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The Benefit of Designing for Everyone

Report prepared by PwC Australia

Centre for
**Inclusive
Design**

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If products and services are designed with unique needs in mind, organisations have the potential to reach **four times** the number of intended consumers.

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Introduction

Our communities are diverse - we live in different places, with different circumstances.

We are old, young, live with disability and difficulties, and speak multiple languages; we are diverse individuals and communities. However, often goods and services are designed as if we are all the same. Design that embraces diversity maximises widespread access and usability, meaning more people are included. Both individuals and organisations benefit from making inclusive design a standard practice.

People that have difficulty accessing and/or using products and services (edge users) are often not included in the design process. For example, have you ever lived in a town where your bank doesn't have a physical branch? Or bought a microwave where the buttons are too difficult to press? How about not being able to attend university because the course does not offer an audio and/or visual component? These challenges are faced every day by people living in remote areas, the elderly, or people who have difficulty hearing and/or seeing, respectively.

Design flourishes best in environments that encourage learning, testing and iterating. This concept should be applied with consideration for user diversity; that is, young or old, physically or cognitively challenged, whether English is a first language or third; a person is *included* in design – where these cohorts' optimum use of the product or service is guaranteed, and not left to chance.

Designers, companies, and government all have a role to play, by designing, investing and legislating with difference in mind, so that a design process that is inclusive becomes standard practice. There is clear evidence of the financial, economic and social benefits associated with including those that are left out in design.

Designing with our differences in mind does not limit the commercial potential of a product or service, in fact, it increases it – to consumers, designers and organisations alike.

Inclusive design is a human centred or user centred design methodology that provides a framework to understand the needs, wants, and limitations of end users. It is a methodology that encourages and employs the principles highlighted above, to enhance the reach that companies and designers have on their respective markets. It encourages organisations to design products and services with input from edge users. This helps uncover additional efficiencies and potential that is often hidden when designing for the 'majority' takes precedent. Inclusive design is a powerful source of innovation and creativity that leads to multiple demonstrated benefits - when designing inclusively, organisations can create exceptional products and services, which are available and desirable.

The world is rapidly transforming.

Design can too.



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Key Findings

Every stakeholder wins when designing for individuals is standard practice. Inclusively designed products and services that have edge users in mind, can reach and benefit up to four times the size of the intended audience.

Across Australia there are people that are constantly unable to appropriately access products and services because of poor design, where there is inappropriate availability, usability, utility or desirability. At least five million Australians are vulnerable to exclusion based on the number of Australians living with disability and the elderly alone. They possess over \$40 billion in annual disposable income, a significant portion of which is untapped due to design exclusion. This does not take into account people that are excluded due to other circumstances (e.g. location, gender, ethnicity, financial status, etc.), nor does it take into account their respective friends and family, whose disposable income is almost double that.

1. Three industries formed the core of our research. Within these, we found that implementing inclusive design can lead to financial, economic and social benefits. Some of these include:

- an increase in higher education for excluded population groups, resulting in 228,000 additional tertiary qualifications gained, which in turn can increase employment and salaries by \$4.5 billion annually
- within the retail industry, increases of \$4 billion in 'household goods' and 'clothing, footwear and personal accessory sales' due to non-inclusively designed products
- reductions to the disadvantage experienced by people that are financially excluded. Over 4 per cent of Australians gaining financial inclusion as a result of inclusively designed and targeted financial services.

2. Inclusive design enables organisations to increase their revenue by growing the size of their target markets and reducing the need to make costly retrofits when products and services don't meet the needs of excluded population groups. In turn, organisations can improve their brand reputation and recognition.

3. Inclusive design should be used at the beginning of the design process because the cost to implement inclusive design increases the later it is introduced. Design that is not inclusive can lead to complaints, legal challenges, planning delays and costly retrofits as a product or service matures. Poor design can also negatively impact brand reputation. The relative cost of retrofitting a product or service to become inclusive will increase significantly over time and can reach up to 10,000 times the cost of introducing inclusive design earlier on.

3-4x a product or service's intended audience benefits from inclusive design

\$40b annual disposable income of Australians living with disability

228,000

additional tertiary (e.g. university and TAFE qualifications) qualifications could be earned as a result of inclusive design in higher education

\$4b in potential increased retail industry revenue from better designed products and services*

4.2% of financially excluded Australians gaining financial independence

*This is based on 'household goods' and 'clothing, footwear and personal accessories' industries only

1 The Ambition of Design for Tomorrow

The world is rapidly transforming. Our businesses, communities, and access to information and technology, are subject to both innovation and disruption. Businesses, organisations and governments need to be comfortable with this transformation - they need to be comfortable with change.

In the future, design will play a leading role in innovation and disruption. Design will be an important part of the market environment, and in the way we make choices and determine value - whether economic or social. Even so, today there are too few organisations that invest in inclusive design processes to increase commercial success, ensure maximum market reach and inspire innovation. In the future, design should be about legislating, innovating and developing the services we use and the objects we need to include the largest number of the community possible and have access to the suite of products and services that are available.

There are dramatic advances in the technologies that people use, the digital environments we play in, and the social and demographic variation that underpins our community and individual identity.

The capabilities that are available to designers and the design culture that organisations and communities live and breathe will most effectively impact the changing world where they keep up with these advances. The ambition for tomorrow is realisable when the transforming world is supported by design, not limited by it.

