



SUBMISSION TO THE PRODUCTIVITY COMMISSION CONSULTATION ON THE CIRCULAR ECONOMY INTERIM REPORT

Australian Digital Inclusion Alliance
8 April, 2025

The Australian Digital Inclusion Alliance (ADIA) welcomes the opportunity to contribute to the Productivity Commission consultation on the Circular Economy Interim Report.

ADIA is a shared initiative with over 500 business, government, academic and community organisations working together to accelerate action on digital inclusion. Our vision is to reduce the digital divide and enable greater social and economic participation for everyone in Australia, highlighting the national imperative for action and the value of key initiatives across the key pillars of digital inclusion: affordability, access and ability.

While digital inclusion is a multifaceted challenge, one important aspect is affordable access to devices. In our highly digitised society, this is fundamental to being able to participate in all kinds of activities; from access to government services, to banking, telehealth, studying, and finding employment.

Ensuring that all Australians have access to affordable devices suited to their needs can be supported in a variety of ways. One of those is encouraging the donation of surplus devices from enterprise and government agencies for affordable reuse, and the ADIA is a strong advocate of the important work of a number of community, not-for-profit and business organisations in developing and piloting a National Device Bank model to bring this concept to life.

We are enthusiastic about the potential for the principles of a circular economy model to help enable the refurbishment and reuse of devices for the purposes of improving digital inclusion outcomes. In this regard, we welcome recommendations in the Interim Report to reduce barriers to greater device refurbishment and reuse, including Recommendations 9.1, 9.2 and 9.3.

While we are supportive of these particular recommendations, we urge the Commission to explore ways to further incentivise and encourage device donation that would support the development and operation of a scheme to collect and distribute refurbished devices for people who need them. To that end, the ADIA covered a range of relevant aspects in our 2024 paper, [A Digital Inclusion Approach to Device Donation and Reuse](#), which may be of use to the Commission's considerations. Of note, the paper covers five key learnings the ADIA has taken from organisations involved in device reuse with digital inclusion aims. These include:

1. *Many commercial organisations have leasing arrangements in place.*

It is estimated that 70% of the devices used by the corporate and public sectors are leased. This means that these devices generally go back to leasing companies to be replaced for new. Leasing companies support their business model through the commercial resale of devices,

normally overseas. Some leasing companies are starting to explore models which allow customers to opt in to donate a percentage of their devices to digital inclusion programs.¹

2. *Government departments have a large number of devices that could have a big impact on device reuse and affordability.*

It is estimated that the government refreshes 3.7 million laptops, desktops and tablets every five years as well as 2.4 million mobile devices. Generally 50-70% of these are reusable for digital inclusion programs, potentially generating 1.9-2.6 million laptops/tablets and 1.2-1.7 million mobile devices for digital inclusion purposes.²

3. *Consumers are also sitting on a lot of devices that could be reused, but there are challenges.*

There can be challenges accessing personal devices due to the logistics involved in collecting from multiple locations. Anecdotal evidence also suggests that these devices are not refreshed as often as corporate/public sector devices, which means the reusability rates are lower. Further, the broader range of models used means that any technical support provided to the digitally excluded individuals is more challenging. Additionally, consumers tend not to trade in their devices due to data privacy concerns.³

4. *The product stewardship scheme doesn't incentivise reuse:*

- a. *The Scheme*⁴

The National Television and Computer Recycling Scheme (NCRS) was established in 2011. It gives Australian households and small businesses free access to industry-funded collection and recycling services. These services are for televisions and computers, including printers, computer parts and peripherals. The NCRS builds on state, territory and local government e-waste management by providing other collection services. It also creates employment opportunities within the recycling sector. The objectives of the scheme are to:

- reduce waste to landfill, especially the hazardous materials found in electronic waste (e-waste)
- increase the recovery of reusable materials in a safe, scientific and environmentally sound manner

¹ One example of this is the Quadrent Green Lease product (<https://www.quadrent.com.au/green-lease>)

² Based upon experience from WorkVentures.

³ Mobile World Live in partnership with Kingfisher, 2023, *Whitepaper: A New Approach to the Circular Economy for Mobile*, <https://www.mobileworldlive.com/a-new-approach-to-the-circular-economy-for-mobile/>

⁴ Australian Government, Department of Climate Change, Energy, the Environment and Water, 'National Television and Computer Recycling Scheme', <https://www.dcceew.gov.au/environment/protection/waste/product-stewardship/products-schemes/television-computer-recycling-scheme>

- provide convenient access to recycling services for households and small businesses throughout Australia.

Companies who import or manufacture television and computer products over certain thresholds are liable under the scheme, and are required to pay for a proportion of recycling through membership in a co-regulatory arrangement. This is a form of product stewardship, where those involved in producing and selling products take responsibility for the whole life cycle of their products.⁵

b. The Right to Repair Report

In 2021 the Productivity Commission released its Right to Repair Inquiry Report⁶ which noted that while product stewardship schemes such as the NTCRS have had success in terms of recycling and environmental impact, the current design of such schemes may be generating adverse incentives that limit their capacity to provide net benefits to the community:

The NTCRS was designed to be a recycling scheme only, with minimal incentives for co-regulatory bodies to repair and reuse collected e-waste. This results in some otherwise functional or repairable products being dismantled and destroyed for their component materials, rather than being put to higher-valued uses. Reuse of e-waste would help to extend product lifetimes and potentially lead to better environmental outcomes than recycling.

c. Regulated product stewardship scheme for solar photovoltaic systems and small electrical and electronic equipment (SEEE)

The Australian Government has committed to develop a mandatory product stewardship scheme to reduce waste from small electrical products and solar photovoltaic systems. The Department of Climate Change, Energy, the Environment and Water sought feedback on a proposed scheme in mid-2023,⁷ which aims to:

- maximise the amount of waste from e-products (e-waste) that is directly collected and recycled by the scheme via free disposal services provided to households and small businesses
- improve recycling outcomes for e-waste collected outside of the scheme's disposal services (for example, e-waste collected from large businesses and government agencies by commercial service providers).

