

ACCESSIBLE WEBSITES REALLY MATTER

The Australian Network on Disability tells us that 1 in 5 people in Australia have a disability. That's equivalent to about 4 million people or potential customers. The statistics are roughly the same in the United States and nearly 1 in 4 (approximately 1.1 million people) in New Zealand.

What are you doing to ensure your website isn't driving them away and losing you business?

By

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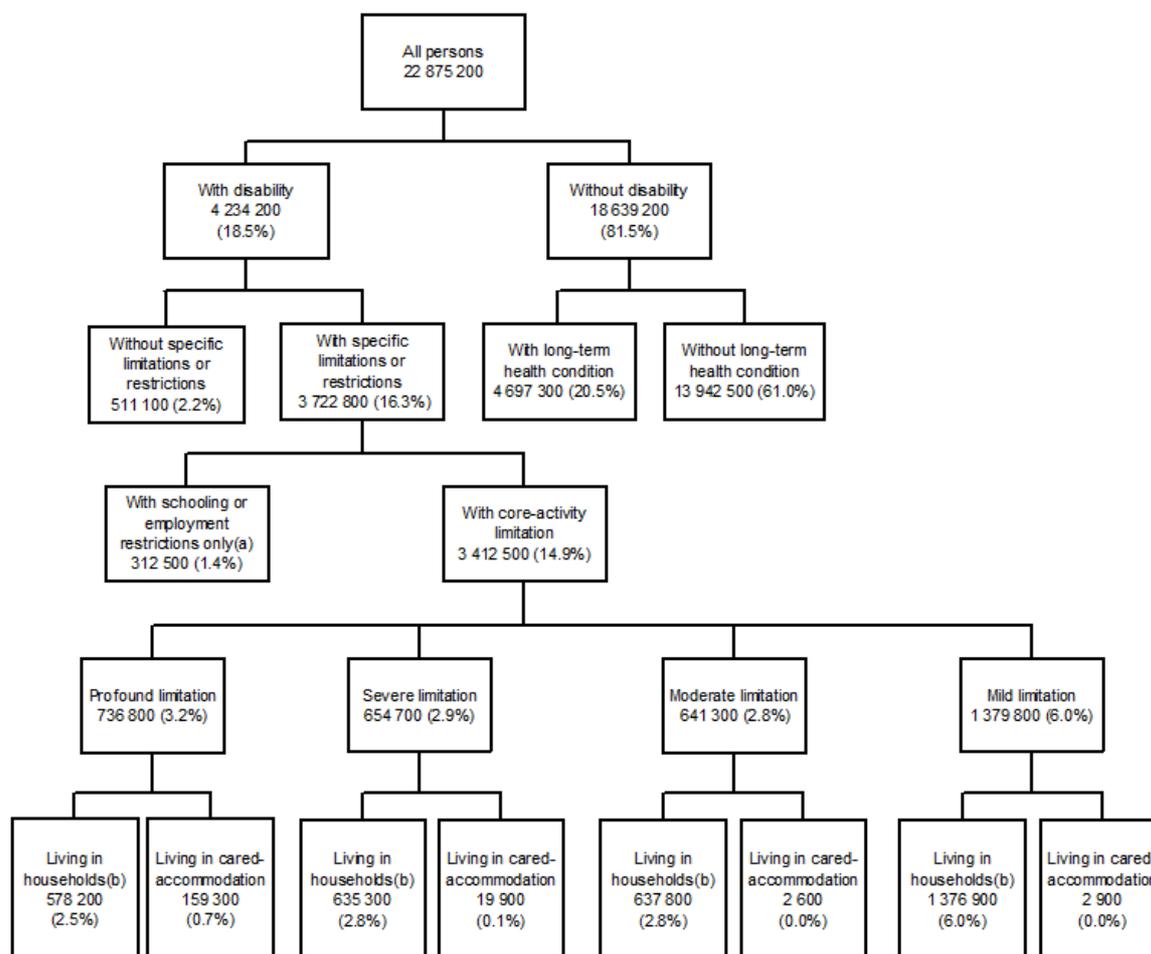
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1 - DISABILITY DEFINED

The Australian Bureau of Statistics understands disability in terms of whether a condition restricts a person’s daily living. In other words, it is defined as ‘any limitation, restriction or impairment, which restricts everyday activities and has lasted or is likely to last for at least 6 months’. (Endnote 1)

The Australian Network on Disability bases its definition on the Disability Act 1992 which is slightly different as it does not see disability as a restriction but rather as a condition that reduces a person’s mental, sensory or mobility functions. It may be caused by accident, trauma, genetics or disease. Such a disability may be temporary or permanent, total or partial, lifelong or acquired, visible or invisible. (Endnote 2)

According to the ABS, in 2012 just under one in five Australians or 18.5% reported having a disability. For this group, 88% or 3.7 million people had a specific limitation or restriction that meant they were limited in the core activities of self-care, mobility or communication or restricted schooling or employment.