Consumers and organisations alike desire similar things - a positive consumer experience.

A consumer covets access and inclusion to products and services available to them (and sometimes not available to them); whilst organisations aspire for their products and services to reach the largest potential market. In practice, whole customer cohorts are left out, and organisations fail to encapsulate the entire, varied market in their respective design processes. A future where this alignment occurs, is possible.



Up until the 21st century, floppy disks were used for data storage, with capacity of less than three megabytes. Today, our personal smartphones store up to 256 gigabytes!

The factors of success that should drive this alignment, and the ambition for design tomorrow, include:

A consumer appreciates a well-designed product or service when it has:

- Availability - Do I know this exists? Do I know what it is?
- Usability - Can I effectively use it?
- Utility - Does it allow me to do something better or quicker?
- Desirability - Am I motivated to purchase it?

For a company or organisation, design centres around:

- Appropriateness - does this solve a consumer problem?
- Commercial potential - Will it be profitable?
- Technical viability - Are we efficient in manufacturing and developing it?
- Compatibility - Does it comply with guidelines and our product/service portfolio?

Encouragingly, there are a number of leading organisations that are embracing the advantages that come with delivering the majority of consumer products and services that provide availability, utility, usability and desirability.

There is work that could be done, by all organisations, today.



2 The Challenge in Designing for Today

Design decisions that are made every day will either include or exclude certain persons or communities. The design relationship between organisation and consumer can have conflicting decision points.

The 'traditional' design approach is the current gatekeeper of design - where design focuses on the majority of 'mainstream' consumers. In Australia and globally, there are converging trends that limit the effectiveness of designing for the 'mainstream'. There is no majority, and the 'one-size fits all' approach that dominates the traditional design ethos is no longer effective. Where traditional design persists, inclusion and access is not guaranteed for consumers, and market potential is not reached.

Our research explored three industries and identified each industry's current design challenge, areas of good inclusive design practice, and areas of opportunity for organisations and customers to benefit. These industries provide a snapshot of the influence that design has on all products and services, all consumer interactions, all organisations and government.

Our research focused on:



Education

Focusing on higher education



Retail

Focusing on domestic goods



Financial services

Focusing on minimum banking

Across these industries, there is evidence of edge users, or individuals and communities who miss out on being included, meaning they are not easily able to access or use products and services.

For example:

- **within the education sector**, Australians living with disability are considerably less likely to complete bachelor level qualification or above compared to those without a disability (17 per cent vs. 30 per cent)¹
- **within the retail products sector**, up to 20 per cent of Australians are unable to access and use goods appropriately²
- **within financial services**, almost 17 per cent of Australian adults are financially excluded,³ which is significantly higher than comparable developed nations such as the UK, Germany, Austria, France and Sweden (2-6 per cent).⁴

Our research has looked to identify and determine the necessary means by which Australia can act to fight this challenge, and reduce these gaps. There is clear evidence of the benefits from increasing the accessibility and inclusion of excluded population groups to products and services. These benefits come in the form of creating financial, economic, and social impact to consumers, organisations and the broader community. The next step for organisations, government, and communities alike is to identify these disadvantaged population groups, and solve the design challenge for them.

1. ABS. (2017). 4430.0 - Disability, Ageing and Carers, Australia: Summary of Findings, 2015.

2. Australian Human Rights Commission. (1997). The Overlooked Consumers - 20% of the Australian population with Disabilities and Older People.

3. Financial exclusion is defined as the "lack of access to mainstream financial products that are affordable and appropriate to a person's needs and enables them to fully participate in [their] society." (Financial Inclusion for NSW, 2017)

4. NSW Financial Inclusion Network. (2017). Financial Inclusion for NSW.

“ Solve for one, and extend to many.”

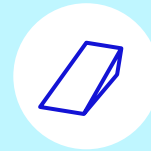
There are countless retail products that we all benefit from, despite being designed with edge users in mind. These include:⁵



Electric toothbrushes: first created for patients with limited motor skills but used by many people who don't have motor skill issues, including children.



Subtitles: created for people who are deaf or hard of hearing but used by people in noisy places, translation purposes, and to increase concentration. Interestingly, a UK study found 80 per cent of people using subtitles were not deaf or hard of hearing!



Dropped curbs on sidewalks and ramps: designed by wheelchair users⁶ but are also used by parents with strollers and travellers with suitcases.



Coles Quiet Hour: Coles supermarkets have introduced an autism spectrum-friendly low-sensory “Quiet Hour” experience in 173 of their stores where they reduce noise, lighting, and other in-store distractions. In addition, it also benefits anyone who wants peace and quiet while they shop!

With these examples in mind, there is enormous potential for inclusive design to boost innovation to create better products and services.

