



Summary of Engagement

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Introduction

Over the short life of the New Zealand Data Futures Forum we talked with a large number of people, who provided different perspectives on the issues raised by the Forum. Our conversations were hugely important in helping us to develop our ideas and recommendations. We are very grateful that people took the time to engage with us.

Our aim was to get a conversation going, to create a platform of shared understanding on the issue of data sharing. We also wanted to spark informed debate and discussion by creating an environment of active engagement and participation from audience groups such as government, business, Māori, the research community and interested members of the public. Our engagement was not comprehensive, but focussed on relevant and interested people. In particular, given the time-frame of the Forum, we did not have as widespread engagement with the general public as we would have liked, and interaction with some specific groups, such as young people, and immigrant communities, was considerably less than we would have preferred.

The engagement we have begun is the first stage in an ongoing conversation, to ensure that we have a broad, open debate to support shared understanding and to ensure that the views of New Zealanders continue to inform responses to the new data environment.

Methods of engagement

The Forum issued two discussions papers designed to create a platform of awareness, stimulate engagement and feedback, and refine the debate. The first paper discussed possible data futures, and the potential risks and benefits. The second paper put forward four principles to guide the New Zealand response to the new data environment. Responses helped us develop the third and final paper.

We sought feedback via the following channels:

- Conversations and meetings
- Comments and polls on the Forum website www.nzdatafutures.org.nz/have-your-say.
- Social media: Twitter and a LinkedIn group
- Events
- Emails and letters inviting feedback
- Email submissions
- Media releases

There was a limited amount of media coverage and some blog commentary in response to our events and discussion papers.

Events

The Forum held a number of events, and also presented at events hosted by others. The Forum's events were designed to engage different groups:

- Victoria University of Wellington hosted a public lecture by Forum member Joshua Feast on 30 April. The lecture prompted a lively discussion on privacy and risks amongst the 30 or so attendees.

- A breakfast event in Wellington on May 27 was designed to share the Forum’s thinking and hear responses to the four principles we had presented in the second discussion paper. Around 80 people attended this event, from government academia, non-governmental organisations and business.
- In Christchurch, we held a half day workshop on 30 May. The aim was to learn from the data innovation taking place as part of the Canterbury rebuild. This event was attended by around 40 senior technical and policy leaders from government, business , NGOs and the academic and data science communities.
- The Auckland event, hosted by the Minister of Finance on 6 June, was targeted at business, and was attended by around 100 business representatives. We wanted to share our thoughts with the business community, and hear their views, to explore how government and the business community could work together in the data space.
- An informal hui with around 15 interested local Māori was held in Rotorua and announced on www.tangatawhenua.com.

A panel of Forum members also spoke to Statistics NZ staff (1 May) and at a Wellington GOVIS lunchtime event on Open Government, attended by a range of government IT and data scientists (3 June). See Appendix One for a list of other events where Forum members spoke.

Key themes arising from stakeholder engagement

Our key reflections from our engagement were:

- Privacy matters – control and trust are fundamental
- Inclusion matters – this is about all New Zealanders
- We can build on the innovation and data sharing that is already happening – people told us about projects underway and mentioned new opportunities. There is huge excitement about possibilities that data offers.
- Once engaged, individuals care about this topic. We met passionate New Zealanders in all sectors.

We have broken these key reflections down further into eight key topics. Different sectors had different views on the issues, but discussions and comments fell into the following topic areas.

Figure 1 - Key engagement topics



Privacy

- **How much of my information do you have?**
- **What are you doing with it?**
- **How do I know?**

We heard people across all sectors voice their concern about privacy and the need to retain control over their personal information if trust is to be maintained. We heard that Māori have heightened concern over government having their information, due to negative past experience. There were multiple requests for more discussion on sanctions and controls to address misuse or more detail on techniques such as anonymisation. Similarly, there was a strong push for more debate to ensure that the public are involved in negotiations on what is private and what is not. Overall, there was a clear sense that some people are trying to control their privacy and are feeling that they are losing it.

A number of people suggested that the principles should be in the reverse order to reflect the importance of privacy *“as control leads to trust leads to inclusion leads to value”*. The feedback highlighted that in order to maintain trust, people need to continue to feel in control of their individual information and have choices about how much is shared and used.

