



# Digital Inclusion in Western Australia

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**A Blueprint for a digitally-inclusive state**

## Ministerial Foreword Content

Emerging digital technologies and services present a remarkable opportunity to greatly improve the lives of Western Australians, enabling economic prosperity, social inclusion, education and training, access to health and other government services, and civic participation. However, the rise of digital technology also presents significant challenges; as those who do not have ready and reliable access to modern technologies and services are not able to enjoy many of the benefits on offer.

The Western Australian (WA) Government is committed to supporting Western Australians and their communities to confidently and safely enjoy the benefits of digital technologies in their everyday lives.

This Blueprint, *Digital Inclusion in WA*, was developed by the WA Government to outline our vision and approach for making WA a digitally-inclusive state. It identifies four key priority areas to address in achieving this vision—connectivity, affordability, skills and design—and builds on collective effort across the state to guide the delivery of digital inclusion in WA.

The Office of Digital Government will lead this work, collaborating with agencies across the WA public sector, as well as the Australian Government, local governments, industry and the community to deliver *Digital Inclusion in WA* as part of the Government's vision for digital transformation, progressing Western Australia towards a more secure, sustainable and inclusive digital future.

Through *Digital Inclusion in WA*, the WA Government invites industry, business and community organisations to work with government in WA to collaboratively deliver initiatives to improve digital inclusion.

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## Why we need a Blueprint for digital inclusion

Digital technologies and the internet play an increasing role in our lives, providing the opportunity for people and communities to flexibly learn, grow and connect. Whether looking for a job, starting a business, interacting with government, accessing information and education, or exploring opportunities across the state, nation and indeed, the world – there is a growing expectation that everyone has access to, and can use technology.

People spend, on average, six hours a day online, yet 11.6 per cent of Western Australian households do not have access to the internet.<sup>1</sup> Further, 26 per cent of WA's lowest income households do not access the internet.<sup>2</sup> Overall, WA sits below the national average for digital inclusion, ranking fourth out of eight Australian states and territories.<sup>3</sup>

This shows that many Western Australians do not access the internet or use digital technologies, and as a result, may be excluded from the opportunities and benefits enjoyed by others. In particular, we know that little to no digital participation is linked to social isolation, loss of income, limited access to health, education and other government services, as well as social and economic disadvantage.

Many of the challenges of digital inclusion are interdependent, and are likely to get worse as technologies and infrastructure become redundant, people's need for data grows, and as more government services move online with greater levels of interactivity.

A coordinated approach is required to improve this trend toward digital inclusion and develop solutions for people across the state. In this Blueprint, the WA Government proposes this new approach as a collaborative effort between government, industry and communities, that will address the four major challenges to digital inclusion in WA: digital connectivity, affordability, ability, and design.

### Connectivity

Getting connected is a first hurdle that some Western Australians face. While the majority of people living in the Perth metropolitan area, Australia's large geographic size makes it difficult to provide quality infrastructure, Information Communication Technology (ICT) hardware, and internet services for all communities, particularly in regional and remote areas in WA.<sup>4</sup>

Many regional communities in WA only have access to costly, poor-quality and low bandwidth internet, and in some cases, even consistent mobile reception can be difficult to access. People are often reliant on mobile devices or satellite services to get online, which can be more expensive with less data available for everyday use.

Additionally, many of the factors that make connectivity a challenge also leads to further issues with affordability and whether people and communities have experience and skills to safely and confidently navigate technologies.

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<sup>1</sup> *Household Use of Information Technology Survey 8146.0* (Australian Bureau of Statistics, 2017).

<sup>2</sup> *Falling through the Net: The Digital Divide in Western Australia* (Bankwest Curtin Economic Centre, 2018).

<sup>3</sup> *Measuring Australia's Digital Divide: The 2019 Australian Digital Inclusion Index* (RMIT; Centre for Social Impact, Swinburne University).

<sup>4</sup> *The Inclusive Internet Index 2020* (The Economist Intelligence Unit); *Australian Digital Readiness Index 2018: Digital Dividend or Digital Divide* (CISCO).

## Affordability

Australians spend a higher proportion of their income accessing the internet than people in many other countries.<sup>5</sup> The real costs of data, internet and mobile services, smart devices, and ICT hardware have been increasing, making it difficult for Western Australians with low or no income to readily use computer applications and access opportunities online.<sup>6</sup> This causes further financial stress for people who rely on government services and support often only accessible online.