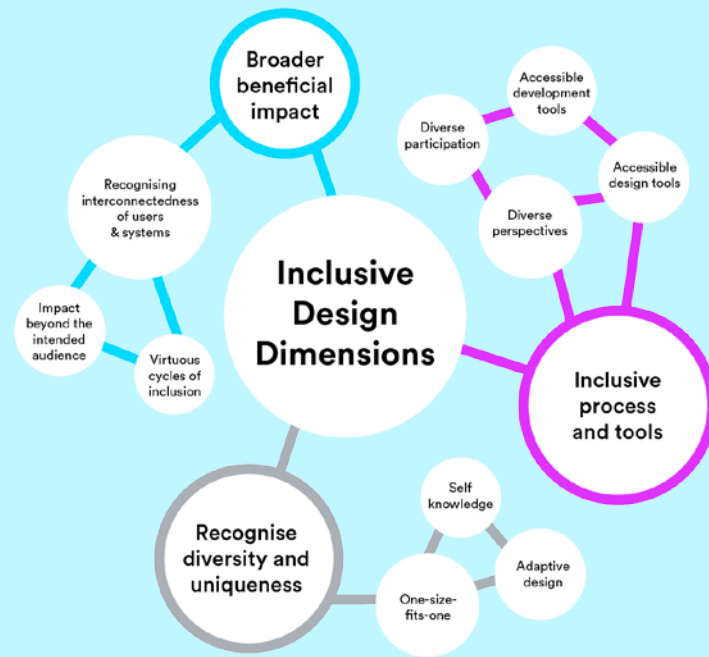
5. Eone. (2014). Everyday Inclusive Design: 8 Products that make Life a Little Easier. Available: <https://www.eone-time.com/everyday-inclusive-design-products/>; Coles. (2018). Quiet hour expands nationwide to help shoppers. Available: <https://www.coles.com.au/about-coles/news/2018/09/10/quiet-hour-expands-nationwide-to-help-shoppers>

6. 99% Invisible. (2018). Curb Cuts. Available: <https://99percentinvisible.org/episode/curb-cuts/>

3 Inclusive Design, a Part of the Solution

There are clear challenges that designers face today. This ultimately means that some of us will miss out on using products and services or participating fully in our communities. Positive change, within Australia and globally, requires a proactive design approach from organisational leaders, designers, and government. One tested approach is the inclusive design methodology, which is:

“Design that considers the full range of human diversity with respect to ability, language, culture, gender, age and other forms of human difference.”⁷



Source: Inclusive Design Research Centre, OCAD University

Inclusive design is a human centred or user centred design methodology that provides a framework to understand the needs, wants, and limitations of end users. The inclusive design methodology is about the design of mainstream products and services that are accessible to, and usable by, as many people as reasonably possible. It sparks innovation and creativity through designing with edge users in mind. By doing this, it benefits so many more people than those on the ‘edge.’

There are three dimensions to inclusive design:

- 1. Recognise diversity and uniqueness:** Inclusive design considers the rich diversity of each unique individual. Most people stray from the ‘norm’ at some point(s) of their needs and this means a one-size-fits-all approach doesn’t work well. Inclusive design does not mean we should be creating separate, specialised or segregated solutions as this is usually unsustainable. We need flexible and adaptable systems that can cater for the diversity of individuals and maintain the values of self-determination and self-knowledge.
- 2. Using inclusive processes and tools:** Inclusive design teams need to represent the diversity they are designing for, including individuals with lived experience of being on the ‘edge’ or an ‘extreme user’ that inclusive design strives to design for. This includes hiring inclusively to promote diverse participation and perspectives within organisational processes and the design of products and services.
- 3. Aiming for the broadest beneficial impact:** Inclusive designers need to be aware of the context and broader impact of any design and strive to effect a beneficial impact beyond the intended beneficiary of the design.

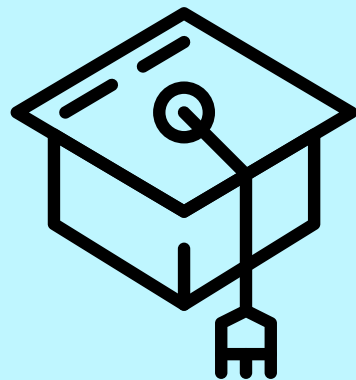
These dimensions are not linear. The inclusive design methodology promotes an iterative journey that provides businesses with the opportunity to continually work towards improved outcomes.

The challenge is not insurmountable. inclusive design offers an approach that involves all potential users in the design process, attempting to close this gap and benefit both purchasers of products and services, as well as benefit the organisations at the centre of this design. However it is important to note that inclusion and accessibility is not guaranteed; a shift, whether behavioural or cultural, needs to take place that supports the successful use of this methodology, with broader leadership and regulation, design principles and the ultimate goals of businesses and governments to support the communities in which they operate.

7. Inclusive Design Research Centre. What do we mean by Inclusive Design? Available: <https://idrc.ocadu.ca/resources/idrc-online/49-articles-and-papers/443-whatisinclusivedesign>

Examples of inclusive design in practice:

Education



Organisation: Bristol Community College

Bristol Community College made a conscious effort to present their courses and coursework to suit all students, regardless of each student's life experiences or abilities.

An example of this is when the students were given a final exam in a form that was aligned to their individual learning strengths and preferences, not focusing on any particular skill such as their ability to write, memorise, be creative or perform under pressure. Instead, students were given a variety of options for the exam, including an essay, poster board, video recording, prearranged phone call with the course convener, any combination of these options, or an unlisted option.