Others were keen to discuss options for how to give protection to citizens, to “get over the privacy hurdle”, and to harness the opportunities. Some of this feedback suggested that the best way to address privacy concerns was to deliver value from data, identifying a problem of national significance, using data to solve it, ensuring privacy is built into the design and thereby demonstrating the benefits.

Opportunities

- **Economic and social potential for New Zealand**
- **Excitement about all types of data, not just personal data**
- **We need to get going!**

Many people are excited about the opportunities that data sharing and data use could provide for the economy, society, the environment and our personal lives. Some of those commenting thought New Zealand could take a global lead as they felt we had perhaps the most data-rich public sector anywhere, and that there was strong potential to create a competitive advantage for New Zealand.

A strong theme in feedback was on the value from improving government services and improving the wellbeing of citizens, especially when accompanied by open government initiatives. Improvements in management of health information were highlighted by several commentators who value improved patient wellness, health and independence gains as well personalised healthcare.

“I've always dreamt of a time where... I could visit the doctor, dentist, family planning, sexual health clinic, etc. and they each have my medical history and previous medication I have taken in my lifetime. I could visit WINZ, Studylink, Banks, etc and they have my payment history and know how much I earn. I could verify permissions and consents through voice/fingerprint/pin recognition in one single government agency. If someone goes missing/commits a crime, their phone history, banking history, employment information etc is given freely to police. Big Data has huge advantages in the modern world. There are so

many times where we deal with frustratingly long processes; we think to ourselves "why don't you share my information with that company who (sic) you work. "

Another area highlighted was the value for improving resource management particularly, at regional or city level, to add more dynamic and responsive management to the needs of inhabitants.

We received a strong sense that there was a lot of work already underway and the focus should be on fostering innovation, accepting that some mistakes might be made and removing barriers where possible. Comments were also received on the need to increase understanding of what data is already available for use and to enable people to use it. There is a desire for more good use stories to balance the adverse current coverage around inappropriate data release.

While many people seemed already convinced of benefits and eager to get going, it was clear that others were not convinced by the examples of benefits and opportunities in the documents. For some this was because of privacy concerns, or scepticism about the promise of big data.

Data sovereignty

- **How to capture the gains for New Zealand**
- **Concerns about international companies and their impact on individual rights of New Zealanders**

It is widely recognised that that New Zealand cannot have a conversation about data in isolation: it has to be international. Lack of information about how data is held internationally or resold to third parties, was singled out in feedback as particularly concerning and requiring clarity in the Forum's documents.

"They only talk about New Zealand. Data is inevitably and routinely travelling off-shore. The principles need to reflect that NZ data futures are inevitably part of a global world."

The majority of this feedback related to questions about how a customer could keep any degree of control over their information, in such a scenario. Some comments stated that data management and education by the New Zealand government was needed to ensure that non New Zealand data institutions can be used with confidence by New Zealanders. Other comments highlighted potential benefits from participating in international research as well access to overseas data to drive business opportunities for NZ companies. People said that it was important not to duplicate any of the work that has already been done here or overseas.

Stakeholders suggested we should not turn off international flows of data, but rather ensure New Zealand captures good value from these flows, and make certain that (personal) information remains private and secure when required.

The needs of society vs. individual rights

- **What is the government doing with our information and are we ok with that?**

We heard that there is a need to strike a balance between privacy at the individual level and social usefulness from sharing data. There was debate around what privacy exactly is and how we should weight individual privacy against social benefits.

“It’s a balancing act, Government must take to heart the philosophy of preventative education and care, rather than adding more power to their prosecution and penalisation. Data Sharing should be used to create a more efficient government that focuses on caring for its citizens, not to police them”

Some highlighted the risk to individual privacy from the cumulative effect of many data sets being released. A single data set might not contain personally identifying information, but when linked to other data, individuals could be identified.

