

The Essential Guide to Digital Accessibility



You're concerned about digital accessibility, but you're not sure where to start. You may not even be sure of what exactly digital accessibility is. All you know is you and your organization need to do something about it.

Does that sound familiar? If so, this guide is for you.

What is Digital Accessibility?

"Digital accessibility" means building digital content and applications that can be used by people with disabilities. This can apply to websites, mobile apps, desktop apps, video games, electronic documents, and more.

At **1.31 billion people** globally, PWD [people with disabilities] represent nearly one person in five on the planet — a market the size of China."

— 2016 Global Economics of Disability Annual Report



In the United States, there are over **56 million** people with a disability.



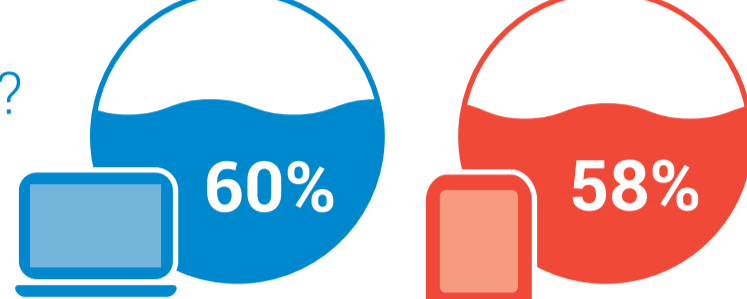
That's more than the populations of California and New York combined.

Types of Disability as defined by the US Census:

- Hearing: **11.4 million**
- Vision: **7.7 million**
- Cognitive: **15.5 million**
- Ambulatory: **21.2 million**
- Self-Care: **8.1 million**
- Independent Living: **14.4 million**

How do people with disabilities use the internet?

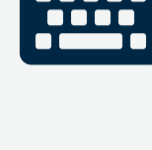
More than **60%** of people with disabilities in the US own a computer and **58%** own a smartphone.



Many people with disabilities use some form of **Assistive Technology** to navigate their computers and mobile devices. Some examples are:



Screen Readers Software that reads out content to the user and allows them to navigate via keyboard shortcuts



Keyboard-Only Navigation Users who can't operate a mouse due to visual or motor impairment need to be able to navigate entirely by keyboard. Likewise, alternative input devices like sip-and-puff or single switch buttons are emulating keyboard-style input.



Screen Magnification Software or hardware tool that magnifies the screen to extreme levels for people with low vision



Dictation Software Allows people who have trouble with computer input devices but are able to speak to navigate by voice.

How do I know if my site/app is accessible?

The only way to know if your site is accessible is to test it. An accessibility audit is generally performed through a combination of manual and automated accessibility testing.



Manual Testing: An accessibility specialist attempts to navigate and interact with your application using different types of assistive technology

Pros: Thorough; the only way to get a complete picture of a site/application's accessibility

Cons: Time consuming; requires special expertise



Automated Testing: Software tools that can automatically evaluate your code for accessibility issues.

Pros: Can detect hundreds of basic accessibility issues in seconds; doesn't require special expertise

Cons: Can't detect all accessibility issues

Accessibility Regulations

You need an accessibility audit to know if you're accessible, but what exactly are you testing for? Depending on your industry, where your organization is based, and other factors, your organization may be subject to specific accessibility regulations. For example...

<p>Americans with Disabilities Act (ADA) The ADA doesn't have specific requirements for digital accessibility, but most courts interpret the ADA as applying to web sites and applications.</p>	<p>Section 508 Federal government agencies and contractors are required to comply with Section 508 accessibility requirements. 508 also applies to federal contractors and products being sold to the federal government.</p>	<p>21st Century Communications and Video Accessibility Act (CVAA) Requires accessibility of communications devices, products, and services as well as video programming on television and the Internet.</p>
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In 2017 there were at least **814** federal ADA lawsuits pertaining to inaccessible websites. That's more than **3x** as many cases as 2016 and more than **14x** as many as in 2015. (from Seyfarth Shaw study)

How does accessibility help my organization?

Accessibility opens your organization up to a new market.

In the US, people with disabilities represent over **\$645 billion in disposable income.**

Their friends and family represent almost **\$4 trillion in disposable income.**



Accessibility increases findability. Many accessibility techniques will help your site's search optimization (SEO). If your site is screen reader-friendly, it's also search-bot friendly.



Accessibility improves User Experience. How often do you use video captions, voice search, and building ramps? Accessibility features help everyone!



Accessible is inclusive. Accessibility is part of a more inclusive brand and a more inclusive workplace.

The Web Content Accessibility Guidelines

The **Web Content Accessibility Guidelines (WCAG)** developed by the W3C are widely accepted as the go-to standard for digital accessibility compliance and serve as the basis of most accessibility regulations worldwide.

If you don't have specific accessibility regulations that apply to your organization but want to avoid legal risk, WCAG 2.1 level A and AA compliance is a safe bet.

According to WCAG, digital content should be:

- P** Perceivable
- O** Operable
- U** Understandable
- R** Robust

How does my organization become accessible?

<h3>Reactive Accessibility</h3> <p>This is the approach to accessibility that organizations take when they're under legal pressure or have some other impending compliance deadline to meet. It's also best way to approach addressing accessibility issues on existing sites and applications.</p> <p>Step 1: Get a full accessibility audit performed by accessibility specialists. Make sure the final report is clear and has been fully explained to all product/site owners and whoever else will be responsible for fixing the product.</p> <p>Step 2: Prioritize the accessibility issues by severity, traffic, how critical the component is to your users, and other criteria.</p> <p>Step 3: Fix those accessibility issues! Make sure your team has been thoroughly trained in accessibility issue remediation through bootcamps and embedded support from accessibility specialists. Depending on your deadlines and budget, you may need to outsource your accessibility remediation.</p> <p>Step 4: Perform validation testing to ensure that all accessibility fixes actually work. This can be done by in-house specialists or the consultants who performed your initial audit.</p> <p>Most early accessibility projects will require a reactive approach. Although this process can be stressful and time-consuming, you can save your team a lot of frustration by working with experts who are willing to provide a solution that fits your needs and deadlines.</p>	<h3>Proactive Accessibility</h3> <p>If your organization isn't facing legal pressure or if you're working on new sites and applications, you can take a proactive approach to accessibility.</p> <p>Step 1: Train your developers, testers, and content creators in accessibility concepts and techniques.</p> <p>Step 2: Get any new design wireframes reviewed for accessibility optimization and potential issue identification.</p> <p>Step 3: Equip your development teams with tools to integrate accessibility testing into all stages of the development process.</p> <p>Step 4: Establish internal policies and processes to ensure the accessibility of digital products, content, and 3rd party tools your provide to your users and your employees.</p> <p>Proactive accessibility not only puts you organization at lower risk of receiving a legal complaint about accessibility, but also makes the entire accessibility process more efficient, cost-effective, and as nondisruptive as possible.</p>
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First steps on the journey to accessibility...

- 1** Download the free **axe browser** extension for Chrome or Firefox and run it on your site. This will give you a great snapshot of your site's accessibility as well as a list of accessibility issues you can start fixing today.
- 2** Learn more about how people with disabilities use computers and mobile devices. This is invaluable insight when you're first trying to understand accessibility.
- 3** Talk to your colleagues. Talk to your compliance team about accessibility to learn more about your risk level. Introduce the idea of accessibility compliance to upper management, and talk to your teammates to identify allies who can help support accessibility efforts.

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