TECHLEADERS EXECUTIVE.

BRIEFING PAPER
FOR INCOMING MINISTER

Build Digital Capability to accelerate economic growth and productivity

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Briefing to Incoming Ministers
Build Digital Capability to accelerate economic growth and productivity

November 2020

INTRODUCTION

New Zealand's TechLeaders Executive welcomes you as Minister for Digital Economy & Communications.

The TechLeaders Executive (NZTLE) is a group of senior and leading digital Executives at Chief Information Officer level. As a body, we provide a platform for vendor independent, cross-sector collaboration in the public and private sectors. We are, like you, committed to a prosperous New Zealand where technology underpins wellbeing.

2020 has been a difficult year for many however, it has also created an opportunity for NZ by forcing a rapid uplift in digital capability both at an individual level and for our businesses as a whole. NZTLE members believe we can create further momentum from this shift to grow digital capability, lift the economy and be a more inclusive society.

To coordinate efforts from the private sector with Government action, **we recommend the joint development of a NZ Digital Strategy** to progress the frameworks, policy, regulation and the investments needed to grow New Zealand's digital capability.

This BIM outlines what we think a NZ Digital Strategy might include with an example set of recommended strategic pillars set out as a digital strategy straw man in appendix A.

If you agree that a NZ Digital Strategy would be valuable, then we offer a further conversation to explore how we might assist in shaping this.

As a group that are living and breathing digital every day, we welcome the opportunity to meet with you on a regular basis to share insights and opportunities relevant to building the digital capability of NZ.

Our shared vision for New Zealand as a Digital Nation, articulated in this BIM

- New Zealand is internationally recognised for how a thriving digital economy and society has enabled the living standards framework.

- Digital regulation, policy and investment are aligned to enable digital technology growth and evolution.

- Every New Zealander has access to training, coaching and technology for an agile workforce and entities across the private and public sectors.

- Well defined skill pathways for New Zealanders and migrants to contribute to New Zealand's digital economy.

- The private sector, from small businesses to large corporates, has confidence to invest in optimal and transformational digital operating models with the related human resource investment.
- Our schools, from pre-school to post-graduate, are digitally enabled with teachers and lecturers trained and supported so that digital is incorporated throughout.

TechLeaders Executive is eager to contribute – we believe the next 100 days and the opportunity that is taken now, will define New Zealand's future in a rapidly changing world.

Stuart Wakefield
Chair
TechLeaders Executive

A NEW ZEALAND DIGITAL STRATEGY

In a post Covid-19 world, many organisations are now open to distance working and procuring products and services digitally. This changing paradigm is an opportunity to create scalable growth opportunities for New Zealand. We believe growth will be quicker by working in partnership with Government and we propose the joint creation of **a New Zealand Digital Strategy.**

The New Zealand Infrastructure Commission, in 2021, will deliver a 30-year Infrastructure Strategy. This explicitly relates to the built environment involving tens of billions of dollars of public investment. There is no counterpart relating to the digital economy. TechLeaders Executive recommends that a Digital NZ Strategy is needed noting the UK this year will release its third national digital strategy.

A New Zealand Digital Strategy would enable us to become a digital nation by focussing on key enablers and infrastructure required to accelerate economic productivity and growth, for example, culture, capabilities, infrastructure, technologies, innovation, IP commercialisation, open data, privacy, ethics, workforce training/retraining, digital inclusion, skills and competency.

A DIGITAL STRATEGY STRAWMAN

To demonstrate our intent to work collaboratively with you, we have produced an outline of what we believe the NZ Digital Strategy might cover. Included in this are actions that will have immediate positive impact to the economy and the workforce.

Strategic Pillars

We believe a NZ Digital Strategy should cover a broad set of objectives to build the digital capability of our people, the workforce, our companies and the government and be supported by changes in policy, regulation and appropriate financial incentives.

The proposed strategic pillars represent this broad focus.

1. **NZ A Digital Nation** – a collaborative public/private sector approach to building economic prosperity and digital inclusion
2. **Critical Skills** – Immediate and ongoing access to critical digital skills
3. **Talent** – Growing a domestic pipeline of digital talent
4. **Inclusion** – Building digitally inclusive infrastructure and standards
5. **Education** – Digital education delivery

The Strategy should be informed by a current state diagnostic and baseline set of metrics. We see the strategy as being evolved continuously to keep pace with changes in citizen behaviour, technology capability,

policy and regulation with regular review points. We also expect this is likely to be a natural extension of the MBIE-led Industry Transformation Plan, consultations and current work by the government on its own digital services.

We believe the strategy should consider:

- **Globally benchmarked data standards:** whereby public and private enterprises and citizens have confidence in open data standards that inform, invent and inspire new products, services and delivery.

- **A digitally skilled workforce:** supported educational and training benefits, like an 'Digital New Deal,' which embeds technology from preschool to lifelong education in consistently equipping the workforce with quality digital skills.

- **World-leading next-generation infrastructure:** New Zealand must be a global leader as Covid-19 reshapes and redefines the future of work and where work happens; pertinent to regional economic development.

- **Regulations that enable competition and innovation:** The UK recognises need to avoid "unnecessary layers" of regulation while ensuring a coherent and consistent approach to drive growth. This applies especially to autonomy and artificial intelligence.

- **Kaupapa Māori and Pasifika technology:** this is a uniquely Aotearoa-New Zealand approach to global digital delivery and coding.