Feedback from the Māori sector stressed the need to ensure that data sharing works for Māori on their terms rather than being applied to or used in discriminatory manner. This was echoed by others who also wanted the opportunity to improve outcomes for their own communities. Many felt that they were already in the middle of these issues and wished to retain control and momentum. Data sharing techniques such as predictive modelling were poorly received by these groups despite potential efficiency gains. As one commenter stated

“If Marc Smith [in the case study in the Forum’s first discussion document] is singled out as a high-risk child at a young age because of his demographics, parent’s histories and ethnicity, does an MSD intervention put him in a school room of people who are also thought to be like that? Taking him out of the mainstream and acting like he will be turn out a certain way might just become a self-fulfilling prophecy”

The role of the New Zealand government for these stakeholders was strongly linked to their trust, confidence and prior experience with agencies. As a result, there was strong interest in further debate and discussion on appropriate governance, the role of informed consent and stewardship and how to ensure that any government response fits New Zealand “psyche”.

Access

- **There should be free access to government data ("it's ours")**
- **What information is available and how to access it**

We heard, particularly from the business sector, strongly-expressed views that innovation and benefits from data use were being hindered by current government procurement practice and data availability. The challenge for those who held this view was getting hold of the data, especially public data. There was a strong sense that the New Zealand Government’s approach to data sharing is lagging behind or too risk adverse.

Associated feedback noted that Government should make the data it collects freely available so that others can innovate, create products and add value. Some comments focused on the need to provide more clarity on the roles and responsibilities of different agencies and to catalogue its information holdings while others felt cost and licensing of data collected with public funds was the priority to be resolved. There was a belief expressed that, where possible, data collected with public funds be available as cheaply as possible, and with as unrestrictive licenses as possible, to encourage innovation, especially for those just started out on the next big idea. The example of the sharing of LINZ data on Koordinates.com was mentioned as an example in point where public data is freely available in a manner which is assisting businesses. As one commentator stated, *“Get the right rules and get out of the way”*. (This feedback did suggest that many were unaware of the government data that is already freely available.)

There was also some conversation on access to private sector data. People expressed concerns about not knowing which data is held by private companies, and to what degree organisations are willing to share all or part of it for commercial gain or other reasons. People wanted more clarity about the “terms of use”. There was considerable debate on how much control the original data provider was able to retain and whether they were aware of the range and degree of use by organisations. This feedback highlighted that Government needs to engage the private sector early, and work in partnership to achieve the data opportunities and efficiencies for data sharing as well as to maintain the trust of New Zealanders.

Inclusiveness

- **How to do we ensure people across society have the rights skills and knowledge to be involved and benefit?**

A recurring theme in the feedback was on how differing levels of capability could reinforce existing differences in society and result in parts of New Zealand society being excluded from any benefits from data use. For example, there were concerns that “only the smart will have access, not others” and this would reinforce differences in society stemming from lack of basic skills to navigate privacy and control and a lack of understanding of the possibilities. Similarly, concerns were raised about the impacts of age and gender gaps in capability on the effectiveness of government data-based services.

Trust was also seen as pivotal for inclusion. A number of comments highlighted the point that for those at the margins, trust has already been lost and that this would need to be rebuilt if this part of society was to benefit.

Nearly all the feedback stressed the need for more education on rights and responsibilities and continued engagement across all parts of society to ensure that all have the opportunity to benefit from data. The need to increase understanding of what data is available for use and enable people to use it was seen as vital in fostering innovation. It was also noted by stakeholders that different approaches for different groups in society would be needed and that different cultural views were important factors.

Risks of openness and sharing

- **How to retain data quality if everyone has access**
- **How to ensure that data is managed if everyone has access**
- **How to assist appropriate interpretation of data that has multiple users and uses**

The challenge of managing the use of the country's information assets to ensure continued value and control was another key theme. Feedback included comments on data accuracy, currency, maintaining the context of the data, keeping a check on the interpretation of the data and dealing with any misuse. Debate in some cases extended to practical concerns about where to house data and whether there was scope for a neutral centralised location.

A number of the comments concerned the quality and governance of shared data. It was pointed out that data ages quickly which affects the usability and relationship to other data. Data and metadata standards were seen as important to ensure value and to aid correct interpretation. There was

considerable interest from the government sector in particular, on how to develop expertise and learn from others with experience in this area.