“Approximately 40 per cent of Western Australians surveyed who receive the federal government Newstart payment cannot afford access to the internet at home”

- *100 Families WA: Life on Newstart Bulletin.*

## Skills

Western Australians have diverse levels of general and digital literacy and experience using digital technologies and the internet. This can lead to some people developing fewer skills and capabilities to independently use digital technologies and the internet in a way that benefits their everyday lives. For instance, some people may have the ability to confidently navigate applications on their smartphone, but struggle using a computer or laptop to apply for a job or interact with government. As a result, people may have difficulty in finding and evaluating information, or accessing different services such as Medicare, transport, social media, or banking.

People who have fewer skills and experience with using digital technologies and the internet are more at risk of being the target of cyber-attacks, online scams and bullying, and misleading news. This is also a significant risk for remote communities exposed to potential risks online without support to build their digital awareness.

## Design

Less than half of the Australian population considers digital technology to be empowering.<sup>7</sup> Many technologies are simply not designed for a diversity of users and skills in mind, and as a result do not empower all Western Australians.

Computers, laptops, and other smart devices can have limited accessibility and functionality. Computer software and online content and services can also be difficult to navigate, and are often unsuitable for use on smartphones or in low-internet bandwidth areas. Compared with other Australian states, WA ranks poorly for government investment in tech and start-up environments.<sup>8</sup> Public trust in privacy protections and government delivery of online services in Australia is also very low compared with other high-income countries.<sup>9</sup>

<sup>5</sup> *The Inclusive Internet Index 2020.*

<sup>6</sup> *Measuring Australia's Digital Divide: The 2019 Australian Digital Inclusion Index.*

<sup>7</sup> *Measuring Australia's Digital Divide: The 2018 Australian Digital Inclusion Index.*

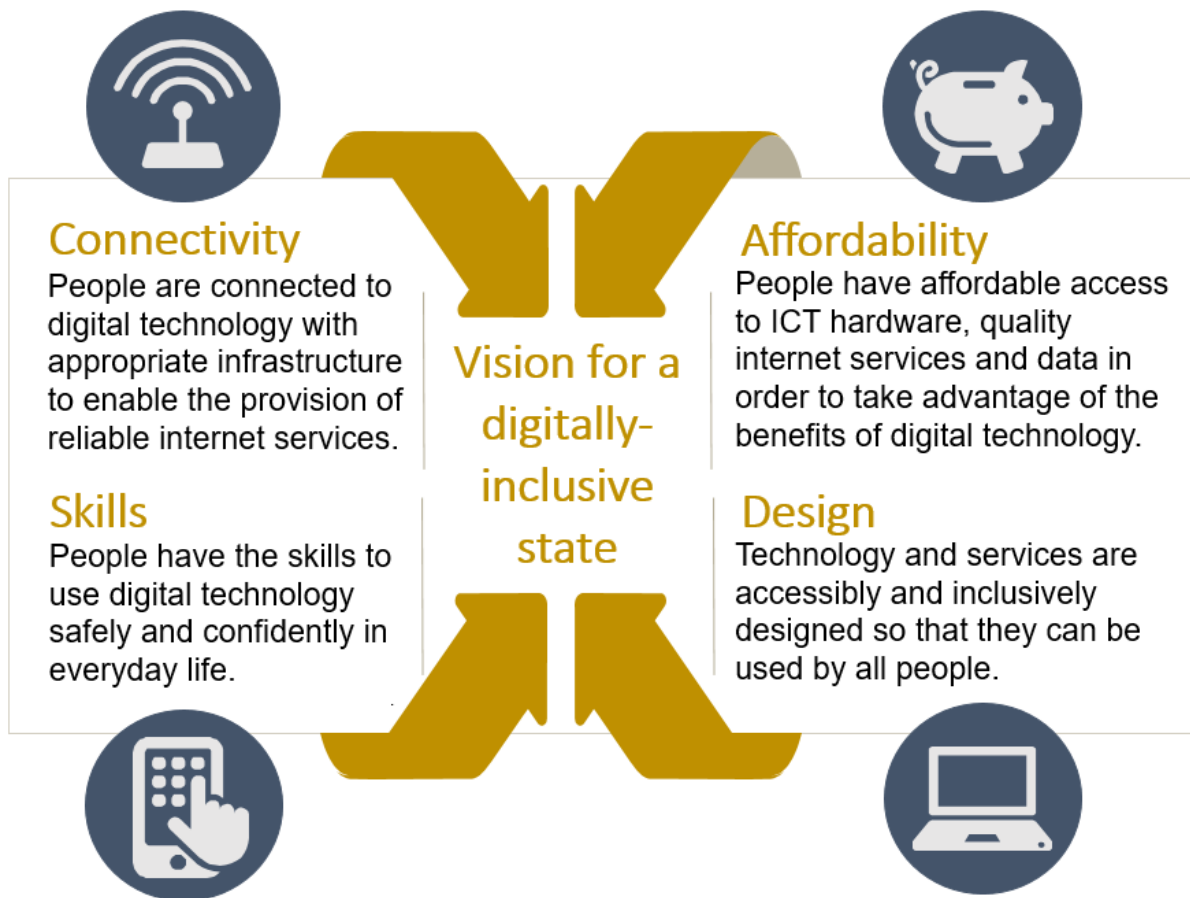
<sup>8</sup> *Australian Digital Readiness Index 2018: Digital Dividend or Digital Divide.*