The feedback of this innovative approach to assessing students was positive and students were able to find their own unique ways of expressing what they learned.⁸

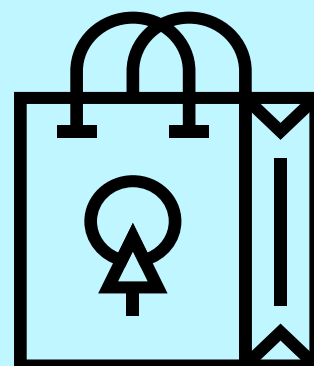
Organisation: OXO⁹

"OXO is dedicated to providing innovative consumer products that make everyday living easier. We study people—lefties and righties, male and female, young and old—interacting with products and we identify opportunities for meaningful improvement."

The conceptual idea behind OXO's first product came from Betsey Farber, who experienced difficulty and frustration in using the old-style metal peeler with her arthritic hands. This led to the invention of the "Swivel Peeler", with thick rubbery handles that were easy and comfortable to hold.¹⁰ Despite being designed with edge users in mind, the peeler became universally popular and benefited everyone, not just those with arthritis.

Since its inception, OXO has been producing ergonomically designed, transgenerational tools that can be used by anyone, using their 'question everything' process and attention to detail to create solutions for everyday tasks. OXO now has over 1,000 products in their range.

Retail



Financial services



Organisation: Barclays

Barclays partnered with Gemalto to redesign their credit cards and make it easier for people with visual impairment and elderly customers to use. This process required the designers to be receptive to feedback from customers and what they found most useful.

The new design included a range of highly visible cards that helped customers to better identify and read the details. It also pioneered tactile notches and highly contrasting text. The launch of these cards received extremely positive feedback from their customers.

Although this was designed with edge users in mind, other customers also enjoyed the features such as the black rather than silver raised numbers highlighting the value of inclusive design beyond those who require additional assistance. Since its launch, there were more than 2,000 customer requests for these high visibility cards in just a few years.¹¹

8. Burgstahler, S. Universal Design in Higher Education: Promising Practices.

9. OXO About Us. Available: <https://www.oxo.com/>

10. Wilson, M. (2018). The untold story of the vegetable peeler that changed the world. Available: <https://www.fastcompany.com/90239156/the-untold-story-of-the-vegetable-peeler-that-changed-the-world>

11. Barclays. Intelligent Partnerships. Available: <https://www.barclayscorporate.com/content/dam/corppublic/corporate/Documents/Accessibility/Intelligent-partnerships.pdf>



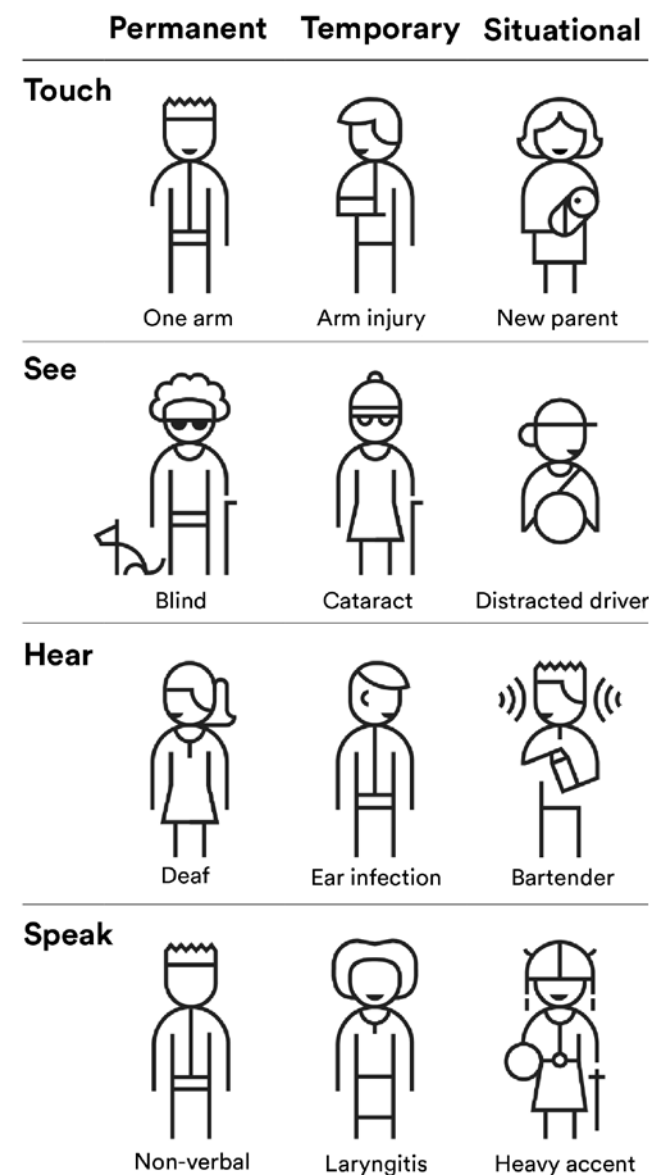
4 Understanding diversity

If products and services are designed with the ‘majority’ in mind, there are many people who would miss out on full utility, usability, choice and desirability. So, who is missing out?? The short answer is - **most people**.

What we find hard to visualise is that **any one of us** can experience difficulty at some point in their life, even if temporary or situational. Microsoft illustrates this concept using three personas to describe different types of disability and difficulty experienced by everyone:¹²

- 1. Permanent:** someone with an ability-limiting condition that is lasting and is unlikely to change (e.g. amputee, blind or deaf person)
- 2. Temporary:** someone with an ability-limiting condition that will resolve with time (e.g. broken arm, tonsillitis, or even severe sunburn)
- 3. Situational:** someone with an ability-limiting condition that is dependent on specific situations (e.g. at a music concert where it’s very loud and hard to hear anything, or a new parent with an infant).

