Breaking Down Barriers to Digital Government

How can we enable vulnerable consumers to have equal participation in digital government?

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About ACCAN

The Australian Communications Consumer Action Network (ACCAN) is the peak body that represents all consumers on communications issues including telecommunications, broadband and emerging new services. ACCAN provides a strong unified voice to industry and government as consumers work towards availability, accessibility and affordability of communications services for all Australians.

Consumers need ACCAN to promote better consumer protection outcomes ensuring speedy responses to complaints and issues. ACCAN aims to empower consumers so that they are well informed and can make good choices about products and services. As a peak body, ACCAN will represent the views of its broad and diverse membership base to policy makers, government and industry to get better outcomes for all communications consumers.

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Executive Summary

In recent years, digital service and information delivery has found its way to the top of the Australian Government's priorities. The public sector's renewed focus on digital engagement[1] aims to meet the twenty-first century expectations of consumers; Australians want simple, secure, seamless and personalised digital experiences anytime, anywhere and on any device.[2]

For the public sector, the benefits of 'digital transformation' are two-fold: it significantly lowers the cost of delivering services and information to consumers[3] and it can also generate valuable real-time data for Government planners and policy-makers.[4] Increasing the sample size and quality of government data will, in theory, translate into better policy and services that meet the needs of all citizens.

While increasing consumer convenience and public sector efficiency are laudable grounds for the Australian Government's heavy investment in digitisation, there is little discussion on a 'Plan B' for the millions of Australians who cannot engage with digital government due to technological, geographical, health and socioeconomic barriers.

With the generous support of ACCAN and Google, this research project aims to provide that 'Plan B' by assessing the distinct needs of eight vulnerable consumer groups in Australia and offering recommendations on how digital government can be more inclusive. Ultimately, digital channels should only form one part of the Government's citizen engagement strategy and non-digital points of contact should be retained until there is universal access to digital technology in Australia.

As a growing number of consumers engage with digital government, the disadvantages of being offline also increase. Under the Australian Government's digital-first strategy, it is implicitly assumed that all Australians are digitally-literate and capable of accessing a digital device and internet connection. However, this research project challenges this assumption by highlighting the barriers which hinder universal access to digital technology in Australia. These barriers include a lack of internet coverage in remote and regional Australia, digital illiteracy and, for some of Australia's most financially-disadvantaged consumers, the cost of an internet connection can be prohibitive.

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[1] Adhikari, S. 2017, 'Digital transformation gets budget love', *The Australian,* 10 May, viewed 15 September 2017, <http://www.theaustralian.com.au/business/technology/digital-transformation-gets-budget-love/news-story/7f763fa0f534f76d2fc7c0e833342c2a>.

[2] SAP 2016, *Australian Digital Experience Report,* viewed 15 September 2017, <https://www.sap.com/australia/docs/download/cmp/2016/11/australian-digital-experience-report-2016.pdf>.

[3] Deloitte Access Economics 2015, *Digital Government Transformation,* Deloitte Access Economics, Sydney, for Adobe Systems Pty Ltd, Sydney, p. 24.

[4] Taylor, A. 2016, *The Promise of Digital Government: Transforming Public Services, Regulation, and Citizenship,* Menzies Research Centre, Connor Court Publishing, Redland Bay, Queensland.

As traditional points of contact such as shopfronts and call centres give way to the Government's new digital channels, millions of digitally-disconnected consumers will need to spend more time and effort to engage with government – exacerbating their social exclusion and the impacts of Australia's digital divide. Without taking positive action to eliminate the barriers to universal digital access, the Australian Government risks alienating millions of vulnerable consumers who are effectively denied the opportunity to engage with crucial services such as healthcare, welfare and social housing – all of which are increasingly mediated by the internet.

Between March and July 2017, community engagement interviews were conducted with vulnerable consumers and consumer advocates across Australia to identify areas for improvement in digital government. In addition to this first-hand qualitative data, the recommendations in this research project are also informed by studies, journals and surveys from the public and private sectors.

There is no doubt that digital service and information delivery is the way forward for the Australian Government, as it has been for governments in other developed countries.[5] The Government's shift to digital reflects the modern demands of consumers who can already complete most of their private sector transactions online. However, the question that this final research report will answer is how digital government can be best implemented to benefit *all* Australians, particularly vulnerable consumers who depend most on government services.

[5] Accenture 2014, *Digital Government: Pathways to Delivering Public Services for the Future,* viewed 14 September 2017, <https://www.accenture.com/be-en/~/media/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Industries_7/Accenture-Digital-Government-Pathways-to-Delivering-Public-Services-for-the-Future.pdf>.

Background

What is digital government?

Digital government refers to a government's use of computers, mobile devices and the internet to provide services and information for consumers in its jurisdiction. One key change for consumers is the reduction in the number of discrete agency-centric platforms in favour of one integrated consumer-centric digital experience.[6] The Australian Government's attempt at delivering an integrated digital experience for consumers is MyGov, which acts as a gateway to a range of government services.

At the federal level in Australia, the Digital Transformation Agency (DTA) has been tasked with digitising government services and information with a view to make it easier and faster for consumers to access its digital platforms. Some states have established their own digital government agencies, such as the South Australian Office for ICT and Digital Transformation which has a similar vision to modernise the public sector with digital technology and simplify consumer access to government.

Australians undertake 811 million transactions with the state and federal levels of government each year, with 40 per cent still completed via non-digital channels, such as in person or over the phone.[7] Consumer interactions with digital government generally occur to achieve one of these two purposes:

i. To find information about government services (digital information)
ii. To complete a government service-related application, transaction or booking (digital services)

Digital information provides real-time advice, news and data on government agencies and their services. This is often presented on a digital platform such as a website and, more recently, governments have embraced mobile application technology to deliver information. Digital information platforms complement traditional methods of government communication such as print media, television and radio.

Digital services allow consumers to complete government applications and transactions remotely. This is often facilitated through the submission of an electronic form on a digital platform such as a government website or mobile app. For example, consumers can apply for a new passport, register for Centrelink benefits and lodge a tax return anytime and anywhere in the world by signing into the relevant government agency's website or app.

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[6] Victorian Government 2013, *Victorian Government Digital Strategy,* viewed 12 July 2017, <http://www.enterprisesolutions.vic.gov.au/wp-content/uploads/2014/06/Victorian-Government-Digital-Strategy-December-2013.pdf>, p. 6.

[7] Deloitte Access Economics 2015, *Digital Government Transformation,* Deloitte Access Economics, Sydney, for Adobe Systems Pty Ltd, Sydney, p. 1.

Impact on consumers

To date, public and private sector reviews on the effectiveness of digital government have largely turned a blind eye to the needs of vulnerable consumer groups who struggle to keep pace with the changes.

The Australian Government's digital transformation has been criticised as a cost-shifting exercise which fails to deliver real service improvements to the consumer.[8] This report highlights the absence of support for **eight vulnerable consumer groups** who are denied opportunities to engage with digital government due to a range of socioeconomic, health, geographical and technological barriers.

The eight vulnerable consumer groups are identified on the next page, followed by an analysis of the unique **barriers** that hinder each group's participation in digital government. In response to these barriers, **recommendations** have been drawn from best practice to increase consumer engagement, with a focus on making digital government more accessible and equitable for vulnerable consumers in Australia.

Both the public and private sectors[9] are quick to celebrate the economic benefits of digital government, while the broader social impact of the government's digital transformation is overlooked. A failure to carefully consider the inclusiveness of digital government could exacerbate the digital divide – the large discrepancies in the accessibility of services and information between consumers who are digitally-literate and those who are not.

Vulnerable consumer groups

With the government's shift to online service and information delivery, digital government must be accessible to Australia's most vulnerable consumers. This report addresses the following eight consumer groups, which have been identified by ACCAN as being at risk of falling behind in the government's digital transformation:

1. CALD communities
2. People with disability
3. Low-income consumers
4. Rural and remote consumers
5. Adults over age 65
6. Remote Indigenous communities
7. Homeless people
8. Small businesses

[8] Newman, L., Biedrzycki, K. & Baum, F. 2012, 'Digital technology use among disadvantaged Australians: implications for equitable consumer participation in digitally-mediated communication and information exchange with health services', *Australian Health Review,* vol. 36, Flinders University, Adelaide, viewed 14 June 2017, <http://www.publish.csiro.au/ah/pdf/AH11042>, p. 127.

[9] Deloitte Access Economics 2015, *Digital Government Transformation,* Deloitte Access Economics, Sydney, for Adobe Systems Pty Ltd, Sydney.

Research objectives

- To identify barriers which prevent vulnerable consumers from engaging with digital government.
- To propose recommendations that ensure the Government's digital transformation creates digital dividends from which all Australians can benefit, rather than exacerbate the existing digital divide.
- To demonstrate the benefits of an inclusive digital transformation, that ensures that consumers are not left behind by the Government's shift to digital service and information delivery.
- To highlight the role of affordable telecommunications and digital literacy in enabling equal access to digital government.
- To identify areas for further exploration.

Methodology

1. Frame project scope
2. Define key terms and terms of reference
3. Literature review
4. Community engagement
5. Recommendations
6. Draft report for review
7. Final report

1. Engage with ACCAN policy team to frame the scope of the research project and identify key vulnerable consumer groups in Australia upon which the research focusses.
2. Define key terms and terms of reference in the research project.
3. Conduct a literature review:
    a. Academic literature: government and private sector studies, journals and surveys
    b. Media material: news stories and press releases on digital government
        - Reviews of media material will be an ongoing process throughout the research project to ensure that research findings are up-to-date.
4. Engage with community stakeholders in-person, via telephone and email to gather qualitative data and case studies on vulnerable consumer engagement with digital government.
5. Produce recommendations, as informed by literature review and community engagement.
6. Release draft research report for peer review.
7. Publish revised research findings and case studies in a final report.

Community engagement questions

The following list of questions was developed to guide discussion on vulnerable consumer groups' engagement with digital government. The list was used in the:

- Focus group with Infoxchange (CALD communities, low-income consumers & homeless people).
- Interview with Ellie Rennie and Julian Thomas, RMIT (remote Indigenous communities).
- Interview with Robert Morsillo, Telstra (low-income earners, regional & remote consumers).
- Interview with NSW Farmers (regional & remote consumers).
- Interview with Sue McGrath, Council on the Aging (COTA) (adults over 65).
- Interview with Combined Pensioners Superannuants Association of Victoria (CPSA) (adults aged over 65, low-income earners).
- Interview with Emma Campbell, FECCA (CALD communities).
- Interview with Wayne Hawkins, Disability Policy Advisor, ACCAN (people with disability).
- Interview with Kelly Lindsay, Small Business & Consumer Engagement Officer, ACCAN (small businesses).

- Interview with Joanna Gibson, Isolated Children's Parents' Association (ICPA) (regional & remote consumers).

Interviewee welcome

1. About me
2. About the research project
3. About this interview / focus group & house rules: no right or wrong answers; encourage everyone to participate to gather a wider range of opinions and experiences; speak up if you disagree.

Interviewee consent

1. Do you give permission for ACCAN to use your names and response?
2. Do you give permission for me to type notes during this interview?

A. Engagement questions

1. What are the top three ways that you engage with digital government? (e.g. completing a transaction, accessing services or viewing information from a government agency)
2. What device do you use to engage with digital government?

B. Exploration questions

3. What do you see as the (a) pros and (b) cons of engaging with government digitally?
4. Why do you think engaging with digital government is important?
5. What are some barriers which prevent you from engaging with digital government? (e.g. affordability, digital literacy, attitudes toward digital technology)
6. From your experience, how do these barriers impact you?
7. Have you complained to anyone (e.g. a government agency, Ombudsman, service provider) about any of the barriers that you have described?

   If yes, (a) what was the result and (b) how was your complaint handled?

8. What would you change to improve the digital government platforms that you use?
9. If applicable, how has your organisation helped vulnerable consumer groups to overcome the discussed barriers?

C. Exit questions

10. Is there anything else you would like to add?

11. Is there anything in your above responses that you would like to be anonymised?

Barriers across all vulnerable consumer groups

The Federal and State Governments' 'digital by default' approach to delivering public services and information reflect Australia's growing demand for the ability to engage with government anytime and anywhere. In Australia digital connectivity is already a pre-condition for social, economic and community inclusion.

Despite the Federal Government's efforts to bring all Australians on board, many vulnerable consumers still struggle to access and participate in government via its digital platforms and channels. This section pinpoints the barriers that are shared across the eight identified vulnerable consumer groups.

Digital literacy

Consumers who are not digitally-literate may be prevented from engaging with government via its digital channels. As communication with government, business transactions and social interactions are increasingly mediated via the internet, consumers with limited digital literacy are at increasing risk of social exclusion and socioeconomic disadvantage.

Digital literacy has been 'steadily' improving in Australia, with the Digital Inclusion Index showing a gradual rise in 'basic skills'[10] from 47.2 in 2014 to 49.9 in 2015 and 51.6 in 2016 (Index scores are relative to a 'perfectly digitally included' individual).[11] Nationally, the rapid emergence of new applications and proliferation of new devices and online services has presented a challenge for many Australians who 'find it hard to keep up' with the pace of change in digital technology.[12]

Out of Australia's states and territories, Tasmania had the lowest level of basic digital skills with a score of 42.7 while the Australian Capital Territory fared the best with 60.2.[13] Australians who are unemployed (40.9), have not completed secondary education (33.6) and are aged over 65 (30.0) also performed poorly in the 'basic skills' criterion.[14]

Attitudes towards digital technology (digital choice)

Within each vulnerable consumer group, a minority hold the view that there are no benefits to digital government and digital technology. Generally, consumers with negative attitudes towards digital technology prefer to interact with government via its shopfronts and call centres.

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[10] In the Digital Inclusion Index, 'basic skills' are defined as 'including mobile phone, banking, shopping, community, and information skills'.

[11] Thomas, J, Barraket, J, Ewing, S, MacDonald, T, Mundell, M & Tucker, J 2016, Measuring Australia's Digital Divide: The Australian Digital Inclusion Index 2016, Swinburne University of Technology, Melbourne, p. 8.

[12] Thomas, J, Barraket, J, Ewing, S, MacDonald, T, Mundell, M & Tucker, J 2016, Measuring Australia's Digital Divide: The Australian Digital Inclusion Index 2016, Swinburne University of Technology, Melbourne, p. 8.

[13] Thomas, J, Barraket, J, Ewing, S, MacDonald, T, Mundell, M & Tucker, J 2016, Measuring Australia's Digital Divide: The Australian Digital Inclusion Index 2016, Swinburne University of Technology, Melbourne, p. 10.

[14] Thomas, J, Barraket, J, Ewing, S, MacDonald, T, Mundell, M & Tucker, J 2016, Measuring Australia's Digital Divide: The Australian Digital Inclusion Index 2016, Swinburne University of Technology, Melbourne, p. 11.

Interviews conducted as part of this research project found that consumers who chose not to engage with digital government justified their preference by pointing to the purported immediacy of solving a problem when dealing with a person, as opposed to a digital platform where they would be 'on their own' to find answers. Some consumers, particularly those aged over 65, prefer to conduct their government transactions in-person so they can 'see' their transaction being processed in front of them. For these consumers, there is an implicit trust in government intermediaries (e.g. shopfront and call centre staff).[15]

A connection can be drawn between negative attitudes towards digital technology and a lack of exposure to digital technology, as seen with some older consumers who never seen the benefits of the internet in their working lives. A lack of exposure to digital technology may lead to a poorer understanding of online security and reduced levels of trust in digital government. For these consumers, engaging with government digitally is seen as an unnecessary burden when alternative channels such as government shopfronts and call centres are available.

A lack of exposure to digital technology may be tied with a consumer's inability to afford the ongoing cost of maintaining a telecommunications connection or buying a digital device. For this reason, a distinction must be drawn between those who could afford to go online, but choose not to (digital choice), from those who do not have access or could not afford it anyway.[16]

Consumers with negative attitudes towards digital technology have complained that the trend towards digital contact causes stigmatisation, stress and feelings of losing control.[17] As a result, encouraging or coercing these consumers to engage with government digitally could undermine health in lower socio-economic groups and cause them to opt-out of services, putting their health in further jeopardy.[18] With 'visit our website' becoming a ubiquitous phrase, one consumer suggested that they felt like they were forced to "be connected [and] you're no-one if you aren't".[19] On the other hand, government agencies such as the Department of Human Services have argued that their Medicare and Centrelink

[15] Combined Pensioners Superannuants Association (CPSA), Victoria 2017, *personal communications,* 22 June.
[16] Internet Society 2014 Global Internet Report 2014: Open and Sustainable Access for All, Internet Society, Geneva Switzerland, Reston VA 20190 USA, p. 12.
[17] Newman, L., Biedrzycki, K. & Baum, F. 2012, 'Digital technology use among disadvantaged Australians: implications for equitable consumer participation in digitally-mediated communication and information exchange with health services', *Australian Health Review,* vol. 36, Flinders University, Adelaide, viewed 14 June 2017, <http://www.publish.csiro.au/ah/pdf/AH11042>, p. 127.
[18] Newman, L., Biedrzycki, K. & Baum, F. 2012, 'Digital technology use among disadvantaged Australians: implications for equitable consumer participation in digitally-mediated communication and information exchange with health services', *Australian Health Review,* vol. 36, Flinders University, Adelaide, viewed 14 June 2017, <http://www.publish.csiro.au/ah/pdf/AH11042>, p. 128.
[19] Newman, L., Biedrzycki, K. & Baum, F. 2012, 'Digital technology use among disadvantaged Australians: implications for equitable consumer participation in digitally-mediated communication and information exchange with health services', *Australian Health Review,* vol. 36, Flinders University, Adelaide, viewed 14 June 2017, <http://www.publish.csiro.au/ah/pdf/AH11042>, p. 127.

Express mobile apps actually better enable consumers to manage their own affairs in the name of 'self-management'.[20]

Affordability of digital technology

The affordability of a good or service can be objectively measured by assessing whether a consumer can purchase it without undue financial hardship.[21] For asset and income-poor consumers, the cost of maintaining digital contact with government can be unaffordable. Consumers bear the onus of meeting this cost, which can be divided into three parts:

i. Start-up cost of buying a digital device
ii. Ongoing cost of internet connection
iii. Incidental costs arising from maintaining a digital device (including repairs and software updates).