⁵ Australian Government, Department of Climate Change, Energy, the Environment and Water, 'National Television and Computer Recycling Scheme', <https://www.dcceew.gov.au/environment/protection/waste/product-stewardship/products-schemes/television-computer-recycling-scheme>

⁶ Australian Government, Productivity Commission Inquiry Report, No. 97, 29 October 2021, <https://www.pc.gov.au/inquiries/completed/repair/report/repair.pdf>

⁷ Wired for change: Regulation for small electrical products and solar photovoltaic system waste, DCCEEW Discussion Paper, June 2023 <https://consult.dcceew.gov.au/regulation-small-electrical-products-solar-pv>

In response to the 2020 review of the NTCRS,⁸ which found that the scheme's lack of recognition of reuse led to reusable products being recycled instead of being reused, the department proposes an obligation to promote reuse rather than a reuse target. This obligation would require the scheme administrator to facilitate specific collection mechanisms for reuse and repair at scheme collection sites, when requested by a repair and reuse organisation.

d. *The Opportunity*

The Right to Repair Inquiry Report recommended that reuse be included within NTCRS annual recycling targets, and we note this aspect is covered in the Commission's interim recommendations. This would allow NTCRS co-regulatory bodies to determine the best outcome for collected e-waste, instead of requiring all of it to be recycled. The Right to Repair Inquiry Report also suggested that any future product stewardship schemes should also include repair and reuse as options within their targets, where practical.

Enabling collected e-waste to be appropriately donated for reuse would support device affordability and digital inclusion.

5. *A National Devices Bank brings multiple digital inclusion opportunities*

In their initial report released in 2023, the First Nations Digital Inclusion Advisory Group recommended⁹ that the Australian Government consider developing a National Device Bank to help provide low-income earners in First Nations communities with refurbished donated devices free of charge, based on the UK National Device Bank model coordinated by Good Things Foundation.¹⁰

WorkVentures has since called for a national strategy on devices, including the introduction of a National Device Bank, and is advocating to secure one million pledged devices to support digital inclusion programs within five years.¹¹

Providing a donated device to low-income Australians not only helps address the issue of access to an affordable and appropriate device, but also provides a tangible opportunity for digital upskilling, a flow on effect which is already being realised by both WorkVentures and The Smith Family through existing device donation programs. Anecdotal evidence collected by WorkVentures suggests that two in three recipients of a donated device will sign up to digital coaching upon receipt of the device. Adjacent opportunities could include training in online safety and digital citizenship.

⁸ Review of the *Product Stewardship Act 2011*, July 2020, <https://www.dcceew.gov.au/sites/default/files/documents/product-stewardship-act-review.pdf>

⁹ First Nations Digital Inclusion Advisory Group, Initial Report, 2023: <https://www.digitalinclusion.gov.au/sites/default/files/documents/first-nations-digital-inclusion-advisory-group-initial-report.pdf>

¹⁰ Good Things Foundation: <https://www.goodthingsfoundation.org/our-services/national-device-bank.html>

¹¹ WorkVentures, 2023: <https://workventures.com.au/national-device-bank/>

For convenience, we have attached a copy of our report to this submission, and would welcome the opportunity to provide more detail or make connections to relevant sector participants should the Commission feel this could be of value to considerations.

As we have mentioned, it is pleasing that a number of recommendations in the interim report have potential to positively impact rates of device refurbishment and thus support the supply of quality devices for reuse. We urge the Productivity Commission to maintain its focus in this important area.

Thank you for the opportunity to contribute to this consultation. We look forward to further collaboration and engagement to advance opportunities around the circular economy with respect to its capacity to improve rates of device refurbishment, and thus support the development of scaled initiatives for the affordable reuse of these products by digitally excluded people in the community.

Yours faithfully,

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Australian Digital Inclusion Alliance
**A Digital Inclusion Approach
to Device Donation
and Reuse**

March 2024



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Background

The ADIA's vision is to build a digitally inclusive Australia where everyone is equipped to fully participate in the economy and society. While many people are benefitting from the increased role technology is playing in society, many Australians are digitally excluded, lacking affordable connectivity; essential digital capability; and appropriate, affordable devices. Some of the most digitally excluded are seniors, people who live in rural and remote Australia, First Nations Australians, people with a disability, and people vulnerable across income and employment.¹

Digital inclusion is a multifaceted challenge. One aspect is affordable access to devices. In our highly digitised society, this is fundamental to being able to participate in all kinds of activities; from access to Government services, to banking, telehealth, studying, and finding employment.

Ensuring that all Australians have access to affordable devices suited to their needs can be supported in a variety of ways. One of those is encouraging the donation of surplus devices from enterprise and government agencies for affordable reuse.

In this paper we unpack a range of issues associated with device reuse including:

- Existing programs for device donation and reuse, including different types of devices and their purposes.
- Case studies and success stories.
- The current policy landscape along with challenges and opportunities for enterprise and government.

¹ Thomas, J., McCosker, A., Parkinson, S., Hegarty, K., Featherstone, D., Kennedy, J., Holcombe-James, I., Ormond-Parker, L., & Ganley, L., 2023, *Measuring Australia's Digital Divide: Australian Digital Inclusion Index: 2023*. Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society, RMIT University, Swinburne University of Technology, and Telstra.

Foreword

For many of us, access to digital technology is taken for granted. Whether we're engaging with the morning news through a mobile device over a coffee, working remotely on a laptop, or setting up children's content on a tablet for a long journey; the options are endless.