With this perspective, it is evident that any one of the **25 million Australians** can be susceptible to fall in either the temporary or situational category, even if we don’t live with a permanent disability. Some examples are illustrated on the right.



Source: Inclusive Design Toolkit, Microsoft

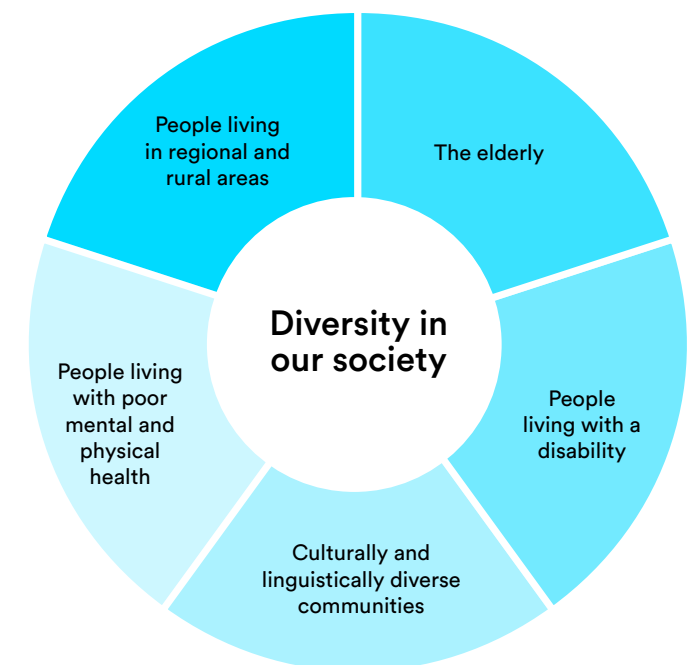
12. Microsoft. Inclusive Microsoft Design - Toolkit

Australians that are edge users experience more difficulty than others. This includes people living with disability, the elderly, people suffering from physical or mental health issues, people who are culturally and linguistically diverse, and many others. As people identify themselves in many ways and potentially in many of these categories, it makes it even harder to use traditionally designed products and services.

For us to comprehensively understand our diversity, we need to uncover what is happening with edge users which can often be hidden from the ‘majority.’ For example, captioning in media was originally designed for deaf and hard of hearing viewers decades ago. Today, captioning is readily available in many forms of visual media¹³ (e.g. TV, online streaming services and more) and is used by many people including those in noisy places, those watching international media in a language they don’t speak, to maintain concentration, far beyond those who are deaf or hard of hearing. In fact, a study by the Office of Communications in the UK found that the majority (80 per cent) of viewers using subtitles were not deaf or hard of hearing.¹⁴

Evidently, designing products and services with edge users in mind can push us to be more innovative which consequently create better user experiences of everyone.

This further demonstrates the need for design to include everyone.



In Australia there are...

18% living with disability
(4.6 million)

20% living with a long term health condition
(5.1 million)

28% living in regional & remote areas
(7.1 million)

14%
(3.6 million)

aged 65 & over

48%
(12.3 million)

born overseas or had one or both parents born overseas

Source: PwC Analysis

These circumstances are not always mutually exclusive. They can be permanent, temporary and/or situational, meaning it isn’t just edge users that experience risk of exclusion in their lives.

13. National Captioning Institute. History of Closed Captioning. Available: <http://www.ncicap.org/about-us/history-of-closed-captioning/>

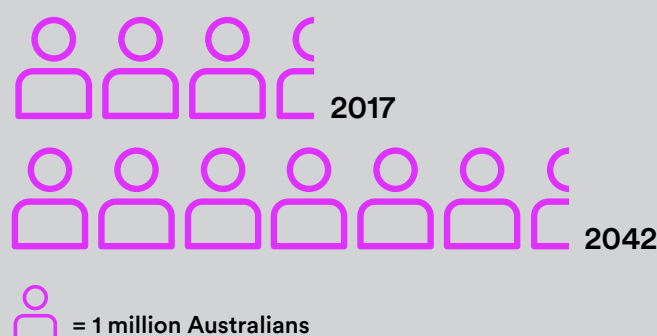
14. Ofcom. (2006). Television access services.

5 Consistent Change and Growth

Australia's demographics are evolving and our society is becoming increasingly diverse. There are important trends that will impact the way we look at design for products and services, and how we can cater for the increasing diversity in our country.

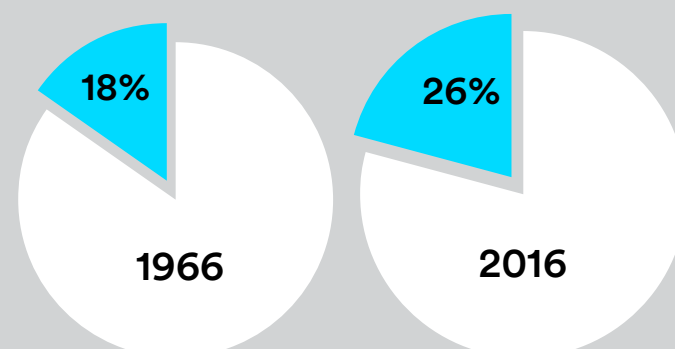
One of these trends is our ageing population. In Australia as in many places around the world, the population is ageing due to lowering fertility rates and increasing life expectancy. It is estimated the number of Australians aged 65 years and over will nearly double from 3.8 million in 2017, to approximately 6.5 million in 2042.¹⁵ As disability prevalence increases with age,¹⁶ there may be a larger number of Australians living with disability as our population ages.

