



NZTech Developing a National Technology Strategy
Transforming Government

BRIEFING PAPER

Transforming Government Technology – innovation & partnership

April 2016

This NZTech briefing paper provides insights from the recent NZTech Advance Government Technology Summit in Wellington, including key observations from the Leaders Forum discussions involving senior executives and chief information officers from a broad cross section of government agencies and the tech sector.

EXECUTIVE SUMMARY

“Further fiscal pressure will hit agencies who do not innovate, who do not look at how technology can increase value and services to public.” said Deputy Prime Minister Bill English as he opened the NZTech Government Technology Summit.

A clear theme from the Summit was that transforming government services will lead to better outcomes for all New Zealanders, especially those in most need.

With up to 40 percent of all money spent on ICT in New Zealand spent by the public sector, enabling agencies to share innovative ways of using technology can drive better public services. As will successful partnerships and collaboration across agencies with the tech sector.

This message was explored by several speakers at both the Summit and the Leaders Forum discussion. Government Chief Technology Officer (CTO) Tim Occleshaw outlined the vision of the government’s ICT strategy to create a single, coherent ICT ecosystem supporting a radically transformed public service.

Occleshaw stated that ICT is at the heart of the transformation that the New Zealand government is looking for. NZTech fully supports this view and our members are committed to working with government to enable this transformation.

We trust the insights from this paper will aid further discussion and decision-making as the government continues its transformation journey.

OUR GREATEST CHALLENGE – PRODUCTIVITY

In his opening address at the summit, Deputy Prime Minister Bill English stated that productivity lies at the core of New Zealand's long-term economic challenges.

Hard won in a small isolated economy, productivity in New Zealand has declined over the past 40 years, compared to other small developed economies. With services making up 70% of New Zealand's GDP, it is here that the greatest productivity challenge exists. This is particularly so with government services, which make up half of all services. Improving the productivity of government services has the capacity to have a far greater impact than succeeding in other areas requiring reform such as housing regulation and water management.

Minister English identified technology as being at the heart of improving productivity of government services. This was reiterated by the Ministry of Business, Innovation and Employment Chief Executive, David Smol as he outlined the work being done across government to help government transform.

DISSATISFACTION DRIVING TRANSFORMATION

English expressed a relentless dissatisfaction with the state of government services. This sense of dissatisfaction has driven the government's goal to create a single, coherent ICT ecosystem across government agencies to support radically transformed public services.

Armed with its ICT Strategy and Action Plan, the government has already made progress in addressing high levels of inertia towards change in the public sector.

However, legislatively barred from interfering in the management of government departments, ministers have limited tools with which to drive transformation. While the ICT Strategy and Action Plan can put pressure on a department to deploy better tools, ministers cannot direct technology choices. One of the most effective tools ministers do have is creating departmental fiscal pressure by restricting budgets. In the current low inflation economic climate, this pressure is set to remain, along with a directive to improve outcomes.

A challenge with the fiscal pressure approach is that it tends to drive a culture of "squeeze the supply" rather than transformation. Agencies with no transformation budget try to drive out costs which often leads to a reduction in service.

Nevertheless, technological transformation in government has already delivered significant savings. Since 2012, better use of technology has delivered a 16% reduction in the reported effort in dealing with government departments.

POWER OF DATA TO MEASURE IMPACT

The vast majority of government spending is devoted to social services. English acknowledged that to date the government has not adequately measured most of the social service activities it funds. This is despite the fact that government is in fact an information business with agencies constantly generating new data about those who use its services.

Better tools are needed to collect and analyse data in order to measure the impact of funding and services. This is essential as the government shifts to a more results-focused framework to measure the impact of money spent and determine the success of services.

Agencies need to be constantly asking questions about the people using their services in order to develop a better understanding of their customers. Therefore, ongoing work is required by government departments to be able use data more effectively in order to address immediate presenting needs and their underlying causes This need will drive a demand for technology to equip agencies with data management and measurement tools. Using technology to provide new information on issues affecting the service users experience can help decision-making processes have a greater impact on outcomes.