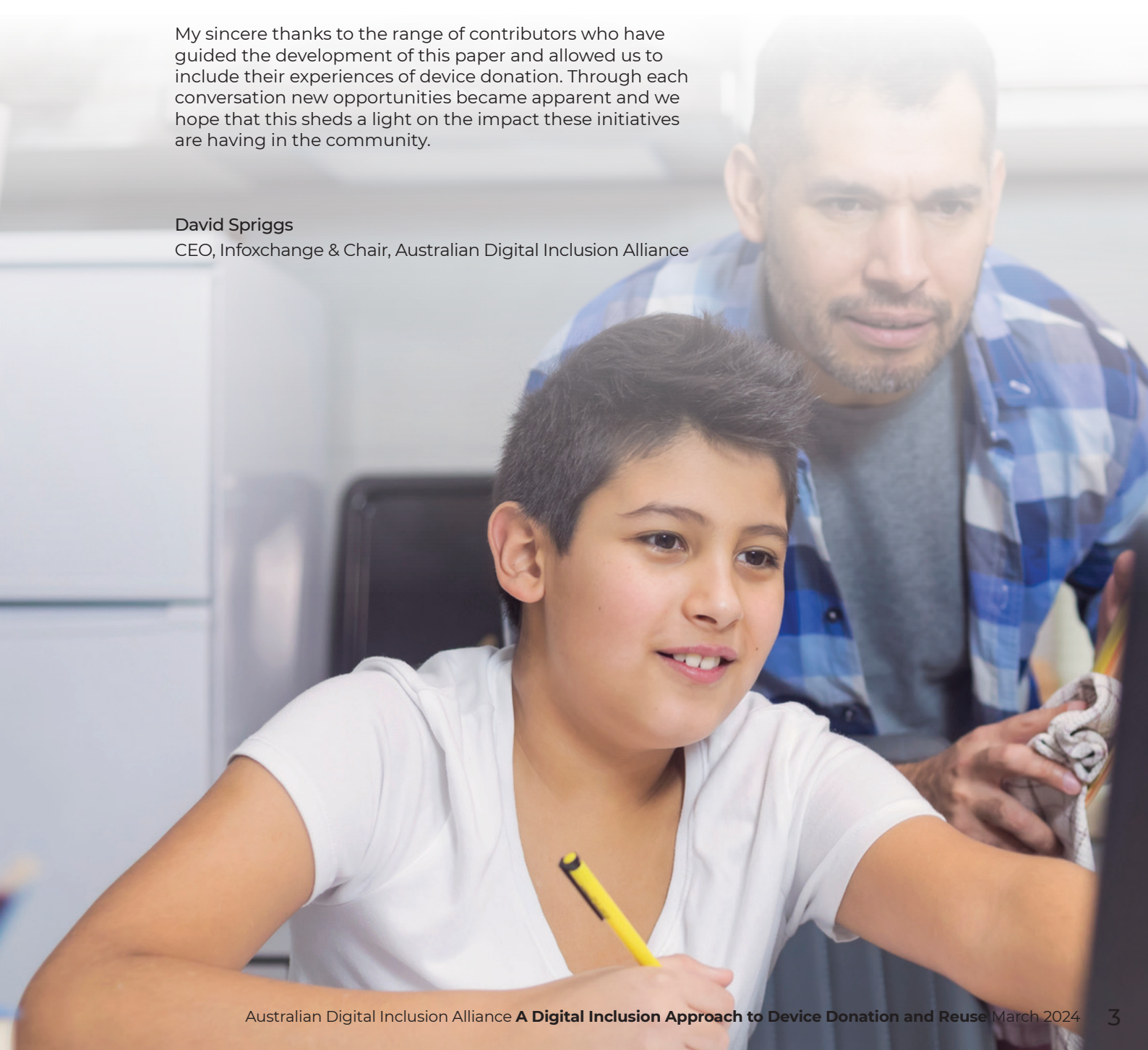
But for many digitally excluded Australians, access to an appropriate device is not only a luxury, but also a prohibiting factor when it comes to fully participating in contemporary society.

Whilst the Covid-19 pandemic brought the demand for devices into the spotlight, it is an issue that endures. There is no one answer to supporting the availability of affordable devices, however one avenue is device donation and reuse. In this paper, the Australian Digital Inclusion Alliance has set out to understand the varying aspects of device donation and reuse in Australia.

My sincere thanks to the range of contributors who have guided the development of this paper and allowed us to include their experiences of device donation. Through each conversation new opportunities became apparent and we hope that this sheds a light on the impact these initiatives are having in the community.

David Spriggs

CEO, Infoxchange & Chair, Australian Digital Inclusion Alliance



Introduction

What do we mean by appropriate devices?

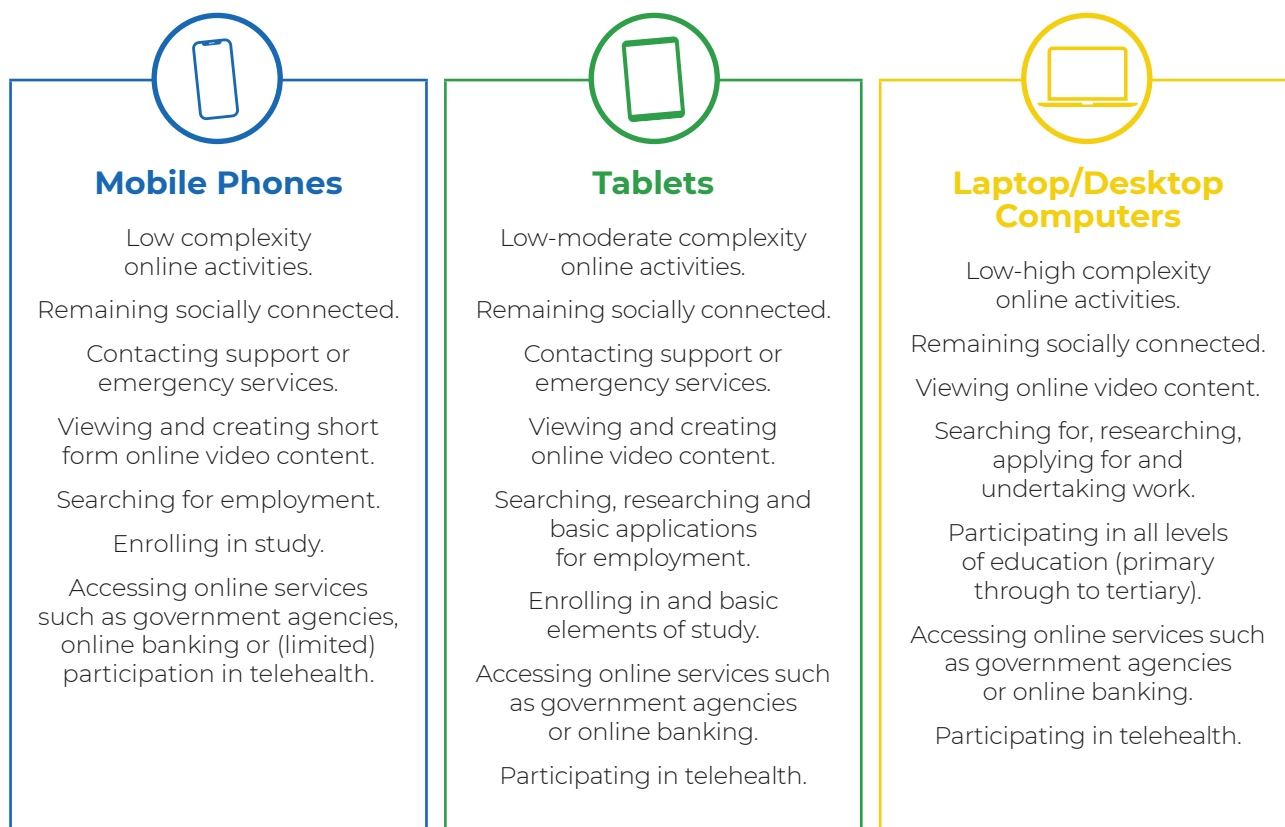
In this paper, we talk about devices such as mobile phones, tablets and laptop or desktop computers. We assume that all devices are able to be connected to the internet. Whilst additional hardware, such as a router, is required for internet access, this is out of scope for this paper.

