

Web Accessibility

How Inclusivity Protects Your Business
and Your Bottom Line

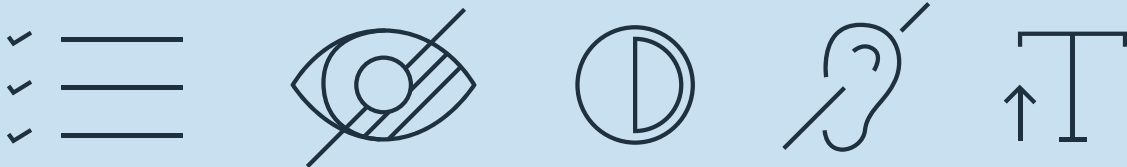


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How Does Accessibility Benefit My Organization?

Accessibility is more than a feature; it's a great opportunity! In this section, we'll explain how you can increase your customer base and revenue, give your SEO a healthy boost, and recruit brand evangelists, all by improving your web accessibility. Web accessibility is a win-win. It's not just great for users — it's great for businesses too.

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Accessibility law can be confusing, and lawsuits have been proliferating. Do you legally have to be accessible? What is Section 508, and does it apply to your organization? Does the ADA apply to your website in the private sector? Knowing your responsibilities online can help keep your organization out of hot water.

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Keys to a Successful Web Accessibility Initiative

Once you've decided to make your online presence accessible, how does that decision translate into action? By including everyone involved in the project, integrating checkpoints, and listening to your users, your accessibility initiative will be built on a solid foundation.

What Is Web Accessibility?

Web accessibility (or a11y for short) is a big term for a simple concept — making the web work for everybody. By building your website mindfully and implementing inclusive best practices, we can ensure that your online presence includes as many users as possible.

The ‘Edge Case’ Myth

The question that gets asked a lot when the topic of accessibility is raised is whether or not the financial or time investment is worth it. After all, aren’t users with disabilities an edge case?

Imagine that your web team is about to launch your brand new site. It looks great, and it runs beautifully. There’s just one little hitch: it won’t work at all in the state of New York. If you heard that, you probably wouldn’t be willing to launch the site until that was fixed. After all, that’s 19.8 million users who won’t have access. It’s a launch-blocker.

What if you learned that there are 18.55 million more people with severe disabilities living in the United States than all of the people living

There are 18.55 million more severely disabled people in the United States than there are people living in the entire state of New York.



19.8m RESIDENTS OF NEW YORK STATE
illustrated by million



38.3m SEVERELY DISABLED IN US
illustrated by million



Source: [2012 American Community Survey](#)

in all of New York? At 38.3 million people, users with severe disabilities aren’t an edge case at all. They’re a big piece of the marketplace that an inaccessible site can’t capture.

When we scale it back from severe disabilities to all disabilities, we’re looking at a figure around

56.7 million here in the United States. For perspective, that's more than twice the entire population of Australia.

Users Who Benefit

There are many disabilities that may impact a user's ability to use your website, but most fall into six main categories.

VISUAL IMPAIRMENT

- ▶ Users with a visual impairment may have trouble distinguishing between colors, viewing content without enough contrast, or may not be able to see at all.
- ▶ Users who are low-vision or blind usually navigate exclusively by keyboard, as they cannot point and click with a mouse. They will also likely be using either magnifying technology, a screen reader, or both. If you have video content with context provided visually, these users will need a transcript to know what's going on.

MOTOR IMPAIRMENT

- ▶ Users with a motor impairment may have trouble with dexterity or movement. This includes users who have had a stroke,

There are more than twice as many people with disabilities in the US as the entire population of Australia.



POPULATION OF AUSTRALIA
illustrated by million



DISABLED PERSONS IN USA
illustrated by million



Source: [Census.gov](https://www.census.gov)

were born with cerebral palsy, people with Parkinson's, and people with paralysis, to name a few.

- ▶ This genre of disability may impact the fine or gross motor skills required for using a mouse. Many of these users will use the keyboard for navigation instead. Users with more significant paralysis may navigate using a mouth stylus, head-based navigation, or an eye-tracking system.