THE IMPORTANCE OF MATURE RELATIONSHIPS

As Deputy Prime Minister Bill English acknowledged in his opening address the government's relationship with the technology sector has matured significantly in recent years. Specifically, this was driven by the establishment of a centralised procurement function and a Government CIO. As a result, discussions between government and the industry are now far more "gritty" and open, and able to grapple with real issues faced by agencies.

This sentiment was reflected in several other presentations and discussions at the Summit and aligns with insights gathered through previous NZTech government procurement working groups and sessions. There is a shared desire throughout the government and the technology sector to improve public services through better use of technology. This has been captured in the New Zealand government's Better Public Services strategies and in particular in the Results 9 and 10 objectives. In addition, the government's ICT Strategy and Action Plan sets out to transform government ICT in order to deliver better services and enhance trust and confidence in government. The most recent Action Plan Update reinforces the focus on positioning technology as an enabler of agency business-led transformation.

WORKING TOGETHER FOR BETTER OUTCOMES

A key focus of the Summit was exploring how government and the technology sector can work together to deliver better outcomes.

Raised several times during the summit, English also acknowledged that no particular government agency has an interest in the broader pool of demand that drives public services. Agencies are inherently focussed on their own institutions and are supply driven, "They fund hospitals, doctors, nurses, teachers, schools, prison officers. They don't fund reduction of misery among our population."

At the Summit, Government CTO Tim Occleshaw outlined the Partnership Framework his team established to help develop a single, coherent ICT ecosystem supporting radically transformed public services. The framework includes key stakeholders from across government and represents a new approach to governing work and getting buy-in across the public sector.

According to Occleshaw, public sector agencies have indicated a high commitment to system-wide transformation and expressed impatience for change. However, they also recognise that structural challenges are hampering collaboration and information sharing. There is a need for government agencies to work together to transcend their own boundaries and deliver smarter customer-centred services.

As the Partnership Framework matures it is evolving from centrally-led to a joint leadership approach, which is not an easy task in a system designed in silos, Occleshaw stated. NZTech recognises this is a complex environment and that there has been an increased level of maturity in terms of how organisations operate together. The functional leadership of agencies exploring novel approaches to working together should be

applauded. The New Zealand tech industry looks forward to an ongoing role in the collective effort to deliver better outcomes for New Zealanders in future.

HURDLES TO TRANSFORMATION

The Leaders Forum at the Summit raised the issue of what is preventing government departments transforming as fast as they would like. A number of factors were identified:

- **Innovation vs risk**

The environment in many government agencies does little to nurture innovation. While some do encourage risk taking, there is little room for failure. Such environments are not considered conducive to innovation.

- **Capability gaps**

The Leaders Forum found a need to ensure the right capability are present at all levels within government, departments and the industry to support innovation.

Minister English encouraged the ICT industry to be more proactive in working with schools to help develop future tech talent. Schools would welcome the resources and people the industry has to offer, as well as the opportunity to transform computer training programmes into content that would inspire students.

- **Resistance to collaboration**

While there is a proliferation of data in government agencies, a resistance, or inability, to share and collaborate is undermining the value of the data. Leaders at the Forum recognised that using available data to its full potential would certainly create opportunities to deliver better outcomes for citizens. However, the way in which agencies are currently incentivised, organised and even legislated creates resistance to collaboration. Each agency is focussed on its own goals, rather than system-wide objectives. Questions were raised regarding how to change the culture within government to be more innovative, how to enable agencies to have a better appetite for risk and how to encourage cross-agency collaboration.

- **Lack of leadership**

Driving transformation requires strong leadership, but this is not a strength across government, according to the Leaders' Forum. Agency executives, heads of departments and politicians responsible for enabling change require higher levels of technology competence and a real understanding of what the transformation aims to accomplish. However, the question was raised whether the experience and diversity were present in those involved. Meanwhile, competing agendas between agencies have resulted in some leaders not staying the course on transformation initiatives and backtracking to focus on saving money or dealing with reactive issues in their departments. The need for a leadership drive was identified to ensure all agencies are working toward realising system-wide benefits.

RECOMMENDATIONS

The vision of the Government's ICT Strategy is to create a single, coherent ICT ecosystem supporting a radically transformed public service. Based on discussions and issues raised at the Summit, we have compiled the following recommendations on how this can be supported.

