domain includes key questions about iwi demographics and the connections of the iwi population to the iwi.

In the second phase of the study, the economic domain of *Te Kete Tū Ātea* was prioritised for implementation and review. The implementation process and feasibility for broader implementation across all domains was assessed. This applied research was intended to provide evidence to inform future framework implementation across all framework domains for the five Collective members.

In progressing to populate the economic domain, the lead researcher was confronted by the limited existence and accessibility of relevant iwi economic data from government and other official sources. When an iwi is recognised and included on the Stats NZ iwi classification list, access to statistical information produced by government departments across the Official Statistics System relevant to that iwi can be more readily identified. Accessing such data, however, is likely to be reliant upon the data expertise available to and within that iwi. Accessing the data can additionally be costly with detailed customised requests (for iwi specific tables) ranging from $6,000 - $8,000 per iwi. When an iwi is not included on the Stats NZ iwi classification list, access to statistical information produced across the Official Statistics System relevant to that iwi can be limited. Ngāti Tamakōpiri, Ngāti Whitikaupeka, and Ngāi Te Ohuake; three of the five Collective members were not included on the Stats NZ iwi classification list at the time the research was conducted. Data directly relevant to these iwi, through the census for example, was unavailable and an impediment to iwi seeking to plan and monitor iwi development. There are recognised data gaps for Māori businesses, iwi collectives, and Māori land trusts, but further limitations were identified in trying to access data from the multitude of economic and business surveys at a disaggregated geographical level relevant to the areas of the Collective, particularly the rural areas.

Detailed customised data requests were lodged with Stats NZ for 2001, 2006, and 2013 Census data; specifying iwi income, occupations, qualifications, labour force status, sources of income, industries of work, iwi household income, and unpaid activities. Though data was available for Ngāti Apa and Ngāti Haumia, this was not the case for Ngāti Whitikaupeka, Ngāti Tamakōpiri, and Ngāi Te Ohuake. To address this gap, a method of combining the code-file counts for these iwi with the total Māori descent population was used to produce estimates for each economic domain variable under the name Mōkai Patea. A further customised request was lodged to access IDI data through the Datalab. This request was one of the first of its kind requiring the linking of iwi data from each Census to Inland Revenue Department (IRD) data and data held in the Business Frame. The combined data provided information about iwi businesses, contributing to better understanding components of the economic domain relevant to each of the iwi making up the Collective.

A potential alternative iwi data source is the government’s Māori ethnic data. The Māori ethnic population data differs from the Māori descent population data (598,605 individuals versus 668,724 individuals, respectively). Ethnic population data is, however, a more widely used classification, or categorisation, across government data collections. In the short to medium term population of the framework, segments of the Māori ethnic data were necessarily used as a proxy for iwi data in the rohe. Statistical data sources used to populate the framework therefore included iwi data produced by government as well as government Māori ethnic data, individual iwi data currently being collected, and potential future data collection methods for individual iwi where current gaps in addressing information needs were identified.

Presentations of statistical information and analysis from the economic domain of the framework at rūnanga hui involved interested members from across the five iwi, provided an avenue for research translation and offered an opportunity to assess data identification processes along with impact. The utility and
quality of both the framework and current iwi data bases were additionally able to be assessed. The lead researcher worked with iwi, in these workshop settings, to strengthen capacity to utilise publicly available data and to begin embedding utilisation practice in policy decision-making and monitoring. Knowledge transfer occurred throughout the research process as part of a continuous action-reflection cycle. The transfer of knowledge and development of critical consciousness was additionally fostered through involving a Ngāti Hauiti iwi administrator in the research team. The administrator took part in activities including shadowing the lead researcher at a range of data-related hui (meetings) locally and nationally. Through this activity, the administrator was better positioned to herself access and interpret iwi-prioritised data and networks on behalf of the Collective.

Discussion

Te Kete Tū Ātea research has highlighted the significant challenges that Collective members face in accurately assessing the hauora (health) needs of their populations as well as in measuring change over time across a range of broad indicators. These challenges are not confined to the iwi making up the Collective. Even larger iwi with greater resources may struggle with the issue of data collection at an iwi population level. Te Kete Tū Ātea has contributed to addressing some of the critical population-level information needs for the iwi involved in the research. Importantly, the framework developed uses an approach that could be modified and adopted by interested iwi nationally.

With limited accessible data, data analyst capacity issues, and added constraints of cost, it is understandable that iwi leaders and governors have had varying levels of exposure to relevant iwi data in decision making processes in the past. Trialling the framework through populating the economic domain underlined the need for capability building across the Collective and the respective rūnanga (tribal council) of each iwi. Capability building needs ranged from data and statistical analysis training to data interpretation and translation, through to system and infrastructure development. The trial also underlined the dearth of easily accessible iwi economic data. The detail of these key learnings could provide valuable insight into the investment that different government departments are looking to make in the data space, in particular around data capability programmes and the co-design of data collection for, and about, iwi/Māori development.