While these two genres of disability are very different from one another, their accessibility needs are often the same — keyboard accessibility. By simply making all of your website easily navigable via keyboard, you gain big wins for access for both of these groups.

DEAF / HARD OF HEARING

- ▶ Deaf and hard of hearing users may have trouble understanding audio content if there is not appropriate captioning provided.

SEIZURE & VESTIBULAR DISORDERS

The next two categories of disability are fairly simple to cover. It's more about what not to do than what to do. They don't need much in the way of accommodation, but it is vital that it happens.

Unlike the other categories of disability that will simply be deprived of access if their needs are ignored, people with seizure disorders and

vestibular issues can actually be injured by an inaccessible website. For that reason, their needs being met are perhaps the most crucial of all.

SEIZURE DISORDERS

- ▶ Users who are prone to seizures can have an attack triggered by repetitive flashing effects.

VESTIBULAR ISSUES

- ▶ Individuals with vestibular issues can feel sick from content with special effects that trigger motion sickness such as parallax effects.

COGNITIVE DIFFERENCES

- ▶ Users with cognitive differences might need more time to ingest the material. People with dyslexia, sensory processing disorders, and other cognitive or developmental disabilities fall under this category.
- ▶ Aside from people who were born with cognitive differences, many users of advancing age fall into this category. People who are living with Alzheimer's and other forms of dementia will need accommodations to use your website successfully. Providing this can help them retain more of their independence, which can lead to a higher quality of life and improved self-esteem.

- ▶ To include these users:
 - *Allow people to explore and submit content at their own pace by avoiding auto-advancing slides and timed forms*
 - Keep the structure of your site consistent
 - Use simple and clear language
 - Use purposeful pictures that enhance and clarify your material
 - Don't clutter your content — use plenty of whitespace

EVERYBODY ELSE

Good web accessibility benefits everyone, not just people with disabilities. Your users will never complain that your site is too easy to see, too well laid-out, or has too few annoying visual effects.

FUN FACTS:

- ▶ The grand majority of people who use captions aren't people who need audio accommodation due to a disability; they are people with hearing in the normal range who simply prefer to leave them on.
- ▶ People who aren't native English speakers benefit from the accommodations made for people with cognitive differences, too!

VISUALLY IMPAIRED

Visually impaired users may have trouble distinguishing between colors, viewing low contrast content, or seeing it at all.

MOTOR IMPAIRED

Motor impaired users may have trouble with dexterity or movement. This may limit the fine motor skills required for mouse use.

VESTIBULAR ISSUES

Individuals with vestibular issues can feel sick from content with special effects that trigger motion sickness.

DEAF/HARD OF HEARING

Deaf and hard of hearing users may have trouble understanding audio content if there is not an appropriate alternative transcript or closed captioning.

SEIZURE DISORDERS

Users who are prone to seizures can be triggered into an attack by flashing effects.

COGNITIVE DIFFERENCES

Users with cognitive differences might need more time to ingest material. Allowing users to explore content at their own pace is best.



Simple language and imagery will make your website easier to use for users from diverse backgrounds.

- ▶ Captions on your social media videos aren't just great for your deaf and hard of hearing users; they're an extra opportunity to grab the attention of hearing users, too! Most people don't keep the video audio on when they scroll through feeds like Facebook. They may scroll right by if they can't hear your audio, but seeing an interesting sentence on the opening frame might get your content a second glance.
- ▶ Strong accessibility also benefits children. Creating a positive association with your brand early in life can lead to a lifetime customer as they age into your prime consumer demographic.

Core Principles of Web Accessibility

Great accessibility comes from four fundamental principles, provided by the acronym POUR.

Thinking about the needs that non-traditional users have helps us consider if the POUR principles are being met by our websites.

PERCEIVABLE

- ▶ Can all of the information presented be obtained by someone who can't see or hear?
- ▶ Can users access my content in a variety of ways?

