The Digital Inclusion Blueprint

Te Mahere mō te Whakaurunga Matihiko

Te Tari Taiwhenua
Internal Affairs

New Zealand Government

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Minister's Foreword
Hon Dr Megan Woods

We live in a time of rapidly changing digital technologies that affect the ways we work, access entertainment, communicate, and how we see the world. As Minister of Government Digital Services, I want all New Zealanders to thrive in this digital era.

While the term digital inclusion might be new to some people, it's not a new idea. It's a world where everyone has equitable opportunities to participate using digital technologies. Digital inclusion is broader than the idea of "digital divides", which focuses on the gaps between people who use the internet and digital technologies and those who do not.

Digital inclusion is complex and multi-faceted. In this blueprint, we introduce four elements of digital inclusion: motivation, access, skills, and trust. Each element reflects a number of underlying challenges or drivers, which affect different groups of people.

Digital inclusion is an important contributor to the ambitious goals this Government has set for New Zealand, including our commitment to lift the wellbeing of our society. The access to information, services and communication that the digital world offers leads to greater opportunities for increased wellbeing for all New Zealanders. The Government is focused on building stronger relationships with Māori, and I am proud of Te Whata Kōrero, the approach we introduce in this blueprint to ensure that the voices of tangata whenua are central in our work.

Digital inclusion is a building block for innovation. Even basic digital skills and understanding form a strong starting point for lifelong learning and resilience as the technologies around us change. In a world where everyone can participate online, anyone can become a digital creator, innovator and instigator of change.

We have set an ambitious vision, and there is a lot of work to do to make it a reality for everyone in New Zealand. Good progress is already being made, from individual actions like helping a family member with a new smartphone, to nationwide initiatives led by a range of organisations, both inside and outside government. I am excited to share this blueprint, which is the first step towards consistent, sustainable action for a more inclusive New Zealand.

Hon Dr Megan Woods
Minister of Government Digital Services

Government Chief Digital Officer's Foreword

Paul James

E ngā iwi o Aotearoa tēnā rā koutou katoa. E mihi kau ana ki ngā whānau katoa e noho nei i ngā tōpito whenua puta noa i te motu.

As Government Chief Digital Officer, I am responsible for leading digital transformation across government. My team and I collaborate across the public sector so that all New Zealanders can thrive in the digital era. Digital inclusion is an important part of this work.

As you'll see in this blueprint, government has many roles to play in digital inclusion: leading, connecting, supporting and delivering to ensure everyone can participate in, contribute to, and benefit from the digital world.

I am committed to working with my colleagues across the public sector to ensure everyone can access and use the online information, services and products we produce. This means applying existing standards to ensure content on government websites is accessible. It also means thinking about the people who aren't already online by reducing barriers to access and providing alternative offline channels where we can. I also recognise the need to join up the many government initiatives that address aspects of digital inclusion.

We will look outside government as well, collaborating with communities across New Zealand and the many iwi, hapū, non-governmental organisations, businesses and charities already making important contributions toward a more inclusive and innovative digital nation. Because digital inclusion doesn't exist in a void, we must link in closely with other initiatives, including work on the digital economy, digital rights, data sovereignty and the future of work. It's important that we learn from each other, so all New Zealanders thrive in this digital era.

There's plenty to do to ensure a digitally included New Zealand, now and in the future. By working together we can do that.

Paul James
Government Chief Digital Officer

Introduction

We are living in a rapidly changing digital world. In the last ten years alone, smartphones have gone from a curiosity owned by a few to a commodity used by over two billion people worldwide. Technologies once confined to science fiction are becoming part of daily life, from the artificial intelligence that drives some of the world's biggest companies to the augmented reality we've seen in viral smartphone games. By the mid-2030s, it's been estimated that 24% of current jobs in New Zealand could be automated (PwC, 2018), and a new range of jobs we can only imagine will have emerged.

As digital technologies weave their way into our lives, they impact society and the way we do things. It is therefore vital that everyone can participate fully in, and make the most of, our increasingly digital world. This is digital inclusion.

The vision: that all of us have what we need to participate in, contribute to, and benefit from the digital world.