Lack of access to a suitable device has a strong correlation with digital exclusion. Mobile only users have a digital inclusion score of 57 as opposed to the national average of 73.2, according to the latest Australian Digital Inclusion Index data.² 10.5% of Australians are mobile-only users, and single persons and public housing renters are overrepresented in this group, with 25% being reliant solely on mobile devices.³

Mobile devices can present limitations. Mobile only usage is generally suitable for less complex uses of the internet, for example, it is more difficult to complete multi-task-based activities such as school assignments or job-seeking using a mobile device. Job-seeking in the contemporary setting involves digital activities such as CV preparation, online job search and company research, online application and video interviews. Similarly, completion of a high school or further study related assignment might involve extensive online research, document formatting, spreadsheets and presentations, often toggling between different applications.

Additionally, research indicates that access to the internet via laptops and desktop computers helps develop digital capability.⁴ When access is limited to mobiles only, it has been found that digital capability levels may be negatively impacted or remain stagnant.⁵ As one small example, laptops and desktops enable people to gain competence in the use of file management and file retrieval, which is an important skill and often essential knowledge for successful workplace participation.

Below is a non-exhaustive list of tasks associated with the use of each device:

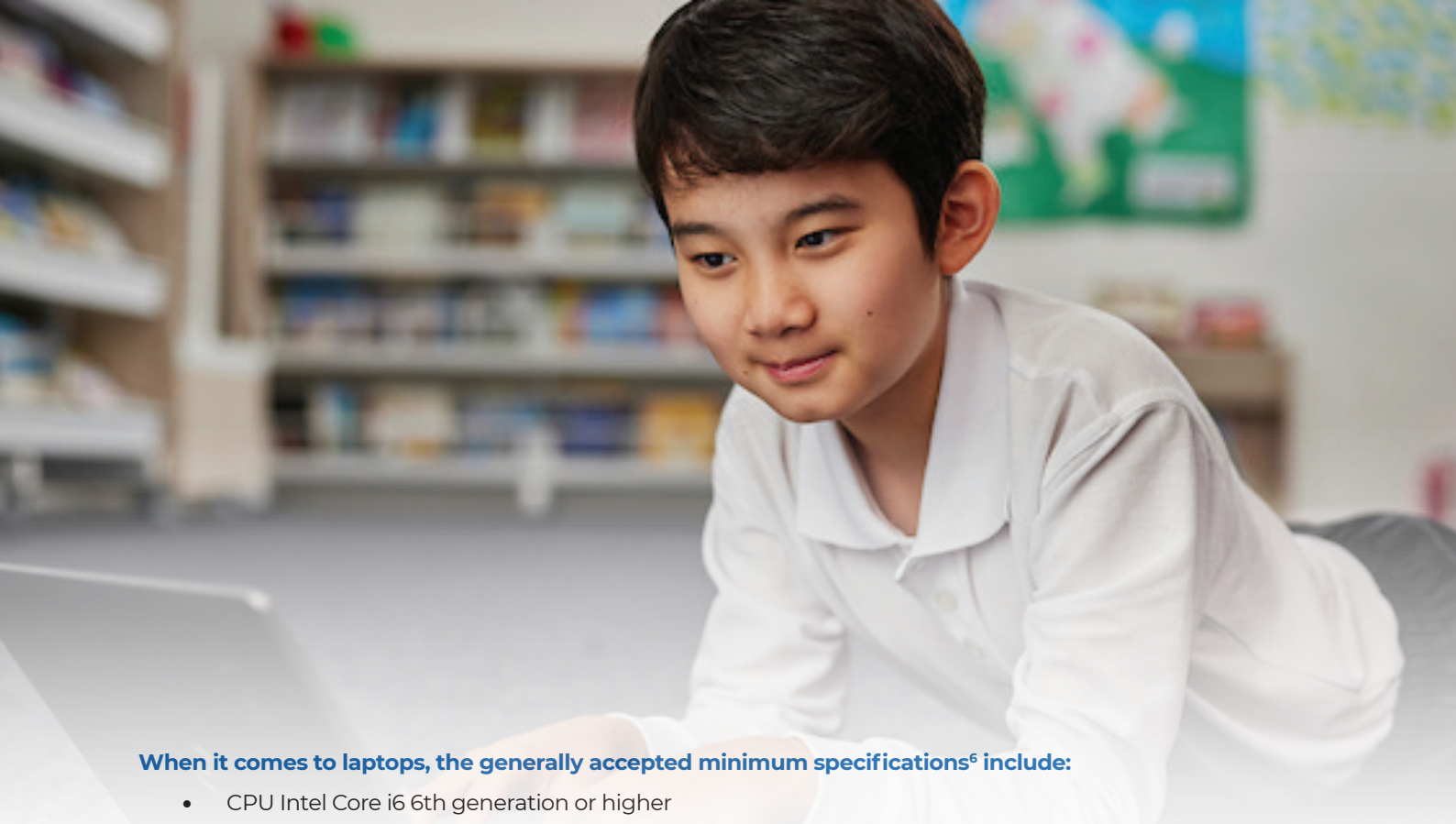


² *Ibid.*

³ *Ibid.*

⁴ Rebecca Eynon & Anne Geniets, 2016, The digital skills paradox: how do digitally excluded youth develop skills to use the internet?, *Learning, Media and Technology*, 41:3, 463-479, DOI: 10.1080/17439884.2014.1002845