NEXT STEPS

We welcome the opportunity to discuss the formation of a Digital Strategy and Strategic Pillars that we believe will underpin growth in digital capability and good outcomes for all New Zealanders.

We propose a working session with yourself and your key representatives with members from the NZ Techleaders Executive to discuss this proposal and agree an approach to collaboratively build the Digital Strategy for NZ.

ABOUT THE NZ TECHLEADERS EXECUTIVE

NZTech launched TechLeaders Executive in 2017 as an independent platform for technology and digital leaders across industry and government. The TechLeaders Executive also includes Chief Digital Officers from government portfolios, including StatisticsNZ and from the SOE, and Transpower.

A not-for-profit membership organisation, TechLeaders Executive sees a prosperous future for New Zealand underpinned by technology. We seek to actively contribute by influencing and paying forward our experience to support positive economic and social change.

TechLeaders come from a wide range of sectors including education, councils, FMCG, banking and finance, logistics, aviation, entertainment and professional services. The members enjoy working together on significant issues and providing learning opportunities that benefit their wider teams.

TechLeaders provide you and ministerial colleagues with a real-world collective resource with shared interest in wellbeing and seeing New Zealand prosper.

NZ TECHLEADERS EXECUTIVE KEY CONTACTS

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NZ TECHLEADERS EXECUTIVE MEMBER ORGANISATIONS

The NZTechleaders Executive members represent the following organizations

DIGITAL STRATEGY STRAWMAN

To demonstrate our intent and as a starting point to work collaboratively with you, we have produced a strawman example of what we believe the NZ Digital Strategy might cover. We believe these focus areas would have an immediate positive impact to both our economy and workforce.

Strategic Pillars

We believe a NZ Digital Strategy should cover a broad set of objectives to build the digital capability of our people, the workforce, our businesses and the government and that this be supported through changes in policy, regulation and appropriate financial incentives.

The proposed strategic pillars represent this broad focus:

1. **NZ A Digital Nation** – a collaborative public/private sector approach to building economic prosperity and digital inclusion
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5. **Education** – Digital education delivery

NZ Digital Strategy – Overview of Strategic Pillars

The following describes the focus areas for each pillar and where we believe a collaborative approach will have the most impact.

1. **NZ A DIGITAL NATION: A collaborative approach to building economic prosperity & digital inclusion**

   Through bringing together both public and private sectors we are believe we will be able to achieve good outcomes for New Zealanders at pace. Key inputs include MBIE as a catalyst for seamless digital technology and includes human resource development, standards, integrated digital self-service adoption, inwards investment touchpoint and industry promotion both in New Zealand and internationally.

   To ensure we are making progress in the most important areas, we suggest forming a Digital NZ Diagnostic to deliver a baseline set of key metrics that will inform strategy and keep us on track. This should include measures of vitality, readiness, culture, capability, capacity, productivity and inclusion.

   An opportunity exists to include acceleration of commercial IP through facilitating access.

2. **CRITICAL SKILLS: Immediate and ongoing access to critical digital skills**

   While Covid-19 has impacted parts of the economy, technology has remained a positive performer. There is now an immediate need for skills, talent and investors to maintain our momentum and ensure New Zealand has the right capability to grow.

   Aligned to this is the urgent need to research the technology skills of expatriate arrivals since March 2020. This will help inform Immigration NZ's Long Term Skill Shortage List to ensure we better understand todays digital skills deficit and are focusing on the right gaps.

3.   TALENT: Growing a domestic pipeline of digital talent

New Zealand has three ICT graduate schools with three different offerings for students however all three currently deliver inconsistent outcomes.

Despite this inconsistency all have made a positive contribution by increasing the number of senior experienced ICT workers.

Unfortunately, we understand that ICT Graduate Schools funding will end in 2020 from a decision taken in Budget 2019. TechLeaders Executive recommend this funding be extended to June 2021, allowing for a considered review before a final decision is taken in Budget 2021/22.

There is currently a vocational disconnect where skills may not align to industry needs; something the Digital NZ Strategy can help answer. The United Kingdom and Australia offer technology apprenticeships that unify the world of work and qualification. TechLeaders Executive recommends an 'earn as you learn' model be adopted to widen employment pathways for new entrants and older workers who retrain.

A trend to offshore roles is both a data and cybersecurity concern. Bringing back roles from offshore would further help to grow our human resource pipeline of technology talent:

4.   INCLUSION: Building digitally inclusive infrastructure and standards

To be a digital nation, recognised on the world stage, we need to bring all our people and communities with us. Presently, we still have a significant percentage of New Zealanders in digital poverty without access to technology, learning or infrastructure.

Research confirms that digital inclusion delivers significant benefits to both the public and private sectors. Better coordination across local and central government and related agencies will overcome the barriers to access, technology, learning and infrastructure:

5.   EDUCATION: Digital education delivery

The impact of closing educational facilities and transitioning our students to distance learning during Covid-19 lockdowns, highlighted significant gaps and the variability of digital access as well as teacher/lecturer capability.

The learning experience for children and students was, in some cases, poor. Digital is a means to make education resilient, relevant, and inclusive by bringing educational facilities, teachers and lecturers up to a minimum standard. There is further application to regional health schools, Te Kura, Youth Justice and remedial education within correctional facilities.

While there has been a lot of cooperation between industry and education, there is an increasing disconnect between what is being taught and what the workforce needs. We will need to be more purposeful about how we leverage industry participation to support workforce planning and curriculum, to assist with the delivery and training of teachers and lecturers. This supports a wide range of geographically independent career pathways.