This Digital Inclusion Blueprint, Te Mahere mō te Whakaurunga Matihiko (the Blueprint), focuses on making sure everyone in New Zealand can conveniently and confidently access and use digital devices and the internet. This reflects that the internet has become part of the fabric of everyday life for most New Zealanders. As more key services move online, people who can't access or use the internet are increasingly missing out. For example, some can't easily apply for jobs because many recruitment processes start online, and others could feel isolated from more digitally savvy friends and family who communicate using social media.

It will take a team effort to make sure everyone is digitally included. Government has a key role to play, along with community organisations, iwi, hapū, businesses, libraries, philanthropic organisations, charities, and local authorities, many of which have been working in this space for decades. The Blueprint sets out the roles that government will play in the journey towards digital inclusion: lead, connect, support, and deliver. It also sets out the high-level actions to support these roles in the coming year.

The Blueprint is an important step toward a digitally included New Zealand. Now is the time to shift up a gear to make strong, coordinated progress that makes a real difference for New Zealanders.

The Blueprint is for anyone interested in or working towards the wellbeing of New Zealanders, digital or otherwise. We invite you to join us on this journey.

About the Blueprint

The Digital Inclusion Blueprint sets out the vision and context for digital inclusion in New Zealand. It identifies what actions are already underway and where the gaps lie. The Blueprint also describes the role and next steps for central government in the journey towards a digitally included New Zealand.

The Government's digital inclusion work programme, which includes developing and implementing the Blueprint and a supporting action plan, is led by the Government Chief Digital Officer (GCDO) at the Department of Internal Affairs Te Tari Taiwhenua. The GCDO and Department will be working with other government agencies that provide services to support the four elements of digital inclusion.

The content of the Blueprint was informed by research on digital divides and digital inclusion, both in New Zealand and overseas, as well as engagement with organisations, businesses and individuals who work toward digital inclusion in their communities.

The evidence base for digital inclusion in New Zealand is still emerging, which means there are some gaps in our current understanding and knowledge. The Blueprint reflects this by making the development of the evidence base for digital inclusion a priority.

The scope of digital inclusion in the Blueprint

Digital inclusion can be defined as an end-state where everyone has equitable opportunities to participate in society using digital technologies (Digital Inclusion Research Group, 2017). This definition is reflected in the vision for digital inclusion set out in the Blueprint, that "all of us have what we need to participate in, contribute to, and benefit from the digital world".

To achieve this vision, we need to clarify what it means to be digitally included. For the purposes of the Blueprint, being digitally included means having convenient access to, and the ability to confidently use, the internet through devices such as computers, smartphones and tablets. This focus reflects the way that most people currently interact with the digital world, and that more and more services and day-to-day activities are going online.

The Blueprint also focuses on enabling non-users and sporadic users of the internet to become users, rather than on upskilling people who already access and use the internet in their day-to-day lives.

While the definition and vision for digital inclusion will likely stay consistent over time, what is needed to be digitally included will change as technology and society evolve. For example, in the future it might be important to understand artificial intelligence, have access to a companion robot, or be able to write computer code. In coming years, the focus will need to be able to change to reflect this.

Digital inclusion through a Māori lens

Te Tiriti o Waitangi/Treaty of Waitangi

The work to improve digital inclusion in Aotearoa has been underway for decades, much of it through the dedicated, continuous effort of iwi, hapū, communities, government, non-government organisations and charities.

The government's work towards digital inclusion will embody Te Tiriti o Waitangi/Treaty of Waitangi principles. This includes making sure tāngata whenua have input into decisions relating to digital inclusion and are involved at all levels of this work.

Te Whata Kōrero: a storehouse for Māori aspirations

Work towards digital inclusion in Aotearoa needs to support the aspirations and culture of tāngata whenua in a digital world, both collectively and as individuals. This was strongly reflected in the engagement with Māori during the development of the Blueprint.

The Department of Internal Affairs Te Tari Taiwhenua is currently developing Te Whata Kōrero, a call to action for tāngata whenua to provide leadership on digital inclusion-related issues, alongside government. The Department will make sure Māori experts in the field, and mandated Māori-led organisations, are supported to collectively work towards a world-leading, indigenous-supported digital future.