<sup>9</sup> *The Inclusive Internet Index 2020.*

## Our vision

*“Western Australians and their communities can confidently and safely enjoy the benefits of digital technologies and services in their everyday lives”*

All Western Australians deserve to participate in our digital future. Our vision of a digitally-inclusive state is one where Western Australians and their communities can confidently and safely enjoy the opportunities and benefits of digital technologies and services in their everyday lives. Four strategic priorities are key to achieving this outcome.



Empowering Western Australians, as both individuals and collective communities, is key to finding local and sustainable solutions for digital inclusion in WA. Through this supportive approach, we seek to provide people with more choices and the opportunity for ownership over their own digital experience.

## How digital inclusion benefits Western Australians

Digital inclusion can play an important role in WA's success as a prosperous and modern society. Digital inclusion activities are already benefiting communities in some parts of the state.

### Enabling delivery of better services to the community

Digital inclusion will provide more people with access to support and assistance in their everyday lives and in pursuing life opportunities. This is particularly important with the digital transformation of government services presenting more available, convenient and mobile channels for Western Australians. The provision of online services and platforms, as well as the innovative technologies that support the delivery of health, education and judicial services, are underpinned by improved access to quality internet, infrastructure and digital technologies.

The Statewide Telehealth Service provides quality telehealth services to make it easier for people in regional and remote communities to access primary health care without traveling long distances. Telehealth facilities allow patients and healthcare providers to communicate using audio, videoconferencing, or image and data transfer to provide diagnosis, treatment, and preventive aspects of healthcare. Across the state, telehealth services save Western Australians from having to travel a total of 27.3 million kilometres per year. Importantly, telehealth provides the opportunity to receive highly specialised care such as plastic surgery, respiratory medicine, gastroenterology, orthopaedics, and mental health from the convenience of their local health facility.

### Boosting prosperity in regional and remote communities

Digital inclusion will support prosperity in regional and remote communities, enabling Western Australians to remain connected wherever they are. Through improved access to telecommunications, internet services, digital technology, and digital skills, people living in regional and remote communities will have more opportunities to engage with government and services locally. Improved infrastructure and ICT capabilities will enable primary industries and local businesses to participate in the digital economy, through the use of Internet of Things and smart technologies for farming, agriculture, mining and tourism. This will support the resilience and productivity of regional communities.

The Tjuntjuntjara Community Wi-Fi Project is piloting an accessible, affordable, sustainable and scalable model for connecting residents and visitors to each other and to the world wide web from any smart device, whether indoors or outdoors, at any time of day. A local loop provides free calls and data sharing within Tjuntjuntjara, while external internet access is managed via nbn's Sky Muster service on a prepaid basis, similar to purchasing mobile phone credits. People can now transact online, access information and services, develop social and professional networks, and participate in the global digital domain at their convenience. Initially, the community is exploiting the network to help create employment opportunities through skills training, capacity building, local services provision and tourism development.

## Supporting participation in the digital economy

The digital economy is rapidly growing, providing industries and communities with new opportunities for innovation and commercial success. By improving digital inclusion in WA, more people and communities will have the capacity to meaningfully engage and participate in the opportunities of a digital economy. Digital inclusion will support Western Australians to access these opportunities by developing skills for the modern workforce, and enabling innovation across businesses and industry. Long term, this will also support the growth of Science, Technology, Engineering and Maths (or STEM) industries.