Population aged 65+



In addition to our ageing population, we are becoming more diverse in many different ways.

Proportion of overseas-born Australians



As one of the most multicultural countries in the world,¹⁷ Australians come from nearly 200 countries in the world, speak more than 300 languages in our homes, and share over 100 religions.¹⁸ Our culturally and linguistically diverse (CaLD) communities have grown over the years, seen through the growth in the proportion of overseas-born Australians from 18 per cent in 1996 to 26 per cent in 2016.¹⁹

We are becoming better at recognising our diversity in many areas of our lives, whether it's through improving the way we view and respond to mental health, acknowledging the broad spectrum of gender and sexuality, or invoking principles of user choice and control as seen in the National Disability Insurance Scheme (NDIS).

Digital transformation and customer centricity has helped to push organisations to reflect this diversity in the products and services we use every day. Digital transformation has touched all sectors and industries; some recent highlights include the National Broadband Network (NBN), My Health Record, Blockchain, the Internet of things (IoT) and more.

In addition to this, organisations have begun to move away from being product-centric to having a greater focus on customer needs. Several public and private sector initiatives have attempted to take on the customer-centric approach, including the NDIS, My Aged Care, Amazon and more.

Although there has been positive change towards catering for our diverse community, many people still miss out on using products and services to their full potential. This gap represents a significant market opportunity for businesses. Addressing the diverse needs of the community through innovative design approaches is not only commercially attractive, but must be considered for the long term sustainability of any business.

Employing the principles of inclusive design can allow organisations and consumers to realise these market opportunities.

15. ABS. (2018). 3222.0 - Population Projections, Australia 2017 (base) - 2066.

16. ABS. (2017). 4430.0 - Disability, Ageing and Carers, Australia: Summary of Findings, 2015.

17. Griffiths, M. (2010). Australia second Most multicultural country.

18. ABS. (2017). 2024.0 - Census of Population and Housing: Australia Revealed, 2016

19. ABS. (2017). 2071.0 - Census of Population and Housing: Reflecting Australia - Stories from the Census, 2016.

6 The Value that Inclusive Design Can Bring

Too many Australians are constantly excluded from using products and services because of poor design. Inappropriate availability, usability, utility and desirability can add further barriers.

At least five million Australians are vulnerable to exclusion, yet they possess over \$40 billion in annual disposable income.

This is a significant amount which is untapped due to design exclusion and it does not take into account the disposable income of their respective friend and family, which doubles this amount.

Inclusive design, used to better craft products and services, will open opportunities to vulnerable communities and edge users in areas education, employment, financial security and overall personal independence. All other Australians benefit too, gaining positive cultural and contextual understanding of themselves and others.



Inclusive design benefits organisations, too, for example:

- the push for customer centricity in our services has increased the importance we place on improving **customer experience and satisfaction**. Inclusive design leads to increased customer satisfaction, for both population groups with edge users and the broader user group. Banks and financial service providers can improve brand reputation, education institutions could reach a broader local and international audience, and retail providers can improve the brand recognition through improved store and product experience
- a positive customer experience also leads to improved **customer loyalty and retention**. Recent research found that 94 per cent of consumers are loyal to brands that deliver a consistently good customer experience, and 73 per cent are loyal because of good customer service. Increasing the experience and service for excluded populations can increase these numbers and overall customer retention²⁰
- the cost to implement inclusive design increases as a project, product or service matures in its delivery. Design that is not inclusive leads to complaints, legal challenges, planning delays and costly retrofits. Further, poor design can also negatively impact brand reputation.²¹ It is imperative to **embed an inclusive design approach from the outset** - the relative cost of retrofitting a product or service to become inclusive increases significantly as time passes as shown in the table to the right.

Figure 1: The relative cost of inclusive design through the Project Lifecycle²²

Design stage	Relative cost of inclusive design change (£)
Concept	1
Detail design	10
Construction/Tooling	100
Completion	1000
Occupation/Post-release	10000

As an example, Queensland New Generation Rollingstock trains failed to comply with disability legislation where the toilets were not big enough for people to move from their wheelchairs to the seat.²³ \$4.4 billion was invested in these new trains. To fix the train to be disability compliant will cost a further \$336 million to install a second toilet on all the trains and increase the size of the existing trains by 10 per cent.²⁴ This additional cost may have been avoided if the design process considered the diversity and involved people from different backgrounds

- hiring inclusively will be critical to enable these benefits, as a core component of the inclusive design methodology. Organisations and workplaces that have improved their efforts to hire inclusively are **four times** more likely to have higher total shareholder returns than those organisations within their industry peer group.²⁵