Te Whata Kōrero will provide an opportunity for tāngata whenua to discuss digital inclusion as a collective and whakairi[1] their measurable goals and aspirations. This means not only thinking of immediate needs, but also looking forward to what is likely to be an increasingly digital future. This Blueprint acknowledges the value of turning these aspirations into reality, not only for tāngata whenua, but for Aotearoa as a whole.

Māori data in a digital world

One topic that may be discussed through Te Whata Kōrero is Māori data, which is data and content about, or created by, Māori. Māori data is a taonga along with Te Reo Māori and Māori identity, tikanga,[2] values and symbols. Māori data needs to be respected, understood and protected in a digital world, just as it is in the physical world, and considered in the context of digital inclusion and data sovereignty. There are many opportunities that can arise from this approach. While in large part, the availability, use and storage of Māori data is not in scope for the Blueprint, it's important to recognise that without looking at these issues, it will be hard for tāngata whenua to realise the trust element of digital inclusion.

1 Elevate

2 Māori customary practices or behaviours

Why is digital inclusion important?

If everyone has what they need to access and use the internet, there will be a strong foundation in place for all New Zealanders to move forward together in an ever-changing digital world. The digital world opens up opportunities for many people, whether that's having access to a sign language interpreter who lives in another part of the country, building an online community of people who share similar interests or life experiences, or having an engaging online presence for a small business.

People who cannot access and use the internet are increasingly at a disadvantage. The November 2018 report *Out of the Maze: Building Digitally Inclusive Communities* is based around stories from New Zealanders who face barriers to digital inclusion. Interviewees described the impact of not being able to access the internet as exclusion, isolation, powerlessness and limited opportunity (Elliott, 2018). The report emphasises that "losing the ability to be digitally connected could have a disproportionately disastrous impact on people in vulnerable or tenuous times, or when moving through a life transition" (Elliott, 2018).

"Technology is meant to help you, but when you don't know how to use it, technology really slows you down." [3]

"Even though I want to participate in the world, I feel like I can't. It makes me feel irrelevant."

"I like that I don't have to travel as much, I can just look up Facebook and see family."

The 2017 report *Digital New Zealanders: The Pulse of our Nation* (*The Pulse of our Nation*) found that overseas studies show a lack of digital inclusion "leads to diminished wellbeing and opportunity, and other forms of deprivation" (Digital Inclusion Research Group, 2017). A growing body of international research indicates that digital inclusion plays a significant role in the wellbeing of individuals. These findings will be tested in a New Zealand context as part of an outcomes and measurement framework for digital inclusion that is being developed by the Department of Internal Affairs Te Tari Taiwhenua.

International research also indicates there are economic benefits of digital inclusion, although there has been limited research to quantify this in a New Zealand context. *The Pulse of our Nation* notes that initial calculations (based on international data) suggest that universal digital inclusion could deliver over $1 billion a year in economic benefit to New Zealand (Digital Inclusion Research Group, 2017).

3 This pull-quote and the others shown in green boxes in this document are from people we spoke to during our engagement process on the Blueprint.

What is needed to be digitally included?

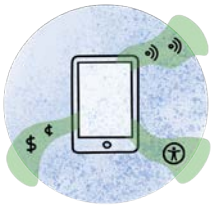
For the purposes of this Blueprint, a digitally included person, whānau or community has convenient, reliable access to affordable, accessible digital devices and an internet connection,[4] and can confidently use them in their day-to-day life. This definition will change over time as technology evolves.

The four elements of digital inclusion

There are four interdependent elements which are all needed for a person to be digitally included: motivation, access, skills, and trust. **Figure 1** below explains each element.

Figure 1: The four elements of digital inclusion

Motivation: Understanding how the internet and digital technology can help us connect, learn, or access opportunities, and consequently have a meaningful reason to engage with the digital world.



Access: Having access to digital devices, services, software, and content that meet our needs at a cost we can afford; and being able to connect to the internet where you work, live and play. Access is a broad element, which can be broken into three key parts: connectivity, affordability and accessibility.