The financial burden of engaging with digital government is particularly concerning for vulnerable consumer groups such as people with disability, who are overrepresented in the cohort of Australians who live in poverty[22] and are unemployed or underemployed.[23] Besides unemployment and disability, financial hardship can also result from relationship and family breakdown, illness, reduction in income,[24] domestic violence and natural disasters.[25]

Nationally, household affordability of telecommunications services has improved. Overall, consumers are getting better value for money as service price stay the same or fall, while product inclusions (such as data) increase.[26] Between 2008 and 2015, the proportion of household income spent on fixed-line telephone, mobile and internet services also fell; in 2008, 4.1% of disposable household income was spent on telecommunications services compared to 3.5% in 2015.[27] However, this decline is largely due to increases in disposable income rather than reduced telecommunications expenses.[28]

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[20] Humphry, J. 2014, *Homeless and Connected: Mobile phones and the Internet in the lives of homeless Australians,* University of Sydney & Australian Communications Consumer Action Network (ACCAN), Sydney, p. 39.
[21] United Kingdom Office of Communications (Ofcom) 2014, *Results of research into consumer views on the importance of communications services and their affordability*, p. 9.
[22] Dorsch, P., Phillips, J. & Crowe, C. 2016, *Poverty in Australia 2016,* Australian Council of Social Service (ACOSS), Sydney, <http://www.acoss.org.au/wp-content/uploads/2016/10/Poverty-in-Australia-2016.pdf>, p. 34.
[23] Australian Bureau of Statistics (ABS) 2015, *4433.0.55.006 - Disability and Labour Force Participation, 2012,* viewed 12 July 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4433.0.55.006>.
[24] Australian Securities and Investments Commission (ASIC) & Consumer Affairs Victoria, 2009, Report 152: *Helping home borrowers in financial hardship.*
[25] Department of Human Services (DHS) 2017, *Crisis Payment,* viewed 13 July 2017, <https://www.humanservices.gov.au/customer/services/centrelink/crisis-payment>.
[26] Department of Communications and the Arts 2017, *Trends and drivers in the affordability of communications services for Australian households (Working Paper, July 2017),* viewed 28 July 2017, <https://www.communications.gov.au/documents/trends-and-drivers-affordability-communications-services-australian-households>, p. 1.
[27] Department of Communications and the Arts 2017, *Trends and drivers in the affordability of communications services for Australian households (Working Paper, July 2017),* viewed 28 July 2017,

As engaging with digital government is increasingly a pre-requisite to accessing financial support, health records and other critical government information, consumers who cannot afford digital technology risk further social exclusion. The issue of affordability is explored in greater detail at Part 3: Low-income earners.

Availability of digital technology

Consumers in regional and remote Australia – including remote Indigenous communities – can be geographically excluded from engaging with digital government due to the absence or limited availability of digital service providers. While city-based consumers can choose between a wide range of internet service providers and digital device retailers, not all Australians have the same privilege. In remote communities, the cost and time required to maintain digital devices can be prohibitive when the nearest repair or technical assistance facility is hours away.

The availability of internet can be affected by local weather conditions. Consumers can lose internet access when their satellite connection is restricted by cloud cover, rain, storms and dust at the ground station or at the consumer's location.[29]

In 2016, the United Nations Human Rights Council (UNHRC) adopted a resolution which held that internet access is a human right due to its role in, amongst other things, facilitating affordable education and promoting freedom of expression.[30] The resolution declared that 'the same rights that people have offline must also be protected online… in accordance with article 19 of the Universal Declaration of Human Rights and of the International Covenant on Civil and Political Rights'.[31] However, universal internet availability and access to digital government remains an ideal in many regional and remote communities.

<https://www.communications.gov.au/documents/trends-and-drivers-affordability-communications-services-australian-households>, p. 2.

[28] Department of Communications and the Arts 2017, *Trends and drivers in the affordability of communications services for Australian households (Working Paper, July 2017),* viewed 28 July 2017, <https://www.communications.gov.au/documents/trends-and-drivers-affordability-communications-services-australian-households>, p. 3.

[29] Australian Communications Consumer Action Network (ACCAN) 2016, *Guide to Sky Muster services*, viewed 13 July 2017, <http://accan.org.au/files/Consumer%20education/Sky Muster%20Guide/Sky Muster%20-%202nd%20Edition%20-%20Web%20Nov2016-2.pdf>, p. 9.

[30] United Nations Human Rights Council (UNHRC) 2016, *The promotion, protection and enjoyment of human rights on the Internet,* 32nd sess, Agenda Item 3, UN Doc A/HRC/RES/32/13, 1 July, viewed 13 July 2017, <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G16/156/90/PDF/G1615690.pdf?OpenElement>.

[31] United Nations Human Rights Council (UNHRC) 2016, *The promotion, protection and enjoyment of human rights on the Internet,* 32nd sess, Agenda Item 3, UN Doc A/HRC/RES/32/13, 1 July, viewed 13 July 2017, <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G16/156/90/PDF/G1615690.pdf?OpenElement>.

Barriers specific to each vulnerable consumer group

CALD communities

Context

Culturally and linguistically diverse (CALD) communities are those that differ from the mainstream community in their main language, values and cultural norms.[32] CALD communities include migrants and refugees,[33] who also fall within the 28% proportion of Australians who were born overseas.[34] The definition of CALD is fluid as it encapsulates communities and individuals who self-identify as having cultural and linguistic traits which distinguish them from the majority of the population.

This self-identification process can be influenced by politics and public sentiment. As an example, in the decades following World War II Italian migrants were held out as 'different' from the predominantly Anglo-Saxon Australia and a challenge to the White Australia Policy.[35] In the inter-war period, the increased Catholic Italian population was the subject of tension in government circles and the then powerful church.[36] However, two generations later, the Italian diaspora is now a widely-accepted part of Australian society and many Australians of Italian descent would not perceive that they are CALD.

Some individuals who do not currently identify themselves as being CALD may later perceive themselves to be CALD due to a life event or experience that strengthens their ties with a non-mainstream culture or language.[37] This demonstrates that term 'CALD' is distinct from being a racial or ethnic classification.

Why are CALD communities a vulnerable consumer group?

CALD communities can be more susceptible to the impact of the Government's digital transformation due to a lower English proficiency, a limited understanding of government systems and processes and a lack of support networks. The vulnerability of CALD people – as with other groups in this report – can be accentuated by other factors, such as unemployment or insecure employment, caring responsibilities, financial insecurity in older age and disability.

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[32] Australian Institute of Family Studies 2008, 'Characteristics and experiences of CALD groups in Australia', AFRC Issues No. 3, viewed 14 June 2017, <https://aifs.gov.au/cfca/publications/enhancing-family-and-relationship-service-accessibility-and/characteristics-and>.

[33] Australian Institute of Family Studies 2008, 'Characteristics and experiences of CALD groups in Australia', AFRC Issues No. 3, viewed 14 June 2017, <https://aifs.gov.au/cfca/publications/enhancing-family-and-relationship-service-accessibility-and/characteristics-and>.

[34] Australian Bureau of Statistics (ABS) 2017, *Over 28 per cent of Australians born overseas*, media release, 30 March, ABS, Canberra, viewed 14 June 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/lookup/3412.0Media%20Release12015-16>.

[35] Baldassar, L. & Pyke, J. 2012, *The Italian Diaspora in Australia: Current and Potential links to the Homeland,* Deakin University and Victoria University, Melbourne, p. 23.

[36] Tolcvay, M. 2007, 'Community and Church: the Italian "problem" in Australia during the inter-war years', *Flinders University Languages Group Online Review*, vol. 3, no. 2, pp. 52, viewed 16 June 2017, <http://ehlt.flinders.edu.au/deptlang/fulgor/volume3i2/papers/tolcvay_3i2.pdf>.

[37] Federation of Ethnic Communities Councils of Australia (FECCA) 2017, personal communications 16 June.

‘Digital choice’ can also come into play in CALD communities, as seen with older migrants in South Australia who are disinterested in learning how to use digital technology.[38] Developing digital literacy should be considered part of the settlement process, with recognition that this will take time.[39]

While ACCAN has identified CALD communities to be an ‘at risk’ group in the Government’s digital transformation, it would be unfair to categorise *all* CALD people as digitally-disadvantaged. Rather, the level of digital participation in CALD communities varies according to education level, age, language proficiency, socioeconomic conditions, communication preferences and familiarity with technology.[40]

The English proficiency of CALD people varies; in New South Wales, 28% of Vietnamese and Korean-speaking people indicated that they did not speak English well, or at all.[41] This is followed by the Thai-speaking population with 20% who had low English proficiency and the Lao and Burmese-speaking population with 19% who could not speak English well or at all[42]. This amounts to tens of thousands of residents in Australia who are unable to access essential information on public services, highlighting a desperate need to improve multilingual support on government platforms.

[38] Goodall, K, Ward, P. & Newman, L. 2010, ‘Use of information and communication technology to provide health information: what do older migrants know, and what do they need to know?’, *Quality in Primary Care*, vol. 18 no. 1, pp. 27-32.

[39] Federation of Ethnic Communities’ Councils of Australia (FECCA) 2016, *Digital Access and Equity for Multicultural Communities,* FECCA, Canberra, viewed 14 June 2017, <http://fecca.org.au/wp-content/uploads/2016/08/feccadigitalconsultationreport.pdf>.

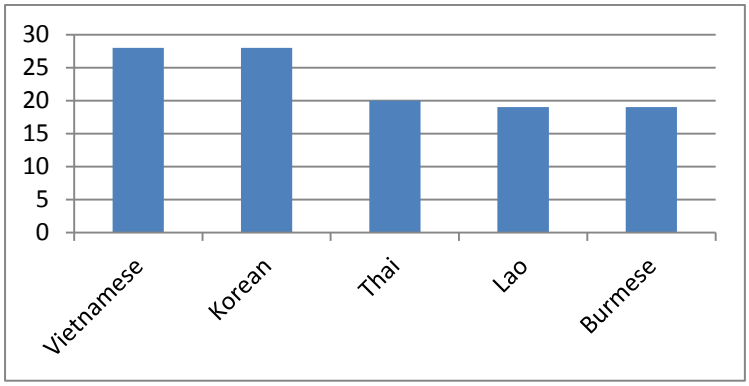
[40] Alam, K. & Imran, S. 2015,’The digital divide and social inclusion among refugee migrants: A case in regional Australia’, Information Technology & People, vol. 28 no. 2, pp. 344–365, viewed 14 June 2017, <https://eprints.usq.edu.au/27373/1/Alam_Imran_ITP_v28n2_AV.pdf>.

[41] NSW Health: Multicultural Health Communication 2017, *About CALD Communities,* viewed 14 June 2017, <http://www.mhcs.health.nsw.gov.au/services/cald-community>.

[42] NSW Health: Multicultural Health Communication, *About CALD Communities,* viewed 14 June 2017, <http://www.mhcs.health.nsw.gov.au/services/cald-community>.

Graph: CALD groups with the lowest English language proficiency (ELP) in NSW (2011)

Percentage (%) of CALD groups indicating that they speak English not well, or not at all[43]



A 2016 survey conducted by the Federation of Ethnic Communities' Councils of Australia (FECCA) found that migrants who were skilled, young and had good English language skills adapted more quickly to using digital services. [44]

Barriers

Low English language proficiency

As many government websites are only available in English, migrants with low English language proficiency (ELP) are less able to interact with them and risk missing out on important health, social security, employment and aged care information. Migrants with low ELP may also lose the ability to stand up for their rights, when digital information on Ombudsmen and online complaint mechanisms are only available in English.[45] The English language barrier can be prohibitive for older CALD people, who can 'forget' English and revert to their first language with the onset of dementia.[46]

Free online services like Google Translate can be used to translate websites, but these automatically-generated translations are not always accurate or culturally-sensitive. Where websites are available only provided in English, migrants who have no or limited literacy in English lose the ability to interact with them. [47]

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[43] Australian Bureau of Statistics (ABS) 2011, cited in NSW Health: Multicultural Health Communication, *About CALD Communities,* viewed 13 July 2017, <http://www.mhcs.health.nsw.gov.au/services/cald-community>.

[44] Federation of Ethnic Communities' Councils of Australia (FECCA) 2016, *Digital Access and Equity for Multicultural Communities,* FECCA, Canberra, viewed 14 June 2017, <http://fecca.org.au/wp-content/uploads/2016/08/feccadigitalconsultationreport.pdf>, p. 5.

[45] Federation of Ethnic Communities Councils of Australia (FECCA) 2017, personal communications 16 June.

[46] Settlement Council of Australia (SCOA) 2013, *Settlement News (February),*viewed 13 July 2017, <www.scoa.org.au/_literature_140583/Settlement_News_February_2013>, p. 9.

[47] Federation of Ethnic Communities' Councils of Australia (FECCA) 2016, *Digital Access and Equity for Multicultural Communities,* FECCA, Canberra, viewed 14 June 2017, <http://fecca.org.au/wp-content/uploads/2016/08/feccadigitalconsultationreport.pdf>, p. 7.

Participants in an African refugee focus group in South Australia criticised the Australian Government for not providing multilingual support on its websites. For example, it is conceivable that a large number of visitors to the Government's immigration page will not be proficient in English.[48] Refugees are particularly reliant on digital government services for information on settlement, housing, employment, health and education.[49]

Conflicts of interest when engaging with digital government via a nominee

Many CALD people who lack fluency in English access digital government services through a nominee such as a family member, friend or community service provider.[50] In certain circumstances, the use of a third party as a nominee may breach the CALD person's privacy or represent a conflict of interest. For example, a conflict can arise where a CALD person – out of desperation – approaches a familiar bank manager (who speaks the same language as them) for urgent help with their online Centrelink account. In doing so, the bank manager gains access to the CALD person's confidential health and financial information on MyGov, which could be inappropriately used to sell commission-based products to the CALD person.

As more government services are shifted online, there is an increased risk of a CALD person's interests and confidentiality being overshadowed by a nominee's interests.[51] The sharing of passwords and account security information with a nominee or 'proxy' may also breach the terms and conditions of using a digital government platform.

Leaving CALD people to rely on nominees to facilitate their engagement with digital government can produce a system of inequity and perpetuate Australia's 'digital divide'. CALD consumers with stronger family and community networks will have more secure and timely access to digital government, while newly-arrived refugees who lack support networks may not be able to access digital government at all. Allocating resources to guide migrants through digital government is critical to their social inclusion and transition to a new life in Australia.

Illiteracy in native language

Some migrants and refugees are illiterate in their first and native language, making it difficult to interpret text-intensive websites. The Department of Social Services has noted

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[48] Newman, L., Biedrzycki, K. & Baum, F. 2012, 'Digital technology use among disadvantaged Australians: implications for equitable consumer participation in digitally-mediated communication and information exchange with health services', *Australian Health Review,* vol. 36, Flinders University, Adelaide, viewed 14 June 2017, <http://www.publish.csiro.au/ah/pdf/AH11042>, p. 126.

[49] Alam, K. & Imran, S. 2015,'The digital divide and social inclusion among refugee migrants: A case in regional Australia', Information Technology & People, vol. 28 no. 2, pp. 344–365, viewed 14 June 2017, <https://eprints.usq.edu.au/27373/1/Alam_Imran_ITP_v28n2_AV.pdf>, p. 2.

[50] Federation of Ethnic Communities' Councils of Australia (FECCA) 2016, *Digital Access and Equity for Multicultural Communities,* FECCA, Canberra, viewed 14 June 2017, <http://fecca.org.au/wp-content/uploads/2016/08/feccadigitalconsultationreport.pdf>, p. 7.

[51] Federation of Ethnic Communities Councils of Australia (FECCA) 2017, personal communications 16 June.

that 17% of males and 23% of females in our recent humanitarian migrant intake are illiterate in their first language (cannot read or write own language at all).[52]

Limited support networks

While recent school leavers in Australia have received formal digital literacy training as part of their primary and secondary education (digital natives), many CALD people have arrived from countries where there is limited digital training. As a result, CALD people are more reliant on self-learning or informal digital training with the help of their friends, families and workplaces.

However, many CALD people do not have the benefit of a supportive social network in Australia, particularly those who have recently arrived. Furthermore, migrants with low skills tend to find employment in 'low status jobs' such as retail, catering and cleaning[53] – jobs which often do not require or provide digital training.

Social connections also influence an individual's perception of the importance of digital literacy and whether they are persuaded to overcome their lack of confidence in technology by learning new digital skills.[54]

Lack of awareness of digital government platforms

Some CALD consumers are not aware of the option to engage with government digitally. This lack of awareness stems from the ignorance of CALD communities in digital government advertising campaigns, which are largely directed at digitally and English-literate Australians.[55]

Distrust in digital government

Migrants and refugees who have lived in countries with corrupt governments may arrive in Australia with distrust in government and a reluctance to store all of their personal information in one place.[56] Given the currently conservative immigration policies favoured by the current government,[57] some migrants are doubtful of the government's intentions

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[52] Marshall, D. 2015, *Building a New Life in Australia: The Longitudinal Study of Humanitarian Migrants*, data highlight no. 2, Department of Social Services: National Centre for Longitudinal Data, viewed 14 June 2017, <https://www.dss.gov.au/sites/default/files/documents/09_2015/data-highlight-no-2-2015-bnla_pdf.pdf>.

[53] Thomson, L. 2014, *Migrant Employment Patterns in Australia: post Second World War to the present,* Adult Migrant English Service Australia (AMES), Melbourne, viewed 15 June 2017, <https://www.ames.net.au/files/file/Research/History%20of%20migrant%20employment%20final.pdf> p. 15

[54] Newman, L., Biedrzycki, K. & Baum, F. 2012, 'Digital technology use among disadvantaged Australians: implications for equitable consumer participation in digitally-mediated communication and information exchange with health services', *Australian Health Review,* vol. 36, Flinders University, Adelaide, viewed 14 June 2017, <http://www.publish.csiro.au/ah/pdf/AH11042>, p. 127.

[55] Federation of Ethnic Communities Councils of Australia (FECCA) 2017, personal communications, 15 June.

[56] Federation of Ethnic Communities' Councils of Australia (FECCA) 2016, *Digital Access and Equity for Multicultural Communities,* FECCA, Canberra, viewed 14 June 2017, <http://fecca.org.au/wp-content/uploads/2016/08/feccadigitalconsultationreport.pdf>, p. 6.

[57] Hartcher, P. 2016, 'Virulent US and UK anti-immigrant sentiment a warning for Australia', *Sydney Morning Herald,* 21 June, viewed 13 July 2017, <http://www.smh.com.au/comment/virulent-us-and-uk-antiimmigrant-sentiment-a-warning-for-australia-20160620-gpnmqs.html>.

when it collects personal information about them, as this could potentially be used as evidence against them.[58]

Migrants and refugees may also come from countries where challenging authority is dangerous, so if a digital government platform prompts them to take a particular action, they will comply without question.[59] This can have serious implications for consumers where, for example, Centrelink's digital platform tells them to pay a miscalculated 'robodebt'.[60] In-person support is also suited for more complex government interactions, such as those which involve resolving discrepancies in claims or evidence.

As a result of their possible previous experiences with non-democratic governments, a CALD person's 'vulnerable' understanding of bureaucracy translates to a lower likelihood of challenging information or instructions on digital government platforms, even if they are incorrect. Some migrants may be reluctant to ask questions for fear of affecting their immigration status.[61]

Furthermore, CALD consumers may not understand the purpose of the security measures (e.g. mobile phone verification and security questions) that are in place to protect their personal information from unauthorised access, meaning that they are less likely to trust digital government.