20. Zakowicz, G. (2018). How Customer Service Can Increase Sales and Build Brand Loyalty.

21. NetworkRail. Spaces and Places for Everyone - Network Rail Inclusive Design Strategy 2015-19.

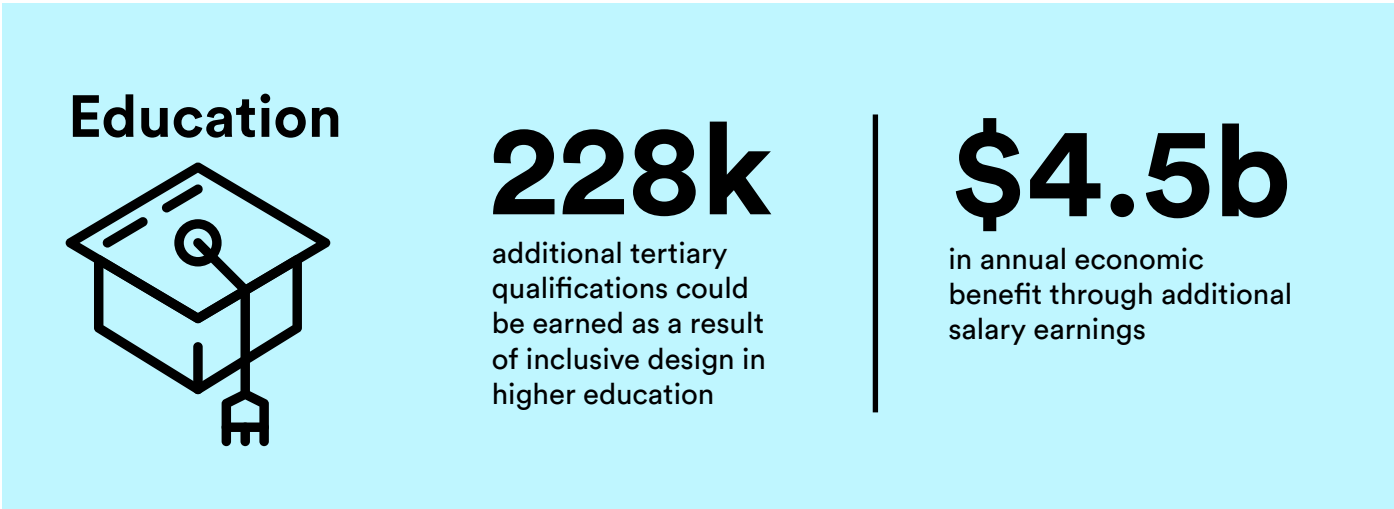
22. Ibid

23. Queensland Government. (2018). New Generation Rollingstock Train Commission of Inquiry - Final Report.

24. Horn, A., Howells, M. (2018) New Queensland train delivery doomed 'from day one', inquiry chief declares. ABC News.

25. Accenture. (2018). Getting to equal: The disability inclusion advantage.

Within the three industries that formed our research, we found that implementing an inclusive design approach can lead to financial, economic and social benefits. Some of these benefits include:



Overall, Australians living with disability have lower access to higher education compared to those without disability. If the levels of higher education attainment of those with disability were matched to those without, we would have 228,000 additional Australians that access higher education annually.

If the levels of higher education attainment of those with disability were matched to those without, we would have 228,000 additional Australians that access higher education annually.

Further, if a person has a higher education qualification, they are 1.3 times more likely to be employed than without higher qualification, with 82 per cent of Australians employed with a non-school qualification compared to 61 per cent of those without.²⁶ This would mean there is the potential for \$4.5 billion in increased annual economic benefit through additional salary earnings for those who gain employment as a result of higher education attainment.

Australian educational institutions could also benefit from implementing inclusive design through:

- improvements to student experience, institution reputation and brand
- improved market competitiveness to attract students from both local and international regions
- economic benefit through increases in total tuition fees from additional students.

26. ABS. (2016). 4235.0 - Qualifications and Work, Australia, 2015.



Retail products are used by all Australians every day.

Whether heating food in a microwave, or putting on a pair of jeans, interactions take place all the time that many of the population can sometimes take for granted. If inclusive design was universal across the retail industry, businesses have the potential to increase accessibility of their products to 5 million overlooked Australian adults.²⁷

More inclusively designed retail products will promote accessibility, and the user experience for all Australians.²⁸

To put this into perspective, we have chosen two Australian Bureau of Statistics (ABS) retail categories - 'Household goods' and 'Clothing, footwear and personal accessory'. These categories were chosen as they include products that everyone is likely to use, no matter the background, and the outcomes can be impacted through inclusive design.

If products and services in these categories were more inclusively designed, we would see a \$4.0 billion increase in revenue for these retail categories. This comprises:

- \$2.8 billion in household goods benefits
- \$1.2 billion in clothing, footwear and personal accessory.

If this magnitude of benefit were applied across multiple retail products, this would equate to considerable financial benefits in an untapped market for many retail businesses.

27. Australian Human Rights Commission. (1997). The Overlooked Consumers - 20% of the Australian population with Disabilities and Older People.

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Financial services



832k

additional Australians that become financially included

\$1.5b

additional revenue for the financial services industry from annual fees³⁰

Economic benefits:³¹

\$1.6b

in reduced government spending on welfare, health and criminal justice systems

\$11.9b

in increased Gross Domestic Product (GDP).