Skills: Having the know-how to use the internet and digital technology in ways that are appropriate and beneficial for each of us.

Trust: Trusting in the internet and online services; and having the digital literacy to manage personal information and understand and avoid scams, harmful communication and misleading information. This element also touches on online safety, digital understanding, confidence and resilience.

More detailed information about how the definition and elements were developed for a New Zealand context is in **Appendix 1**.

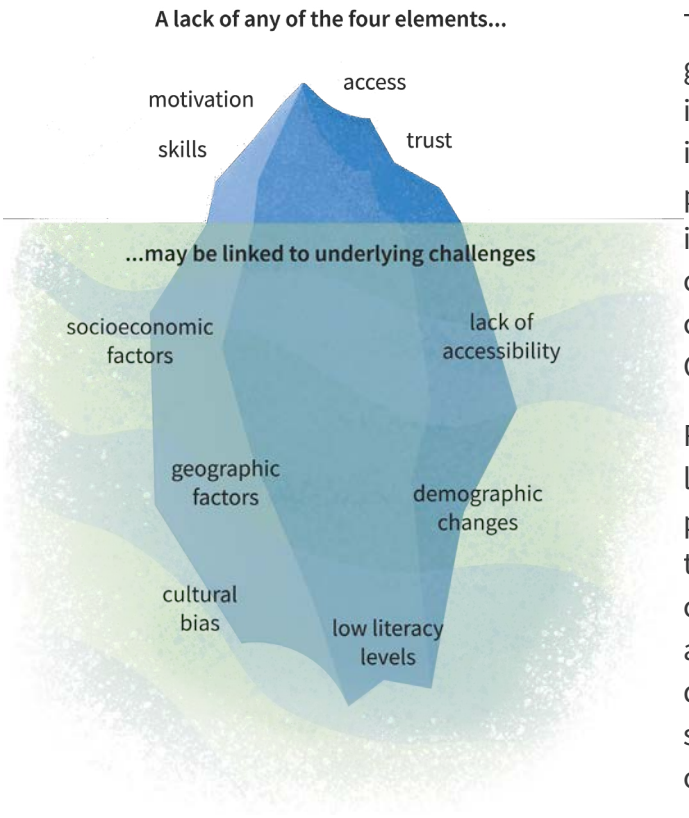
4 This could be through a broadband or fibre connection, Wi-Fi or mobile data.

What are the barriers?

The barriers to digital inclusion can be mapped against the four elements: motivation, access, skills, and trust. The barriers people face vary widely, and a variety of approaches will be needed to overcome them. For example, some people will lack the ability to connect to the internet at home, due to cost or lack of infrastructure. Others may have internet access, but don't know how to find and use the information and services they're interested in. Some people may have the skills and connection they need, but the content and services they want to use aren't designed in a way that works for them. Another barrier to digital inclusion is capacity. People may lack the time or energy needed to learn, adapt to, and use digital technologies and platforms.

Some people face multiple barriers, amplifying the effects of not being digitally included. Barriers to digital inclusion are often linked to underlying issues, like poverty and inequality. In order to fully achieve digital inclusion in New Zealand, we will need to address underlying issues as well as the symptoms. The underlying challenges are highlighted in **Figure 2**.

Figure 2: Underlying challenges



Who isn't digitally included?

There has been some research to identify groups that are at risk of not being digitally included in New Zealand. Groups identified in *The Pulse of our Nation* include seniors, people with disabilities,[5] people living in rural communities, and families with children living in low socioeconomic communities (Digital Inclusion Research Group, 2017).

Research shows that Māori are also less likely to be digitally included than the wider population (Lips, 2015). It is important to understand the barriers that Māori communities and organisations, iwi, hāpu and whānau face, and work with them to design solutions. Te Whata Kōrero is the starting point for our work together. This is outlined on page 8.

5 When not referring to specific research, we use the term 'disabled people', reflecting the terminology of the New Zealand Disability Strategy.