One commentator felt these concerns were important enough to suggest the inclusion of an additional principle:

“That addresses the longevity, availability and business continuity aspect of information, i.e. information is available to those that need it, when and for as long as they need it, to provide public services (and form part of the national memory). We need to have information that is well managed so that we can have trust that access is appropriate, use and re-use is enabled and optimised and is usable for the entire life-cycle of its utility as a public asset”.

Other comments focused on the need to manage and monitor access to data to maintain trust and confidence in New Zealand institutions. We heard that it was vital to assure people that effective sanctions would exist and would be applied for any misuse of data, with one commentator stating *“There need to be real penalties for misuse of data, a 'sorry' is not an effective deterrent”.*

Capability

- **Do we have enough talent?**
- **Are the right people in the right places and connected?**

A number of people, particularly from the business and government sectors, expressed concerns about whether New Zealand had enough people with the right skills to enable value to be obtained from data sharing. One comment stated that *“our biggest problem is that there are too few competent analysts in this country, and these people are required if we are to turn data into knowledge and wisdom”.* Others felt that skills were available, and the real need was to encourage demand for data projects, and to connect the skills with the opportunities.

The need to take data, to be able to understand it, to process it, to extract value from it, to visualize it, and to communicate it was seen as a hugely important skill in the next decades, not only at the professional level but even at the educational (school) level. A number of comments called for greater investment to meet the demand for these skills particularly as they were likely to be in short supply internationally as well as in New Zealand. There was also a general theme promoting greater education across all aspects of society on how to use data to empower themselves and to ensure that data is not just accessible but understood and acted on.

Summary of stakeholder feedback by sector

Different groups had different views on the eight key topics. In this section we give a brief summary of the perspectives of different groups. We highlight the area of most interest and concern – three flames indicates an area of burning interest, two an area of warm interest.



A topic of burning interest



A topic of warm interest

See Appendix Three for a list of those whom we met with directly.

Critical government leaders

We met with a number of government leaders, people that we identified as having a critical interest or role in New Zealand’s data ecosystem and data future. They included the Privacy Commissioner, the Government Chief Information Officer, the Government Statistician, the Chief Science Advisor and the leaders of the Government Open Data and Information Reuse Programme.

Hot topics



Needs of Society versus individual rights – where should the line be? what is the government doing with our information and are we ok with that?



Access – what and how to make data available, inclusiveness

What we heard

- Government data is a public asset. There is a need to improve data management, leverage the opportunities data presents and make it available for the public good.
- There is sense of urgency – we need to do this now or risk falling behind.
- Shifting public debate and perceptions will help to build a culture for the future that enables data sharing.
- Government leaders are keen to find ways to give protection to citizens, to “get over the privacy hurdle”, and to harness the opportunities.

Public Sector

Government agencies were invited to provide input to the NZDFF, and many attended a Wellington event where they gave feedback. Some also engaged online or in one-on-one conversation. Input came mainly from those already working in data related initiatives. Canterbury regional and local government bodies provided input at a Christchurch event, but we had more limited engagement with local government bodies in other regions.

Hot topics



Privacy – how much of my information do you have? What are you doing with it?



Opportunities – lots already underway, excitement, huge potential for industry inclusiveness

What we heard

- New Zealand needs to move forward from personal data and privacy/big brother debates to achieve opportunities.

- Government should be able to provide assurance to citizens. This means we need techniques and procedures that are adequate to address privacy concerns and maintain trust.
- It is important to plan to minimise risks from data sharing and to communicate this to public.
- Lots of work is already underway. Public sector workers are excited about opportunities to improve services and improve the wellbeing of citizens
- Bubbling under the surface are operational concerns about how to manage the data, access and quality.

Business Sector

We received feedback from those already in the data-business across all engagement channels, but especially at the Auckland event. There was less feedback from utilities or resource management sectors or those businesses that would not directly benefit or are not already using data.

