Information & Communications Technology

HIGHLIGHTS

Labour will:

- Aim for ICT to be our second-largest contributor to GDP by 2025
- Aim to achieve digital equality across all divides by 2020
- Speed up access for all New Zealanders to world class broadband and telecommunications services, whether they live on the fringes of Auckland or rural New Zealand
- Build a more connected economy by updating legislation to give certainty to digitisation for industry, businesses and consumers
- Introduce a digital bill of rights to protect on-line rights, modernising our copyright laws and empowering digital citizenship
- Establish the position of Chief Technology Officer (CTO).

Introduction

Last year Labour released the Future of Work report which identified the changing workforce due to fast changing technology. This is starting to hollow out middle end jobs and occupations such as accountancy, law, insurance, health while low-skill jobs increase, which in turn could see real incomes decline.

There are opportunities alongside the disappearance of jobs through emergence of new business models (the rise of the micro multi-national) and job opportunities driven by new technology. But we have to take advantage of these opportunities and government has a role to ensure we do.

This means a critical role for innovation, science and research to harness the benefits of technology for the future of work. Morale in New Zealand’s science and research community is low, but despite this, our technology sector is starting to flourish and become a large contributor to the New Zealand economy. It creates many jobs, and contributes to GDP and exports.

Labour’s objective is a “joined-up” approach where Government is encouraging renewal of the New Zealand economy using technology advances as the driver, while prioritising and enabling widespread, equitable usage of new technology for maximum community benefit.

Issues across the New Zealand tech landscape are challenging, exciting and disturbing.
We need to move beyond business as usual and develop a strategy to support innovation and entrepreneurship through a rich innovation ecosystem.

- It should link strategic science to regional high-value clusters and sector centres of excellence;
- align tax and investment incentives to support a high-value strategy;
- attract and retain global and local talent;
- ensure information and social infrastructure is sufficient and appropriate.

It will need to address social inclusion and the digital divide so that all citizens have their basic needs met and can participate in the information age.

Labour believes that New Zealand must aim for ICT to be our second-largest contributor to GDP by 2025. To achieve this goal, New Zealand has to lift its game and confront some significant barriers. These include barriers in education, in the way we treat contractors and in our investment in research and technology.

Specifically Labour will:

- Develop a comprehensive action plan for each major industry in New Zealand, to use technology more effectively
- Engage industry groups so that these plans are co-designed and are not seen as Government fiats or bureaucratic paperwork
- Focus on the least productive sectors, identified by the Productivity Commission as including construction as well as several services industries (e.g. food, accommodation, professional services)
- Reach out to small business, advocating how they can survive technology disruption. Many industries have a large number of smaller operators who are often not ICT-savvy, see ICT as a cost item not a value driver, and are fearful of technology change
- Include, and even prioritise, the sectors where the Government is a major funder and/or operator, such as health, education, housing, transport, justice and energy.

Achieving digital equality across all divides

Effective use of technology by all New Zealanders requires four things:

(i) Improved Access - because some New Zealanders still have poor internet access and a small number have none at all;
(ii) Increased Affordability - because some Kiwis are unable to afford broadband and digital devices needed to use the internet;
(iii) Greater Skills - because some New Zealanders do not have the capabilities needed to use the internet effectively; and
(iv) Heightened Interest - because some Kiwis are not interested in the internet, social media, e-Commerce or the latest app. While that is their decision, their choice may risk them being disenfranchised as more and more Government and business activity moves online.

Around 8 to 9 per cent of New Zealanders are not regular users of the internet, or around 1 person in every 11. A further 11 per cent are characterised as “Low Level Users” of the internet by the World Internet Project NZ.

There is growing digital inequality between the main centres and rural New Zealand and many people still experience poor or no connectivity. We have an education system which is overstretched and is failing to prepare our students and young people for the changing economy, which is already being impacted by disruptive technology.

For New Zealand to achieve digital equality, our population needs to have access to good connectivity and be able to afford to connect. This is a prerequisite for fundamental economic changes needed for our country to address the challenges we face.