From our engagement with organisations and individuals working toward digital inclusion in their communities, we have learned about other groups that may face barriers to digital inclusion, including people with mental health conditions and people with low housing stability. Further work needs to be done to identify who needs to be supported and their motivations for, and barriers to, going online. A full list of the groups identified in *The Pulse of our Nation*, along with other groups identified through engagement, is in **Appendix 2**.

How digitally included are we now?

The data we have about people's experiences of digital inclusion in New Zealand is limited, and we are still in the process of developing agreed measures across the four elements. There is some information about who might have access to the internet, but data on the other elements of digital inclusion is patchy. Here is a snapshot of things we do know from local and international experience:

Motivation

In the UK, a 2018 Lloyds Bank study showed that 28% of people over 60 do not use the internet, 84% of whom say 'nothing' can help them to go online (Lloyds Bank, 2018).

Access

The 2013 Census found that 82% of the New Zealand population has household internet access, up from 67% in 2006. For Māori, this was 67% in 2013, up from 47% in 2006 (Stats NZ, n.d.). Data from the 2018 Census will be available in 2019.

The UK Lloyds Bank study showed that 25% of people with a registered disability are not online; this is four times higher than the rest of the population (Lloyds Bank, 2018).

Skills

About 5% of respondents in a 2014 OECD survey of adult skills in New Zealand had no prior experience with computers or lacked basic computer skills and 13% did not use a computer in everyday life. About 45% of respondents had only very basic internet skills (Ministry of Education and Ministry of Business Innovation and Employment, 2016).

"Scams are looking more and more realistic, many are imitating trusted companies very well. More education is required to decipher the legitimate ones."

"A big motivation is wanting to keep in touch with family and friends and a sense of inclusivity."

"Internet is a luxury for many and is often seen as one of the first things to cut from a tight budget."

Trust

The 2016 New Zealand General Social Survey found that 74.6% of people who transact online feel safe or very safe doing so (Stats NZ, 2017).

What is already happening?

Community organisations, businesses, libraries, philanthropic organisations, charities, and local and central government all provide important services across the four elements of digital inclusion. Many of these organisations have been working in this space for decades.

Work to understand all the initiatives addressing the elements of digital inclusion has begun. For example, the 20/20 Trust hosts an online map of digital inclusion initiatives,[6] InternetNZ has an online digital inclusion map,[7] and the Department of Internal Affairs Te Tari Taiwhenua carried out a stocktake of community-led digital inclusion initiatives in early 2018. Further work needs to be done to understand all the government-led initiatives that contribute to digital inclusion and bring the full picture together. Having a clear understanding of what is going on will make it easier to learn from each other about what works well, where more could be done, and where there are opportunities to join forces to increase the value for New Zealanders.

From the information collected to date, we can see two broad types of activities: those that directly support individuals and communities to become digitally included and those that support the wider system. These are outlined below:

1. **Supporting individuals and communities:** These are direct interventions that help with one or more elements of digital inclusion at a national, community, whānau or individual level. Some interventions address the needs of specific groups across a number of elements, while others address one element for many people. There's lots going on, with over 170 initiatives counted in early 2018 (this excludes the many government initiatives in this space). Many of these initiatives are focused on the access and skills elements of digital inclusion, while fewer focus on motivation and trust. A variety of case studies about digital inclusion initiatives can be found in *The Pulse of our Nation* (Digital Inclusion Research Group, 2017).

2. **Supporting the wider digital inclusion system:** This includes initiatives to grow New Zealand's understanding of digital inclusion through research and analysis; develop and implement standards and frameworks to support aspects of digital inclusion; and make connections between different digital inclusion initiatives. Many of these initiatives have been developed by government agencies, including the stocktake of government algorithms,[8] the accessibility charter, and the recently established Digital Inclusion Cross-Agency Forum. Others are conducted by universities, not-for-profits or independent think tanks.

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6 https://2020.org.nz/programmes/digital-inclusion-map/

7 https://digitaldivide.nz/

8 https://www.data.govt.nz/assets/Uploads/Algorithm-Assessment-Report-Oct-2018.pdf

What needs to happen next?

To make the greatest impact, we need a clear, cohesive understanding of what digital inclusion will look like, a road map to get there, and measures and supporting data to show progress. We also need to set key priorities and know where the gaps are, so investment can be directed to where it's most needed.