1. IMPROVING SKILLS AND CAPABILITIES

Both government and the tech sector have a responsibility to develop, attract and retain the skills and capabilities required for leading transformation. To enable change that results in real outcomes for New Zealanders, government agencies need to create capabilities among their ICT leaders that (1) allow them to know how and when to take risks. and (2) how to be innovative and engage in richer procurement discussions. Alongside this, the technology industry needs to continue to develop skills around working in partnership with Government to help it on its journey to transformation.

We believe the following focus areas in the 2015 Government ICT Strategy will help achieve the above:

- Integrated competency framework.
- Graduate recruitment programme.
- Virtual leadership academy.

As indicated during discussions at the Summit, our shared challenge requires a holistic approach ranging from improving the immigration of tech talent into the country, through to longer term actions in improving the education of Kiwi kids. This approach will increase the number of people entering the tech sector in the future.

This has been established through an Industry led Digital Skills Forum in collaboration with key agencies and industry bodies. Beneath the Forum are four working groups each focused on tactical initiatives to improve the measurement of skills requirements, the development of the local education pipeline, the development of a sustainable immigration pipeline and continued development of the skills in the market.

2. DATA AS A STRATEGIC NATIONAL RESOURCE

Information the government holds should be regarded as a strategic resource and treated as such. Information standards and policies are needed that allow and encourage data sharing among agencies to improve outcomes for all New Zealanders. This calls for a transparent, collaborative culture enabled by policy, organisational structures and incentives across government. Effective collaboration between agencies will allow government to realise the full benefit from sharing data to improve outcomes for citizens.

This requires the following;

- **A single source of the truth**

Information standards, where data is captured in a common format across agencies, will facilitate improved sharing of vital information across government. A single source would allow different agencies to provide the best services to the right people in the most effective way.

- **A shifting focus of privacy**

A paradigm shift is needed from where agencies will not share information out of fear of breaching privacy to one where they share data more openly by default unless there is a good reason not to. Sharing information by default will allow better analysis of data to support improved service design, policy making and investment decisions.

These recommendations align with the following focus areas in the 2015 Government ICT Strategy:

- Open data and sharing by default supported by privacy and security settings
- Public trust and confidence permits sharing and re-use of information
- Frameworks and infrastructure facilitate flows of information and re-use

3. ENABLING PUBLIC SECTOR INNOVATION

As expressed by several speakers at the Summit and at the Leaders Forum, encouraging innovation within government is crucial. Hence it is referenced in several of the five focus areas of the Government ICT Strategy 2015.

The Strategy calls for agencies to:

- Have easy access to innovations from the ICT industry.
- Look to industry and third parties for sources of innovation.
- Build workforce capability that encourages innovation.

There is a need to both increase innovation in the public sector and to increase awareness of the innovation already taking place.

The Leaders Forum recommends the use of models or case studies to inspire and encourage similar initiatives in other departments and agencies. This would help guide future technology decisions and show that innovation is both supported and encouraged in government in New Zealand. NZTech and its members welcome the opportunity to assist in enabling public sector innovation in New Zealand.

4. BEYOND PROCUREMENT RELATIONSHIPS

Industry and public sector leaders at the Summit recognised that to enable innovation and deliver improved outcomes to citizens, the way agencies commission work needs to change.

A shift in procurement is needed from being prescriptive to being outcomes-focussed. This will create space for agencies to engage with industry through creative dialogues and help determine better solutions to problems.

Leaders felt many of the current procurement systems include a “one size fits none” set of processes, which don’t serve any department particularly well. As David Smol highlighted, there has been progress in this regard, with the Department of Internal Affairs (DIA) committed to working with the tech sector in a far more sophisticated way to deliver better outcomes.

NZTech recognises it’s members need to continue developing their maturity in terms of a willingness to participate in discussions with agencies and potential competitors. The industry is willing to work with government to create a more cooperative procurement model, where parties that would normally operate in competition to each other work together with agencies for mutual benefit.

5. LEADERSHIP

As noted above, strong leadership is required to drive transformation – it enables people to have the courage to take risks or change cultures.

In his address at the summit, Government CTO Tim Occleshaw stated there was a broad desire from leaders in agencies to be involved in driving change. Strong leadership is required to drive transformation by enabling culture change.