OPERABLE

- ▶ Can users with limitations use my content?
- ▶ Are links and buttons accessible via the keyboard?
- ▶ Do content effects triggered by hover happen on keyboard focus?
- ▶ Will a color blind person know which button to click?

UNDERSTANDABLE

- ▶ Is my website clearly worded and laid out so that it is easy to understand?
- ▶ Will someone who can't see color understand the values presented in this chart?
- ▶ Will someone who isn't a native English speaker be able to complete their purchase?

ROBUST

- ▶ Is my site compatible with assistive technology?
- ▶ Is my website likely to work well in the

relatively near future?

- ▶ Can someone who uses a reasonably outdated browser still use my website?

How Does Accessibility Benefit My Organization?

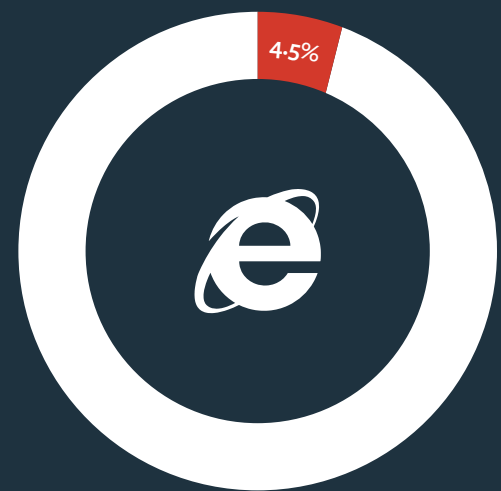
Prevent Lost Customers and Revenue

In 2015, the overall percentage of people with an impactful disability of all ages in the US was 12.6 percent. Conversely, IE and Edge together accounted for only roughly 4.5% of all web users in 2017.

Supporting accessibility stands to benefit nearly three times as many users as supporting IE and is often significantly easier to implement. Despite this, IE support remains regularly prioritized and tested for in the QA process, while accessibility is often red-lined or ignored.

THE ‘TARGET MARKET’ MYTH

One of the points that stakeholders often



Source: [2015 American Community Survey](#) & [W3C](#)

mistakenly use as a justification to red-line accessibility is that users with disabilities aren't their target market. They assume that people with disabilities won't be able to or interested in using their product or content.

This couldn't be further from the truth. People with disabilities often live very independent lives,

and many use and do everything that someone without a disability does — just in a different way. For instance, many blind people love to watch television. Audio cues in the dialogue for the onscreen actions are a helpful way to provide context for the onscreen action, but even without those cues, many blind people will listen to popular TV shows as if they were a radio show.

In fact, people with disabilities often rely more on the internet than anyone else. For someone with limited mobility or eyesight, purchasing an item online and having it delivered can be significantly more convenient than a trip to the store. For someone with painful mobility, having something tasty delivered might be much more enjoyable than cooking or going to a restaurant. Often doing business online isn't just an appealing option for someone with a disability; it's a valuable lifeline to independence.

If given the opportunity, users with disabilities can become some of your most loyal customers. After all, the disability community is a tight-knit network. Once word gets out that your content is easy to access, a loyal following can develop quickly.

Improve SEO

A great bonus that comes with having an accessible website is that the steps taken to ensure good accessibility often benefit your SEO as well.

GOOD FOR SCREEN READERS, GREAT FOR WEB CRAWLERS.

Correct heading usage and page structure are wonderful for Google's indexing algorithms, as are relevant page titles. Appropriate alternative text on images provides more relevant keywords, too.

DECREASING YOUR BOUNCE RATE

A 'bounce' is what happens when a user comes onto your site and immediately leaves. Bounces hurt your rating with Google since the algorithm assumes that the content was not relevant to what the user was looking for or something about your site was off-putting.

When a user with a disability comes onto your site, they will often know almost immediately if it is accessible to them or not. If it's not, they will leave — registering a 'bounce' that will count against you. Since over 12% of all people in the US have a disability, you stand to drop your bounce rate significantly by keeping your site accessible.