Note:
 - estimates have been rounded to the nearest one-hundred persons.
 - due to rounding and the effect of perturbation the sum of sub-totals may not equal totals.

(a) Excludes people with a disability who have both a core-activity limitation and a schooling or employment restriction.
 (b) 'Living in households' comprises all private dwellings and non-private dwellings apart from cared-accommodation.

(Endnote 3)

Despite the variation in definition, the data from the Australian Network on Disability is similar to the ABS and states that there are 4 million (1 in 5) people in Australia with a disability of which:

- 19% are men and 18% are women;
- 43% of people over the age of 55 have one or more disabilities;
- 2.2 million Australians of working age (15-64 years) have a disability;
- There is a correlation between age and disability with 31% of 55-64 year olds living with a disability and 88% of people aged 90 and over;
- 1 in 6 Australians are affected by hearing loss and approximately 30,000 have total hearing loss;
- 357,000 Australians are blind or have low vision. (Endnote 4)

In New Zealand, disability is defined as a long-term limitation (resulting from impairment) in a person's ability to carry out daily activities. In a 2013 census, 24% of the population (1.1m people) were identified as disabled (Endnote 5). That's nearly 1 in every 4 people.

In the US, the estimates vary, although most studies find about 20% of the population has some kind of disability (Endnote 6). In the 2010 census about 8 million people said they have difficulty seeing, with two million of those either blind or unable to see at all. Nearly 8 million people have difficulty hearing including 1 million who are deaf or otherwise have a severe difficulty hearing. Nearly 1 million people are unable to grasp objects and these figures will only grow with the aging population (Endnote 7)

2 – ACCESSIBILITY

2.1 – What Is It?

The World Wide Web Consortium (W3C) is an international community where the global member organisations develop protocols and guidelines that ensure long-term growth for the Web. Its Director, Tim Berners-Lee, is one of the founders of the World Wide Web.

Tim states that access to the Web by everyone regardless of disability is an essential aspect of the web's universality, but that badly designed websites can create barriers that exclude people (Endnote 8). Accessibility is about removing these barriers so that everyone has equal access to all product and services.

WebAIM (<http://www.webaim.org>) is a US online community devoted to empowering organisations to develop accessible web content for people with disabilities. WebAIM categorise disability into four particular types, all of which make access to web content particularly difficult:

- Visual:** Blindness, low vision, colour blindness
- Hearing:** Deafness, hard of hearing
- Motor:** Inability to use a mouse, slow response time, limited fine motor control
- Cognitive:** Learning disabilities, distractibility, inability to remember or focus on large amounts of information

With these categories in mind WebAIM offer training to web developers, website certification, reporting and technical assistance in making your website more accessible.

The Australian Network on Disability (www.and.org.au) takes a similar approach and offer services ranging from document remediation through to in-house training and certification.

2.2 - Why Does Accessibility Matter?

The W3C state that the power of the Web lies in its universality. They argue that the greater the web's accessibility, then the greater its usefulness, penetration and ubiquity. Access to the web also supports social inclusion, independence and freedom from physical and mental stereotyping, which disabled people often face in the physical 'offline' world. While that may not be a big consideration for some people, the fact that inaccessible websites create lost business opportunities should be a strong incentive for businesses to address poor website design.

***DON'T TURN YOUR CLIENTS AND CUSTOMERS
AWAY EMPTY-HANDED BECAUSE OF POOR
WEBSITE DESIGN.***

In addition to these claims, there is another simple reason to have a well designed website; by law a website owner has a legal obligation to ensure its website is accessible to all.

2.3 - Legal Obligations

Under the Australian Disability Discrimination Act of 1992, government agencies must ensure that people with disabilities have the same fundamental rights to access information and services as others in the community.

In 2008 the Australian Government ratified the UN Convention on the Rights of Persons with Disabilities, which specifically recognises that access to information, communications and services, including the Internet, is a **basic human right**.