⁵ Teresa Correa, Isabel Pavez & Javier Contreras, 2020, Digital inclusion through mobile phones?: A comparison between mobile-only and computer users in internet access, skills and use, *Information, Communication & Society*, 23:7, 1074-1091, DOI: 10.1080/1369118X.2018.1555270



When it comes to laptops, the generally accepted minimum specifications⁶ include:

- CPU Intel Core i6 6th generation or higher
- RAM 8GB or higher
- SSD 128GB or higher
- WiFi
- Built in webcam and microphone
- Minimum 13.3 inch screen

Unfortunately there is a lack of holistic data on the device gap in Australia. That said, we do have some data on device access within specific cohorts such as school-aged children. A South Australian Study identified that 13% of students didn't have access to a laptop,⁷ while another report cited 15% of students lacking access to any device, and a further 34% sharing devices for school work at home.⁸ The vast majority of students who didn't have access to an appropriate device at home report facing difficulties completing homework and assignments.⁹

We also know that lack of access to a computer was widely reported during Covid-19 as negatively impacting school children's ability to learn.¹⁰

Research undertaken at the time found that for some families, devices were not available in the home, while others only had access to inappropriate devices for online learning, such as mobile phones, or older tablets. In some circumstances, a single device was shared by multiple siblings with the same device required for parents working from home.¹¹ Additionally, recent research into low income families' experiences of digital inclusion indicated that devices, if or when broken, are unlikely to be repaired.¹²

6 WorkVentures, <https://workventures.com.au/>

7 South Australian Commissioner for Children and Young People, 2021, My Digital Life: Understanding the impact of digital poverty on children and young people, PROJECT REPORT NO. 24, <https://www.ccp.com.au/wp-content/uploads/2022/03/My-Digital-Life-Understanding-the-impact-of-digital-poverty-on-children-and-young-people.pdf>

8 Finder, 2022, 'The digital divide: 49% of kids lack access to tech for school', Finder's Parent Report 2022, <https://www.finder.com.au/digital-divide-49-percent-of-kids-lack-tech-access>

9 Research study conducted by WorkVentures and ABCN, with assistance from KPMG. The study focused on providing donated devices to lower socio-educational students in 6 public schools as directed by WorkVentures and ABCN. Of those provided with a donated refurbished laptop for home use as part of this study, 84% reported that prior to receiving it, they had difficulty completing schoolwork due to a lack of access to an appropriate device.

10 Brown, N., Te Riele, K., Shelley, B. & Woodroffe, J., 2020, Learning at home during COVID-19: Effects on vulnerable young Australians. Independent Rapid Response Report. Hobart: University of Tasmania, Peter Underwood Centre for Educational Attainment.

11 *Ibid.*

12 Dezuanni, M., Osman, K., Foth, M., Mitchell, P., McCosker, A., Notley, T., Kennedy, J., Marshall, A., Tucker, J., Hourigan, A., Mamalipurath, J., & Mavoa, J. 2023, Digital inclusion is everybody's business: Key findings from the ARC Linkage Project Advancing digital inclusion in low-income Australian families. Brisbane: Digital Media Research Centre, Queensland University of Technology. DOI: 10.25916/cqaadq75

An opportunity for reuse

Refurbishing and reusing appropriate devices presents an opportunity to help close the devices gap, and in doing so lift digital capability and reduce digital exclusion. Whilst not the only avenue to address the availability of affordable appropriate devices, there is scope for appropriate reuse to play an important role. There is great work ongoing in this space and also an opportunity to deepen device reuse.

The biggest opportunity is in the reuse of devices no longer needed by corporates and the public sector. Due to consistent technology refresh cycles, these devices tend to be renewed more frequently than personal devices and so have a higher level of reliability. In addition, the logistics of collection of devices that are no longer needed can be more efficient when being done at the corporate and public sector level, rather than when collection is facilitated by individuals.

It is estimated that over a 5-year period, approximately 10 million desktops, laptops and tablets, and a further 6.5 million mobile phones will be refreshed by the corporate and public sector.¹³ Over this period, those refreshed by the public sector alone could generate up to 2.6 million devices.¹⁴

In just one year these refurbished public sector devices could support in excess of 500,000 students facing difficulties completing homework and assignments. Including devices from the corporate sector would increase the total pool of refurbished devices available to bridge the digital divide, and could contribute in excess of 1.4 million devices per year.¹⁵

Incentivising the donation of devices, securely erased and refurbished for reuse where appropriate, would bring great benefits to the number of Australians who lack access to an affordable and appropriate device.

Device donation and reuse: Current state of play

There are a range of organisations working to address the issue of access to affordable and appropriate devices through device reuse. Below we outline some of these organisations and programs. Whilst it's not an exhaustive list, it does highlight the breadth of programs currently underway.

Mobile Phones

- **Kingfisher**

Australian telecommunications provider Belong has launched an online marketplace for refurbished devices. The Belong Second Life Shop is delivered in partnership with Kingfisher, who source preowned phones and refurbish them to sell.¹⁶ Paired with digital inclusion outcomes, Kingfisher has a particular focus on achieving Circular Economy for Mobile and providing a sustainable option for consumers.¹⁷

- **The Reconnect Project**

The Reconnect Project has a straightforward mission: to give pre-owned mobile devices a new life by providing them to people in need. With a simple repair, secure erasure of data and an overall clean, these devices are ready for (re)connecting vulnerable people to family, friends and essential services, and help close the digital divide in Australia.¹⁸

¹³ Aggregated from Industry data in a market summary paper prepared for Good Things Foundation and WorkVentures (with reference to: IBISWorld F3492; IBISWorld OD5470; SpiceWorks; Euromonitor; BusinessWire; Islam et al 2021; Islam et al 2020).