Hot topics



Opportunities – lots already underway, excitement, huge potential for industry



Access – what and how to make data available, inclusiveness

What we heard

- Many expressed a strong belief that this work is or could be underway, with a “just do it” attitude. Mistakes might be made and this needs to be accepted to foster innovation.
- There was excitement about all types of data, not just personal data.
- Clear rules are important, and we heard that clear terms of use would help business to work with data. Government should “get the right rules and get out of the way”
- The challenge is seen as getting hold of data particularly public data. Many believed that the public sector is lagging behind or too risk adverse.
- There was some concern about investment in capability and education to support the availability of relevant skills

Māori

We met with representatives of various Māori groups and individuals including the Māori Women’s Welfare League, the Māori Economic Board, the Independent Māori Statutory Board, Nga pae o te Maramatanga and the Māori Statistics Advisory Board. We spoke with a few iwi representatives, but did not undertake full iwi consultation.

Hot topics



Opportunities – lots already underway, excitement, huge potential for industry



Needs of Society versus individual rights – where should the line be ?, what is the government doing with our information and are we ok with that

What we heard

- Māori see a great opportunity to improve outcomes for their own communities and felt that that they are already in the middle of these issues.
- Land and other non-personal data is vital to support the post settlement Māori economy.

- Māori have heightened concern over government having their information, due to negative past experiences. There was a negative reaction to the Marc Smith example presented in our first discussion document and predictive modelling, with concern about how ethnicity data would be used. In general, we heard there was a lower level of trust in institutions amongst Māori.
- Many indicated the need to ensure the data revolution works for Māori on their terms rather than being applied or used in discriminatory manner. Māori emphasised that discussions around inclusion and control needed to start with the Treaty of Waitangi.
- We also heard strong interest in governance, informed consent and stewardship, and a desire to ensure that Māori concepts are reflected.

Academics and Non-Governmental Organisations

We have grouped these together because they make up only a small group of those canvassed, with shared focus on ethics and inclusion. (Note that hands-on data researchers are included in the data science cluster.) We had input from these groups at events and individual discussions. There was considerable reposting of quotes and promotion to wider community via Twitter.

Hot topics



Privacy – how much of my information do you have? What are you doing with it?



Needs of Society versus individual rights – where should the line be? What is the government doing with our information and are we ok with that?

What we heard

- A strong focus on rights of the individual and ownership. Considerable research is being undertaken to understand attitudes towards information sharing; trends, generation gaps etc. People pushed for more debate to ensure that the public is involved in deciding on what is private and what is not.
- There is a need for an “accountability agent” to raise awareness on what privacy rights people might trade for efficiency.
- Any government response should fit the New Zealand “psyche”.
- The answer is not to reduce the quantity of information sharing but to have controls in place to reduce risk.

Data Science

We had a reasonable level of feedback, with good attendance at events and use of web or LinkedIn channels. A number of Canterbury data scientists attended the Christchurch event. Central government data scientists provided feedback at the Wellington GOVIS event.

Hot topics



Opportunities – lots already underway, excitement, huge potential for industry



Access – what and how to make data available, inclusiveness



Risk of Openness – concerns about quality, how data will be interpreted and other impacts of open access

What we heard

- There was much practical discussion. How do we build good practice into projects and platforms? How do we manage and maintain the information stores?
- The government community were interested in tapping into expertise in other sectors and expanding their own expertise.
- Data scientists are already convinced of benefits and on the crest of the change.
- Many were interested in good use stories to balance the more adverse current coverage.
- Universities are already creating data pools.

New Zealand Public

We only reached a small section of population via the website, Twitter and LinkedIn and through limited media coverage. Those who engaged often held strong opinions, and feedback does not necessarily reflect the full spectrum of New Zealand opinion – some groups appeared to be missing, such as young people, older people and immigrant communities. The results of the website opinion polls are shown in Appendix Three.

Hot topics



Privacy – how much of my information do you have? What are you doing with it?



Data Sovereignty – capturing the gains for NZ, concern about international private sector giants and impact on individual rights

What we heard

- The majority of those providing website feedback had heightened concern over the use of their personal data.
- People are trying to control their privacy but feel they are losing it.
- Many wanted to see a stronger position on privacy than presented in the first two discussion documents. There were requests for more discussion on sanctions and controls to address misuse.
- To maintain trust, it is important that people feel in control of their individual information and have choices about how much is shared and used.
- We heard real concern around unique identifiers and doubts about the effectiveness of anonymisation. Some said they provide real identities only when really necessary.
- Lack of information about how personal data is held and managed internationally was singled out as particularly concerning and requiring clarity.
- Examples of benefits and opportunities in the documents did not convince all individuals.
- People do not necessarily have either good understanding of the value of data in New Zealand or good awareness of what data is available for use.