What does that mean? It means that:

***YOU HAVE LEGAL OBLIGATIONS TO MAKE
YOUR WEBSITE ACCESSIBLE. MAKE SURE YOU
UNDERSTAND WHAT THOSE OBLIGATIONS ARE.***

New Zealand also ratified the United Nations Convention on the Rights of Persons with Disabilities in 2008. It strongly supports accessible websites and requires its Government departments to ensure its websites are accessible (see <https://webtoolkit.govt.nz/guidance/legal-and-policy/accessibility-and-the-nz-legal->

[environment/](#)). It also has a Disability Strategy for the country¹ and includes NZ Sign Language as an official 3rd language²

The situation in the United States is a bit more complicated, but the WebAIM site provides more in-depth information about legal obligations for website accessibility in the United States (see <http://webaim.org/articles/laws/usa/>). They make it clear they are not lawyers and what they are providing is not legal advice. However, it is a useful place to start.

¹ <http://www.odi.govt.nz/nzds/>

² <https://www.hrc.co.nz/enquiries-and-complaints/faqs/new-zealands-official-languages/>

3.0 - Business Opportunities

The Australian Network on Disability has some pretty straight things to say about how accessible websites can help you maximise your markets.³ They found that organisations that understand the impact of disability on their customers will reach a wider market. In fact:

“A UK survey found that a staggering 83 per cent of people with disability had avoided a business, having been unable or unwilling to make a purchase.”

They also pointed out that:

“Businesses that fail to make their products and services accessible to people with disability will miss out on the 18% of Australians who have a disability, plus their families and friends.”

If 18% percent doesn't hold much meaning for you, think about it in terms of customers. Eighteen percent of Australians with a disability is equal to approximately 720,000 people. That's 720,000 customers who could potentially buy your goods and services...but won't if they can't access them on a user-friendly website.

Most importantly, the Australian Network on Disability tells us that:

“An Access Economics report forecasting consumer trends from 2001 to 2011 predicted that mature consumers are the largest growth market in Australia, accounting for half of all growth in retail spending in the decade.

It's clear that mature consumers are more likely to have higher disposable incomes, and statistics show they are also more likely to have a disability. The rate of disability increases to over 56 per cent by age 65. If your business wants to tap into this lucrative customer base, it has to be accessible.”

³ <http://www.and.org.au/pages/resources-disability-confidence-275-maximising-your-markets-278.html>

The Australian Network on Disability say it even more plainly.⁴ They point out that:

- Estimates indicate that Australians with disability have a combined disposable income of \$54 billion per annum.
- 48% of all complaints against businesses that are lodged with the Australian Human Rights Commission are disability related.

And there is one final reason why you might want to ensure your website is accessible...and that's the impact on your bottom line.

The W3C claim that case studies show accessible websites have:

- better search results (more people are finding your website);
- reduced maintenance costs; and
- increased audience reach (you are reaching a wider audience).

The W3C guide to developing a Web Accessibility Business Case can be found at:

<https://www.w3.org/standards/webdesign/accessibility#examples>

The case for improving Internet accessibility is overwhelming. However, financial and operational obstacles are sometimes considered deterrents.

For this reason, the W3C have looked at redefining disability as something people experience when they cannot use a system as it is designed rather than a condition that they have (Endnote 9).

In other words, the definition of web accessibility changes from “web accessibility means that people with a disability can access the web” to “web accessibility means that people can access the web” (Endnote 10). That makes perfect sense.

It means that ability is seen as a continuum, thus making accessibility a system design issue. Because system design issues affect all users, businesses are more likely to fix things than they would be if they thought only a few people were affected.

To say it another way, the website design needs to maximise web traffic in order to capture the widest number of users.

⁴ <http://www.and.org.au/news.php/64/smart-businesses-know-the-disability-dollar>

4.0 Getting Started

So you're convinced about making your website accessible, but where do you start?

I suggest you begin with the W3C's tips for getting started⁵ and then follow the approach that many governments, including Australia and New Zealand have taken.

In 2009 the Australian Online and Communications Council endorsed the requirement for all Australian government websites and agencies to conform to the guidelines specified in the W3C *Web Content Accessibility Guidelines (WCAG) 2.0* (Endnote 11).

These guidelines are based on the following four principles which require a website be **perceivable**, **operable**, **understandable** and **robust**.