Almost **17 per cent of Australians are considered to be financially excluded**. Financially excluded communities can include people living with disability and difficulty etc etc.²⁹

If we reduced financial exclusion through inclusive design by even 25 per cent, we would see:

- 832,000 additional Australians that become financially included
- \$1.5 billion in additional revenue for the financial services industry from annual fees³⁰
- Economic benefits:³¹
 - \$1.6 billion in reduced government spending on welfare, health and criminal justice systems
 - \$11.9 billion in increased Gross Domestic Product (GDP).
- Financial inclusion improves financial capacity and capability, which allows individuals to participate more in social and economic activities and create better outcomes for their communities.³²

Inclusively designed financial products and services will not only help financial services organisations reach larger markets, but will also help to improve customer satisfaction, better public relations, and improve brand and reputation of the organisation to its current and potential customers.³³ This is especially relevant to financial services firms as the recent royal commission has highlighted the misconduct that has taken place within the industry.

All Australians can benefit from inclusively designed products and services, not only those who are experiencing difficulty.

Inclusively designed products and services that have edge users in mind can reach and benefit up to four times the size of the intended audience.

- a product as simple as the electronic toothbrush, originally designed for people with physical motor function difficulty (a maximum of 40 million Americans),³⁴ is today used by over 120 million Americans³⁵
- closed captioning services in the United Kingdom are used by approximately 7.5 million people, which is 4 times more than the intended audience.³⁶

29. NSW Financial Inclusion Network. (2017). Financial Inclusion for NSW.

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7

Transforming Today into Tomorrow

The inclusive design approach should be implemented by all organisations, championed and promoted by government, and demanded by all consumers. It is one way to help address the gap faced by edge user communities who are currently unable to access or use products and services to their full potential.

- **For organisations** - recognise the growing diversity in our community and consider this in the design of your goods and services. Put the end user, and more importantly, the vulnerable user(s) at the center of your culture. Iterate, test and learn with them to incorporate insights that generate exceptional products and services that are available and suitable for everyone. Organisations should hire inclusively to reflect the diversity of our society and champion the inclusive design methodology. This will lead to untapped markets and revenue opportunities.
- **For government** - champion change, incentivising organisations to focus on designing inclusively and hiring inclusively. Encouraging these practices from a policy perspective will shift the dial on organisational culture
- **For customers and communities** - consumers are the drivers of demand, and their choices will make known the products and services that are extraordinary. Customers are, and should be, the beneficiaries of inclusive design. Above all, consumers should speak out about how they can best be included.

Organisations that tackle the design challenges of today will be best placed tomorrow to realise the benefits that an inclusive design approach presents. What's on offer to these organisations is a broadened market reach which can lead to revenue growth. In turn, greater inclusion will have positive social and economic impacts across the community.

It is time to lose the **'one size fits all'** of *today*, and gain the **'design for one, and extend to many'** that is, *tomorrow*.

The world is rapidly transforming.

Design can too.



Glossary

Accessibility	The ability of a system to match the needs of the individual.
Disability	A mismatch between the needs of the individual and the service environment offered.
Disruption	The creation of innovations that create new markets and value networks which eventually disrupt an existing market and value network, displacing established market leading firms, products and alliances and thinking.
Diversity	Diversity is the range of human differences, including but not limited to race, ethnicity, gender, gender identity, sexual orientation, age, social class, physical ability or attributes, religious or ethical values system, national origin, and political beliefs.
Edge users	Individuals and communities that are edge users refer to those who are either excluded or struggle to access or use a product or service.
Financial exclusion	Lack of access to mainstream financial products that are affordable and appropriate to a person's needs and enables them to fully participate in [their] society. (Financial Inclusion for NSW, 2017)
Inclusion	Inclusion is involvement and empowerment, where the inherent worth and dignity of all people are recognized.
Inclusive design	Inclusive Design is human centred design that considers the full range of human diversity - ability, language, culture, gender, age and other forms of human difference - as part of the design process.
Innovation	Innovation is often also viewed as the application of better solutions that meet new requirements, unarticulated needs, or existing market needs.
Universal Design	Universal Design is the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability. An environment (or any building, product, or service in that environment) should be designed to meet the needs of all people who wish to use it. This is not a special requirement, for the benefit of only a minority of the population. It is a fundamental condition of good design. If an environment is accessible, usable, convenient and a pleasure to use, everyone benefits. By considering the diverse needs and abilities of all throughout the design process, universal design creates products, services and environments that meet people's' needs. (Centre for Excellence in Universal Design).
Useability	The ease of access and/or use of a product or service.



About the Centre for Inclusive Design

The Centre for Inclusive Design is a social enterprise that helps government, educators, business and community organisations design and deliver products, services and experiences that are accessible and usable by as many people as possible. We provide a hub for design thinking and inclusion practice. We also advocate for change and contribute to policy debate and consultation, through government submissions, partnering, events and thought leadership.

Our team is comprised of multidisciplinary professionals in fields including strategy, digital, customer experience, accessibility, policy, stakeholder and employee engagement, product development and service engineering. In each of these contexts, we seek to realise the value of Inclusive Design in a way that is relevant, usable and valuable. That value includes breakthrough innovation, connection, efficiency in service delivery and operations, de-biased decision-making, access to markets, and compelling customer and employee experience.

Our mission: to champion Inclusive Design, reduce disadvantage and increase participation and possibility for everyone.

Thank you

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Manisha Amin

CEO Centre for Inclusive Design

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