Recommendations

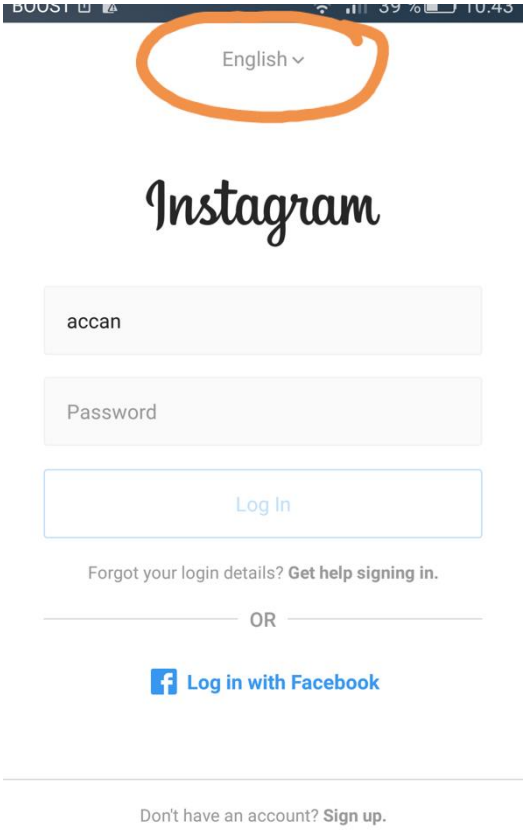
Introduce multilingual support on all digital government platforms

Multilingual support can be offered on government websites and apps in the same way that popular social media platforms such as Facebook and Instagram allow users to change their interface language. This can complement existing forms of multilingual support, such as Centrelink's Multilingual Phone Service and the Translating and Interpreting Service (TIS National). By providing critical government information and services in other languages, CALD consumers are empowered to manage their own affairs, fulfil their obligations and make informed decisions while they improve their English literacy.

Facebook indicates the availability of multilingual support in a highly-visible location on the user's homepage.

[58] Federation of Ethnic Communities Councils of Australia (FECCA) 2017, personal communications 16 June.
[59] Federation of Ethnic Communities Councils of Australia (FECCA) 2017, personal communications 16 June.
[60] Pett, H. & Cosier, C. 2017, 'We're all talking about the Centrelink debt controversy, but what is 'robodebt' anyway?', *ABC News*, 3 March, viewed 23 July 2017, <http://www.abc.net.au/news/2017-03-03/centrelink-debt-controversy-what-is-robodebt/8317764>.
[61] Federation of Ethnic Communities Councils of Australia (FECCA) 2017, personal communications 16 June.

Instagram's app provides the option of switching languages in a highly-visible location at the top of the login screen. This could be implemented on government apps, such as Express Plus Centrelink.



Multilingual support should be rolled out in stages, starting with government websites that CALD people are most likely to access, such as essential information on health and humanitarian services, education, transport and immigration. An informed understanding of the services and information that is most important to CALD people calls for consultation with service providers and community groups that regularly engage with CALD people.

Translations should have the oversight of qualified translators to ensure that information is accurate, culturally-sensitive and easily understood by CALD people. One poor example of multilingual support is a website which merely provides a link to Google Translate, which – as an automated service – does not always give accurate translations.

Top five languages spoken at home in Australia (2016)[62]

[62] Australian Bureau of Statistics (ABS) 2017, *2071.0 - Census of Population and Housing: Reflecting Australia - Stories from the Census, 2016*, viewed 13 July 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/2071.0main+features152016>.

Use plain English on digital government platforms

While multilingual support is a long-term staged initiative, updating government websites and apps so that information is expressed in easily-understood language can immediately increase engagement with digital government, particularly for CALD people with lower English proficiency. Writing in plain English avoids the unnecessary complication of information by steering clear of complex language and antiquated words and phrases as well as paying attention to the structure of sentences and paragraphs.[63]

Community digital literacy classes for CALD people

All levels of government can play a role in upskilling CALD consumers by providing digital training in existing public facilities, such as council libraries and community halls. At the federal level, this could be funded by Department of Social Services (DSS) Settlement Grants for CALD service providers and humanitarian organisations.[64] In a 2016 survey conducted by the Federation of Ethnic Communities' Councils of Australia (FECCA), 54% of respondents reported that they wanted to receive training and support about how to access and use government services digitally.[65] These classes can help strengthen the skills of technologically-challenged CALD consumers, such as mobile texting and searching for information online.

Digital literacy classes should accommodate CALD people by being offered in relevant community languages. Local governments are in a strong position to understand the language and cultural needs of CALD people, given the tendency for one cultural or ethnic group to cluster in one suburb or Local Government Area.[66] Local governments could publish a consolidated list of locations where digital literacy classes are run in the Local Government Area.

Provide the option of in-person contact

In-person support via a shopfront or pop-up stall can make a substantial difference to the quality of CALD engagement with government, improve perceptions of government and alleviate anxiety in CALD communities. In a 2016 survey conducted by the Federation of Ethnic Communities' Councils of Australia (FECCA), 68% of respondents believed that having a local MyGov shopfront would be useful. One respondent described shopfronts as 'the first

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[63] University of Sydney Law School Learning and Teaching 2016, Writing in Plain English, viewed 14 June 2017, <http://sydney.edu.au/law/learning_teaching/legal_writing/plain_english.shtml>.

[64] Department of Social Services (DSS) 2017, *About Settlement Grants,* viewed 13 July 2017, <https://www.dss.gov.au/our-responsibilities/settlement-and-multicultural-affairs/programs-policy/settlement-services/settlement-grants/what-is-settlement-grants/about-settlement-grants>.

[65] Federation of Ethnic Communities' Councils of Australia (FECCA) 2016, *Digital Access and Equity for Multicultural Communities,* FECCA, Canberra, viewed 14 June 2017, <http://fecca.org.au/wp-content/uploads/2016/08/feccadigitalconsultationreport.pdf>, p. 12.

[66] Ho, C. 2015, 'People like us': School choice, multiculturalism and segregation in Sydney', *Australian Review of Public Affairs,* University of Sydney, viewed 14 June 2017, <http://www.australianreview.net/digest/2015/08/ho.html>.

point of contact to direct the customer to get a correct transaction and information'.[67] Another respondent agreed that 'face-to-face contact is the best when English is not your first language.'[68]

Culturally-sensitive 'human' support can increase the effectiveness of CALD engagement with digital government while reducing stress and confusion for many CALD consumers. Face-to-face support can also solve other CALD barriers to digital government by improving the awareness and reputation of government agencies and dissolving feelings of distrust towards government that may have been acquired in Australia or elsewhere.

Introduce a uniform symbol to show availability of multilingual support

A uniform symbol should be introduced across all digital government platforms to indicate the availability of multilingual support. On websites, this symbol should be placed at an easily-seen location, for example on the top-right corner of each page and link to translated versions of the page content.

Offer audio translations of on-screen text

An interactive text-to-speech function is particularly beneficial for CALD people who are not proficient in their native language, let alone English. Consumers in this segment of CALD people can hover over translated text on their screens to play automated audio of it. The most common mobile operating systems such as Android and iOS already offer text-to-speech as an in-built capability.

Live chat multilingual support

A live chat function on government websites and apps can connect CALD consumers with translators. As seen in the private sector, digital technology makes it easy to source live chat agents internationally,[69] which can help reduce the costs of operating multilingual support. In addition, embracing international talent to provide multilingual support has the potential to improve the quality of CALD engagement, due to the live chat agent's knowledge of the consumer's native language and cultural sensitivities.

Raise awareness on digital government platforms

Greater awareness on the availability of digital government platforms can result from broadening the government's public awareness campaigns. This may involve the use of paid and earned media in non-English community publications, social media advertising in community languages and expanding the reach of government YouTube videos by including

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[67] Federation of Ethnic Communities' Councils of Australia (FECCA) 2016, *Digital Access and Equity for Multicultural Communities,* FECCA, Canberra, viewed 14 June 2017, <http://fecca.org.au/wp-content/uploads/2016/08/feccadigitalconsultationreport.pdf>, p. 11.

[68] Federation of Ethnic Communities' Councils of Australia (FECCA) 2016, *Digital Access and Equity for Multicultural Communities,* FECCA, Canberra, viewed 14 June 2017, <http://fecca.org.au/wp-content/uploads/2016/08/feccadigitalconsultationreport.pdf>, p. 12.

[69] Jetstar Airways, BOOST Mobile and Spotify are three companies which operate in Australia, but connect customers with overseas live chat agents.

multilingual subtitles and audio. Outreach activities and targeted resources in CALD community centres and facilities can also help raise awareness on digital government.

Replace or supplement text with visual information where appropriate

Government agencies can consider presenting less complex procedural information with images, reducing the need for text-heavy webpages.

People with disability

Context

People with disability refers to individuals who require extra support as a result of physical, intellectual, psychiatric, sensory, neurological or learning impairments.[70] These impairments may have arisen at birth or later in life from an accident, illness or genetic disorder. There is an overlap between two of the vulnerable consumer groups in this report, as the incidence of disability increases with age;[71] the World Health Organisation (WHO) has identified a correlation between ageing and the loss of vision and hearing ability.[72] People with disability may use assistive technology and services to reduce the effect of their restrictive conditions.[73] With a broad range of special needs, people with disability are a diverse consumer group.

The latest figures from 2015 reveal that 4.35 million Australians or 18.3% of the national population identified themselves as a person with disability, which is a slight decline from 18.5% in 2012.[74] For the purpose of these statistics, disability was defined as a 'limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months and restricts everyday activities'.[75]

Why are people with disability a vulnerable consumer group?

Despite increasing legislative efforts and private sector initiatives to accommodate for consumers' special needs, the impact of living with a disability in Australia remains significant. Affecting an individual's capacity to learn, move or communicate, disability can hinder their participation in education, employment and social activities. In 2015, 8.6% of

[70] Australian Network on Disability 2017, *What is disability,* viewed 23 June 2017, <https://www.and.org.au/pages/what-is-a-disability.html>; Australian Human Rights Commission (AHRC) 2017, *Know your rights: Disability discrimination,* viewed 23 June 2017, <https://www.humanrights.gov.au/know-your-rights-disability-discrimination>; *Disability Discrimination Act 1992* (Cth) s 4.

[71] Australian Bureau of Statistics 2016, *4430.0 - Disability, Ageing and Carers, Australia: Summary of Findings, 2015*, viewed 23 June 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/0/C258C88A7AA5A87ECA2568A9001393E8?Opendocument>.

[72] World Health Organisation (WHO) 2014, *Visual impairment and blindness*, viewed 30 June 2017, <http://www.who.int/mediacentre/factsheets/fs282/en/>.

[73] Western Australia Disability Services Commission 2017, *What is disability?*, viewed 23 June 2017, <http://www.disability.wa.gov.au/understanding-disability1/understanding-disability/what-is-disability/>.

[74] Australian Bureau of Statistics 2016, *4430.0 - Disability, Ageing and Carers, Australia: Summary of Findings, 2015*, viewed 23 June 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/0/C258C88A7AA5A87ECA2568A9001393E8?Opendocument>.

[75] Australian Bureau of Statistics 2016, *4430.0 - Disability, Ageing and Carers, Australia: Summary of Findings, 2015*, viewed 23 June 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/0/C258C88A7AA5A87ECA2568A9001393E8?Opendocument>.

Australians with disability (281 100 people) reported that they had experienced discrimination or unfair treatment because of their disability,[76] which can weaken their prospects of employment, finding accommodation and obtaining basic services.

Of particular concern is the overrepresentation of people with disability in the cohort of Australians who live in poverty. In 2013-14, 510 900 adults with a disability (or 15.8%) were living below the poverty line.[77] The federal Department of Human Services' Disability Support Pension is currently the key form of income support for people with disability, providing a maximum of $808.30 per fortnight for singles and $1218.60 per fortnight for couples.[78] With the additional costs of personal care, home adjustments, medical bills and special transport arrangements, the Disability Support Pension leaves little room for digital devices, digital training and ongoing telecommunications expenses.

Another form of financial support for people with disability is the National Disability Insurance Scheme (NDIS), which has been introduced in stages across Australia since July 2016.[79] The NDIS is designed to give 460 000 Australians with a permanent and significant disability the 'reasonable and necessary supports… to live an ordinary life'.[80] However, accessing NDIS financial support is a challenge for people with disability; the onus lies with the NDIS participant to show what digital technology and related support they need in order to request NDIS funding. This is problematic given the vacuum of information on assistive technologies in Australia.[81]

Even if a person with disability is well-equipped with digital resources, their engagement with digital government may still be prevented by an absence of accessible features on government websites and mobile apps. The way that people with disability use digital government platforms varies according to the nature of their disability and special needs.[82] People with vision impairment, for example, use assistive technology such as external screen reader software, which reads aloud on-screen text. Nonetheless, not all websites are compatible with external screen reader software and only a few government agencies offer an embedded screen reader function on their websites (e.g. via an audio icon).

People with more severe disabilities who lack the capacity to live independently are reliant on their carers who make consumer decisions for them and engage with digital government

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[76] Australian Bureau of Statistics 2016, *4430.0 - Disability, Ageing and Carers, Australia: Summary of Findings, 2015*, viewed 23 June 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/0/C258C88A7AA5A87ECA2568A9001393E8?Opendocument>.

[77] Dorsch, P., Phillips, J. & Crowe, C. 2016, *Poverty in Australia 2016,* Australian Council of Social Service (ACOSS), Sydney, <http://www.acoss.org.au/wp-content/uploads/2016/10/Poverty-in-Australia-2016.pdf>, p. 34.

[78] Department of Human Services (DHS) 2017, *Disability Support Pension,* viewed 28 July 2017, <https://www.humanservices.gov.au/customer/services/centrelink/disability-support-pension>.

[79] National Disability Insurance Scheme (NDIS), *What is the NDIS?*, viewed 28 July 2017, <https://www.ndis.gov.au/about-us/what-ndis>.

[80] National Disability Insurance Scheme (NDIS), *What is the NDIS?*, viewed 28 July 2017, <https://www.ndis.gov.au/about-us/what-ndis>.

[81] Hawkins, W. 2017, personal communications, 12 July.

[82] Hawkins, W. 2017, personal communications, 5 May.

on their behalf. This may involve the sharing of passwords, confidential financial information and sensitive health records with the 'proxy' carer. When assistance is sought from unqualified third-parties, the person with disability's privacy may be put at risk. These security risks highlight the importance of making digital government accessible so that people with disability, where possible, can stay informed and autonomously engage with basic government services. The World Wide Web Consortium's Web Accessibility Initiative (WAI) has produced a detailed guide on how people with disability interact with the internet.[83]

Regulatory & legal efforts to address accessibility to digital government

Of the eight vulnerable consumer groups that are examined in this research report, people with disability have the most regulatory and legislative support in Australia when ensuring that they have equal access to information and services. However, the implementation of accessible features across all digital government channels remains a work in progress.[84]

At the international level, the *United Nations Convention on the Rights of Persons with Disabilities* (UNCRPD) has recognises that access to information, communications and services is an established human right.[85] Parties to the UNCRPD are required to take 'appropriate measures' to ensure that people with disability have equal means to exercise their freedom of expression and access information.[86] Such measures include providing public information in accessible formats and making it compatible with assistive technologies in a timely manner and without additional cost to the consumer.[87] In 2008, the Australian Government ratified the UNCRPD, compelling it to transplant the terms of the Convention into domestic law.

The *Disability Discrimination Act 1992* (Cth) ('DDA') forms the legal framework in Australia which ensures that people with disability, as far as it is practical, have equal rights when seeking employment, education, access to public facilities and accommodation.[88] The DDA also compels government agencies to maintain equal access to information on government entitlements, programs and voting facilities for people with disability.[89]

However, since the DDA was drafted in the early 1990s, digital technology has given people with disability new ways to access information while making it less resource-intensive to produce accessible material. While institutions were previously relied upon to reproduce content in hard copy Braille and audio recordings, digital technology makes it possible for

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[83] World Wide Web Consortium (W3C) 2017, *How People with Disabilities Use the Web: Overview*, viewed 30 June 2017, <https://www.w3.org/WAI/intro/people-use-web/Overview>.
[84] Australian Government, *Accessibility and inclusivity,* viewed 25 June 2017, <https://guides.service.gov.au/content-guide/accessibility-inclusivity/>.
[85] *United Nations Convention on the Rights of Persons with Disabilities* (UNCRPD), Art 9, 21
[86] *United Nations Convention on the Rights of Persons with Disabilities* (UNCRPD), Art 21
[87] *United Nations Convention on the Rights of Persons with Disabilities* (UNCRPD), Art 21(a).
[88] *Disability Discrimination Act 1992* (Cth), s 3.
[89] *Disability Discrimination Act 1992* (Cth), s 29.

many people with disability to convert material into a format that is most appropriate for their individual circumstances.[90]

Questions then arise over whether the DDA needs to be revised to specifically target digital accessibility and creators of digital content. The Australian Human Rights Commission (AHRC) ordered a government-established corporation to 'do all that is necessary' to make its website accessible to visually-impaired people following a complaint from a blind man. [91] The inaccessibility of the digital information (images and text on the corporation's website) was held to be a violation of the DDA, which mandates equal access to goods, services and facilities for people with disability.[92] Furthermore, the AHRC found that the inaccessibility of the website and online ticket booking system to visually-impaired people amounted to 'direct discrimination', as defined by the DDA.[93] A key lesson from this decision is that digital platform hosts must consider the diverse needs of consumers to avoid being held liable for digital inaccessibility.

In 2010, the Australian Government introduced the *Web Accessibility National Transition Strategy (NTS)*, which required all Australian government websites to conform to the **Web Content Accessibility Guidelines Version 2.0** (WCAG 2.0). These guidelines included making all functionality available from a keyboard,[94] avoiding flashing content[95] (which can cause seizures) and providing ways to help users navigate through the website and determine where they are.[96] WCAG 2.0 has been endorsed by the Australian Government's Digital Service Standard's ninth criterion, which stipulates – among other requirements – that a plan must be produced to show how the digital service 'meet[s] accessibility requirements in the design of the product, for example how it will meet WCAG 2.0 AA' (Level AA compliance).[97]

The Australian Human Rights Commission (AHRC) has also produced a set of *Disability Discrimination Act Advisory Notes* to help individual and organisational website hosts make their digital content accessible to people with disability. Ultimately, compliance with WCAG 2.0 and Advisory Notes rests with the goodwill of the content host and government agencies in the context of digital government. Strategies, guidelines and advisory notes provide helpful principles which can influence disability policy, but remain unenforceable.

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[90] Australian Law Reform Commission (ALRC), *Copyright and the Digital Economy,* Report No. 122 (2013) 356.
[91] *Bruce Lindsay Maguire v Sydney Organising Committee for the Olympic Games (H/99/115, 24 August 2000)*, viewed 28 June 2017, <https://www.humanrights.gov.au/bruce-lindsay-maguire-v-sydney-organising-committee-olympic-games>.
[92] *Disability Discrimination Act 1992* (Cth), s 24.
[93] *Disability Discrimination Act 1992* (Cth), s 5.
[94] Web Content Accessibility Guidelines 2.0, Guideline 2.1, viewed 25 June 2017, <https://www.w3.org/TR/WCAG20/>.
[95] Web Content Accessibility Guidelines 2.0, Guideline 2.3, viewed 25 June 2017, <https://www.w3.org/TR/WCAG20/>.
[96] Web Content Accessibility Guidelines 2.0, Guideline 2.4, viewed 25 June 2017, <https://www.w3.org/TR/WCAG20/>.
[97] Digital Transformation Agency 2017, *9 Make it accessible,* viewed 30 June 2017, <https://www.dta.gov.au/standard/9-make-it-accessible/>.

Barriers

Inaccessible digital government platforms

Government websites and apps that are incompatible with assistive software or do not comply with Web Content Accessibility Guidelines Version 2.0 (WCAG 2.0) prevent people with disability from engaging with digital government. Inaccessible digital government platforms also expose people with disability to privacy risks, as they may have no choice but to ask third parties to act as 'proxies' in order to transact with government.