Creative Positive Brand Association

Every customer likes to feel valued, and no one likes to feel forgotten — or worse, disregarded. The best brands understand that their branding isn't just about having an appealing color scheme or even the quality of the product itself; it's about how customers feel about their brand.

The web is notorious for often being an obnoxious, frustrating place for people with disabilities. Throughout extensive interviews with people with disabilities, a common theme emerged: your loyalty to their needs will strongly determine their loyalty to you.

People with disabilities often take it extremely personally when their needs are ignored, to the point of swearing off brands who do so altogether. On the other side of the coin, users who see their needs well met will often become brand evangelists, even if they feel that your product is objectively inferior to that of a poorly accessible competitor.

By giving users with diverse needs a great experience, you establish your organization as one who remembered to include them. Interviewed users often glowed about accessible brands,

lavishing praise onto those organizations and pledging to stand by them as loyal customers.

Aside from the warm fuzzies, pragmatic users will remember that your content was easy to access, especially if competitors haven't been. Providing a convenient site for people with disabilities to use is a great way to make it onto their bookmark bar and stay there.

The ADA, Section 508, and You

Am I Legally Required to be Accessible?

There is a lot of gray area to this question. Your best bet is to ask your legal team. While the answer used to be, "Probably only if you're in the public sector," that has changed a lot in recent years. Increasingly, lawsuits in the private sector have created a legal precedent that websites constitute "public spaces".

While online accessibility law in the United States is currently somewhat ambiguous as to the private sector, most modern nations have adopted or are in the process of adopting online accessibility laws for their businesses.

Americans with Disabilities Act

In June of 2017, the first major federal ADA lawsuit in the private sector regarding access to a company's website as a public accommodation was won by the plaintiff against Winn-Dixie, a Southern grocery store chain¹. The plaintiff made the case that since he couldn't access the coupons on the website he was denied equal access to a publicly offered benefit, and the judge ruled in his favor.

Similarly, Target was the subject of a class-action lawsuit from the National Federation of the Blind in 2006 after they refused to bring their website into compliance with modern accessibility standards. They settled out of court, with Target's costs falling at over \$11m.

Section 508

Section 508 applies to all organizations in the public sector, as well as all private organizations that accept public grants or other public funding. This includes public schools and universities, local governments, federal agencies, libraries, and other public works. Unlike the application of the ADA in the private sector, this has no legal gray area whatsoever. By law, these websites must adhere to the standards outlined in the

Section 508 guidelines in order to provide access to individuals with disabilities.

To learn more about Section 508, please visit section508.gov.

Keys to a Successful Accessibility Initiative

Include Everyone

One of the most important parts of making accessibility for your organization a success is to involve everyone in the process.

Start Early

Expect to devote some of your project time to accessibility. Plan to have some time built in to assess accessibility along each point of the process, from the design phase, to the development phase and throughout the QA, editorial, and post-launch phases.

Retrofitting an inaccessible site to be accessible is

¹ llegal.com

significantly more expensive and time-consuming than building an accessible site from the beginning.

What may have taken only a few extra hours to do in the general flow of the project could take days or weeks to retrofit for accessibility later. By waiting to see if there is time left over in the budget at the end of the project to use on accessibility, you essentially guarantee that there won't be. Making space and setting expectations for accessibility early is the road to success.

Integrate Checkpoints

MANAGEMENT

Management support is crucial to the success of an accessibility initiative. When developers were surveyed at DrupalCon LA, 60% of all developers surveyed said that if it was an enforced project requirement, they would reliably remember to review work before merging for accessibility. The other 40% said that they made an effort to do so, but would occasionally forget¹.

Without accessibility being enforced as a project requirement by management, the percentage of developers reliably checking for it before merging code plummeted to only 20%, with a full third of developers admitting to making no effort at all.

CLIENTS

50% of salespeople surveyed answered "sometimes" or "rarely" when asked how often clients ask them for accessibility.

62% of project managers surveyed answered that they were "rarely" asked.