Labour is committed to the following principles:

- New Zealanders must have access to technology as a right, regardless of income or geography
- A deliberate strategic approach is needed from the bottom-up and the top-down. The market will not bring digital equality. Government involvement is necessary
- No communities or parts of society can be left behind
- We need a holistic view. We have to consider the contribution of innovation to well-being, inclusion and mobility
- Access needs to be on demand, anywhere, anytime
- An innovation and digital-inclusion strategy must link to a high-value economic strategy, involving sector-based, high-value clusters
- The education system needs fundamental reform to its curriculum, teacher training, and a skills strategy.

Frustrations with the slow progress of the UFB2 and RBI programmes are commonplace. UFB2 certainly has the potential to improve education and opportunities for rural New Zealand but 6/7 years for some communities is a long time to wait. That is longer than it takes for a child to complete their high school education during which time they may have been significantly disadvantaged by being unable to access the internet. Tourism and local businesses also benefit hugely from good connectivity. Telecommunications access is another huge issue for those in rural areas with mobile blackspots dotted up and down the country.
Labour will:

- Work toward achieving digital equality across all divides by 2020
- Work to speed up access for all New Zealanders to world class broadband and telecommunications services, whether they live on the fringes of Auckland or rural New Zealand
- Support the roll out of low cost internet access to those communities facing financial difficulty in accessing the internet.
- Work with the private sector to facilitate the provision of internet services to low income communities
- Work with rural communities to provide initial connectivity equipment which can then be managed by the community. Other funded initiatives would aimed at regional development working with local government and communities to extend ultra-fast broadband
- Reprioritise the existing Maori ICT development fund to focus on Maori research, innovation and development which will be governed transparently by Te Puni Kokiri with support from the Ministry of Business, Innovation and Employment and investigate ways to ensure the sustainability of this fund
- Review the role of the state in ownership and licensing of spectrum frequencies to ensure long term public good for all communities.

Specifically Labour will investigate supporting new programmes for digital inclusion including:

**Wired marae projects**, such as those in Northland, Whangarei and remote Mitimiti Beach. Maori are under-represented in the ICT sector – in employment, skills, uptake and usage.

**Connecting people in state and community housing.** A high speed wireless network could be deployed in suburbs with primarily public housing.

**Towns with low levels of uptake.** A specific fund to increase broadband uptake levels offered to industry on a contestable basis to make broadband affordable in lower-income towns

Building on NGO and philanthropic efforts. Supporting Manaiakalani and like initiatives, either geographically or specifically targeting lower income households.

*Increasing funds to current programmes* such as the High Tech Youth Network and Computers in Homes

**Labour will:**

- Extend support to engage seniors, for example through Seniornet
- Engage ethnicities with lower than average ICT usage including Maori and Pasifika
- Research into why some Kiwis are “not interested”

Closing the digital divide will ensure that all children, teenagers, adults, and communities benefit from the jobs, access and participation that a digital future brings.
Labour will:

- Establish a comprehensive programme to ensure that every student in every school has access to a mobile device such as an iPad, tablet or laptop.
- Provide schools with the resources to develop full digital literacy will be supported with teacher training programmes.

The basis of a digital economy is universal access to efficient and cost effective broadband to all corners and communities in New Zealand. ICT is now a strategic asset that is fundamental to the future of the nation’s communities, business and government. As with roads, rail, electricity and aviation, Labour recognises that digital infrastructure requires investment.

Subject to the outcomes of RBI2, Labour believes it is possible to "go further with fibre", and exceed the present Government’s goal of 99% of the population having access to at least 50 Megabits per second speeds by 2025. As there is a point where fibre will always be uneconomic, the right approach is to look for the best possible digital infrastructure, enabling the most usage & highest productivity, to the greatest number of New Zealanders.

The recently approved “Fibre to the Farm” law change is a step forward, but Labour is concerned it does not go far enough to enable fibre operators who are not electricity lines companies (e.g. Chorus), as rights of access apply only to existing electricity lines firms. The next Government has a clear public interest in ensuring third party operators such as Chorus can take up these rights of access in conjunction with electricity lines operators, and if this does not happen a future Government may choose to clarify the law to ensure third party access on reasonable commercial terms is available.