The Department of Mines, Industry, Regulation and Safety ScamNet program provides a safety net and raises awareness to protect the real-world assets of Western Australians engaging online. WA ScamNet profiles the most prevalent scams, rip-offs and fraud schemes targeting Western Australians and provides information on different types of scams, how to recognise scams, and what to do if users have received a scam. The site receives an average of 30,000 visitors every month, with important advice for people who have lost money through a scam: such as how to report fraud, where to locate a financial counsellor and suicide prevention advice. The site also features educational tools for teachers and students.

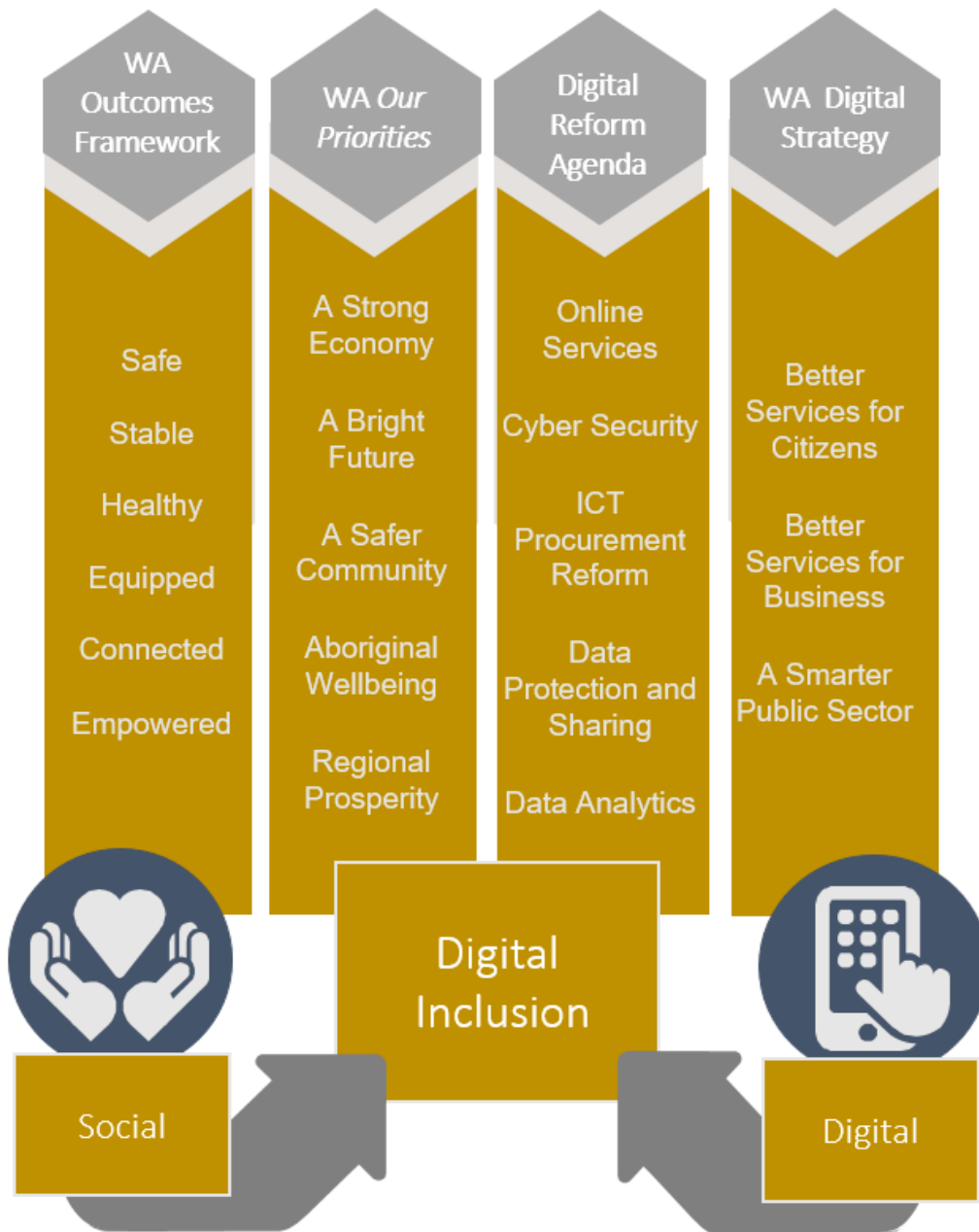
## Building capacity for the digital age