The framework now requires further refinement in terms of the questions, measurement dimensions, and data sources it incorporates. It is recommended that the framework either gets reduced to headline indicators or that a headline indicators dashboard be created in the short term; to encourage greater engagement and use by iwi leaders, iwi governors, and decision makers. A process of populating the framework domain by domain would be the ideal; working with iwi subject matter experts to refine questions, measurement dimensions, and data sources as well as to encourage relevant application.

Further and full population of Te Kete Tū Ātea information framework will require an iterative process of participatory action research working with iwi, as active partners, to ensure utility of the data as well as to allow embedding of an iwi lens right across all data dimensions of the framework. The value of Te Kete Tū Ātea will be fully realised when engagement with the data and use of the information, by iwi leaders, results in informed decisions that empower the people and transform lives. Ultimately, full population of the framework from multiple trusted data sources, including government, iwi, and the private sector would be the goal. It would also be beneficial to have a system or platform, that automatically updates (from the various data sources) and delivers the information in the best format for the different users; e.g. a data visualisation tool on smartphones or the iwi website, or even a detailed system that links with other measurement frameworks and information for different service delivery contracts.

The study sought to utilise existing government data sources more effectively and to determine ways to improve the relevance of existing data. In addition, Te Kete Tū Ātea explored how iwi databases, such as iwi registers, may yield more useful data through additional sampling using, for example, short surveys. The ability to access,
interpret, and utilise a range of existing data sources is economically sustainable in the longer term and will strengthen these existing data sources to enable iwi to more readily identify the needs of their populations. Armed with this information valuable resources can be effectively targeted, and changes in indicators can be measured over time, providing a way to effectively prioritise the interventions that may contribute to positive outcomes for iwi members. Through Te Kete Tū Ātea, the development of culturally specific indicators for the Iwi Collective was achieved.

A significant outcome of the research has been its influence in securing a place for Ngāi Te Ohuake, Ngāti Whitikaupeka, and Ngāti Tamakōpiri, for the first time, on the list of iwi affiliation options included in the census. The research continues to be pivotal too in informing wider research and policy initiatives regarding collecting, analysing, and utilising quantitative data at an iwi level. The Collective has strongly influenced the iwi/Māori data eco-system through the development of Te Kete Tū Ātea. The Collective addressed the National Iwi Chairs Forum at Waitangi, in February 2016, on the issue of iwi data and its significance in relation to iwi development. Following that address, the forum adopted a resolution to focus on iwi data and, to that end, to establish a Data Iwi Leaders Group (DILG). Both the Chair of Ngā Wairiki – Ngāti Apa and the lead researcher for Te Kete Tū Ātea have been appointed to the DILG as Chair and technical advisor respectively. In addition to her work as a DILG technical advisor, Te Kete Tū Ātea researcher Kirikowhai Mikaere is now providing iwi data advice nationally to government departments including Stats NZ as well as to the Māori Data Sovereignty Network.

Conclusion

Te Kete Tū Ātea reflects the desire of iwi to prioritise a “futures focus” and move away from preoccupation with the measurement of deficits. The framework additionally represents an initial step on the iwi data journey from iwi being data providers and data consumers, to ultimately being data designers. The vision of the iwi of Ngā Wairiki-Ngāti Apa, Ngāti Whitikaupeka, Ngāti Tamakōpiri, Ngāi Te Ohuake, and Ngāi Hauiti has positioned them to engage in future data initiatives and innovations at local, national, and international levels. To accelerate that engagement, there needs to be an investment in the data capability of both people and systems.

The Collective has been among the leading iwi in data and information development. The Collective has identified its key iwi information needs and has developed a robust framework to measure success through an iwi lens. The Collective is now positioned to engage with data initiatives and innovations at a range of levels including at:

- **Local level** – Te Pae Tawhiti (Mika, 2016) underlines the need for specific Iwi/Māori data to underpin the regional economic development strategy for Manawatū-Whanganui.
- **National level and central government data initiatives** – Stats NZ has been piloting and trialling different data initiatives to help refine production of data products and dissemination for Iwi/Māori data users.
- **International level** – Google Earth Outreach offers non-profit and public benefit organisations the knowledge and resources to visualise and tell their stories.

Te Kete Tū Ātea has had wide-ranging translational impact with other iwi recognising the framework as an exemplar for collecting, analysing, and utilising quantitative data at an iwi level. The data eco-system is constantly changing, and the emergence of greater recognition of the relevance of data only strengthens the need for iwi to assert governance and control over their own data and its application. Māori data sovereignty is a key mechanism for facilitating tino rangatiratanga (self-determination) and innovation in the post-Treaty settlement environment (Te Mana Raraunga, 2016). In this environment iwi will increasingly need to make informed development decisions using robust evidence to maximise the potential of the limited resources available to them to provide innovative benefits and opportunities for their people, place, and future.
References


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