Proxy engagement with digital government is most alarming when a person with disability cannot interact with an inaccessible platform and reveals their password, financial records and confidential health information to inappropriate third-parties, which may include friends and government agency employees. In some circumstances, it may also be inappropriate to refer to a family member for assistance with a digital government transaction due to a conflict of interest. Disclosing a password to a third party may also violate the terms and conditions of engaging with the digital government platform.[98]

Affordability

People with disability are more likely to be unemployed or underemployed than people without disability,[99] leaving them with limited financial means to pay for digital devices and ongoing telecommunications expenses. Digital government shifts this financial burden onto people with disability – a vulnerable consumer group that is overrepresented in the cohort of Australians who live in poverty.

The most recent figures show that 47.3% of working-aged (age 15 to 64) people with disability were not in the labour force as they were either not employed or not actively seeking work.[100] Over one third (33.6%) of this cohort were permanently unable to work.[101] Consequently, most people with disability rely on financial support from the government as their primary source of income.

Around 800,000 working age people receive Centrelink's Disability Support Pension (DSP), equal to five per cent of Australia's working age population.[102] Centrelink's Newstart Allowance provides another form of financial assistance to its 100,000 recipients who have

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[98] Hawkins, W. 2017, personal communications, 5 May.

[99] Australian Bureau of Statistics (ABS) 2015, *4433.0.55.006 - Disability and Labour Force Participation, 2012,* viewed 12 July 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4433.0.55.006>.

[100] Australian Bureau of Statistics (ABS) 2015, *4433.0.55.006 - Disability and Labour Force Participation, 2012,* viewed 12 July 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4433.0.55.006>.

[101] Australian Bureau of Statistics (ABS) 2015, *4433.0.55.006 - Disability and Labour Force Participation, 2012,* viewed 12 July 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4433.0.55.006>.

[102] Australian Government 2014, *A New System for Better Employment and Social Outcomes: Interim Report of the Reference Group on Welfare Reform to the Minister for Social Services,* viewed 13 July 2017, <https://www.dss.gov.au/sites/default/files/documents/06_2014/dss001_14_full_report_27_june_tagged.pdf>, p. 33.

'partial capacity to work'. [103] These restrictive allowances and the extra costs arising from living with a disability (e.g. special transport, personal carer, home adjustments) put people with disability at a significant economic disadvantage compared to the rest of Australia's population.

Excessive graphic information

Consumers with vision impairment may rely on screenreader software to navigate digital government. However, websites with a high volume of graphic information make it confusing for consumers with vision impairments as the screenreader software tries to identify and describe the illustrative elements. At worst, graphic information which does not have alt-text or a caption may not be interpreted by screenreader software, which makes it impossible for consumers with vision impairments to access information.

Uncaptioned audio-visual information

Increasingly, government agencies and their social media channels are producing videos to capture the attention of consumers when delivering critical information about changes to the law as well as explaining government-related processes. For example, the Australian Taxation Office (ATO) has produced how-to video guides on lodging tax returns as well as videos that illustrate legislative changes to superannuation. While these videos are intended to simplify information and make digital government more transparent for consumers, they are inaccessible to hearing-impaired people unless captions and transcripts are provided.

Recommendations

As the creators of regulations and laws to protect people with disability, governments play a crucial leadership role in setting the standard for digital accessibility. Achieving the goal of 100% digital government compatibility with assistive technology requires a staged approach and consultation with end-users of government websites and apps.

When retrofitting digital government platforms so that they are compatible with assistive technology, priority should be given to the services that are most relied upon by people with disability. For example, the disproportionate number of people with disability who live in poverty suggests an imperative to ensure that consumers relying on assistive technology have full functionality when using Centrelink's digital platforms.

Ensuring equal access to digital government services and information gives people with disability the independence to conduct transactions and fulfil their obligations to government (e.g. reporting a change of circumstances to Centrelink or filling in a tax return form) without undermining their privacy.

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[103] Australian Government 2014, *A New System for Better Employment and Social Outcomes: Interim Report of the Reference Group on Welfare Reform to the Minister for Social Services,* viewed 13 July 2017, <https://www.dss.gov.au/sites/default/files/documents/06_2014/dss001_14_full_report_27_june_tagged.pdf>, p. 33.

Given the endless range of disabilities, the following recommendations are not exhaustive but are intended to show that small changes can make a big difference to a person with disability's experience of digital government.

Provide non-digital points of contact

Making information available in hard copy, over the phone and in-person ensures that people with disability have alternate means to access critical information if they cannot engage with digital government.[104] Face-to-face service at government shopfronts can also be invaluable to people with disability that need extra assistance in performing their government transactions and enquiries.

Increase the readability of websites and mobile apps

Small formatting changes can exponentially increase the readability of digital government platforms for all consumers, but particularly those with vision impairments:

- Choose plain fonts (such as Arial or Calibri) over decorative fonts, which can reduce the readability of text for vision-impaired consumers.

- Allow sufficient colour contrast between the text and background, which can make information easier to read for all consumers.

Remove unnecessary images and include text descriptions of images

Screenreaders may not always interpret images and graphs if alternate text (alt text) has not been provided. Text descriptions should always be given for non-text information on digital government platforms. Where possible, government agencies should refrain from publishing information in an image format (e.g. .gif or .tif) that may be not compatible with screenreader software.

Provide captions and transcripts for non-text material

Captions are crucial to ensure that images can be accessed by visually-impaired consumers. Similarly, captioned video and audio content guarantees that hearing-impaired consumers have equal access to critical government information. YouTube has published a guide on adding subtitles to videos[105] which should be considered by government agencies, as they increasingly deliver information to consumers via online video sharing platforms.

Allow full keyboard navigation on digital government platforms

Using a mouse or keyboard may be challenging for consumers with limited manual dexterity. Digital government platforms should ensure full functionality via a keyboard (e.g. Google Chrome allows users to switch between tabs by pressing ctrl + shift + tab). Full

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[104] Australian Human Rights Commission (AHRC) 2016, *Access for all: Improving accessibility for consumers with disability*, viewed 30 June 2017, <https://www.humanrights.gov.au/sites/default/files/document/publication/AHRC_2016_GPGB_access_for_all.pdf>, p. 8.

[105] YouTube 2017, *Add your own subtitles & closed captions*, viewed 28 June 2017, <https://support.google.com/youtube/answer/2734796?hl=en>.

functionality should also be available to consumers who use a voice typing keyboard (a digital keyboard can be operated by using speech commands).

By making it possible to logically navigate through every element of a digital government platform (e.g. selecting a link on a menu bar or choosing an option in a drop-down list on a digital form) without a mouse or keyboard, consumers with limited dexterity still have the ability to engage with government digitally without third-party assistance.

Refrain from using CAPTCHA verification

Rather than using a 'CAPTCHA' to protect against malicious machine interference with your website (e.g. wavy letters in an image file which a user must identify and retype), consider accessible verification methods such as requiring the user to reply to an email sent to their email address. ACCAN has previously called on website hosts to remove CAPTCHA as a verification method.[106]

Implement accessible features in the early stages of digital platform development

Implementing accessible features at the design stage of website development is easier and less cost-intensive than retrofitting accessibility later.[107] For a comprehensive list of accessible features which target vision-impaired consumers, Vision Australia has produced an 'accessibility toolkit'.[108]

Seek feedback from people with disability in user-testing processes

As the end-users of accessible features, the testing of digital government accessibility should involve a diverse cohort of people with disability. This diversity calls for the consideration of different kinds of disability and the distinct barriers that hinder effective interactions with digital government.

Including people with disability in user-tests ensures that accessibility features accurately reflect their special requirements. People with standard vision and dexterity will inevitably have different experiences of accessible features to individuals who depend on accessible features to conduct their day-to-day transactions.

Low-Income Earners

Context

Determining whether an individual is a low-income earner requires an assessment of their income relative to their living expenses. As living expenses vary according to location – with

[106] Moses, A. 2013, Consumer advocates unite to kill CAPTCHA, media release, 6 August, ACCAN, Sydney, viewed 30 June 2017, <http://accan.org.au/our-work/media-releases/603-consumer-advocates-unite-to-kill-captcha>.
[107] Web Accessibility Initiative 2012, *Financial Factors in Developing a Web Accessibility Business Case for Your Organization*, viewed 25 June 2017, <https://www.w3.org/WAI/bcase/fin>.
[108] Vision Australia 2017, *Accessibility toolkit,* viewed 30 June 2017, <http://www.visionaustralia.org/business-and-professionals/digital-access-consulting/accessibility-toolkit>.

Sydney being the most expensive city in Australia, so too does the definition of a low income. Typically, low-income earners include employees in less-skilled and lower-paid occupations (e.g. retail and manufacturing) and individuals who rely on a government benefit such as the aged or disability pension.[109]

For income tax purposes, the Australian Tax Office defines a low income as one that is less than $66,677 per year.[110] Centrelink provides a lower threshold, offering the Low Income Supplement to eligible singles with a yearly taxable income of less than $30,000, and eligible couples with a combined yearly taxable income of less than $45,000.[111] Meanwhile, the NSW Government's Centre for Affordable Housing suggests that low-income earners generate 50% to 80% of the median income in their place of residence.[112]

Why are low-income earners a vulnerable consumer group?

Digital connectivity and government support are means of survival for low-income earners who receive Centrelink payments and social housing benefits. Most Centrelink and social housing clients are subject to self-reporting conditions (e.g. declaring income fortnightly, study plans, change of circumstances) and increasingly, these obligations are fulfilled via online channels. However, the cost of maintaining digital contact with government agencies places significant financial pressure on low-income earners who already struggle to pay for internet and phone services.

In a 2016 survey of 500 Centrelink recipients and Low Income Healthcare Card Holders, a majority of low-income earners reported that they were experiencing financial difficulty in paying for telecommunications services or had to cut back on their use of telecommunications.[113] For most Australians, cutting back on telecommunications services is unthinkable in an era where being digitally connected is a social expectation and an increasing number of basic services – such as booking a medical appointment or applying for housing – require digital interaction.

The affordability barrier also stands when interacting with government via non-digital channels. A 2014 study on low income earners' and homeless people's use of digital technology revealed a number of participants in Sydney and Melbourne chose to attend

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[109] NSW Family & Community Services 2017, *Who are very low to moderate income earners?,* viewed 21 June 2017, <http://www.housing.nsw.gov.au/centre-for-affordable-housing/about-affordable-housing/who-are-very-low-to-moderate-income-earners>.

[110] Australian Tax Office (ATO) 2017, *Low income earners,* viewed 21 June 2017, <https://www.ato.gov.au/Individuals/Income-and-deductions/Offsets-and-rebates/Low-income-earners/>.

[111] Department of Human Services (DHS) 2017, *Low Income Supplement,* viewed 21 June 2017, <https://www.humanservices.gov.au/customer/services/centrelink/low-income-supplement>.

[112] NSW Family & Community Services 2017, *Household median incomes 2016*-17, viewed 21 June 2017, <http://www.housing.nsw.gov.au/centre-for-affordable-housing/for-managers-of-affordable-housing/household-median-incomes-2016-17>.

[113] Ogle, Gre.g. & Musolino, Vanessa 2016, *Connectivity Costs: Telecommunications affordability for low income Australians,* South Australian Council of Social Service (SACOSS), Adelaide & Australian Communications Consumer Action Network (ACCAN), Sydney, p. 4.

government agencies in-person 'just to avoid the cost of the call and wait time'.[114] One young woman living in a refuge revealed that her prepaid mobile account kept running out of credit while on hold with Centrelink. Out of desperation, the woman signed up to an unaffordable mobile phone contract so that she could meet her Centrelink reporting obligations, placing her in greater financial difficulty as she exceeded the cap on her mobile plan.[115]

While this case study illustrates that the affordability barrier extends beyond digitally-mediated contact, it also shows the potential for digital government to mitigate the expenses which can arise from self-reporting obligations. The dire financial consequences faced by the woman could have been avoided if a secure Wi-Fi connection was provided by her refuge, over which she could complete her self-reporting without the expense of a long mobile phone call to Centrelink. Ensuring that self-service digital government platforms are easy-to-use and offer the same functionality as other modes of contact can reduce the need for low-income earners to ring a call centre for support, and risk incurring expensive phone charges.

Barriers

Affordability of telecommunications

The cost of maintaining digital contact with government represents a significant burden on the budgets of low-income earners. A 2016 survey of over 500 Centrelink recipients and Low Income Healthcare Card holders found that 62% of respondents were experiencing difficulty paying for their telecommunications services, had to cut back or stop using one or more telecommunication service for financial reasons in the past 12 months.[116]

A recently-released report showed that, overall, first-tier telecommunications providers (Optus, Telstra and Vodafone) had 'very poor' financial hardship practices and no provider met the basic performance benchmarks that are set in other industries, such as banking, energy , water and debt collection.[117]

Overall, however, affordability of telecommunications services has improved in Australia. Between 2008 and 2015, the proportion of household income spent on fixed-line telephone,

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[114] Humphry, J. 2014, *Homeless and Connected: Mobile phones and the Internet in the lives of homeless Australians,* University of Sydney & Australian Communications Consumer Action Network (ACCAN), Sydney, p. 38.
[115] Humphry, J. 2014, *Homeless and Connected: Mobile phones and the Internet in the lives of homeless Australians,* University of Sydney & Australian Communications Consumer Action Network (ACCAN), Sydney, p. 38.
[116] Mint Research 2016, *Centrelink Telephone Allowance Study,* Mint Research (unpublished), cited in Ogle, Gre.g. & Musolino, Vanessa 2016, *Connectivity Costs: Telecommunications affordability for low income Australians,* South Australian Council of Social Service (SACOSS), Adelaide & Australian Communications Consumer Action Network (ACCAN), Sydney.
[117] Financial and Consumer Rights Council 2017, *Rank the Telco: Victorian Financial Counsellors Rank The Financial hardship Policies and Practices of Telecommunications Providers,* viewed 30 June 2017, <http://www.fcrc.org.au/Content/PDF_downloads/5019%20Rank%20the%20Telco%20Report%202017_single_pages.pdf>, pp. 11-12.

mobile and internet services decreased from 4.1% in 2008 to 3.5% in 2015.[118] However, this decline is largely due to increases in disposable income rather than reduced telecommunications expenses.[119]

Outdated and inadequate government support

The Centrelink Telephone Allowance (CTA) is the main form of financial support provided by the Federal Government to give low-income earners basic access to telecommunications services. Introduced in pre-digital 1992, the CTA does not meet the basic needs of the twenty-first century consumer, where transactions, service delivery and information access are increasingly mediated via the internet.

The CTA is currently distributed to eligible Centrelink clients as a supplementary payment, in addition to selected 'base payments'. As at June 2017, the CTA is either $28.20 per quarter ('basic rate) or $42 per quarter ('higher rate') depending on the support payment which is claimed by the Centrelink client.[120] A review of the best value prepaid mobile service providers as rated by consumer satisfaction research agency CANSTAR Blue[121] found that a basic plan containing a call, SMS and small 1.5GB costs approximately $20 per month, or $60 per quarter.

For many low-income earners, the CTA is out of touch with the actual cost of being digitally-connected and the quarterly frequency of CTA payments does not align with telecommunications providers' monthly billing cycle. It comes with no surprise then that the CTA has attracted criticism for being 'poorly targeted, inadequate, and suffering from a legacy of being structured around home landline technology'.[122]

Inadequate scope of licence conditions compelling telecommunications service providers to offer products to low-income earners

Condition 22 of the *Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997* compels Telstra to 'offer products and arrangements to low-income customers (the low-income package) that has been endorsed by low-income consumer advocacy groups'. However, this condition only applies to Telstra, reflecting the then government-owned monopoly's core business in supplying landline telephone connections. Since 1997, the

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[118] Department of Communications and the Arts 2017, *Trends and drivers in the affordability of communications services for Australian households (Working Paper, July 2017),* viewed 28 July 2017, <https://www.communications.gov.au/documents/trends-and-drivers-affordability-communications-services-australian-households>, p. 2.

[119] Department of Communications and the Arts 2017, *Trends and drivers in the affordability of communications services for Australian households (Working Paper, July 2017),* p.3.

[120] Department of Human Services (DHS) 2017, *Telephone Allowance,* viewed 7 June 2017, <https://www.humanservices.gov.au/customer/services/centrelink/telephone-allowance>.

[121] CANSTAR 2017, Prepaid Mobile Plan Providers Compared, viewed 7 June 2017. <https://www.canstarblue.com.au/phone-internet/phone/mobile-phone-providers-prepaid/>.

[122] Ogle, Gre.g. & Musolino, Vanessa 2016, *Connectivity Costs: Telecommunications affordability for low income Australians,* South Australian Council of Social Service (SACOSS), Adelaide & Australian Communications Consumer Action Network (ACCAN), Sydney, p. 5.

telecommunications market has diversified with the entrance of Australian and foreign-based competitors that are not obliged to consider the needs of low-income earners.

Recommendations

Unmetered access to digital government platforms

As governments increasingly require their citizens to interact with them digitally, the cost of digital contact is inevitably shifted to the consumer. Unmetered access to essential government websites and apps, such as Centrelink, the ATO and My Health Record will ensure that low-income earners can confidently complete their government transactions and find basic information without fearing a costly data bill.

Introducing unmetered access to digital government will require collaboration between Internet Service Providers (ISPs) and state and federal governments, who will need to agree on the range of websites and apps that are 'essential', and warrant unmetered access.

It can be argued that the cost of unmetered access to digital government should be borne by state and federal governments, as part of their implementation of 'digital-by-default' service and information delivery. This cost could be paid to ISPs based on estimates of forgone revenue and capital expenses, in the same way that calls to suicide prevention service Lifeline from mobiles are free of charge due to government funding.

More research needs to be done on the technical requirements arising from unmetered access to digital government platforms. Optus has previously provided unmetered mobile access to Facebook, Twitter, LinkedIn and eBay[123] and Virgin Mobile currently offers unmetered access to music streaming services Spotify, Pandora and Google Play Music on certain post-paid plans.[124] These examples demonstrate that the technical capability exists to un-meter specific websites and apps. However, Telstra has indicated that there may be 'upper limits to IP addresses' that can be unmetered.[125]

Provide low-cost channels to reach government

In the absence of unmetered access to digital government, low-income earners rely on other cost-free or low-cost channels to find information about a government service and perform their government-related obligations. These channels can include free call numbers, government shopfronts, in-person assistance at pop-up stalls and new points of contact which enable low-income earners to engage with government over public Wi-Fi.

These new channels can include a 'live chat' on government websites, Facebook Messenger or Skype account through which consumers can direct their government-related enquiries. Providing new methods of two-way communication via existing and widely-used platforms

[123] Optus 2012, Critical Information Summary: OPTUS PREPAID SOCIAL, viewed 7 June 2017, <https://smb.optus.com.au/opfiles/Shop/All/cis/Cis%20Documents/1390049_CIS_Optus_Prepaid_Social_0113.pdf>.
[124] Virgin Mobile 2017. Data-Free Music Streaming, viewed 7 June 2017, <http://www.virginmobile.com.au/music/>.
[125] Telstra 2017, personal communications 1 June.

circumvents the digital literacy barrier; for example, many Australians are familiar with the functionality of Facebook Messenger and would not require further training to use it. Importantly for low-income earners, these channels can offer cost-neutral interactions with digital government where a public Wi-Fi connection is provided.