¹⁴ Based upon 3.8m devices being refreshed by the public sector every 5 years and 50-70% of donated devices generally being suitable for refurbishment for digital inclusion programs (per experience from WorkVentures).

¹⁵ Ibid.

¹⁶ Belong Second Life Shop, <https://shop.belong.com.au/>

¹⁷ Mobile World Live and Kingfisher, 2023, *A New Approach to the Circular Economy for Mobile: Whitepaper*, <https://www.mobileworldlive.com/a-new-approach-to-the-circular-economy-for-mobile>

¹⁸ The Reconnect Project, <https://thereconnectproject.com.au/index.php/our-story/>

Tablets

- **WorkVentures and the Reconnect Project provide tablets when required/available.**

Laptop Computers

- **WorkVentures**

For over 40 years, WorkVentures has collaborated with corporate partners to enable digitally excluded individuals and families to gain access to affordable, reliable IT solutions and ongoing tech support. They work with not-for-profit partners to offer holistic digital inclusion solutions – encompassing devices, connectivity and the development of digital skills, empowering people to fully participate in society. Additionally, by refurbishing and repurposing these devices, WorkVentures is supporting a true for purpose circular economy – both reducing e-waste and digital exclusion. Devices are covered by warranty and come installed with any required software (e.g. Windows and Microsoft Office or bespoke software). WorkVentures also performs these services for mobiles and tablet devices. In 2023 WorkVentures was included in the NSW Government End User Device Services Panel, allowing them to repurpose end-of-life devices for social good across 300+ NSW Government agencies and affiliates.

- **The Smith Family - Digital Access**

The Smith Family has long recognised the importance technology plays in a child's education, having delivered digital technologies into families' homes from 2007. Since 2020, The Smith Family has delivered over 5,000 Digital Inclusion Packs to Learning for Life families in need of digital access. Digital Inclusion Packs include a laptop and/or an internet package along with Tech Support to ensure families have the support they need to use the technology they receive.

- **Good360 - Laptop Launchpad**

Good360 is calling on Australian businesses to put their unused laptops to good use and help with their goal of sourcing and refurbishing 100,000 laptops to people in need by the end of 2025 including raising \$10 million to cover refurbishment.

- **GIVIT (QLD)**

GIVIT has launched the Digital Inclusion Project in Queensland to help close the digital divide, by coordinating digital donations. GIVIT works with generous IT partners and businesses to clean, refurbish and set-up devices to ensure they're ready for use by people in need.

- **South Australian Government - Digital Donation Program**

The Digital Donation Program was created to assist South Australian community based, not-for-profit organisations to access devices from surplus government stocks. By re-using surplus government devices across the state and making them available to non-for-profit organisations in the community, they are able to implement a program that benefits both the community and the environment.

Additionally, the Australian Communications Consumer Action Network (ACCAN) has developed the Affordable Devices resource¹⁹ which provides the first-ever database of free, subsidised and affordable devices in Australia. This includes offers from telcos, community organisations, the National Disability Insurance Scheme, plus state, territory and federal Government programs. It also includes a large number of refurbished device retailers in the market. The aim is to bring to light 'who's doing what' to support consumer access to affordable devices, and to provide consumers with guidance when considering a refurbished device.

¹⁹ <https://accan.org.au/affordable-devices>

Impact

Case Study - Enterprise: Westpac and WorkVentures

Westpac made their first device donation through WorkVentures in 2002, which saw 107 pallets of computers refurbished. The partnership between Westpac and WorkVentures has deepened, with many bespoke projects targeting digital inclusion, including one in 2007 supporting First Nations digital inclusion by providing subsidised computers and training to 150 remote Aboriginal households.

Security and safety of data has always been of critical importance. Every device donated is securely transported, stored and wiped by WorkVentures, with data sanitisation certification provided and regular security and sustainability reporting provided. Westpac completes onsite inspections periodically to ensure the integrity of all data.

Reflecting on the overall impact of their partnership, with technology donations from Westpac, WorkVentures have:

- Supported 44,022 people with affordable technology;
- Partnered with over 180 not-for-profit organisations to deliver digital inclusion programs; and
- Diverted over 720 tonnes of technology from landfill.

“WorkVentures is one of Westpac’s longest partners in the technology space. They have experience and passion and are trusted partners for device donations and digital inclusion initiatives. We are very happy with their quality of work with responsible disposal of devices as well as the work they do turning potential waste into positive change in the community. WorkVentures gives us peace of mind that devices are not only disposed of securely but are being used for social good.” (– Paul McKenna, Head of Digital Workplace & Contact Centre Platforms at Westpac).

Case Study - Public Sector: TasNetworks

TasNetworks is Tasmania’s publicly owned energy distributor, and the organisation has a strong focus on community impact. Following the success of a device reuse scheme delivered during peak Covid-19 lockdowns in Victoria,²⁰ TasNetworks set about rolling out a device donation program in Tasmania’s most vulnerable communities. While 48% of Tasmanians do not have the literacy and numeracy skills they need for life in a technologically-rich world,²¹ supporting digital inclusion efforts seemed like a natural fit for an organisation which also operates in telecommunications and technology services.

TasNetworks partnered with Neighbourhood Houses Tasmania to provide vulnerable communities with access to devices. 90 laptops retired from TasNetworks’ operations have been donated across 11 community houses, following refurbishment by social enterprise, WorkVentures. For the TasNetworks team, the focus of this program is really about upskilling communities, and supporting people to achieve outcomes that would not otherwise be possible without access to a device:

“As a publicly owned business working closely with the Tasmanian community, we have a responsibility to use our internal resources to work out how best to direct support for Tasmania’s most vulnerable people. Success for me will be two-fold: I hope that through our partnerships, young Tasmanians will have the opportunity to continue or pursue further study; and I hope that the positive outcomes of TasNetworks’ donations trigger another major player in the Tasmanian economy to start donating their retired devices as well. Collectively, Tasmania’s major employers can put a huge dent in the number of Tasmanians without access to a device” (— Andrew Davis, Executive Digital, Strategy & Customer at TasNetworks).