To date, there are no agreed measures for digital inclusion in New Zealand or reliable, comprehensive data to provide a full picture of who is not digitally included. The Department of Internal Affairs Te Tari Taiwhenua is leading work on an outcomes and measurement framework for digital inclusion, with a draft due to be released in early 2019. The framework will be based around the four elements of digital inclusion and line up with the Treasury's Living Standards Framework.[9]

At the moment, digital inclusion initiatives often operate separately to address specific needs in their communities. Without coordination and visibility of what's already happening, it is hard to identify gaps and see how the puzzle fits together. While still in its early days, recent work to bring together a non-profit alliance of digital inclusion providers and advocates[10] shows promise, as does the central government Digital Inclusion Cross-Agency Forum, which brings together agencies that are working towards aspects of digital inclusion.

From our engagement with community groups and digital inclusion service providers, we have learned that many operate on small budgets, rely on volunteers, and may have inconsistent funding sources. There is a need for future investment in this space.

In order to address the barriers to digital inclusion, it will be important to look at underlying systemic challenges and drivers, as illustrated in **Figure 2: Underlying challenges**, as well as the more visible symptoms. It will also be important to recognise that different approaches will be needed to address different barriers.

Once priorities have been agreed and gaps identified, a case for government investment in key areas will be made. Potential actions could include scaling up initiatives already underway, or commissioning new initiatives where gaps exist. Interventions will be designed collaboratively with relevant communities and digital inclusion providers, to make sure the perspectives of people facing barriers to inclusion are front and centre.

9 https://treasury.govt.nz/information-and-services/nz-economy/living-standards

10 https://digitalinclusionalliance.nz/

What is the role of government?

As noted above, making sure everyone in New Zealand is digitally included is going to require a team effort, with iwi, hapū, community organisations, businesses, libraries, philanthropic organisations, charities, and local government, and others all making important contributions.

Central government has a big leadership and support role to play in order to make sure everyone in New Zealand is digitally included. This work is led by the Department of Internal Affairs Te Tari Taiwhenua.[11] The central government's role is broken into four parts:

- **Lead:** Being trusted subject matter experts in digital inclusion; collaborating inside and outside government to determine priority areas and future direction; leading by example by making sure government's digital content is accessible and online services can be used by everyone; collating data to measure the progress towards digital inclusion.
- **Connect:** Bringing visibility to the work being done to address aspects of digital inclusion; making links between people, funders, initiatives and communities both inside and outside government working on digital inclusion to maximise impact.
- **Support:** Providing support and information to communities, organisations and businesses working to address digital inclusion issues; making a case for investment to address identified priority areas.
- **Deliver:** Delivering services that address aspects of digital inclusion (across a range of agencies); collaborating with communities, other agencies and the wider sector to solve problems and increase digital inclusion.

Work is already underway in each of these four areas. However, more needs to be done in order to make real, consistent progress toward digital inclusion at a system level. An overview of next steps for 2019 and an indication of future direction is outlined in the next section.