SALES

50% of salespeople surveyed answered "sometimes" or "rarely" when asked how often they mention the importance of accessibility to their current or prospective clients.

PROJECT MANAGERS

37.5% of project managers surveyed said that they only account for accessibility in a project if it specifically requested by the client.

DEVELOPERS

60% of developers surveyed said that they reliably review work for accessibility when it is a project requirement, and the other 40% answered that they "sometimes" did.

If accessibility is not a project requirement, the number for reliable accessibility review drops to a mere 20% with 1/3 admitting to making no effort at all.



¹ Accessibots DrupalCon LA Survey 2015

DESIGN AND UX

Accessible designs are a strong start to an accessible website. Clean code will be needed later to bring those plans to life, but the site needs to be designed from the beginning with plenty of white space, good color contrast, and thoughtful UX accommodations for diverse bodies kept in mind to enjoy optimum success.

DEVELOPMENT

It goes without saying that the people writing the code for your site should be adhering to best practices and accessibility standards in order for your site to be accessible.

Make sure that your developers are familiar with WCAG 2.0, as well as the requirements of Section 508. Developers should be testing all work for accessibility in the peer review process before it gets merged in. Using a checklist [like the one provided on a11yproject.com](#) for testing criteria can be especially useful for this.

QA

Sometimes a mistake slips through. That's why we have QA teams! Your QA team should have a strong understanding of accessibility guidelines, and they should examine each merged item for

accessibility compliance.

EDITORIAL

Even the strongest accessible websites can fall apart without an editorial team that is on board. Setting up safeguards like required alternative text for uploaded images and WYSIWYG plugins can go a long way. Editors should be briefed on what accessibility is, why it's important, and how to keep their content accessible to everyone before they are given access to create content, and accessibility should be a standard part of editorial review before content is published.

Listen to Your Users

Accessibility is for humans, and humans are complicated. Even with our best intentions and knowledge put forward, our users still may have a hard time using what we've built if things don't work the way we had intended.

If users reach out to tell your organization that they are having a hard time using something on your site, acknowledge them. Apologize, seek clarification if needed, then file a ticket for their issue to be fixed and share that knowledge with your user. This can go a long way to preventing a lawsuit or losing a customer.

Let's Do It!

While accessibility might sound like a daunting task, it's actually a fascinating and rewarding process that can help protect your organization legally, establish brand loyalty, increase your customer base, and improve your SEO.

Aside from all of the sound financial and strategic business reasons to undertake an accessibility initiative, it's also an opportunity for your organization to do the right thing — help make the web awesome for everyone.

If you want to join in but you're not sure how, [we're happy to help!](#)

Authored by [Helena McCabe](#), Senior Front-end Developer at Lullabot

About Lullabot

Lullabot is a strategy, design, and Drupal development company that has created some of the most high-profile and award-winning websites for large-scale publishers. As one of the first Drupal agencies, Lullabot is highly recognized for their body of work, authentic approach, and leadership in Drupal innovation, having contributed to more than 150 modules. Lullabot clients include NBC Universal, Martha Stewart Living, Syfy, Hotwire, GE, Principal Financial Group, Harvard University, and Verizon.

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LULLABOT RESOURCES

- ▶ [Lullabot Podcast: Web Accessibility with Marcy Sutton](#)
- ▶ [Lullabot Podcast: Web Accessibility in 2017](#)
- ▶ [Lullabot Podcast: Let's Chat About Web Accessibility](#)
- ▶ [Article: Web Accessibility: The Inclusive Way to Boost Your Bottom Line](#)

OTHER RESOURCES

- ▶ [2012 Disability Status Report - United States](#)
- ▶ [Facts for Features: Anniversary of Americans With Disabilities Act: July 26](#)
- ▶ [2016 Disability Statistics Annual Report](#)
- ▶ [Big Win for Blind Shopper in First U.S. Web Accessibility Trial](#)
- ▶ [GSA Government-Wide Section 508 Accessibility Program](#)
- ▶ [The A11y Project: Web Accessibility Checklist](#)