Digital inclusion has a significant role to play in building WA's capacity for the digital age. Developing digital skills and awareness will support, among other things, eSafety, social participation and civic engagement, online diversity and inclusion, cultural connections, and the development of digital human rights. Improving telecommunications infrastructure and access to digital technologies will also enable communities to equally participate in the digital age, while acknowledging that other considerations such as ethical data sharing and privacy, diversity in WA's STEM industries and the impact of automation and new technologies on WA's workforce can be understood using a digital inclusion approach.

The State Library of Western Australia's (SLWA) *Storylines* is a digital platform providing learning and access to heritage collections including photographs, oral histories, video recordings, and genealogical information. Storylines is a flexible and scalable training, advice, and archival package, allowing Aboriginal families and communities to engage directly with their history. Access to cultural materials through audio visual content transcends print and alphabetic literacy, connecting community to the multi-modal digital with images, music, film making and oral language preservation. Storylines engages with Western Australian Aboriginal clients through a network of public libraries, Community Resource Centres and Aboriginal organisations across Western Australia. It is proving to be a driver of change, harnessing multi-generational interaction, as well as developing digital engagement and skills while preserving culture, language and history.



## How the Blueprint aligns with priorities for WA



## Our approach: Empowering Western Australians

Many of the challenges that people face in accessing the benefits of technology are linked to existing social or economic disadvantage. Our approach supports all Western Australians so that people and communities are empowered to engage with technology in the ways that they choose.

### People living on low income

People on low incomes are significantly impacted by the affordability of access to digital technologies and internet services, often experiencing 'digital stress'. This is even more difficult for people experiencing homelessness and those without a fixed address who don't have access to fixed-line connections and encounter barriers to verifying their digital identity.

Supporting affordable and accessible connections for unemployed Western Australians, single-parent households, and social housing residents is one avenue to assist WA's internet affordability problem. Options for government and industry to consider might include initiatives such as low-cost telecommunications plans, unmetered online services, and free wi-fi access hubs.

### People living in regional and remote communities

In recent years, significant gains have been made to improve connectivity issues for those living in regional and remote communities. Yet growing need for greater bandwidth and household data allowances, migration to 5G technologies, and the completion of the National Broadband Network will bring new challenges for these areas.

Providing technical expertise, general digital skills development, quality infrastructure for reliable telecommunications, and electricity and internet services in our regions, will address some of these challenges. For some remote communities, bandwidth-boosting technologies and new ways of supplying internet services can provide cost-effective solutions to supply essential health, education, and emergency services.

### Aboriginal communities

Around 1 in 5 low-income Indigenous households are in remote or very remote locations, and only 1 in 5 of these have internet access. However many Aboriginal people are already leveraging digital technologies to maintain culture, increase learning, foster leadership and social connections, and encourage entrepreneurship.<sup>10</sup>

Addressing digital inclusion will involve building skills and digital literacy for Aboriginal communities that may have limited experience with digital technology or even limited security for basic needs. Structured volunteer or digital mentorship programs, accompanied by technology support on country, might provide opportunities for Aboriginal people to connect and innovate. Education and awareness-raising can also reduce the risk of scams, online bullying and online racism; supporting people to safely and confidently engage with digital technology.

Digital inclusion promotes the development of quality ICT infrastructure to address reliance on mobile-only access and the downsides of phone-sharing, and creates more accessible, culturally-relevant online services and content. Programs that provide affordable ways to connect include wi-fi services through low-priced, prepaid data plans

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<sup>10</sup> *Measuring the Digital Divide: The 2019 Australian Digital Inclusion Index.*

or community hotspots. Promoting participation in STEM education and careers can lead to proficiency and self-determination in data management for Aboriginal communities and corporations.

### Older people

Many older Western Australians use technology every day. However, some older Western Australians who encountered modern technologies later in life may need considerable support to engage with digital technologies. Older people are more likely to have mobility impairments or decreased physical dexterity, also reducing their ability to use ICT.

Community Centres, libraries, and resource centres are paving the way for older people to maintain and refresh their skills; and to overcome the attitudes and challenges that stem from limited experience with computers. Friends and family are also often a key source of technical support.