Modernise the Centrelink Telephone Allowance (CTA)

Update the CTA so it reflects consumers' needs and expenses in 2017. The South Australian Council of Social Service (SACOSS) has suggested that the CTA should be increased to a base rate of at least $60 per quarter ($20 per month) and paid fortnightly or monthly.[126] The allowance should provide for some data usage, given the growing number of essential government interactions which require digital contact.

Widen the scope of 'low-income package' provisions

An overarching approach which compels *all* telecommunications service providers that serve Australian consumers to offer 'low-income packages' will ensure that all low-income earners have access to budget-appropriate products and arrangements, regardless of whether they are Telstra customers.

As at July 2017, Telstra is the only telecommunications service provider that is required to provide low-income products and programs.[127] To meet this obligation, advice on how to best support low-income earners is given by the independent Telstra Low Income Measures Assistance Committee (LIMAC), which is comprised of vulnerable consumer advocate groups: the Australian Council of Social Service (ACOSS); the Council on the Ageing (COTA); Homelessness Australia; Anglicare Australia; St Vincent de Paul Society; Jobs Australia; the Salvation Army; the Smith Family; and the Department of Families, Housing, Community Services and Indigenous Affairs.[128]

A cross-company committee that performs a similar role to LIMAC will ensure that low-income packages are available to non-Telstra customers, which is particularly important as some low-income earners may be unable to choose and receive Telstra services with the NBN roll-out. A coordinated approach will lead to more resources and better outcomes for low-income earners as well as reputational benefits for the companies involved.

Incentivise corporate social responsibility initiatives to connect low-income earners

Encourage telecommunications service providers to play a role in helping low-income earners access critical government services. Incentives can be provided by the Government to make it more feasible to implement reduced-cost or unmetered access to digital government across the telecommunications industry.

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[126] Ogle, Gre.g. & Musolino, Vanessa 2016, *Connectivity Costs: Telecommunications affordability for low income Australians,* South Australian Council of Social Service (SACOSS), Adelaide & Australian Communications Consumer Action Network (ACCAN), Sydney, p. 35.

[127] *Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997,* Condition 22.

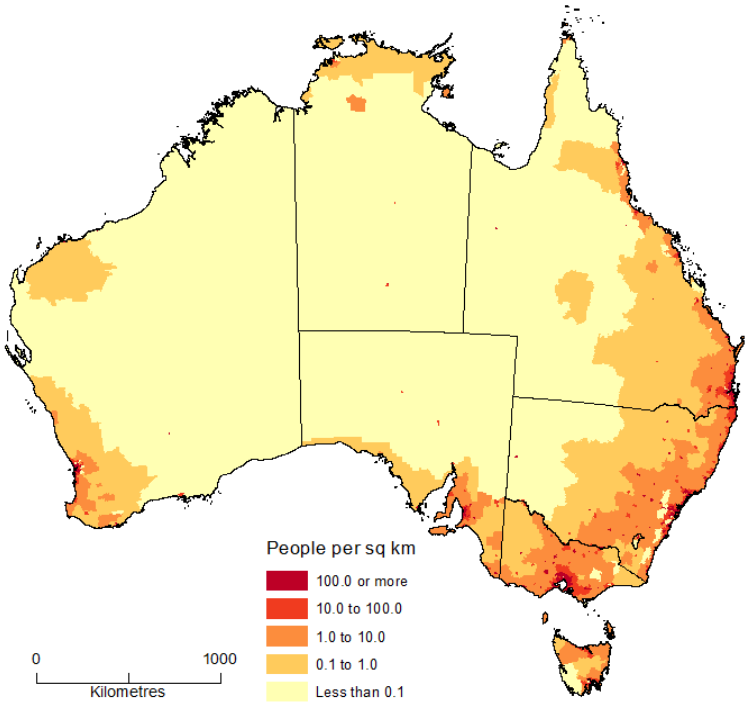
[128] Telstra 2017, *Community & environment,* viewed 28 July 2017, <https://www.telstra.com.au/aboutus/community-environment/community-programs/access-for-everyone>.

Telstra has taken the lead with its Access for Everyone initiative, which was launched in partnership with the Salvation Army. This initiative includes billing and pricing options for consumers with lower-incomes, the Pensioner Discount Scheme and InContact[129] – a telephone service which only allows incoming calls and outgoing calls to emergency numbers, Lifeline and customer service.[130]

Regional & remote consumers

Context

Australia is a highly-urbanised country, with 69% of its population living in a 'greater capital city'.[131] Population densities outside Australia's major cities are among the world's lowest, with sparse distribution of residents in regional and remote communities.



Picture: ABS 2015

[129] Telstra 2017, *Community & environment,* viewed 28 July 2017, <https://www.telstra.com.au/aboutus/community-environment/community-programs/access-for-everyone>.
[130] Telstra 2017, *InContact Telephone Service Section: Our Customer Terms*, viewed 30 June 2017, <https://www.telstra.com.au/content/dam/tcom/personal/consumer-advice/pdf/incontact.pdf>, p. 2.
[131] Australian Bureau of Statistics (ABS) 2016, *3218.0 - Regional Population Growth, Australia, 2014-15*, viewed 30 June 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/Previousproducts/3218.0Main%20Features152014-15?opendocument&tabname=Summary&prodno=3218.0&issue=2014-15&num=&view=>.

Digital government plays a crucial role in the lives of regional and remote consumers, who may live hours away from the nearest government shopfront and have identified lengthy hold times as a barrier to conducting their government transactions over-the-phone.[132] The main reasons[133] for engaging with digital government in regional and remote communities include:

- Completing an ATO, Medicare or Centrelink transaction
- Facilitating livestock transfers
- Downloading documents from the National Heavy Vehicle Regulator (NHVR) website
- Business Activity Statement (BAS) lodgement
- Viewing government regulations and legislation
- Engaging with Local Land Services (NSW) .

As interactions with government are increasingly 'digital by default', unreliable internet in regional and remote communities prevents millions of Australians from completing their transactions and accessing critical information. The Federal Government recently committed $220 million towards improving mobile coverage along major regional transport routes, in small communities and areas prone to natural disasters with upgrades to regional mobile base stations.[134]

Given the monopoly of satellite internet in many remote communities and its susceptibility to weather conditions, digital connectivity is never guaranteed for remote consumers. While the National Broadband Network's (NBN) Sky Muster satellite service was designed to deliver broadband internet to Australia's 'hard to reach places',[135] there are many periods during the wet season where it remains impossible to connect to the internet via Sky Muster,[136] which amounts to a few months every year. This raises questions over the inclusiveness of the Government's digital-first approach to delivering services and information.

Overall, however, the 2016 Digital Inclusion Index found that the gap in digital access between capital city and 'country' areas is narrowing while the capital city-country gap in affordability has worsened.[137] The Index also found that the gap in 'digital ability' – defined

[132] NSW Farmers 2017, *Your Engagement with Digital Government Services Survey Results* (unpublished).
[133] NSW Farmers 2017, *Your Engagement with Digital Government Services Survey Results* (unpublished).
[134] Department of Communications and the Arts 2017, *Mobile Black Spot Program,* viewed 5 July 2017, <https://www.communications.gov.au/what-we-do/phone/mobile-services-and-coverage/mobile-black-spot-program>.
[135] nbn 2017, *Sky Muster™- bringing broadband to regional Australia*, viewed 22 June 2017, <http://www.nbnco.com.au/learn-about-the-nbn/network-technology/sky-muster-explained/satellite.html>.
[136] MaRiKi Media 2017, Stories from B.I.R.R.R. (Better Internet for Rural, Regional and Rural Australia), video, Vimeo, viewed 22 June 2017, <https://vimeo.com/209040090>.
[137] Thomas, J, Barraket, J, Ewing, S, MacDonald, T, Mundell, M & Tucker, J 2016, Measuring Australia's Digital Divide: The Australian Digital Inclusion Index 2016, Swinburne University of Technology, Melbourne, p. 5.

in the Index as one's digital literacy, digital activity and attitudes towards digital technology[138] – is worsening between Australia's capital cities and 'country' areas.

While capital city-based governments are pushing forward with their 'digital first' agendas, little consideration has been given to Australians in regional and remote areas who cannot reap the benefits of digital service and information delivery due to technological and socioeconomic barriers. As the public sector's digital transformation accelerates, the failure to overcome these barriers threatens to widen the existing digital divide between urban and non-urban Australia.

Barriers

Poor quality of internet connection

Poor or non-existent internet connections are the key barrier to regional and remote engagement with digital government. Mobile internet coverage remains patchy in regional and remote parts of Australia, with constantly-disconnecting internet connections and sluggish download and upload speeds.[139] [140] For farmers, mobile internet is particularly crucial and a mobile device is the number one tool to stay connected during the day while they work on the land.[141] A pre-requisite to engaging with digital government is reliable internet access, which many regional and remote communities are yet to receive.

One Better Internet for Rural, Regional and Remote Australia (BIRRR) member said she was left with no choice but to drive 110 km on a round trip to the nearest town for an internet connection.[142] This trip also incurred fuel costs, which are generally higher in regional Australia.[143] The lack of reliable internet and additional costs arising from 'internet road trips' must be considered in the public sector's 'digital first' strategy to ensure that the roll out of digital government does not further exacerbate the financial burden of staying connected in regional and remote communities.

Poor value plans for regional & remote consumers: limited data, high costs

The 9000 member-strong Better Internet for Rural, Regional and Remote Australia group has consistently raised concerns over the low data limits and high costs of internet access in regional and remote parts of Australia.[144] Data usage arising from digital government will

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[138] Thomas, J, Barraket, J, Ewing, S, MacDonald, T, Mundell, M & Tucker, J 2016, Measuring Australia's Digital Divide: The Australian Digital Inclusion Index 2016, Swinburne University of Technology, Melbourne, p. 6.
[139] NSW Farmers 2017, *Your Engagement with Digital Government Services Survey Results* (unpublished).
[140] Isolated Children's Parents' Association 2017, personal communications, 18 May.
[141] NSW Farmers 2017, *Your Engagement with Digital Government Services Survey Results*, Member from Uralla, NSW (unpublished).
[142] MaRiKi Media 2017, Stories from B.I.R.R.R. (Better Internet for Rural, Regional and Rural Australia), video, Vimeo, viewed 22 June 2017, <https://vimeo.com/209040090>, 'Amanda'.
[143] Australian Competition & Consumer Commission (ACCC) 2017, Fuel in regional Australia, viewed 5 July 2017, <https://www.accc.gov.au/consumers/petrol-diesel-lpg/fuel-in-regional-australia#regional-fuel-price-differences>.
[144] MaRiKi Media 2017, Stories from B.I.R.R.R. (Better Internet for Rural, Regional and Rural Australia), video, Vimeo, viewed 22 June 2017, <https://vimeo.com/209040090>.

exacerbate telecommunications costs for regional and remote consumers, prompting a reasonable reluctance amongst some consumers to engage with government digitally. Similarly, NSW Farmers has identified an urgent need for telecommunications providers to offer 'better value for money' in rural and regional communities.[145]

Lack of alternatives to satellite internet

Regional and remote communities have a limited range of internet service providers, with many consumers relying on the nbn Sky Muster service. Better Internet for Rural, Regional and Remote Australia members have highlighted the lack of a 'back-up' in the common event where Sky Muster is unavailable, particularly in the annual wet season when there is higher cloud cover.[146] The reliability of Sky Muster is also affected by 'overcrowding' which has worsened as more regional and remote consumers are using the service.[147]

In April 2017, a Queensland cotton grower made headlines after completing construction of a 53-metre tower on a farm which connects him to high speed internet from a nearby town.[148] This example highlights the lengths that some consumers will go to for reliable telecommunications in regional and remote Australia, which Sky Muster does not currently offer.

Ineffective handling of complaints on rural mobile coverage

The handling of complaints about unreliable mobile coverage can be ineffective. One regional consumer who complained to Telstra about a mobile tower fault was challenged to 'prove that others in the area are also experiencing similar issues'. [149]

Complicated structure of digital government platforms

Government websites have been described as 'too complicated' with 'information… buried too deep'.[150] The non-intuitive design of some digital government platforms and hard-to-find information stand in the way of engaging with digital government, particularly for farmers who are focussed on rural production.

The over-complication of digital government is shown by the observation that 'in most cases, farms need a delegated person to deal with all the [administrative and government]

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[145] NSW Farmers 2017, personal communications, 29 June.

[146] MaRiKi Media 2017, Stories from B.I.R.R.R. (Better Internet for Rural, Regional and Rural Australia), video, Vimeo, viewed 22 June 2017, <https://vimeo.com/209040090>, Jay Morbell, Katherine, NT.

[147] Gunders, J. & Roe, I. 2017, 'Farmers forced to go to extreme lengths to access reliable internet', *ABC News Rural,* 26 April, viewed 5 July 2017, <http://www.abc.net.au/news/rural/2017-04-26/farmers-forced-to-go-to-extreme-lengths-to-access-internet/8460590>.

[148] Gunders, J. & Roe, I. 2017, 'Farmers forced to go to extreme lengths to access reliable internet', *ABC News Rural,* 26 April, viewed 5 July 2017, <http://www.abc.net.au/news/rural/2017-04-26/farmers-forced-to-go-to-extreme-lengths-to-access-internet/8460590>.

[149] MaRiKi Media 2017, Stories from B.I.R.R.R. (Better Internet for Rural, Regional and Rural Australia), video, Vimeo, viewed 22 June 2017, <https://vimeo.com/209040090>, 'Sam'.

[150] NSW Farmers 2017, *Your Engagement with Digital Government Services Survey Results*, Member from Uralla, NSW (unpublished).

issues'.[151] However, smaller businesses may not have the capacity to hire administrative assistants, which highlights the inequity that can result from poorly-designed digital government platforms.

Recommendations

Enable auto-saving on digital forms

Frequent internet outages are a source of frustration for regional and remote consumers who attempt to fill out forms on digital government platforms.[152] Without an auto-saving function, the data (e.g. personal details, upload of bank statements to prove income) entered by a consumer will be lost in the likely event of an internet 'drop out' during adverse weather conditions.

An auto-saving function will enable consumers to return to their previous place on a digital form before the internet disconnection. Reducing the need to re-enter any information or re-upload documents, an auto-saving function safeguards regional and remote consumers from data loss and the cost of additional data.

Provide the option of offline form-filling

Digital government platforms are designed with the assumption that the consumer has a stable internet connection which allows them to upload and download data effectively. However, this assumption does not hold true in regional and remote communities, where internet connectivity fluctuates.

By providing downloadable forms (e.g. in a .doc or .pdf format) which can be completed offline helps circumvent the barrier of unreliable internet access. Once complete, these forms can be uploaded to the digital government platform and processed. Given the low data limits in regional and remote Australia, these downloadable forms should be data-minimal (i.e. containing text only).

Support consumers with a digital government helpdesk

In the current transition towards the Government's 'digital first' strategy for delivering information and services to consumers, a digital government helpdesk is necessary to assist unfamiliar users and take feedback from consumers. A key theme in the results of a survey on regional and remote engagement with digital government[153] was the lack of avenues to seek help where a digital government platform fails to complete a transaction or resolve a question.

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[151] NSW Farmers 2017, *Your Engagement with Digital Government Services Survey Results*, Member from Uralla, NSW (unpublished).
[152] Isolated Children's Parents' Association 2017, personal communications, 18 May.
[153] NSW Farmers 2017, *Your Engagement with Digital Government Services Survey Results*, Member from Uralla, NSW (unpublished).

Include a 'breadcrumb trail' on all digital government platforms

Regional and remote consumers have suggested that some government websites can be 'complicated' to navigate.[154] This barrier can be ameliorated with the introduction of 'breadcrumb trails' (a horizontal line under a website masthead which displays the hierarchy of the current page in relation to the website's structure) on all digital government platforms to make it easier for consumers to find 'where they are'. This can make the task of navigating digital government more logical and intuitive for all consumers.

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Home page > Section page > Subsection page
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Example of breadcrumb trail

Adults aged over 65

Context

Between 1996 and 2016, the proportion of Australians aged 65 and over increased by 3.3% to 15.3%.[155] Australia's ageing population can be attributed to its declining fertility rates and increasing life expectancies, which puts our nation in line with population trends in other developed countries.[156] The rising median age in Australia has implications on the size of the working-age population (aged 15 to 64[157]) and the adequacy of essential government services, such as health, social housing and aged care.

Why are adults aged over 65 a vulnerable consumer group?

The Australian Communications and Media Authority (ACMA) has identified that adults aged 65 and over have a low level of digital engagement compared to other age groups in Australia,[158] putting them in a vulnerable position amidst the Government's digital transformation. Similarly, the most recent Digital Inclusion Index found that people aged

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[154] NSW Farmers 2017, *Your Engagement with Digital Government Services Survey Results*, Member from Uralla, NSW (unpublished).

[155] Australian Bureau of Statistics (ABS) 2016, *Feature Article: Population by Age and Sex, Australia, States and Territories,* viewed 28 July 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/Previousproducts/3101.0Feature%20Article1Jun%202016?opendocument&tabname=Summary&prodno=3101.0&issue=Jun%202016&num=&view=>.

[156] Australian Bureau of Statistics (ABS) 2016, *Feature Article: Population by Age and Sex, Australia, States and Territories,* viewed 28 July 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/Previousproducts/3101.0Feature%20Article1Jun%202016?opendocument&tabname=Summary&prodno=3101.0&issue=Jun%202016&num=&view=>.

[157] Australian Bureau of Statistics (ABS) 2016, *Feature Article: Population by Age and Sex, Australia, States and Territories,* viewed 28 July 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/Previousproducts/3101.0Feature%20Article1Jun%202016?opendocument&tabname=Summary&prodno=3101.0&issue=Jun%202016&num=&view=>.

[158] Australian Communications and Media Authority (ACMA) 2016, *Research snapshots: Digital lives of older Australians,* viewed 8 June 2017, <http://www.acma.gov.au/theACMA/engage-blogs/engage-blogs/Research-snapshots/Digital-lives-of-older-Australians>.

over 65 are Australia's 'least digitally included demographic group', based on their access to and ability to afford digital technology, and digital ability (skills, online activity and attitudes toward digital technology).[159]

In response, the Coalition-led Australian Government pledged $50 million to 'improve the digital literacy of senior Australians and improve their safety online' in the lead-up to the 2016 federal election.[160] In October 2017, the Federal Department of Social Services will launch the Digital Literacy for Older Australians (DLOA) program with the goal of increasing the online confidence, skills and safety of seniors who have minimal or no engagement with digital technology.[161] The Program will involve one-on-one community-orientated informal training on how to perform basic tasks such as sending emails, sharing photos and using social media. However, as at June 2017, there is no mention of whether the program will provide support for interacting with digital government.

Exposure to digital technology

In 2017, an adult over 65 was born in the year 1952 or earlier. For Australian-raised adults aged 65 and over, the only electronic screens that they could access in their formative years were found on analogue television sets after the arrival of black-and-white TV in 1956. It was not until the 1990s before this age group could learn how to use dial-up internet, by which time many were middle-aged.

While digital education is now a compulsory component of primary and secondary education in Australia, many people aged over 65 relied on informal 'on-the-job' training to improve and practice their digital skills. However, noting that the shift to paperless business and government interactions only accelerated in the last five years, many people in this age group would have moved on from the workforce – missing out on the opportunities for informal digital education through employment and formal digital education at school.