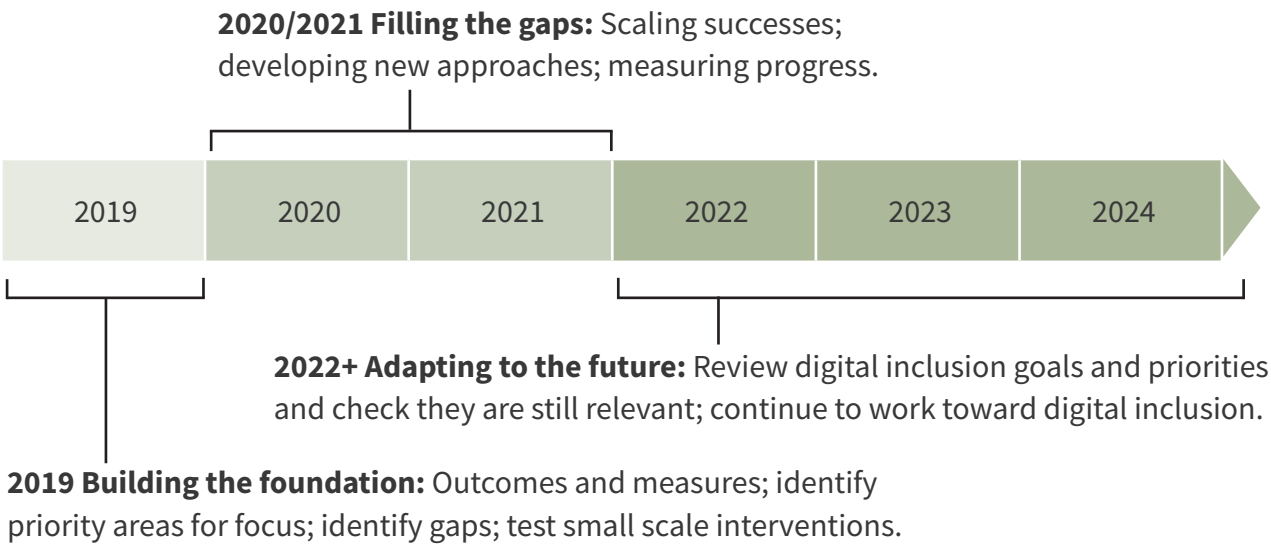
11 The first clause of the "deliver" role is an exception. While The Department of Internal Affairs Te Tari Taiwhenua has a role to join up these initiatives where possible, the responsibility sits with the agency/agencies delivering the service.

Next steps

Figure 3 below shows the high-level timeline for central government action on digital inclusion. During 2019, the focus will be on building a strong foundation. This will include setting outcomes, measures, priorities and investment criteria. It will also include joining up, and bringing visibility to, the work already underway towards digital inclusion.

The Blueprint is just a starting point for strong, sustainable progress towards a digitally included New Zealand. We know things will change in the digital inclusion space and we want to adapt with it. We will refresh the action plan regularly to reflect what is needed next and any changes in our understanding of digital inclusion.

Figure 3: High-level timeline for action



What will happen in 2019?

The Department of Internal Affairs Te Tari Taiwhenua is developing a detailed action plan for how to deliver on the four roles of government in 2019. Some actions are already underway.

The high-level areas for government action in 2019 are set out below under the four roles of lead, connect, support and deliver.

Lead

- Continue to build an evidence base for digital inclusion in New Zealand (underway).
- Agree on desired outcomes for digital inclusion and how to measure them (underway).
- Undertake a gap analysis to see what's missing in order to deliver on agreed priorities.
- Investigate how to measure the success of government digital inclusion initiatives (underway).
- Work towards making sure all government online content and services are accessible (underway).

Connect

- Understand the current digital inclusion initiatives inside and outside government, and what is working well to address each of the four elements.
- Connect government initiatives to increase digital inclusion outcomes for New Zealand (underway).
- Make sure information and stories about digital inclusion initiatives across New Zealand are publicly available so providers, users and funders can make connections and increase positive impact.

Support

- Set criteria and priorities for future investment and effort.
- Make a case for investment to achieve the agreed priorities.
- Establish Te Whata Kōrero in partnership with tāngata whenua (see page 8).

Deliver

- Test small-scale initiatives to address barriers to digital inclusion in collaboration with communities.
- Continue to deliver services that address the elements of digital inclusion for New Zealanders.

Find out more

You can find out more about the work of the digital inclusion team at the Department of Internal Affairs Te Tari Taiwhenua at digital.govt.nz. The team blogs regularly, and there are also links to other resources.

Principles for working toward digital inclusion

We will follow these principles when carrying out all our actions to make sure we are driving towards benefits for all New Zealanders:

- Fulfill our responsibilities under The Treaty of Waitangi
- Collaborate with others inside and outside government
- Work with groups that face barriers to inclusion on solutions that work for them
- Openly share lessons learned and progress toward our goals

Appendix 1: What it means to be digitally included

Defining what it means to be digitally included

In the Blueprint, a digitally included person, whānau or community has convenient, reliable access to affordable, accessible digital devices and an internet connection, and can confidently use them in their day-to-day life.