To improve digital inclusion for older people, government services should be accompanied by online features such as larger print, audible signals, and easy to navigate menus and assistance options. Using hobbies, interests, and information, as well as the opportunity for social connection can also encourage skill development and learning. Mentorship between more digitally skilled users and older Western Australians can be a powerful and fun way to learn and build confidence online. Digital literacy training can also address eSafety concerns such as online scams, susceptibility to fake or misleading news, or worries about viruses and malware.

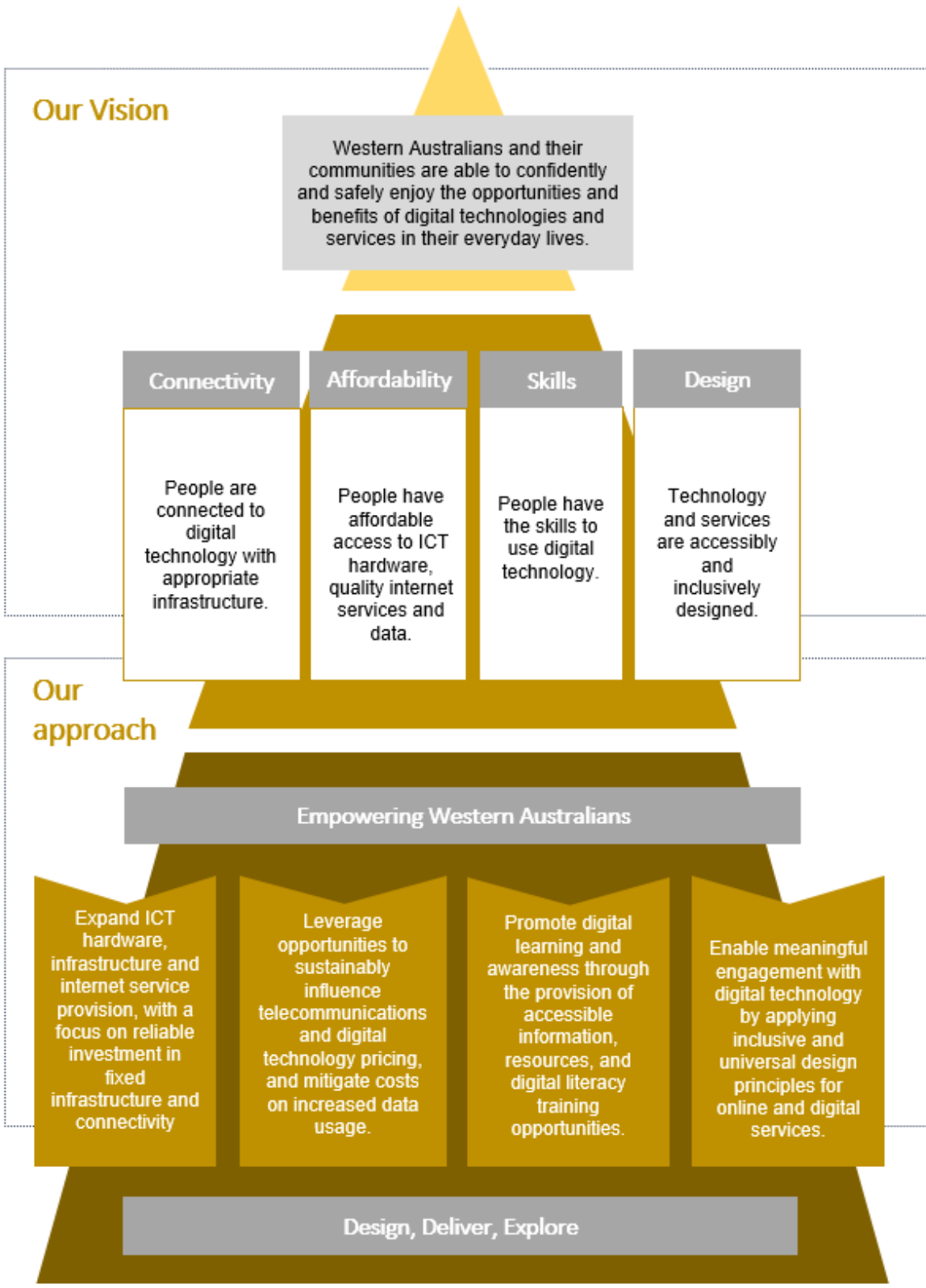
Research shows that there is a growing skills gap between older and younger Australians - *Measuring the Digital Divide: The 2019 Australian Digital Inclusion Index*

### People with disability

Some people with disability experience additional barriers to participating in the digital world, yet technology that is designed to include everyone can provide equal opportunity for people with disability to participate and contribute to our society and economy.