In a 2015 ACCAN case study of social housing residents aged between 55 and 86,[162] most research participants attributed their digital disengagement to a 'lack of confidence', rather than infrastructure barriers such as accessibility and cost. As part of this case study, digital training was provided to the research participants through onsite support, a converted common room with high-speed internet and recycled computers, a simplified online portal to a community website, online games and the loan of tablets. At the conclusion of the

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[159] Thomas, J., Barraket, J., Ewing, S., MacDonald, T., Mundell, M. & Tucker, J. 2016, *Measuring Australia's Digital Divide: The Australian Digital Inclusion Index 2016,* Swinburne University of Technology, Melbourne, for Telstra.

[160] Liberal Party of Australia 2016*, Improving the digital confidence and skills of senior Australians,* 26 June, viewed 9 June 2017, <https://www.liberal.org.au/latest-news/2016/06/26/improving-digital-confidence-and-skills-senior-australians>.

[161] Department of Social Services 2017, *Digital Literacy for Older Australians,* <https://www.dss.gov.au/seniors/digital-literacy-for-older-australians>, viewed on 9 June 2017.

[162] Seton, C., Tucker, J. & Van der Zwan, R. 2015, The Digital Age Project: Strategies that enable older social housing residents to use the internet, Southern Cross University, for the Australian Communications Consumer Action Network (ACCAN), p. 2.

digital training, the research participants reported greater confidence in using digital technology, highlighting the crucial link between digital education and digital inclusion.

The upcoming 2017 Digital Inclusion Index will separate the 'Adults over 65' category into two groups: adults aged 65 to 75 and adults aged over 75, in recognition of the fact that there are notable differences in the level of digital inclusion between the former and the latter.[163]

Benefits of digital government for adults aged 65 & over

Increasingly, digital government channels serve as a gateway to real-time information about health, welfare and aged care services. Eliminating the need to travel, digital government enables seniors to make more informed decisions on matters which affect their wellbeing and day-to-day lives. Giving seniors the choice to engage with government from the comfort of home is particularly important for consumers with declining physical mobility.

As the Government's digital transformation helps it reduce the cost of service and information delivery,[164] it is reasonable to predict that the existence of non-digital government channels will decline.[165] As non-digital points of contact give way to the Government's new online channels, consumers who remain digitally-disengaged will inevitably need to spend more time and effort to complete their government-related tasks. This may involve 'proxy internet users' – those who use online services and applications on behalf of others who would otherwise make limited use of the internet.[166]

Barriers

Reluctance to use digital technology

Adults aged over 65 can be reluctant to engage with digital government, due to their limited exposure to digital technology.[167] The lack of exposure to digital technology can lead to a reduced understanding of online safety and distrust in digital government. These consumers may prefer to interact with government face-to-face via a shopfront, where they can see their transaction being physically processed.[168]

However, 'digital reluctance' does not hold true for all older consumers. The adverse health conditions of older consumers can be the impetus to learn how to search for information

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[163] Thomas, J. 2017, personal communications, 2 June.
[164] Deloitte Access Economics 2015, *Digital Government Transformation,* Deloitte Access Economics, Sydney, for Adobe Systems Pty Ltd, Sydney, p. 24.
[165] Seton, C., Tucker, J. & Van der Zwan, R. 2015, The Digital Age Project: Strategies that enable older social housing residents to use the internet, Southern Cross University, for the Australian Communications Consumer Action Network (ACCAN), p. 51.
[166] Selwyn, N., Johnson, N., Nemorin, S. & Knight, E. 2016, *Going online on behalf of others: An investigation of 'proxy' internet consumers,* Monash University, Melbourne & Australian Communications Consumer Action Network (ACCAN), Sydney.
[167] Combined Pensioners Superannuants Association (CPSA), Victoria 2017, *personal communications,* 22 June.
[168] Combined Pensioners Superannuants Association (CPSA), Victoria 2017, *personal communications,* 22 June.

online, as one survey participant explained: "GPs don't know everything and they don't want to tell you that they don't know everything… so [on the Internet] you can do your own research". [169] In addition, a desire to stay connected with family and friends has led many older consumers to embrace digital technology and social media.

Limited digital literacy

The working lives and education of many adults aged over 65 pre-date the digital-age, meaning that consumers in this age group have had fewer opportunities for digital training compared to their younger counterparts. This has translated into a general lack of confidence amongst older Australians when interacting with digital technology.[170] The most recent Digital Inclusion Index found that people aged over 65 are Australia's 'least digitally included demographic group', based on several criteria including their digital ability (skills, online activity and attitudes toward digital technology).[171]

Affordability

Adults aged over 65 are disproportionately represented in the lower-income category,[172] which shows that many older Australians may not have the capacity to pay for digital devices and ongoing telecommunications costs. This stands in the way of engaging with digital government, which comes with data charges. The Centrelink Telephone Allowance (CTA) is automatically included in all pension payments, but the CTA's quarterly rates are inadequate to maintain a voice and data service.[173]

Health conditions

Worsening manual dexterity in the ageing process prevents many older consumers from using digital devices and engaging with digital government. While the small size of buttons on traditional mobile phones is a limiting factor for consumers with poor manual dexterity,[174] the small size of screens on touchscreen phones remains a barrier for older consumers with worsening vision.[175] Amongst older consumers, there is a preference for

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[169] Newman, L., Biedrzycki, K. & Baum, F. 2012, 'Digital technology use among disadvantaged Australians: implications for equitable consumer participation in digitally-mediated communication and information exchange with health services', *Australian Health Review,* vol. 36, Flinders University, Adelaide, viewed 14 June 2017, <http://www.publish.csiro.au/ah/pdf/AH11042>, p. 127.

[170] Council on the Aging (COTA Australia) 2017, *personal communications*, 28 June.

[171] Thomas, J., Barraket, J., Ewing, S., MacDonald, T., Mundell, M. & Tucker, J. 2016, *Measuring Australia's Digital Divide: The Australian Digital Inclusion Index 2016,* Swinburne University of Technology, Melbourne, for Telstra.

[172] Australian Bureau of Statistics (ABS) 2013, *6523.0 - Household Income and Income Distribution, Australia, 2011-12,* viewed 5 July 2017, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/6523.0Main+Features22011-12>.

[173] Ogle, Gre.g. & Musolino, Vanessa 2016, *Connectivity Costs: Telecommunications affordability for low income Australians,* South Australian Council of Social Service (SACOSS), Adelaide & Australian Communications Consumer Action Network (ACCAN), Sydney, p. 5.

[174] Newman, L., Biedrzycki, K. & Baum, F. 2012, 'Digital technology use among disadvantaged Australians: implications for equitable consumer participation in digitally-mediated communication and information exchange with health services', *Australian Health Review,* vol. 36, Flinders University, Adelaide, viewed 14 June 2017, <http://www.publish.csiro.au/ah/pdf/AH11042>, p. 127.

[175] Council on the Aging (COTA Australia) 2017, *personal communications*, 28 June.

tablets over phones when accessing the internet, due to the 'intuitiveness' of tablets and screens which are large enough for vision-impaired older consumers. [176]

Privacy concerns

The Australian Communications and Media Authority (ACMA) has previously identified generational differences in attitudes towards online privacy, with a study finding that older consumers tend to be more 'reserved' over the sharing of personal information.[177] This can translate into a lower uptake of digital government services amongst older consumers.

Recommendations

Free or subsidised digital training courses for older consumers

Cost savings from the Government's delivery of services and information digitally can be invested into community initiatives such as free digital training courses for seniors. Resources can also be diverted to subsidise courses at established seniors' 'computer clubs'[178] which already provide targeted training for adults over 65. Both tactics can help increase the uptake of digital government platforms amongst older adults. Interviews with seniors in a lower-socioeconomic outer suburb in Melbourne found that the cost of digital literacy community classes can be prohibitive, turning many seniors away from learning digital skills.[179]

Digital literacy courses for older consumers can be offered at community facilities, such as local libraries and town halls. These learning experiences have the added benefit of promoting social activity between seniors – an age group that is disproportionately affected by social isolation and mental health issues.[180]

Include a 'breadcrumb trail' on all digital government platforms

Non-digital natives aged over 65 have suggested that many government websites are too complicated to navigate.[181] This barrier can be ameliorated with the implementation of 'breadcrumb trails' (a horizontal line under a website masthead which displays the hierarchy of the current page in relation to the website's structure) which can make it easier for consumers to find 'where they are' on a website. The inclusion of subheadings can also

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[176] Council on the Aging (COTA Australia) 2017, *personal communications*, 28 June.

[177] Australian Communications and Media Authority (ACMA) 2009, *Attitudes towards the use of personal information online: Qualitative research report,* viewed 5 July 2017, <http://www.acma.gov.au/~/media/mediacomms/Research%20library%20reports%20old/pdf/attitudes_towards_use_of_personal_info%20pdf.pdf>.

[178] For example, the Australian Seniors Computer Clubs Association: <http://ascca.org.au/index.php/find-a-course>.

[179] Combined Pensioners Superannuants Association (CPSA), Victoria 2017, *personal communications,* 22 June.

[180] Pate, A. 2014, *SOCIAL ISOLATION: Its impact on the mental health and wellbeing of older Victorians*, Council on the Ageing (COTA) Victoria, Melbourne, viewed 5 July 2017, <http://www.cotavic.org.au/wp-content/uploads/2014/02/Working-Paper_Social-Isolation.pdf>.

[181] Combined Pensioners Superannuants Association (CPSA), Victoria 2017, *personal communications,* 22 June.

improve the clarity of information on government websites, particularly for older consumers who are accustomed to using subheadings and indexes to navigate through paper-based information.[182]

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Example of breadcrumb trail

Involve older consumers in user-testing of digital government platforms

Incorporating the feedback of older consumers will ensure that digital government platforms are inclusive and meet the accessibility needs and preferences of seniors who are unfamiliar with the internet. Co-design needs to take place from the early design stages to the ongoing evaluation of a digital government platform.

Ensure that the Digital Literacy for Older Australians (DOLA) Program provides training on engaging with digital government

Engaging with digital government should be included as a core component of the Digital Literacy for Older Australians (DOLA) program. This training should address how personal information can be managed safely while using digital government services, how to navigate digital government channels and platforms as well as explain why specific pieces of personal information are collected.

Retain non-digital points of contact

There will continue to be a small but diminishing cohort of consumers who are unlikely to be digitally-literate in their lifetime and will not be able to access government services digitally.[183] This highlights the need to retain 'legacy' points of contact, such as face-to-face service and postal communication, to ensure that consumers in this cohort can still engage with government.

Remote Indigenous communities

Context

Remote Indigenous communities have one of the lowest rates of internet adoption compared to anywhere else in Australia.[184] The digital divide is exemplified by parts of the Barkly region in the Northern Territory (excluding Tennant Creek), where less than one in ten Indigenous households have access to the internet.[185] This raises questions over the

[182] Council on the Aging (COTA Australia) 2017, *personal communications*, 28 June.
[183] Council on the Aging (COTA Australia) 2017, *personal communications*, 28 June.
[184] Rennie, E., Hogan, E., Gregory, R., Crouch, A., Wright, A. & Thomas, J. 2016, *Internet on the Outstation: The Digital Divide and Remote Aboriginal Communities,* Institute of Network Cultures, Amsterdam, p. 14.
[185] Rennie, E., Hogan, E., Gregory, R., Crouch, A., Wright, A. & Thomas, J. 2016, *Internet on the Outstation: The Digital Divide and Remote Aboriginal Communities,* Institute of Network Cultures, Amsterdam, p. 14.

inclusiveness of the Government's digital transformation, which cannot be accessed by some of Australia's most vulnerable consumers.

The consequences of digital exclusion can severely impact the wellbeing of remote Indigenous communities. The lack of reliable internet and expensive data makes it difficult for remote Indigenous consumers to apply for Centrelink assistance and meet reporting obligations. A consumer's inability to keep up with reporting obligations can result in an automatic stop to payments. In one extreme but not uncommon example, several Indigenous people from the Utopia homeland in the Northern Territory could not report to Centrelink due to insufficient funds and a lack of mobile coverage. As a result of their blocked welfare payments, these people were unable to feed their families, obtain prepaid mobile credit or fuel to travel to Alparra, Northern Territory to rectify the situation.[186]

The Central Australian Youth Link Up Service (CAYLUS) has estimated that 20,000 of 45,350 eligible people in remote Indigenous communities in the Northern Territory have no income support, citing internet and telephone access as the key obstacle to accessing Centrelink.[187]

Benefits for remote Indigenous communities

Reducing the tyranny of distance

In remote Indigenous communities, the benefits of an internet connection extend beyond service and information access. The internet also has a role to play in helping residents overcome the hardship and inconveniences of living in remote settlements. [188] Without a telephone or internet connection, it is not uncommon for remote Indigenous consumers to drive several hours to a shopfront in the nearest population centre to complete a transaction or enquiry. For remote consumers with access to the internet and a digital device, the benefits of digital government are transformative – the burden of expensive regional fuel[189] and time taken to travel to a government shopfront will be eliminated.

Greater autonomy over personal matters

Digital government can also give remote Indigenous consumers greater autonomy over their personal affairs.[190] Access to digital government can reduce the necessity of phonebank messages and third-party gatekeepers to personal information such as storekeepers and government administrators.

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[186] Broadband for the Bush Alliance 2017, *Letter to Michael Gunner, Northern Territory Minister for Aboriginal Affairs,* 10 July (unpublished), p. 4.
[187] Broadband for the Bush Alliance 2017, *Letter to Michael Gunner, Northern Territory Minister for Aboriginal Affairs,* 10 July (unpublished), p. 4.
[188] Rennie, E., Hogan, E., Gregory, R., Crouch, A., Wright, A. & Thomas, J. 2016, *Internet on the Outstation: The Digital Divide and Remote Aboriginal Communities,* Institute of Network Cultures, Amsterdam, p. 14.
[189] Australian Competition & Consumer Commission (ACCC) 2017, Fuel in regional Australia, viewed 5 July 2017, <https://www.accc.gov.au/consumers/petrol-diesel-lpg/fuel-in-regional-australia#regional-fuel-price-differences>.
[190] Rennie, E., Hogan, E., Gregory, R., Crouch, A., Wright, A. & Thomas, J. 2016, *Internet on the Outstation: The Digital Divide and Remote Aboriginal Communities,* Institute of Network Cultures, Amsterdam, p. 22.

Overcoming historical distrust of government

Digital government can facilitate higher quality engagement with remote Indigenous communities by circumventing historical distrust of government service providers. In many remote Indigenous communities, government and social workers are treated with suspicion. Institutional racism in healthcare,[191] tension and miscommunication between police and Indigenous people[192] and deep scepticism towards law reform in Northern Territory Indigenous communities[193] are some of the challenges which underpin the fractured relationship between many remote Indigenous communities and government.

Giving remote Indigenous residents the choice to manage their own affairs without having to face government doorknockers and shopfronts can give remote Indigenous residents a sense of empowerment and self-determination. Many remote Indigenous residents perceive government workers as an intrusion and simply want to see less 'white Toyota brigades' in their community.[194] Government intervention programs are viewed with scepticism and are referred to as 'another white Toyota' – they drive in, they drive out, never to return.[195]

Digital government has the potential to make government service providers more approachable while circumventing the negative perceptions of public servants. In addition, digital government can also reduce the risks of non-verbal miscommunication that can arise from the inadequate cross-cultural training of frontline government staff, or because of language barriers.

The release of guidelines on communicating with Indigenous people by government agencies suggests there is room for improvement in increasing Indigenous cultural sensitivity. Avoidance of eye contact, for example, is a customary gesture of respect when interacting with Indigenous people, in contrast to the Western tendency to initiate eye contact in face-to-face communication.[196]

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[191] Henry, B.R. 2004, 'Institutional racism in Australian healthcare: a plea for decency', *Medical Journal of Australia,* vol 18 no 10, pp. 517-520, viewed 7 July 2017, <https://www.mja.com.au/system/files/issues/180_10_170504/hen10112_fm.pdf>.

[192] Breen, J. 2015, 'Trust lacking between police and Aboriginal community, say Broken Hill residents', *ABC News,* 18 September, viewed 7 July 2017, <http://www.abc.net.au/news/2015-09-18/trust-lacking-between-police-and-aboriginal-community2c-say-br/6785456>.

[193] Australian Associated Press 2007, 'Scepticism and distrust greets Aboriginal reforms', *Sydney Morning Herald,* 22 June, viewed 7 July 2017, <http://www.smh.com.au/news/national/scepticism-and-distrust-greets-aboriginal-reforms/2007/06/22/1182019326040.html?page=fullpage#contentSwap1>.

[194] Rennie, E. 2017, personal communications 2 June.

[195] Alexander, J. 2011, *Speech,* 21 November, House of Representatives (Australia), viewed 7 July 2017, <http://parlinfo.aph.gov.au/parlInfo/genpdf/chamber/hansardr/e3438d90-354a-4802-8540-6d3a85164a3a/0070/hansard_frag.pdf;fileType=application%2Fpdf>.

[196] Queensland Health 2015, *Communicating effectively with Aboriginal and Torres Strait Islander people,* Aboriginal and Torres Strait Island Cultural Capability, viewed 7 July 2017, <https://www.health.qld.gov.au/__data/assets/pdf_file/0021/151923/communicating.pdf>.

Benefits to the public sector

Despite the initial cost of digitising government services, the public sector will benefit from reduced service and information delivery costs in the long-term. Centrelink officers working in remote parts of the Northern Territory have noted the logistical challenges and expenses which can arise from travelling to small communities to check whether residents' welfare payment details were up to date.[197] Indigenous organisations such as the Central Land Council and Centre for Appropriate Technology have reported similar logistical challenges in providing services and staying connected with residents living in remote outstations.[198]

Barriers

Lack of internet access

The lack of internet access remains the key barrier to digital government in remote Indigenous communities. In remote communities such as Kwale Kwale, Mungalawuru and Imangara in Central Australia, only 1 in 30 households are connected to the internet.[199] Without internet access, consumers in remote Indigenous communities do not have the opportunity to engage with digital government and are left behind in a modern economy where services, information and transactions are increasingly mediated by the internet.

Slow internet

In larger remote Indigenous communities that have internet access, network congestion remains a key barrier to digital information.[200] As more interactive and video content is used on government websites and as part of education, increasing pressure is placed on already-constrained internet connections in remote Australia.

Limited literacy skills

The lack of internet access translates into a lack of opportunities for remote Indigenous communities to realise the benefits of digital literacy. Remote Indigenous communities also suffer from a perpetuating cycle of poor English literacy; overall school attendance remains poor and children who struggle academically may have parents who also have low literacy skills.[201] 2016 results from the National Assessment Program Literacy and Numeracy

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[197] Rennie, E., Hogan, E., Gregory, R., Crouch, A., Wright, A. & Thomas, J. 2016, *Internet on the Outstation: The Digital Divide and Remote Aboriginal Communities,* Institute of Network Cultures, Amsterdam, p. 22.

[198] Rennie, E., Hogan, E., Gregory, R., Crouch, A., Wright, A. & Thomas, J. 2016, *Internet on the Outstation: The Digital Divide and Remote Aboriginal Communities,* Institute of Network Cultures, Amsterdam, p. 22.

[199] ARC Centre of Excellence for Creative Industries & Innovation, Centre for Appropriate Technology & Central Land Council 2011, *Home Internet for Remote Indigenous Communities,* Australian Communications Consumer Action Network (ACCAN), Sydney.

[200] Thomas, J. 2017, personal communications 2 June.