Looking at the broader digital inclusion challenge, separate to device donation, TasNetworks employees – through corporate volunteering days – have provided mentorship in basic digital skills for community organisations. With the increasing price of fuel and the remoteness of many regional Tasmanian towns, TasNetworks have also provided audio visual equipment to communities throughout the state to assist with access to learning opportunities and social connection when transport isn’t an option. So far, TasNetworks is proud to have partnered with Neighbourhood Houses Tasmania, the Aboriginal Land Council of Tasmania, and are looking at supporting organisations in neuro-diverse and CALD communities.

20 Business Council of Australia, 2020, ‘Jemena powers up digital learning for struggling families in Victoria’, https://www.bca.com.au/jemena_covid19

21 Tasmanian Government, 26Ten, <https://26ten.tas.gov.au/Pages/default.aspx>

Case Study - Community: Australian Computer Society (ACS) Queensland Branch and Queensland Aboriginal and Torres Strait Islander Foundation (QATSIF)

Grassroots community organising has seen over 1000 devices delivered to disadvantaged young people across Queensland over the past year through donations from industry and the public sector.

This is a joint effort coordinated by ACS Queensland in partnership with Substation33, QATSIF, P&Cs Qld and LiteHaus International. Substation33 and LiteHaus International securely wipe the data from the donated devices, install Microsoft Office and set up Wi-Fi capabilities ready for student use. P&Cs Qld and QATSIF work directly with schools to identify the students and families who otherwise could not afford a device. The devices are delivered through schools so that they get directly into each student's hands.²⁰ In mid-2023 it was announced that ACS and LiteHaus International would expand this program nationally.

How do we increase device reuse?

A UK study delivered by the Good Things Foundation, Circular Electronics Partnership and Deloitte found that the key barriers for enterprise or government device donation are data security, liability risks, cost and logistics of finding appropriate external refurbishment and charity partners, and a lack of awareness around the opportunity to donate devices for social good.²¹

We have learnt from organisations involved in device reuse with digital inclusion aims that:

1. *Many commercial organisations have leasing arrangements in place.*

It is estimated that 70% of the devices used by the corporate and public sectors are leased. This means that these devices generally go back to leasing companies to be replaced for new. Leasing companies support their business model through the commercial resale of devices, normally overseas. Some leasing companies are starting to explore models which allow customers to opt in to donate a percentage of their devices to digital inclusion programs.²²

2. *Government departments have a large number of devices that could have a big impact on device reuse and affordability.*

As outlined earlier in this paper, it is estimated that the government refreshes 3.7 million laptops, desktops and tablets every 5 years as well as 2.4 million mobile devices. Generally 50-70% of these are reusable for digital inclusion programs, potentially generating 1.9-2.6 million laptops/tablets and 1.2-1.7 million mobile devices for digital inclusion purposes.²³

3. *Consumers are also sitting on a lot of devices that could be reused, but there are challenges.*

There can be challenges accessing personal devices due to the logistics involved in collecting from multiple locations. Anecdotal evidence also suggests that these devices are not refreshed as often as corporate/public sector devices, which means the reusability rates are lower. Further, the broader range of models used means that any technical support provided to the digitally excluded individuals is more challenging. Additionally, consumers tend not to trade in their devices due to data privacy concerns.²⁴

20 Australian Computer Society, 2022, 'See I.T. Be I.T. Project – Helping bridge the digital divide in Qld', <https://membership.acs.org.au/member-insight/2022-02-16-See-it-be-it.html>

21 Good Things Foundation, Circular Electronics Partnership and Deloitte, 2023, *Circular electronics for social good: Reusing IT equipment to bridge the digital divide*, <https://www.goodthingsfoundation.org/what-we-do/news/the-charity-initiative-helping-all-sectors-achieve-their-sustainable-development-goals/>

22 One example of this is the Quadrent Green Lease product (<https://www.quadrent.com.au/green-lease>)

23 Based upon experience from WorkVentures.

24 Mobile World Live in partnership with Kingfisher, 2023, *Whitepaper: A New Approach to the Circular Economy for Mobile*, <https://www.mobileworldlive.com/a-new-approach-to-the-circular-economy-for-mobile/>

4. *The product stewardship scheme doesn't incentivise reuse:*

a. *The Scheme*²⁵

The National Television and Computer Recycling Scheme (NTCRS) was established in 2011.²⁶ It gives Australian households and small businesses free access to industry-funded collection and recycling services. These services are for televisions and computers, including printers, computer parts and peripherals. The NTCRS builds on state, territory and local government e-waste management by providing other collection services. It also creates employment opportunities within the recycling sector. The objectives of the scheme are to:

- reduce waste to landfill, especially the hazardous materials found in electronic waste (e-waste)
- increase the recovery of reusable materials in a safe, scientific and environmentally sound manner
- provide convenient access to recycling services for households and small businesses throughout Australia.

Companies who import or manufacture television and computer products over certain thresholds are liable under the scheme, and are required to pay for a proportion of recycling through membership in a co-regulatory arrangement. This is a form of product stewardship, where those involved in producing and selling products take responsibility for the whole life cycle of their products.²⁷

b. *The Right to Repair Report*

In 2021 the Productivity Commission released its Right to Repair Inquiry Report²⁸ which noted that while product stewardship schemes such as the NTCRS have had success in terms of recycling and environmental impact, the current design of such schemes may be generating adverse incentives that limit their capacity to provide net benefits to the community:

The NTCRS was designed to be a recycling scheme only, with minimal incentives for co-regulatory bodies to repair and reuse collected e-waste. This results in some otherwise functional or repairable products being dismantled and destroyed for their component materials, rather than being put to higher-valued uses. Reuse of e-waste would help to extend product lifetimes and potentially lead to better environmental outcomes than recycling.

c. *Regulated product stewardship scheme for solar photovoltaic systems and small electrical and electronic equipment (SEEE)*

The Australian Government has committed to develop a mandatory product stewardship scheme to reduce waste from small electrical products and solar photovoltaic systems. The Department of Climate Change, Energy, the Environment and Water sought feedback on a proposed scheme in mid-2023,²⁹ which aims to:

- maximise the amount of waste from e-products (e-waste) that is directly collected and recycled by the scheme via free disposal services provided to households and small businesses
- improve recycling outcomes for e-waste collected outside of the scheme's disposal services (for example, e-waste collected from large businesses and government agencies by commercial service providers).