Perceivable:

- Provide **text alternatives** for non-text content, e.g. include a transcript for any videos or spoken content, such as podcasts or audio files, or a sign language video for audio-only files;
- Provide **captions and other alternatives** for multimedia;
- Create content that can be **presented in different ways**, including by assistive technologies, without losing meaning;
- Make it easier for users to **see and hear content**.

Operable:

- Make all functionality available from a **keyboard**. In other words, don't force people to use mouse clicks to navigate through your website;
- Give users **enough time** to read and use content. This is particularly pertinent if you have content that scrolls automatically or changes at a set rate;
- Do not use content that causes **seizures**;
- Help users **navigate and find content**.

Understandable:

- Make text **readable and understandable**;
- Make content appear and operate in **predictable** ways;
- Help users **avoid and correct mistakes**.

Robust:

- Maximize **compatibility** with current and future user tools. (Endnote 12)

⁵ <https://www.w3.org/WAI/gettingstarted/tips/index.html>

4.1 - The User - Assistive Technology

In practical terms, someone with a disability will often need additional hardware to access the Internet. The hardware can include things like:

Technology	Use	Example
Screen Readers	Reads the content of the computer screen from the source code	Jaws for Windows Voiceover for Mac
Magnification software	Controls the size of the text or graphic by emulating a magnifier	MAGic – Freedom Scientific ZoomText
Text Readers	Software reads the text only so is beneficial for people with a learning disability	Read Aloud Natural Reader
Speech input software	Software responds to limited commands to perform mouse actions	Dragon or Naturally Speaking
Alternative input devices	To replace a mouse or keyboard for people with no or low fine motor control	Head pointers Eye or Motion Tracking
Web Browsers	To enable browsing and searching	Internet Explorer 6 JAWS with Internet Explorer 6
Media Players	To enable playing, store and organise audio, video and images	Real Media Player Windows Media player

W3C are continually evaluating assistive technologies and user agents and their reports can be found on their website at:

<https://www.w3.org/WAI/UA/implementation/report-cr2.html>

4.2 – Things You Can Do Now To Create Great Website Design

The following list contains some general examples of how a website might need to be modified to maximise its audience and ensure a website is compatible with a user's assistive technology.

- **Ensure all images have alternative text** for screen reader users so the screen reader will be able to read out a description of the image. This is because images or graphics of text as text cannot be read by screen readers so live, properly styled text needs to be used to ensure everyone can understand what is being said.
- **Use colour combinations where the text and background colours have a high contrast.** Low contrast is to be avoided because it makes those areas very hard to distinguish or differentiate between other areas.
- **Use correct styles for headers, and use relevant HTML tags to identify quotations, tables and data.** This makes it much easier for screen readers to correctly interpret what is on the screen.
- **Ensure tables are used for data only** and not for layout. Also ensure that each column and row has an appropriate heading or tag.
- **Give each page a meaningful title** (i.e. not just your company name on every page).
- **Make sure links are properly labelled** and make sense on their own. Avoid using URL's in-text, and don't use links such as "read more" or "click here" as such links are taken out of context by a screen reader and consequently don't make sense to the user.
- **Ensure that all functionality can be accessed via a keyboard.** Avoid navigation that is completely dependent on mouse clicks;
- **Provide captioning or a text transcript to all audio content,** including podcasts.
- **Provide an alternative format to PDF files** such as HTML pages

Implementing these changes could be simple or complex depending on the nature of the website and coding expertise and development know-how will be required.

However, there are a multitude of testing tools, references and guidelines available some of which can be accessed through the websites in the Further Information section below.

4.3 - The Site owner – 6 Key Points for Website Direction and Leadership

The site owner's role in implementing accessibility is to provide commitment, accountability and support.

1. Ensure there is consistency throughout the website by educating everyone who has permission to upload content is knowledgeable in the standards and requirements for accessible content.
2. On a practical level, the use of specific web content authoring tools and content management systems makes content development easier.

Both Wordpress and Drupal include accessibility functionality and YouTube and Vimeo have both been positively reviewed for their accessibility features. Microsoft Office and Adobe Acrobat Pro have inbuilt accessibility checkers, however it is critical not to rely solely on checkers and evaluation tools.

3. Always check with a technical department or web developer to make sure your content is accessible and reaches the maximum number of users possible.
4. Even more importantly, check with your customers. It is very easy to set up mini-surveys to measure website usability and satisfaction. You can also use bounce-rate metrics (how quickly visitors leave your website) to determine whether there might be a problem.
5. Take the time to sit down with your website owner to plan how you will make your website more accessible.
6. Build the mentality of having user friendly, accessible website design into business as usual. That includes ensuring that your web designer views accessibility as a way of driving more traffic to your website and not as an expensive add-on.