The Leaders Forum presented the following three recommendations:

- **Mentoring for board members or advisors on ICT**

With a general lack of technological understanding around the board table, mentoring on how ICT can enable transformation would be of significant value.

- **Letting technologists rise as leaders**

Proactively placing senior IT leaders, like CIOs, in other business roles would broaden their experience of the overall organisation. This would enhance their opportunities to rise up to wider leadership roles in the business.

- **Enabling the art of storytelling from leadership**

Effective storytelling can help senior leaders both craft and communicate their vision for change to engage their people and execute a vision. This could focus on getting buy-in for short and long term objectives and be used to share success stories and lessons from failed projects to help ensure change initiatives progress.

These recommendations align with the following focus areas in the 2015 Government ICT Strategy:

- Public sector leaders lead change to overcome system barriers
- Public sector leaders re-balance agency and system priorities

6. PUBLIC SPENDING TO DRIVE ECONOMIC OUTCOMES

We welcome Minister English's acknowledgment that the technology industry can play a major role in transformation of New Zealand Government services, and the economy as a whole.

We are pleased to note this sentiment is reiterated in the Government ICT Strategy 2015 with partnerships with industry among the focus areas that underpin the strategy.

Helping New Zealand businesses grow through better use of technology while helping tech companies successfully export is important and the government's approach to technology is paramount.

Government spending has a significant impact on the economy, and the public and technology sectors. Between 29 and 40% of all money spent in the tech sector is spent by government – at both local and central level.

The government's Business Growth Agenda sets out a vision for the New Zealand economy for 2025, which is:

- Internationally connected and diversified.
- Innovative.
- A hub for talent and ideas for the Asia Pacific region.
- One of the most highly skilled in the world.

As David Smol, chief executive of the Ministry of Business, Innovation & Employment (MBIE) outlined at the Summit, to achieve this vision, New Zealand needs significant growth in its technology sector.

With New Zealand's exports still dominated by the primary sector, New Zealand needs to find other sources of exports. The tech sector presents the most obvious opportunity to expand the diversity of New Zealand's exports.

Ongoing investment in the New Zealand tech industry can help achieve these aspirations, while helping to drive better public services. The industry is committed to developing a strong relationship with government and to engage in productive ways with the aim to improve New Zealand's prosperity through a vibrant tech-led economy.

CONCLUSION

The Summit highlighted that technology is central to both the government's aspiration for the economy and transforming the way government operates and delivers public services.

The New Zealand technology industry, represented by NZTech, understands that underlying the government's drive to deliver better public services are targets to reduce welfare dependency and crime, to support vulnerable children, boost employment and make it easier to interact with government. Across all of these, technology is recognised as an enabler.

We believe real transformation and better public services will come through mature, collaborative relationships among government agencies, and between government and the industry.

This calls for better collaboration, the sharing of solutions, leveraging initiatives across the public sector and a focus on delivering system-wide benefits.

With the best people, processes and technology, combined with open dialogue and true partnerships, we can accelerate the transformation of public service to deliver greater outcomes for all New Zealanders.

Ultimately, the industry believes that more can be done and wishes to work alongside government to help bring about these positive outcomes.



The New Zealand Technology Industry Association (NZTech) is the national voice for the technology sector in New Zealand.

NZTech is a not-for-profit association funded by members - the technology businesses in New Zealand and associated partners - from start-ups and local IT firms through to hi-tech manufacturers, major corporations and tertiary institutes.

NZTech works to increase New Zealand's prosperity through better use of technology and strategically focuses on enhancing skills and talents, driving business growth & exports, and guiding & supporting government policy. By actively encouraging relevant initiatives and policies that stimulate and advance the use of technology, together we aim to increase New Zealand's productivity, innovation and economic growth.

DISCLAIMER

Any opinion and analysis presented in this Briefing Paper are the opinion of the author of the paper, not the opinion of the members of NZTech. Any NZTech information that is to be used in press releases or promotional materials requires prior written approval from NZTech.

New Zealand Technology Industry Association
L1 Building C, 14-22 Triton Drive, Auckland 0632,
New Zealand, ph +64 9 475 0204, www.nztech.org.nz

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