Innovation in technology and digital design has the potential to significantly change the lives of people with disability. Smart devices that are easy to use, convert speech to text, and feature voice-activated technologies are examples of readily available technology that can support and empower people with disability. Providing comprehensive and user focused training and support will also assist people with disability to build digital skills and knowledge in a way that is compatible with lived experience. This can be monitored on an ongoing basis through adjustments to software and accessibility standards aligned with a diverse user experience.

[Lived-experience case studies to be determined through consultation]



## Digital Inclusion Partnerships

The challenges to digital inclusion in WA cannot be addressed by the WA Government alone. A key feature of our approach will be to forge strong partnerships with communities, local and federal government, industry, business and community organisations. These partnerships will serve those experiencing digital disadvantage to effect locally-sustainable change.

### The WA Government

The WA Government has an important role to play in leading the improvement of digital inclusion across the state. This involves:

**Providing leadership:** Working with partners across the public sector, industry, and community services to develop innovative local solutions at a grass-roots level. The WA Government will harness collective action and insights from organisations with established roles serving digitally-disadvantaged communities.

**Driving collaboration:** Led by the Office of Digital Government, the cross-sector Digital Inclusion Working Group has begun work to drive partnerships and collaboration to inform the development of digital inclusion initiatives.

**Providing support and advocacy:** to build capable services, programs, and infrastructure that supports access to digital technologies and internet services at a national level and in collaboration with local government and other Australian jurisdictions.

**Developing expertise and delivering:** services, initiatives, and policies to improve digital inclusion in WA. Our agencies will engage with communities and forge partnerships to design, deliver and implement initiatives locally.

The Office of Digital Government is driving digital transformation for WA, working to improve digital inclusion through the WA Digital Strategy. This ensures that digital inclusion is a key focus for online services and platforms, procurement of government ICT, data sharing and analytics, and cyber-safety.

### Industry and research partners

Private industry and businesses can provide critical resources to improve digital connectivity and build digital skills and capabilities in communities. The WA Government will work with industry and business to develop, deliver, and co-fund programs that improve digital inclusion, such as providing affordable internet connections, upgrading telecommunications infrastructure, and building online customer bases through digital skills training. The WA Government will also work with research partners to provide evidence-based insights that inform the Government's approach to digital inclusion.

### Community services and not-for-profit sector

Services in the local community are at the front-line of many digital inclusion activities supporting vulnerable communities to engage with digital technology. The WA Government will work with community services to develop digital inclusion programs, such as digital skills training and better access to digital technology and the internet. Community services will also support *Digital Inclusion in WA*, informing the design and delivery of digital inclusion activities through consultation.

## Digital Inclusion Initiatives

Digital inclusion initiatives can be developed and delivered through collaborative partnerships to promote equitable outcomes in four interdependent areas that will grow digital inclusion capabilities in WA: connectivity, affordability, skills, and design.

The Office of Digital Government has developed a list of possible digital inclusion initiatives following inter-jurisdictional research and analysis of digital inclusion strategies and initiatives, as well as through informal consultations with agencies, industry and service providers.

The Office of Digital Government will investigate the viability and suitability for implementation of these initiatives with the assistance of the Digital Inclusion Working Group, in collaboration with other jurisdictions through the *Australian Data and Digital Council*, and through consultation with relevant stakeholders.

As the Project progresses, initiatives will be prioritised and mapped according to time-relevant opportunities for implementation – for immediate ‘delivery’, for ‘design’, and for further ‘exploration’. This will be outlined in the final version of the *WA Digital Inclusion Blueprint*.

## Monitoring digital inclusion

Each proposed initiative will require planning and evaluation in order to identify how to deliver the best outcomes for digital inclusion in WA.