4.4 - Websites and Apps

This report does not deal with Websites and Apps that provide disability services, rather it deals with Website design issues that may limit user access.

An interesting article that deals with Australian apps that provide specific disability information such as wheelchair access around Brisbane can be found at:

http://www.and.org.au/data/general/Review_of_Access_Apps_AND_Final.pdf

5.0 – In Summary

- Website accessibility matters. Making your website user friendly and accessible will keep you out of court, help your bottom line and go a long way towards keeping your customers happy.
- There are lots of resources out on the Internet to help you learn more about website accessibility. We've listed a few in Section 6 below.
- Get started by analysing your website for basic accessibility barriers such as alt-text for images, alternatives to PDFs, captioning for videos.
- Make sure someone in your business has responsibility for implementing any accessibility changes.
- Check in with your customers and website visitors and use your website traffic statistics to help diagnose potential problems.
- Create a plan of attack for how you are going to steadily improve your website. Build the focus on accessibility into the normal way things get done in your business.
- Then sit back and reap the benefits of providing a good customer experience...to every sort of customer, whether disabled or not.

If you need help with getting started, or you'd like someone to assess your website for you, email me at trankin@westislanddigital.com.

I will have a quick chat with you to determine what you need.

As required, I will then either organise some assistance through West Island Digital or if you have special requirements, put you in touch with people who can assist you.

Thanks for taking the time to read our whitepaper on website accessibility. We welcome any feedback.

6.0 - FURTHER INFORMATION

A google search on Website accessibility will access nearly 200M results. The following sources about website accessibility are a good place to start.

<https://www.w3.org/WAI/intro/accessibility.php> This is an essential introduction for those wanting to improve their website accessibility. It has everything from Business Cases through design and evaluation tools to tutorials. Highly recommend looking at as many pages as possible.

<https://webaccess.berkeley.edu/resources/tips/web-accessibility> This website from the University of Berkeley is clearly written with good information, and links to other resources for those needing more technical information.

<https://www.w3.org/standards/webdesign/accessibility#examples> Provides background and some great examples of Web Accessibility, plus an introduction with links to the W3C Website Accessibility Initiative.

<https://www.w3.org/WAI/WCAG20/glance/> Provides an Introduction and links to the WCAG 2.0 Standards.

<http://webaim.org/intro/> WebAim is dedicated to Website accessibility. This intro page is clear and concise with good user experience videos and links to further guidelines and testing resources.

<http://www.and.org.au/pages/digital-accessibility-services.html> The Australian Network on Disability covers both employment and accessibility and has partnered with Media Access Australia to provide services to enable and improve accessibility.

<http://www.Internetsociety.org/doc/Internet-accessibility-Internet-use-persons-disabilities-moving-forward> A 2012 Global Issues paper on Internet Accessibility.

ENDNOTES

- (1) The Australian Bureau of Statistics,
<http://www.abs.gov.au/ausstats/abs@.nsf/lookup/A813E50F4C45A338CA257C21000E4F36?opendocument>
- (2) The Australian Network on Disability, <http://www.and.org.au/pages/disability-statistics.html>
- (3) The Australian Bureau of Statistics,
<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/3A5561E876CDAC73CA257C210011AB9B?opendocument>
- (4) The Australian Network on Disability. <http://www.and.org.au/pages/about.html>
- (5) Statistics New Zealand – Disability Survey 2013
http://www.stats.govt.nz/browse_for_stats/health/disabilities/DisabilitySurvey_HOTP2013.aspx
- (6) WebAIM – web accessibility in mind - <http://webaim.org/intro/>
- (7) Areheart, B A and Stein M A. *Integrating the Internet* 2015. The George Washington Law Review Vol 83:449
- (8) W3C - <https://www.w3.org/standards/webdesign/accessibility - examples>
- (9) W3C email discussion on the definition of disability.
<https://lists.w3.org/Archives/Public/w3c-wai-ig/2015JanMar/0113.html>
- (10) Gibson, Anne, *Reframing Accessibility for the Web* 2015
<http://alistapart.com/article/reframing-accessibility-for-the-web>
- (11) The Australian Government Web Guide <http://webguide.gov.au/accessibility-usability/accessibility/>
- (12) W3C - <https://www.w3.org/WAI/WCAG20/glance/>