[201] Purdie, N. & Buckley, S. 2010, *School attendance and retention of Indigenous Australian students,* Closing the Gap Clearinghouse, Australian Institute of Health and Welfare & Australian Institute of Family Studies.

(NAPLAN) revealed that 25% of remote Indigenous Year 5 students were at or above the national minimum standard for reading, compared to 91% of non-Indigenous students.[202]

As it would be a challenge for the Government to translate its content into the 48 surviving Indigenous Australian languages,[203] English literacy – along with digital skills and internet access – is one of the keys to digital government for remote Indigenous communities.

Rigid registration processes on digital government platforms

Providing an address is a requirement when registering for a digital government account or service. However, some remote Indigenous residents do not have a street address and, instead, regard themselves as residents of a community.[204] A person in a remote Indigenous community may also refer to their place of residence as 'the blue house', for example.[205] Furthermore, some people in remote Indigenous communities do not know their exact birthdate and may not possess the requisite forms of ID to verify themselves online (e.g. a passport or licence).[206]

Security questions on digital government platforms can also be a source of confusion for remote Indigenous communities. One common method to verify a consumer's identity is to ask for their mother's maiden name. In many cases, however, an entire remote Indigenous community may have the same mother's maiden name or kinship name.[207] Evidently, an Anglo-centric approach to designing digital government platforms may not produce the best security or user-friendliness outcomes for remote Indigenous communities.

As soon as a consumer's personal details are rejected by a digital government system, they are effectively denied the opportunity to apply for critical welfare support or a health service. Their exclusion from digital government can lead to further deterioration of their financial and health circumstances.

Unaffordable internet

In the remote Indigenous communities where there is internet coverage, residents generally have no other option but to pay a 'poverty premium' for a Telstra service.[208] This is a disincentive to engage with digital government, when the same transaction or enquiry could be performed at a government shopfront without expensive mobile data costs.

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[202] Australian Curriculum, Assessment and Reporting Authority (ACARA) 2016, National Assessment Program Literacy and Numeracy (NAPLAN) National Report for 2016, viewed 13 July 2017, <http://www.nap.edu.au/docs/default-source/default-document-library/2016-naplan-national-report.pdf>.

[203] Australian Bureau of Statistics (ABS) 2011, *1267.0 - Australian Standard Classification of Languages (ASCL), 2011,* viewed on 6 June 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/1267.0main+features82011>.

[204] Thomas, J. 2017, personal communications 2 June.

[205] Thomas, J. 2017, personal communications 2 June.

[206] Broadband for the Bush Alliance 2017, *Indigenous Focus Day*, Fremantle, personal communications 21 June.

[207] Thomas, J. 2017, personal communications 2 June.

[208] Thomas, J. 2017, personal communications 2 June.

Another 'poverty premium' arises from the higher use of prepaid mobile services in remote Indigenous communities,[209] which means paying higher per-unit data costs compared to post-paid plans.

Lack of support networks

In many remote Indigenous communities, a common complaint is that there is simply 'no one to help' with digital literacy and government issues.[210] This leaves many consumers with no choice but to seek help from 'trusted' community members such as shopkeepers, police officers and teachers. [211] However, it may be inappropriate to approach some of these community members due to conflicts of interest or privacy risks.

Peer-influenced digital choice

An analysis of the barriers to digital government should not overlook the groups of consumers who have access to the internet, but decide against using it. This 'digital choice' arises from a consumer's positive or negative attitudes towards technology which is influenced by their cultural and social context.[212] Peer-influence can have a strong effect on a consumer's digital choice, as people are more likely to adopt technology if they know others who are doing so.[213] Some remote Indigenous residents were unaware that satellite internet was an option because no one else in the community had chosen to subscribe.[214]

Complicated billing systems and communicating with retailers

Within remote Indigenous communities, some residents choose not to use the internet because of difficulties with billing and interacting with retailers. [215] These difficulties are tied to systemic challenges such as language barriers and inadequate infrastructure such as a home phone which can provide another useful avenue for support and dealing with service providers.[216]

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[209] Broadband for the Bush Alliance 2017, *Letter to Michael Gunner, Northern Territory Minister for Aboriginal Affairs,* 10 July (unpublished), p. 4.

[210] Rennie, E. 2017, personal communications 2 June.

[211] Rennie, E. 2017, personal communications 2 June.

[212] Rennie, E., Hogan, E., Gregory, R., Crouch, A., Wright, A. & Thomas, J. 2016, *Internet on the Outstation: The Digital Divide and Remote Aboriginal Communities,* Institute of Network Cultures, Amsterdam, p. 24.

[213] Hartley, J. & Potts, J. 2014, *Cultural Science: A Natural History of Stories, Demes, Knowledge and Innovation,* Bloomsbury Publishing, London, cited in Rennie, E., Hogan, E., Gregory, R., Crouch, A., Wright, A. & Thomas, J. 2016, *Internet on the Outstation: The Digital Divide and Remote Aboriginal Communities,* Institute of Network Cultures, Amsterdam, p. 24.

[214] Rennie, E., Hogan, E., Gregory, R., Crouch, A., Wright, A. & Thomas, J. 2016, *Internet on the Outstation: The Digital Divide and Remote Aboriginal Communities,* Institute of Network Cultures, Amsterdam, p. 24.

[215] Rennie, E., Hogan, E., Gregory, R., Crouch, A., Wright, A. & Thomas, J. 2016, *Internet on the Outstation: The Digital Divide and Remote Aboriginal Communities,* Institute of Network Cultures, Amsterdam, p. 24.

[216] Rennie, E., Hogan, E., Gregory, R., Crouch, A., Wright, A. & Thomas, J. 2016, *Internet on the Outstation: The Digital Divide and Remote Aboriginal Communities,* Institute of Network Cultures, Amsterdam, p. 24.

Recommendations

Provide internet access in remote Indigenous communities

Centrelink internet kiosks (where a digital device is provided) and public wifi can be lifelines for remote Indigenous communities who have no other means of connecting with the outside world. Hitnet is currently working with remote Indigenous communities to install internet kiosks. The risk of identity theft from using shared internet facilities is highly unlikely, due to the 'closed' nature of remote Indigenous communities.[217]

Unmetered government websites and apps

With some telecommunications providers offering unlimited data-free access to social media and music streaming,[218] the technology exists to unmeter digital access to critical government services, such as Centrelink and Medicare. Remote Indigenous communities are heavily reliant on social security and government health services, [219] which could soon be inaccessible with the Government's digital transformation.

As the Government's record-keeping and application processes are shifted online, there is a growing demand within remote Indigenous communities for a cost-neutral way to engage with government websites and apps.

Add audio information to digital government platforms

Adding audio information to digital government platforms may lower the literacy barrier, given that listening comprehension is generally higher than written comprehension in remote Indigenous communities.[220] However, as audio information will lead to higher data consumption, this should be implemented where there is sufficient internet access.

Co-design digital government platforms with remote Indigenous communities

Registration processes on digital government platforms which demand addresses and other identifiers demonstrate the need for consultation and user-testing with remote Indigenous residents, which will ensure that they can be identified in a culturally-appropriate manner.

Accepting a statutory declaration on a person's identity which is signed by a trusted community representative (e.g. a police officer, teacher or elder) may be a short-term solution to verifying consumers' identities in remote Indigenous communities.[221]

Explain why personal questions are being asked on digital government platforms

When registering for a digital government account, some questions – such as 'What is your mother's maiden name?' – can cause confusion and, at worst, be perceived as culturally-

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[217] Rennie, E. 2017, personal communications 2 June.
[218] Optus 2017, *Music Streaming,* viewed 5 July 2017, <http://www.optus.com.au/shop/entertainment/music/music-streaming>.
[219] Rennie, E. 2017, personal communications 2 June.
[220] Broadband for the Bush Alliance 2017, *Indigenous Focus Day*, Fremantle, personal communications 21 June.
[221] Broadband for the Bush Alliance 2017, *Indigenous Focus Day*, Fremantle, personal communications 21 June.

inappropriate. A small intuitive icon (e.g. ⓘ) could be placed next to a question on a digital government form, which links to an explanation on why the question is being asked ('Why am I being asked this?').

Provide opportunities for digital education

Digital literacy rates remain low in remote Indigenous communities,[222] highlighting an urgent need for practical digital training and a greater awareness of the benefits that digital technology can bring to geographically-isolated communities. Given the lack of internet or congested and unreliable internet connections in remote Indigenous communities, course material should be replicated offline. These digital education opportunities could be facilitated by opening up school computer rooms to adults in the community.[223]

Retain frontline government staff

In remote Indigenous Australia, it is not uncommon for residents to approach frontline council staff for digital assistance.[224] Despite the federal government's 'digital first' strategy, certain matters can be more efficiently handled with face-to-face support, particularly where the consumer is not digitally or English-literate.

As government representatives, council staff are in a better position to provide assistance on digital government issues than the many shopkeepers in remote Indigenous communities who act as intermediaries between residents and technology.[225]

Introduce community mentors

Community mentors can be established as a trusted point of contact for remote Indigenous consumers who have no one else to turn to when they need help with managing their digital government accounts. Within remote Indigenous communities, there is a strong preference for training mentors internally so that they are available year-round and they have an existing connection with the community.[226] Training mentors internally also provides employment for remote Indigenous communities.[227]

There can also be benefits to sourcing mentors externally, who can introduce a wealth of digital knowledge from the outside world into a closed-off remote Indigenous community. All mentors should develop close relationships with the community and have a sound understanding of the unique barriers which prevent remote Indigenous communities from engaging with digital government. However, this report acknowledges that it may be

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[222] ARC Centre of Excellence for Creative Industries & Innovation, Centre for Appropriate Technology & Central Land Council 2011, *Home Internet for Remote Indigenous Communities,* Australian Communications Consumer Action Network (ACCAN), Sydney.

[223] Rennie, E. 2017, personal communications 2 June.

[224] Rennie, E. 2017, personal communications 2 June.

[225] Rennie, E. 2017, personal communications 2 June.

[226] Broadband for the Bush Alliance 2017, *Indigenous Focus Day*, Fremantle, personal communications 21 June.

[227] Broadband for the Bush Alliance 2017, *Letter to Michael Gunner, Northern Territory Minister for Aboriginal Affairs,* 10 July (unpublished), p. 2.

difficult and expensive to find mentors who are willing to work in and travel to remote Indigenous communities.

Having access to mentors will reduce the need amongst remote Indigenous communities to seek digital assistance from inappropriate third-parties, such as shopkeepers. Given the significant role of peer-influences in the digital choices of remote Indigenous communities,[228] community mentors can also help raise the profile of digital government services.

Increase awareness of digital government services

Increasing community knowledge of the wide range of digital government services requires a sustained public education campaign. Small steps can be taken, such as putting up a poster about a digital government service at a community health clinic. These resources should also be translated into local Indigenous languages and, where this is not possible, plain English and visual information should be used.

Homeless people

Context

The Australian Bureau of Statistics (ABS) defines homelessness as a living condition where a person's dwelling is inadequate, has no tenure or has a short and inextensible tenure.[229] The ABS's definition of homelessness extends to circumstances where a person has no access to space for 'social relations'.[230] Over 105 000 people are homeless in Australia, equating to 0.5% of the nation's population.[231]

Why are homeless people a vulnerable consumer group?

Homeless people are a vulnerable consumer group as they experience social disconnectedness, disadvantage and marginality.[232] Homelessness can be caused by a

[228] Rennie, E., Hogan, E., Gregory, R., Crouch, A., Wright, A. & Thomas, J. 2016, *Internet on the Outstation: The Digital Divide and Remote Aboriginal Communities,* Institute of Network Cultures, Amsterdam, p. 24.
[229] Australian Bureau of Statistics (ABS) 2012, *Information Paper – A Statistical Definition of Homelessness*, viewed 6 July 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/4922.0Main%20Features22012?opendocument&tabname=Summary&prodno=4922.0&issue=2012&num=&view=>.
[230] Australian Bureau of Statistics (ABS) 2012, *Information Paper – A Statistical Definition of Homelessness*, viewed 6 July 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/4922.0Main%20Features22012?opendocument&tabname=Summary&prodno=4922.0&issue=2012&num=&view=>.
[231] Australian Bureau of Statistics (ABS) 2012, *2049.0 - Census of Population and Housing: Estimating homelessness, 2011,* viewed 13 July 2017, <http://abs.gov.au/ausstats/abs@.nsf/Latestproducts/2049.0Main%20Features22011>.
[232] Forest, R. 1999, *The new landscape of precariousness,* Policy Press, Bristol, cited in Humphry, J. 2014, *Homeless and Connected: Mobile phones and the Internet in the lives of homeless Australians,* University of Sydney & Australian Communications Consumer Action Network (ACCAN), Sydney, p. 8.

variety of factors which are beyond an individual's control, including illness, disaster, being a victim of violence and a shortage of affordable rental housing.[233]

Barriers

Affordability

For homeless people, the most common barrier to telecommunications connectivity arises from a shortage of funds on their prepaid account.[234] Homeless people may also be on a post-paid phone plan, where an inability to keep up with bills can lead to service restrictions or the total disconnection of the consumer's phone service. [235] With a disconnected or restricted phone service, homeless people also lose the ability to engage with digital government at a time when they may be in greatest need of government support.

Lack of electricity access

Mobile phones are the primary means of staying in contact for homeless people, with a higher rate of mobile phone ownership (95%) than the general population (92%).[236] However, the unavailability of a phone charging outlets effectively removes the ability of homeless people to contact support services and find critical information if their phone is out of battery and they cannot locate a power source.

Requirement for fixed address when accessing digital government

With few exceptions, registering for a digital government account or service requires users to provide a fixed address. In the pre-digital era, fixed addresses served as the primary means of communication when dealing with government – paperwork and documentation were posted to a consumer's fixed address. However, it should be questioned whether the requirement for a fixed address should stand in an era where information can be delivered digitally and consumers can be identified in other ways.

Theft of digital devices

There is anecdotal evidence to show that the theft of digital devices from homeless people is a common occurrence.[237]

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[233] Forest, R. 1999, *The new landscape of precariousness,* Policy Press, Bristol, cited in Humphry, J. 2014, *Homeless and Connected: Mobile phones and the Internet in the lives of homeless Australians,* University of Sydney & Australian Communications Consumer Action Network (ACCAN), Sydney, p. 9.

[234] Humphry, J. 2014, *Homeless and Connected: Mobile phones and the Internet in the lives of homeless Australians,* University of Sydney & Australian Communications Consumer Action Network (ACCAN), Sydney, p. 34.

[235] Humphry, J. 2014, *Homeless and Connected: Mobile phones and the Internet in the lives of homeless Australians,* University of Sydney & Australian Communications Consumer Action Network (ACCAN), Sydney, p. 34.

[236] Humphry, J. 2014, *Homeless and Connected: Mobile phones and the Internet in the lives of homeless Australians,* University of Sydney & Australian Communications Consumer Action Network (ACCAN), Sydney, p. 20.

[237] Bell, A. 2015, 'Homeless rely on smartphones to survive but finding somewhere to re-charge is a challenge', *Daily Telegraph,* 4 May, viewed 6 July 2017, <http://www.dailytelegraph.com.au/newslocal/news/homeless-rely-on-smartphones-to-survive-but-finding-somewhere-to-recharge-is-a-challenge/news-story/3cdbac970d1d78250a0c9a25b418d166>.

Recommendations

Unmetered government websites and apps

With some telecommunications providers offering unlimited access to social media and music streaming,[238] the technology exists to introduce unmetered access to digital government. Special plans can be introduced to cater for the unique needs of homeless people; these plans can include data-free access to critical government services, such as Centrelink, Medicare and JobActive. Further economic analysis will help determine the cost of unmetered access to digital government, and whether the Government will compensate telecommunications companies for these costs.

As most consumers interact with government out of necessity, it is unlikely that un-metering access to digital government will lead to abuses of 'fair use' provisions which are found in most telecommunications contracts. Compared to entertainment-streaming services such as Spotify, government websites do not represent a significant burden on internet bandwidth.

Free public Wi-Fi hotspots

The challenge of telecommunications affordability can be overcome by the increasing number of free public Wi-Fi hotspots, which enable homeless people and low-income earners to connect with others without the burden of data charges. The growing availability of free Wi-Fi at community facilities such as libraries comes hand in hand with an increased ability for cost-conscious consumers to have equal access to information and telecommunications services.

Offering free Wi-Fi at train stations, for example, can deliver a significant benefit to homeless people and the broader community. With many homeless people seeking shelter at train stations,[239] free Wi-Fi provides a chance to get in touch with support networks as well as find essential information on healthcare and social security.

With the shift to providing transport information and ticketing online, homeless people are not the only ones who benefit from free Wi-Fi at train stations; passengers who wish to check real-time transport information on their mobile devices and overseas travellers who don't have an Australian SIM card are two groups of consumers who can also take advantage of free Wi-Fi at transport hubs.

Enable contact with digital government via free apps

As public Wi-Fi becomes increasingly ubiquitous, the introduction of cost-free channels to interact with digital government agencies can boost consumer engagement and reduce the burden of hefty calling charges that can arise from being placed on hold or while waiting in a

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[238] Optus 2017, *Music Streaming,* viewed 5 July 2017, <http://www.optus.com.au/shop/entertainment/music/music-streaming>.

[239] Donnelly, B. 2017, *Meet the Flinders Street rough sleepers,* The Age, 19 January, viewed 7 July 2017, <http://www.theage.com.au/victoria/meet-the-flinders-street-station-rough-sleepers-20170118-gtu3s8.html>.

call centre queue. These channels include Facebook Messenger, WhatsApp and Skype which can be installed on mobile devices and can enable consumers to call and message government agencies at no cost when they are connected to free Wi-Fi.

Passengers on the Singapore metro (MRT) can report service issues to the transport authority by using a free messaging and calling app, WhatsApp. Free Wi-Fi is also provided at an increasing number of metro stations, enabling all passengers to access the internet and mobile apps without data charges. (Picture: Jesse Chen)

Retain non-digital points of contact

Face-to-face assistance in government shopfronts must be retained as a method of engaging with government so that homeless consumers who do not have a digital device, electricity access or mobile phone connection still have the ability to access critical government services and information. Given the anecdotal evidence of device theft from homeless people,[240] government shopfronts are a crucial lifeline for these consumers.

Find alternative ways to identify homeless people

The requirement for a fixed address when registering for an online account or service prevents many homeless people from engaging with digital government when they are most in need of support. This, in effect, denies homeless people access to critical government support services.

To reduce the risk of further marginalising homeless people, digital government must be available to those who may not be able to provide a fixed address. This could occur in a domestic violence situation where a person has fled from their abusive partner and has fears over linking their digital government account to their previous address where the abusive partner lives.

Provide the option to pick up hard copy documents from the post office

Despite the increasing use of the internet to distribute information, some government documents are still delivered by post, such as the Centrelink Healthcare Card. An option to pick-up documents from a post office can be beneficial for homeless people who do not have a fixed address to which hard copy correspondence can be delivered.

[240] Bell, A. 2015, 'Homeless rely on smartphones to survive but finding somewhere to re-charge is a challenge', *Daily Telegraph,* 4 May, viewed 6 July 2017, <http://www.dailytelegraph.com.au/newslocal/news/homeless-rely-on-smartphones-to-survive-but-finding-somewhere-to-recharge-is-a-challenge/news-story/3cdbac970d1d78250a0c9a25b418d166>.