Labour will:

- Initiate discussion with fibre operators about pulling their UFB2 build programme forward
- Prioritise towns affected by natural disaster for fibre deployment
- Work with industry to gain support for a DIY approach to fibre installation in rural New Zealand
- Work with fibre operators to standardize rural fibre installation methods and costs
- Work with industry to explore the benefits of alternatives to fibre for the “last mile” for remote households.

Widening economic inequality leads to the digital divide that puts certain communities at a digital disadvantage. Labour is committed to closing the digital divide.

Protecting citizens’ rights online

The emphasis on digital access and involvement must be accompanied by a Digital Bill of Rights that provides the legal framework to protect New Zealand communities’ digital rights. This will include rights from mass surveillance, the right to free expression, the right to privacy and rights
on personal information. Likewise businesses require frameworks that make New Zealand a safe and secure place to store data. Also, and importantly, a digital bill of rights will also protect the interests of those unable to access digital services, such groups must be guaranteed reasonable access to services.

**Labour will:**

- Engage with the wider community to develop a Digital Bill of Rights that will integrate with existing cornerstone legislation such as the Bill of Rights Act, the Crimes Act, the Privacy Act and surveillance legislation.

International connectivity is vital to the digital future of New Zealand.

**Labour will:**

- Take an active interest in improving and enhancing New Zealand’s international connectivity. In government research the development of a South Island trans-Tasman cable, to build a network that mitigates against natural disaster.

**Building a Connected Nation**

Labour’s procurement policies will provide New Zealand firms with the ability to participate in government digital projects. Reducing government ICT costs, supporting local talent and businesses, and increasing the transparency of government procurement is important.

**Labour will:**

- Support open standards and open software development across government IT projects. Open standards will be thoroughly documented and made publicly available at no cost, thereby allowing the exchange of information between government, public and commercial sectors to be free of any costs associated with proprietary software.
- Adopt a whole of government approach to software to achieve open access to government software, evaluating whole of government solutions, rather than a silo approach across departments. There will be a requirement to evaluate publicly available solutions for business requirements.
- Redirect government procurement policy to ensure that ICT projects are offered to New Zealand businesses. By investing in our own resources, the government will encourage the development of world leading knowledge.
- Foster development of the ICT industry through accelerated depreciation programs that will help mitigate the upfront costs that ICT development incurs.

Labour recognises the strategic importance of digitisation and will appoint a CTO to ensure that digital development is planned to achieve the best national outcomes.
**Labour will:**

- Create the position of Chief Technology Officer (CTO) who will report directly to the Prime Minister and Cabinet. The CTO will
  - be tasked with introducing and managing a “National Digital Architecture” and “Digital Technology Roadmap”. This will help define the future of information technology projects undertaken by government to ensure systems fit within agreed parameters
  - work with the wider industry to develop ingenuity and creativity in the ICT sector. The establishment of “X” prizes to encourage breakthroughs in science would be administered by the CTO.

Labour recognises that there is shortage of skilled IT professionals, and that we need to establish clear career pathways for IT professionals.

**Labour will:**

- Reform the immigration process to attract skilled IT migrants
- Establish 1,200 digital apprenticeships to ensure that the ongoing demand in industry can be met
- Establish an industry governed body to oversee ICT training and set recognised qualifications and certification.

Existing legislation, in particular the Telecommunications Act, Radio Communications Act and sections of the Commerce Act are outdated in terms of existing and future digital requirements. Copyright laws are also outdated in terms of the digital age.

**Labour will:**

- Review and update the requirements of the Telecommunications Act to include the wider effects of digitisation and the dependences that now exist. The review will operate on the basis that the objective of regulation is to ensure fair competition to the benefit of consumers and businesses
- Work to amend legislation to ensure that distribution networks are competitive, digital frequencies are made available and monopoly behaviors are controlled
- Undertake a review of the Copyright Act that updates and extends the framework for digital copyright in New Zealand.

In September New Zealander’s have a choice to make about the kind of country they want to live in. This tech vision for New Zealand can be reality under Labour.