This wording draws from a proposed definition in *The Pulse of Our Nation*:

"A digitally included person is someone who has access to affordable and accessible digital devices and services at a time and place convenient to them, as well as the motivation, skills, and trust to use the internet to pursue and realise meaningful social and economic outcomes." (Digital Inclusion Research Group, 2017)

In the Blueprint, we have shortened this definition and kept the focus high level. We have added "reliable" internet access into the definition, reflecting feedback about what is important to people. We have also added whānau and communities to the definition, reflecting that, for Māori, it is important to consider the collective benefit as well as the benefit for individuals.

Defining the elements of digital inclusion

Different variations of the four elements of motivation, access, skills and trust have been used in overseas jurisdictions and in a number of reports written in a New Zealand context. This includes the 2017 report *The Pulse of our Nation* (Digital Inclusion Research Group, 2017) and InternetNZ's *Solving Digital Divides Together* position paper (InternetNZ, 2018). However, what is included in each of the four elements varies across reports and jurisdictions and the names of the elements themselves also sometimes vary.

The four elements we use reflect those used in *The Pulse of our Nation*, but with slightly shortened titles. We have aimed to keep the definition of the four elements short, so they are not exhaustive, but still reflect the key areas.

As 'access' is a broad element, we have broken it into three key parts: accessibility (of content), affordability (of devices and a connection), and connectivity (having the infrastructure).

The 'trust' element has also been expanded to include ideas of online safety, digital understanding, confidence and resilience. This reflects a move in the United Kingdom towards thinking about confidence and digital understanding, and consideration of ideas of online safety and resilience in a New Zealand context.

Appendix 2: Groups at risk of not being digitally included

The following were identified *The Pulse of Our Nation* as being at most risk of not being digitally included[12] (Digital Inclusion Research Group, 2017):

- families with children in low socio-economic communities
- people living in rural communities
- people with disabilities
- migrants and refugees with English as a second language
- Māori and Pasifika youth
- offenders and ex-offenders
- seniors[13]

The report also identified groups in the education system and workplace who could benefit from increased digital skills, including:

- students without access to digital technologies in their homes
- teachers without access to professional learning and development for teaching with digital technologies
- school leavers without a digital technology qualification
- tertiary students without the advanced digital skills required for study
- people without core digital skills seeking to enter the workforce or already in the workforce
- managers of small businesses and not-for-profit organisations.

During engagement on the Blueprint, the following groups were also identified as being at risk of not being digitally included:

- Māori
- Pacific peoples
- people with low housing stability
- people with low incomes
- people with low literacy levels
- people with mental health conditions
- people who choose not to go online
- senior leaders in the public and private sector (skills to adapt to changing environment)
- unemployed people

As noted in the Blueprint, not everyone in these groups will face barriers to inclusion, and some people will fit in a number of groups and may face multiple barriers.

12 This list was developed for the report, taking into account New Zealand and international research.

13 The wording of this list comes directly from the report.

Glossary

The glossary below explains English terms that may not be familiar to readers and explains what they mean in the context of the Blueprint. We have used footnotes in the body of the Blueprint for definitions of Te Reo Māori terms that are not part of New Zealand English.

Word	Meaning of the term, as it is used in this Blueprint
Community	A group of people who have a particular characteristic (such as geography, age, interest, or belief system) in common.
Data sovereignty	The idea that data is subject to the laws and governance structures of the nation or group from which it is collected.
Digital divides	These are the gaps between those who have the four elements of digital inclusion (motivation, access, skills, trust) and those who do not. This term is used in previous work on this topic. In the Blueprint we use the language of 'digital inclusion' instead.
Digitally included	At the moment, a digitally included person, whānau or community has convenient, reliable access to affordable, accessible digital devices and an internet connection, and can confidently use them in their day-to-day life. This definition will change as technologies evolve.
Digital inclusion	An end-state where everyone has equitable opportunities to participate in society using digital technologies (Digital Inclusion Research Group, 2017).
Digital world	Refers to the internet, digital devices, smart devices and other digital technologies and the way we use them.
The internet	A global system of networked computers around the world that allows people to share information and communicate with each other.
Online	Being connected to the internet.

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