Provide phone charging outlets

Electricity access is a lifeline for homeless people, who rely on their mobile phones as the primary method of communication.[241] Providing wall power sockets and USB phone charging sockets in public spaces such as train stations can ensure that homeless people can access critical government services and reach out to support networks via their digital devices.

Small businesses

Context

The Australian Bureau of Statistics (ABS) defines small business as a business that employs less than 20 people.[242] Small businesses are a major contributor to the Australian economy, accounting for over 97% of businesses in Australia.[243]

There is a tendency for small businesses to be owned and operated independently.[244] The majority of small businesses are solely-run, with 60.7% of actively-trading businesses in Australia having no employees.[245] Owners or managers of small businesses generally have close control of operations, make principal decisions for the business and contribute most of the operating capital. [246]

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[241] Humphry, J. 2014, *Homeless and Connected: Mobile phones and the Internet in the lives of homeless Australians,* University of Sydney & Australian Communications Consumer Action Network (ACCAN), Sydney, p. 20.

[242] Australian Bureau of Statistics (ABS) 2002, *1321.0 - Small Business in Australia 2001,* viewed 6 July 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/mf/1321.0>, cited in Gilfallan, G. 2015, *Definitions and data sources for small business in Australia: a quick guide*, Research Paper Series 2015–16, Department of Parliamentary Services, viewed on 6 July 2017, <http://parlinfo.aph.gov.au/parlInfo/download/library/prspub/4228541/upload_binary/4228541.pdf;fileType=application/pdf>.

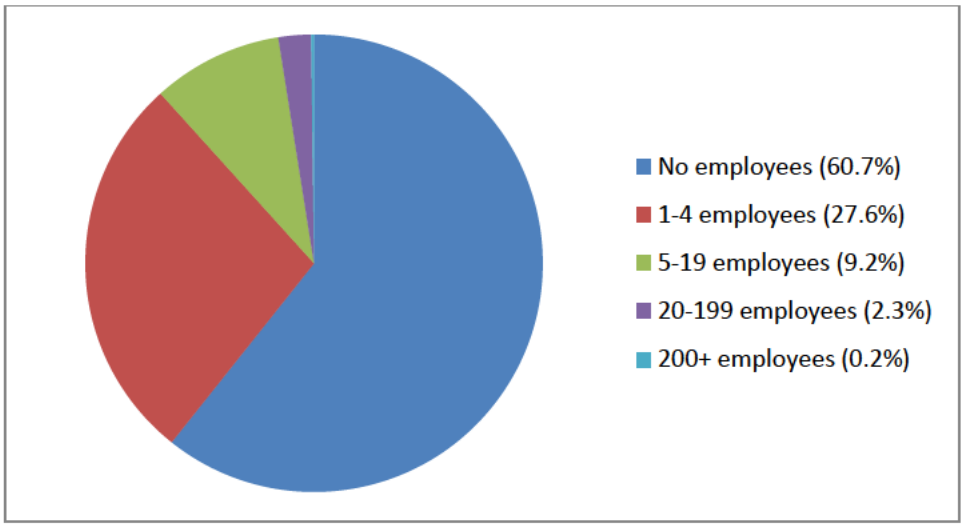
[243] Australian Treasury 2017, *Small Business Data Card,* viewed 6 July 2017, <http://www.treasury.gov.au/~/media/Treasury/Publications%20and%20Media/Publications/2012/sml%20bus%20data%20card/downloads/pdf/Small%20Business%20Data%20Card.ashx>.

[244] Gilfallan, G. 2015, *Definitions and data sources for small business in Australia: a quick guide*, Research Paper Series 2015–16, Department of Parliamentary Services, viewed 6 July 2017, <http://parlinfo.aph.gov.au/parlInfo/download/library/prspub/4228541/upload_binary/4228541.pdf;fileType=application/pdf>.

[245] Australian Bureau of Statistics (ABS) 2017, *8165.0 - Counts of Australian Businesses, including Entries and Exits, Jun 2012 to Jun 2016,* viewed 6 July 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/mf/8165.0>.

[246] Gilfallan, G. 2015, *Definitions and data sources for small business in Australia: a quick guide*, Research Paper Series 2015–16, Department of Parliamentary Services, viewed 6 July 2017, <http://parlinfo.aph.gov.au/parlInfo/download/library/prspub/4228541/upload_binary/4228541.pdf;fileType=application/pdf>.

Australian small businesses by size, June 2016[247]



Principal decision-making may involve engagement with digital government, which can occur when:

- Applying for an Australian Business Number (ABN) when setting up a business
- Submitting a Business Activity Statement (BAS) to the Australian Tax Office (ATO)
- Registering a business name on the Australian Securities and Investments Commission (ASIC)

In 2016, 93% of small and medium enterprises were connected to the internet,[248] paving the way to digital government. The Government must ensure that small businesses are given the necessary support to navigate and engage with its online channels as services and information move online. By bringing more small businesses on board with digital government, the public sector can benefit from real-time statistics and data which accurately reflect the small business sector. More inclusive data sets can improve the quality of policy development on digital inclusion and small business issues. The public sector also has the advantage of reducing service delivery costs as a result of digital government.[249]

Barriers

Lack of resources to change business practices

One key barrier to small business engagement with digital government is the lack of familiarity with its online platforms and processes.[250] Due to their 'lean' management

[247] Australian Bureau of Statistics (ABS) 2017, *8165.0 - Counts of Australian Businesses, including Entries and Exits, Jun 2012 to Jun 2016,* viewed on 6 July 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/mf/8165.0>.
[248] Sensis 2016, *Sensis e-Business Report 2016,* viewed 13 July 2017, <https://www.sensis.com.au/asset/PDFdirectory/Sensis_eBusiness_Report_2016.pdf>.
[249] Deloitte Access Economics 2015, *Digital Government Transformation,* Deloitte Access Economics, Sydney, for Adobe Systems Pty Ltd, Sydney, p. 24.
[250] Council of Small Business Australia (COSBOA) 2017, personal communications 7 July.

structure, [251] many small businesses do not have the support networks, time and money to keep up with the new digital ways of completing transactions and finding information.[252] Some small businesses may also need to re-train staff or recruit new staff to act as intermediaries between the business and digital government.

There is a disconnect between the ambitious digital-first strategies of federal and state government and the small businesses that receive little or no learning support to keep up with the changes brought in by digital government. In contrast, white-collar professionals in larger businesses have daily opportunities to practice and develop their ICT skills.

Sacrificing income-generating work hours to learn digital skills

There is also reluctance among some small business owners and employees to spend time away from their income-generating activity in order to engage in digital training.[253] Sole-trading manual labourers, for example, spend the majority of their work hours on construction sites, away from an environment where they can practice their digital skills.

Inconvenience of engaging with government digitally

Anecdotal evidence points to circumstances where it is more convenient and effective to walk into a shopfront to finalise a government matter or transaction. For example, if a sole-trading labourer is working on a construction site near a government shopfront, it can be more practical to meet face-to-face with a customer service representative, rather than having to carry a laptop around and find a secure location to sit down in order to complete a digital transaction.[254] The Government's strategy to shift more services online may cater well for office-based workers, but it must ensure that blue-collar workers are not disadvantaged as a result of digital government.

Complex government matters

Digital government can make it easier to complete common transactions, such as registering for an Australian Business Number (ABN). For more complex business matters, however, it can be more effective to speak to a knowledgeable government representative who can assist and answer questions immediately. The option to speak to a 'real person' for assistance with more complex government matters can go a long way in reducing frustration for small businesses.[255]

[251] Council of Small Business Australia (COSBOA) 2017, personal communications 7 July.
[252] Lindsay, K. 2017, personal communications 3 May.
[253] Lindsay, K. 2017, personal communications 3 May.
[254] Lindsay, K. 2017, personal communications 3 May.
[255] Lindsay, K. 2017, personal communications 3 May.

Rigidity of digital government platforms

While a minority of small business owners own more than one business,[256] digital government platforms generally require users to fill in separate forms for each business, resulting in wasted time.[257]

Rigid login authentication processes

While small businesses can be managed or operated by more than a single individual, digital government platforms only allow for one mobile phone number to be linked as a login authentication method.[258] This is a source of frustration for small businesses that are managed or operated by multiple business partners.

Consider the example of a couple who jointly manage a small business and take turns to complete government errands. If one person's phone number can be registered as a login authentication method, the other member of the couple is prevented from engaging with digital government for the business unless they have possession of the registered phone. Login authentication processes need to be carefully thought through so that small businesses are not locked out of participating in digital government.

Recommendations

Establish an online portal with learning resources for small businesses

An integrated resource platform with small business-specific guidance on digital government is crucial during the digital transition period. As at July 2017, resources for small businesses are scattered across various federal and state government websites, such as the Department of Industry, Innovation and Science's 'Support for Small Business' page, the Office of Australian Information Commissioner's 'Business resources' and Business Victoria. Unlike with personal government interactions, there is no one-stop shop like MyGov for small businesses and no online resources which specifically assist small businesses with the transition to digital government.

The success of the Government's digital-first strategy is only possible if it embraces the small business sector – which accounts for at least 97% of businesses in Australia.[259] As the Government increases its cost savings by delivering services and information digitally, measures must be taken to ensure that small businesses are not disadvantaged with

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[256] Australian Bureau of Statistics (ABS) 2005, *8127.0 - Characteristics of Small Business, Australia (Reissue), 2004,* viewed 13 July 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/ProductsbyReleaseDate/54B9D7D5493E67B5CA25749C0011424E?OpenDocument>.

[257] Lindsay, K. 2017, personal communications 3 May.

[258] Lindsay, K. 2017, personal communications 3 May.

[259] Australian Treasury 2017, *Small Business Data Card,* viewed 6 July 2017, <http://www.treasury.gov.au/~/media/Treasury/Publications%20and%20Media/Publications/2012/sml%20bus%20data%20card/downloads/pdf/Small%20Business%20Data%20Card.ashx>.

additional training costs to keep up with the digital transformation. Some of these measures include workshops and online resources to help small businesses adapt to the changes to business practices as a result of the shift to digital government.

Provide telephone support for digital government

Despite the Government's preference for all Australians to interact with it digitally, telephone support must be provided alongside digital government. With a lack of learning resources on digital government, small businesses that are unfamiliar with online government processes need to be 'shepherded' through.[260]

Recognising that many small business owners are occupied with income-generating activity during the day, telephone support must be available beyond the standard 9-5 work hours. The demand for a digital government helpdesk will only increase as more small businesses around Australia engage with digital government and issues arise which cannot be resolved on an online government website or app.

Retain government shopfronts

Small businesses with more complex matters and urgent enquiries that require immediate support will benefit from the availability of government shopfronts. Anecdotal evidence shows that it can be more practical and convenient to resolve a government issue by walking into a shopfront than engaging with digital government, particularly for manual labourers.[261]

'Tell us once' approach

Owners of multiple small businesses can benefit if all digital government platforms adopted the 'tell us once' approach. This is where the user is given the option to consent to the digital government platform's retention of their personal details, contact information and notification preferences when they undertake their first transaction or business registration.

When users fill in further forms for the same business or other businesses that they own, they will not need to re-submit every piece of information and re-answer the same questions – provided that the user is logged into the same account. The simplification of digital transaction processes leads to time and cost savings for small businesses, as well as increased engagement in digital government.

Allow multiple phone numbers to be registered as a login authentication method

In the special case of small businesses, digital government platforms should permit the registration of more than one phone number as a login authentication method. This will ensure that digital government services are accessible to small businesses that are managed by more than one individual.

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[260] Council of Small Business Australia (COSBOA) 2017, personal communications 7 July.
[261] Lindsay, K. 2017, personal communications 3 May.

Conclusion

Digital government will continue to change the way that consumers access information, conduct transactions and interact with government services. While digital government substantially reduces the cost of service and information delivery for the public sector, one question remains unanswered: how do Australia's most vulnerable consumers benefit?

The recommendations in this report aim to guide the development of digital government platforms so that vulnerable consumer groups can also benefit from the digitisation of information and services. While this report focusses on government, many of the recommendations can also be applied to the private sector to increase the accessibility of their digital platforms.

By creating digital platforms that embrace *all* consumers, government agencies and private service providers are empowered with the ability to gather broader and more inclusive data on consumer needs and preferences. In the public sector, higher quality real-time data can translate into better policy and services that satisfy the needs of all consumers, particularly for the vulnerable consumer groups who are most reliant on government support.

The first step, however, is equipping vulnerable consumer groups with the tools and skills to engage with digital government. Across all eight vulnerable consumer groups, the following recommendations are applicable:

Key recommendations for all vulnerable consumer groups

Provide learning resources

Free or subsidised digital literacy resources are vital to ensure that vulnerable Australians are given the chance to keep up with the Government's increasing expectation of digital contact with consumers. These resources are particularly important for consumers who have not had opportunities for digital education as part of their formal education and professional training.

Engaging with digital government platforms and the Government's social media channels should be included in any 'basic skills' digital literacy course, particularly as more government services and the most up-to-date information from government is 'digital-by-default'.

Co-design and test digital government with vulnerable consumer groups

Ongoing collaboration with vulnerable consumer groups throughout the design and evaluation of digital government platforms ensures that digital government is inclusive of all Australians. Co-design should begin in the early development stage of a digital government platform as retrofitting community accessibility features after the platform is launched can cost more and cause disruption to consumers.

By broadening the scope of community feedback, co-design results in improved digital government platforms which maintain access to critical government services for those who

need it most, while carefully considering the unique socioeconomic, health, geographical, technological and education barriers in vulnerable consumer groups.

Apply intuitive design principles

'Getting lost' on digital government platforms is a common experience for consumers who are not familiar with online interfaces. Simplifying the structure of government websites and using clear headings makes it easier for *all* consumers to find critical information and access digital government services.

The introduction of a 'breadcrumb trail' (a horizontal line under a website masthead which displays the hierarchy of the current page in relation to the website's structure) on all digital government platforms, for example, can make it easier for consumers to find 'where they are'. This can make the task of navigating digital government more logical and intuitive for all consumers.

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Home page > Section page > Subsection page
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Example of breadcrumb trail

Where possible universal symbols should also be used so that consumers with lower English language proficiency can find their way around digital government platforms. For example, a small intuitive icon (e.g. ⓘ) could be placed next to a question on a digital government form, which links to an explanation on why the question is being asked ('Why am I being asked this?').

Retain non-digital channels

Digital government platforms should complement existing channels of service and information delivery. This is particularly important for vulnerable consumers who do not have the financial capacity, digital devices or skills to engage with government digitally. Interviews across the eight vulnerable consumer groups also found a preference for 'human engagement' for more complex government enquiries and transactions via a shopfront or over the phone.

Use plain English

While plain English is vital for consumers with lower English proficiency, all consumers in Australia – vulnerable or not – can benefit from information that is clear and easy to understand. A focus group conducted for this research project found that consumers from lower-socioeconomic backgrounds are more engaged with digital platforms that use conversational English that 'speaks' to the consumer rather than dense, legalistic language which can cause confusion among consumers with lower English proficiency.[262]

[262] Infoxchange 2017, personal communications 31 May.

Unmetered digital government platforms

Un-metering partly addresses the key barrier of affordability, which currently prevents low-income and remote consumers from engaging with digital government. Implementing this recommendation will offer some relief for Australia's most disadvantaged consumers by enabling them to find and interact with critical government support services without the 'access charge' which arises from data consumption. Un-metering digital government brings it in line with the Government's non-digital channels (e.g. shopfronts and free call or flat-fee phone numbers) which have a minimal 'access charge'.

As a point of reference for government agencies and service providers, this report is intended to be a living document that can be updated as new barriers arise with technological developments and as existing barriers are resolved.

Areas for further exploration

Homeless youth

Youth (people aged 12 to 24 years old) continue to be over-represented in Australia's homeless population. Government support services such as social housing, health and welfare are critical to helping relieve homelessness. As a younger cohort, homeless youth may face unique barriers to digital government, but they may also have generational advantages; the Digital Inclusion Index suggests that younger Australians have a higher rate of digital inclusion compared to their older counterparts.[263]

Security of digital government platforms

As the digital sharing of consumers' personal and biometric details becomes an unavoidable part of government interactions, consumers need to be assured that their personal and business information is safe from unauthorised third-party access. A technical analysis of digital government's capacity to store and safeguard consumer data is timely in light of the Federal Government's ambitious adoption of cloud technology to deliver its digital services[264] and the heightened debate over data security on de-centralised cloud storage.

Biometric data

A detailed discussion on the ability of digital government to manage private data securely is pertinent in light of the Federal Government's move towards using biometric data to identify individuals. 'Biometrics' refers to a measurable physical characteristic or personal behavioural trait that is unique to an individual, such as fingerprints, facial structure, the iris or a person's voice.[265] Consumers need to be assured that the biometric information

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[263] Thomas, J., Barraket, J., Ewing, S., MacDonald, T., Mundell, M. & Tucker, J. 2016, Measuring Australia's Digital Divide: The Australian Digital Inclusion Index 2016, Swinburne University of Technology, Melbourne, p. 8.

[264] Digital Transformation Agency (DTA) 2017, cloud.gov.au, viewed 14 June 2017, <https://www.dta.gov.au/what-we-do/platforms/cloud/>.

[265] Department of Immigration and Border Protection 2017, *Biometrics programme,* viewed 14 June 2017, <https://www.border.gov.au/about/corporate/information/fact-sheets/biometrics-programme>.

collected about them is accurate and that the databases used to store biometric information are secure from unauthorised access.

Since 2015, the federal Department of Immigration and Border Protection has been working towards replacing paper-based incoming passenger cards with a digital system of biometric passenger recognition[266] as part of its 'Seamless Traveller' project.[267] In the same year, the *Migration Amendment (Strengthening Biometrics Integrity) Bill 2015* was passed by Federal Parliament. The Bill paved the way for amendments to the *Migration Act 1958* (Cth) which include broadening the discretionary powers of the Minister and Department of Immigration and Border Protection to collect biometric information from people with disability and children[268]. These two groups contain vulnerable people who may not be capable of giving informed consent to the collection and storage of their biometric data.

The reliance on biometric technology as a recognition tool calls for answers on the procedures in place when one's biometric data is compromised by identity theft. Unlike passwords, an individual's biometric details are assigned at birth and cannot be reset. It remains to be seen whether the biometric identification of consumers will be adopted more widely across digital government.

State and local levels of government

While this report focuses on services and information platforms at the federal level, a deeper understanding of vulnerable consumers' engagement with digital government can be gained from analysing the digital transformation efforts of state, territory and local governments. For the purposes of developing better public policy, it would be beneficial to focus on a select number of government bodies, particularly in locations where there is a high proportion of vulnerable consumers.

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[266] Koziol, M. 2017, 'World first': Government moves to radically overhaul Australia's international airports', *Sydney Morning Herald,* 22 January, viewed 14 June 2017, <http://www.smh.com.au/federal-politics/political-news/world-first-government-moves-to-radically-overhaul-australias-international-airports-20170116-gtss5w.html>.

[267] Dutton, P. 2015, 'Benefits for consumers, travellers and industry from red tape cuts and new technology', media release, 12 May, Minister for Immigration and Border Protection, Canberra, viewed 14 June 2017, <http://www.minister.border.gov.au/peterdutton/2015/Pages/benefits-for-consumers-travellers-industry.aspx>.

[268] *Migration Act 1958* s 257A.

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