Appendix One - Other events

Forum members have attended and spoken at the following events between March and June 2014:

- SAS Users Forum
- Statistics NZ Official Statistics User Forum
- Tax and the Hidden Economy
- Gibbons Lecture by Prof. Miriam Lips – Privacy in the Internet Age
- Privacy Week Forum hosted by the Office of the Privacy Commissioner
- Big Data Breakfast
- Victoria University of Wellington School of Government lecture to the New Zealand online engagement community on the privacy behavior of New Zealanders
- Trans-Tasman Big Data panel
- Institute of Public Administration New Zealand event – How much can we trust the Government with our information?
- New Zealand Analytics Forum, Auckland and Wellington events
- New Zealand Institute of Economic Research, presentation to staff

Appendix Two - People and organisations we met with

Government leaders

- John Edwards, Privacy Commissioner
- Colin MacDonald, Government Chief Information Officer, Department of Internal Affairs
- Peter Mersi, Chief Executive, Land Information New Zealand
- Sir Peter Gluckman, Prime Minister’s Chief Science Advisor
- Liz MacPherson, Government Statistician
- Gabs Makhoul, Secretary of the Treasury

Representatives from the following groups and organisations

Government	<ul style="list-style-type: none"> • Cyber Policy Office, Department of Prime Minister and Cabinet • Government Communications Security Bureau • Accident Compensation Corporation • Ministry of Social Development • Ministry of Primary Industry • Office of the Auditor-General • Land Information New Zealand (including the Open Government Data and Information Reuse Programme and Spatial Data Infrastructure) • Inland Revenue • Office of the Privacy Commissioner • National Health Committee • National Health IT Board, Ministry of Health • Electricity Authority
Government advisory groups	<ul style="list-style-type: none"> • Advisory Committee on Official Statistics (ACOS) • Māori Statistics Advisory Committee (MSAC) • Government Chief Privacy Officer Advisory Board • Analytics and Insights /Integrated Data Infrastructure Governance Group • Official Statistics System Reference Group • National Ethics Advisory Committee (NEAC), health sector • Government Information Group Strategic Leadership Group
Business	<ul style="list-style-type: none"> • Critchlow • Google • MyWave • MyInfoSafe • Microsoft • New Zealand Manufacturers and Exporters Association • Vodafone • ChewyData • Telecom • Qrious
NGOs	<ul style="list-style-type: none"> • Transparency International • Salvation Army • Wiki New Zealand

Māori	<ul style="list-style-type: none"> • Māori Economic Development Board (reports to Ministers Sharples and Joyce) • Māori Women's Welfare League • Independent Māori Statutory Board (monitors Auckland Council) • Ngā pae o te Māramatanga, Auckland University • Tainui • Ngāti Porou • Rotorua hui of interested Māori
Research Community	<ul style="list-style-type: none"> • Shaun Hendy, University of Auckland • Andrew Sporle, University of Auckland
International	<ul style="list-style-type: none"> • Sandy Pentland, MIT • Dazza Greenwood, MIT • Cameron Kerry, former general counsel of the US Department of Commerce • Michael Daniel, Special Advisor to the President, US Big Data and Privacy Forum • Pulse Lab, Jakarta
Political	<ul style="list-style-type: none"> • The Green Party • The Internet Party • The Labour Party

Appendix Three - Website Opinion Polls

(As at 24 July 2014)

How important is it to protect the rights of individuals when personal data is being shared?

51%	Vital – individual privacy must be maintained at all cost
46%	Important – a balance needs to be found between individual rights and social benefits
3%	Unimportant – the digital age is upon us now we need a new approach to harness the benefits

Responses: 65

Should NZ take advantage of the opportunities data sharing offers?

56%	Yes – we'll be left behind if we don't
36%	Maybe – if the right precautions are in place
8%	No – there is too much risk

Responses: 75

How comfortable are you with your personal data being shared?

6%	Very comfortable – I can see the benefits this would bring
35%	Quite comfortable – if it's being put to good use
60%	Extremely cautious – I want to control my personal information

Responses: 84