In response to the 2020 review of the NTCRS,³⁰ which found that the scheme's lack of recognition of reuse led to reusable products being recycled instead of being reused, the department proposes an obligation to promote reuse rather than a reuse target. This obligation would require the scheme administrator to facilitate specific collection mechanisms for reuse and repair at scheme collection sites, when requested by a repair and reuse organisation.

25 Australian Government, Department of Climate Change, Energy, the Environment and Water, 'National Television and Computer Recycling Scheme', <https://www.dcceew.gov.au/environment/protection/waste/product-stewardship/products-schemes/television-computer-recycling-scheme>

26 The Department of Climate Change, Energy, the Environment and Water has oversight of Product Stewardship in Australia, including the National Television and Computer Recycling Scheme, and Mobile Muster. MobileMuster is a free, not for profit recycling program that is voluntarily funded by the Australian telecommunications industry. MobileMuster is the product stewardship program of the telecommunications industry and is accredited by the federal government. It is voluntarily funded by all of the major handset manufacturers and network carriers to provide a free mobile phone recycling program in Australia to the highest environmental standard. The program is committed to awareness and educating the community on repair, reuse and recycling. MobileMuster partners with charities to incentivise consumers and to thank them for recycling with us. We have given over \$1 million to support local charities including the Salvos, Able Australia, OzHarvest, Take 3 for the Sea and Landcare Australia. Our charity partnerships encourage Australians to recycle and do some good.

27 Australian Government, Department of Climate Change, Energy, the Environment and Water, 'National Television and Computer Recycling Scheme', <https://www.dcceew.gov.au/environment/protection/waste/product-stewardship/products-schemes/television-computer-recycling-scheme>

28 Australian Government, Productivity Commission Inquiry Report, No. 97, 29 October 2021, <https://www.pc.gov.au/inquiries/completed/repair/report/repair.pdf>

29 Wired for change: Regulation for small electrical products and solar photovoltaic system waste, DCCEEW Discussion Paper, June 2023 <https://consult.dcceew.gov.au/regulation-small-electrical-products-solar-pv>

30 Review of the Product Stewardship Act 2011, July 2020, <https://www.dcceew.gov.au/sites/default/files/documents/product-stewardship-act-review.pdf>



d. *The Opportunity*

The Right to Repair Inquiry Report recommended that reuse be included within NTCRS annual recycling targets. This would allow NTCRS co-regulatory bodies to determine the best outcome for collected e-waste, instead of requiring all of it to be recycled. It also suggested that any future product stewardship schemes should also include repair and reuse as options within their targets, where practical.

Enabling collected e-waste to be appropriately donated for reuse would support device affordability and digital inclusion.

5. *A National Devices Bank brings multiple digital inclusion opportunities*

In their initial report released in 2023, the First Nations Digital Inclusion Advisory Group recommended³¹ that the Australian Government consider developing a National Device Bank to help provide low-income earners in First Nations communities with refurbished donated devices free of charge, based on the UK National Device Bank model coordinated by Good Things Foundation.³²

WorkVentures has since called for a national strategy on devices, including the introduction of a National Device Bank, and is advocating to secure one million pledged devices to support digital inclusion programs within five years.³³

Providing a donated device to low-income Australians not only helps address the issue of access to an affordable and appropriate device, but also provides a tangible opportunity for digital upskilling, a flow on effect which is already being realised by both WorkVentures and The Smith Family through existing device donation programs. Anecdotal evidence collected by WorkVentures suggests that two in three recipients of a donated device will sign up to digital coaching upon receipt of the device. Adjacent opportunities could include training in online safety and digital citizenship.

31 First Nations Digital Inclusion Advisory Group, 2023, *Initial Report*, <https://www.digitalinclusion.gov.au/sites/default/files/documents/first-nations-digital-inclusion-advisory-group-initial-report.pdf>

32 The National Device Bank is an alternative solution to IT asset disposal that tackles corporate e-waste and gets refurbished devices into the hands of people that can't afford their own. Organisations of any size and sector can donate used IT equipment and devices - it's a secure, sustainable and socially responsible solution for your organisation's end-of-life or unused tech (<https://www.goodthingsfoundation.org/national-device-bank/>).

33 WorkVentures, (2023), <https://workventures.com.au/national-device-bank/>

Conclusion

As with all facets of the digital inclusion challenge, there are a range of organisations and projects underway sourcing, refurbishing and reusing devices for digitally excluded cohorts across Australia. There are ways to make this more commonplace, and it is our hope that the more the positive outcomes of device donation are shared, the more organisations – large and small, public and private – will get behind helping solve the issue of device accessibility and affordability.

At the policy level and within enterprise, there is an opportunity to incentivise and encourage device donation including through the NTCRS, forthcoming regulatory product stewardship scheme for small electrical and electronic equipment (SEEE), corporate leasing programs and the establishment of a National Device Bank.

The ADIA welcomes feedback and examples from your organisation or community. Please get in touch to help us deepen our understanding of the issues associated with device donation and reuse. Contact info@digitalinclusion.org.au

About the Australian Digital Inclusion Alliance

The Australian Digital Inclusion Alliance (ADIA) is a shared initiative with over 500 business, government, academic and community organisations working together to accelerate action on digital inclusion. Our member organisations conduct a variety of research and practical programs aimed at reducing the digital divide and enabling greater social and economic participation for all Australians. The ADIA is supported by Infexchange, Google, Telstra and TasNetworks. Australia Post was also a founding partner.

The ADIA's vision is to build a digitally inclusive Australia where everyone is equipped to fully participate in the economy and society. Being digitally included means a person has:

- Affordable access to quality internet and appropriate devices.
- Access to inclusively designed online content, that's readable and accessible, including if they are differently abled or from culturally or linguistically diverse backgrounds.
- The knowledge, ability, skills and confidence to complete tasks safely and securely online.

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Additionally, we acknowledge that access to an appropriate device isn't a holistic solution, rather one part of the digital inclusion challenge. Importantly, device access must be paired with the digital capability to purposefully use it, along with access to an affordable internet connection.