A greater understanding of the digital inclusion landscape is required to manage ongoing challenges. Implementation of initiatives will be informed by:

- The *Australian Digital Inclusion Index*
- The Australian Communications Consumer Action Network ‘Affordability Map’
- Australian Bureau of Statistics data
- The WA ‘State Telecommunications Infrastructure Audit’
- Federal and State Infrastructure Atlas data sets
- The nbn Performance Monitoring Program
- Ongoing stakeholder engagement as part of project development

This work will also inform the development of Key Performance Indicators for digital inclusion in WA, and allow opportunities to adjust and improve project approaches in order to deliver better outcomes.

# Connectivity

People are connected to digital technology

## Strategy

Expand ICT hardware, infrastructure and internet service provision particularly in areas with limited or no mobile coverage, with a focus on reliable investment in fixed infrastructure and connectivity.

**[The following will be aligned to the 'Deliver, Design, Explore' model through consultation and evaluation]**

- Leverage existing infrastructure to improve the capacity of broadband services in regional and remote communities
- Upgrade mobile and satellite services to fixed-line networks, where appropriate
- Develop a 'one-dig' approach for WA on optic fibre infrastructure
- Promote internet as a utility in community housing
- Repurpose government ICT hardware to support technology provision in communities
- Use excess government bandwidth for public community wi-fi and seek opportunities to build community wi-fi installations
- Explore new technologies to enhance regional and remote connectivity

## Suggested Key Performance Indicators:

- Percentage of people with access to the internet and ICT hardware
- Number of wi-fi enabled public buildings and spaces
- Number of appropriate mobile/satellite connections converted to fixed-line broadband

## Affordability

People have affordable access to ICT hardware, quality internet services and data

### Strategy

Leverage opportunities to influence sustainable pricing in telecommunications and digital technology, and mitigate costs for increased data usage.

**[The following will be aligned to the 'Deliver, Design, Explore' model through consultation and evaluation]**

- Seek opportunities for subsidised or repurposed technology and telecommunication services
- Improve the provision of ICT hardware and support for services in regional and remote communities
- Provide unmetered access and reduced prices for gov.au and edu.au services
- Invest in community wi-fi hotspots to support mobile-only users

### Suggested Key Performance Indicators:

- A sustainable proportion of household income available for specific amounts and quality of data
- A sustainable proportion of household income spent on ICT hardware
- Numbers of people using wi-fi hotspots and public access computers
- Numbers of social housing sites with acceptable internet connections and service



## Skills

### People have the skills to use digital technology

#### Strategy

Promote digital learning and awareness through the provision of accessible information resources and sustainable digital literacy training opportunities.

#### [The following will be aligned to the 'Deliver, Design, Explore' model through consultation and evaluation]

- Develop Digital Tech Champions programs that use mentorship, train-the-trainer, and other locally sustainable strategies that build trust and engagement among interested participants and communities
- Create an online digital inclusion hub to promote digital literacy programs on WA.gov.au to host digital skills training resources
- Develop additional digital skills training resources that address the specific needs of Western Australians
- Build digital skills for front-line public sector and local technical staff to support communities
- Foster industry partnerships to support the provision of digital literacy training and support
- Promote cyber safety awareness, information and training, and deliver digital skills training for government services, jobs and business

#### Suggested Key Performance Indicators:

- Increased use of digital skills to access to services, learning, and social connections
- Increased public confidence in independently using computers and technology
- Reduced or changed demand for training/assistance in public skills training facilities

# Design

## Technology and services are accessibly and inclusively designed

### Strategy

Enable meaningful engagement with digital technology by applying inclusive and universal design principles for online and digital services.

### [The following will be aligned to the 'Deliver, Design, Explore' model through consultation and evaluation]

- Migrate agency content and services onto WA.gov.au so that all government sites are available in one accessible source
- Conduct a review of government online services standards to ensure that government sites are accessible for people's needs and abilities
- Build a whole-of-state citizen engagement platform to facilitate engagement with government, including service options to support access
- Promote the use of audio-visual content for digital literacy training and information for the vision and hearing impaired
- Promote innovative technologies that enable improved accessibility for people with disability, older Western Australians, and other groups
- Support development of Aboriginal created, owned, and managed content to support digital engagement for Aboriginal communities
- Investigate government procurement options to support accessible ICT

### Suggested Key Performance Indicators:

- Increased self-reported use and satisfaction of community members in using government online services
- Increased uptake of users accessing digital services within identified risk groups
- Delivery of specific digital government services, with acceptable bandwidth allowance and internet quality for delivery of the specific service