

2023

Digital Accessibility Index



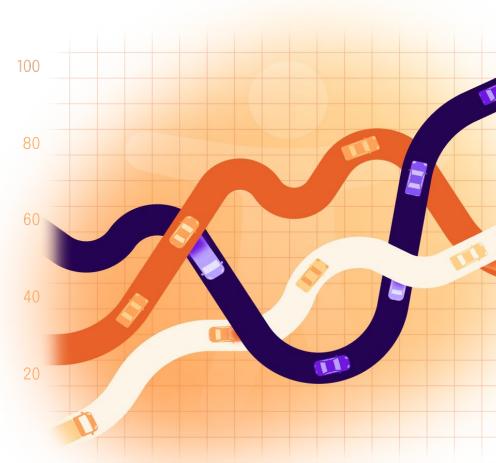


Uncovering the biggest barriers keeping people with disabilities from reaching their digital destinations

We scanned almost 40,000 enterprise websites to measure the accessibility of the world's largest brands. Then we worked with members of the disability community to test key pages on the top sites in industries like retail, finance, and travel. Here are the biggest roadblocks for people with disabilities.

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EXECUTIVE SUMMARY

2023 Digital Accessibility Index

Top barriers and roadblocks keeping disabled users from reaching their digital destination

For people with disabilities, navigating an inaccessible website can feel like driving down a bumpy, broken road. Getting from point A to point B should be easy, but accessibility issues (the potholes and closed roads of the digital world) can slow people down — or keep them from reaching their digital destination.

A WORD FROM THE CEO

The need for a Digital Accessibility Index

David Moradi, CEO, AudioEye

I have a vision of a digital future where people with disabilities can easily accomplish any task online, from shopping to managing their health and finances.

Unfortunately, digital experiences today are often broken for the 1.3 billion people globally who live with a disability. And while many companies have some digital accessibility efforts in place, they tend to be insufficient — which is one reason just 3% of the web is accessible for people with disabilities.

We wanted to identify where some of the world's leading brands fall short on accessibility, so we created the first **Digital Accessibility Index**. It combines data-backed findings from our scan of nearly 40,000 enterprise websites with additional insights from manual audits of the top sites in key industries like retail, media, and travel.

The results were staggering. Across the 2 million pages scanned, we found an average of 37 accessibility errors per page. These errors ranged in severity, from issues that can force people with disabilities to spend extra time accomplishing a task to complete blockers that have no workaround — and often result in lost customers and revenue.

After reviewing the entire data set, our team identified three areas that are especially problematic for people with disabilities: image accessibility, link accessibility, and form accessibility.



56%

of **images are not accessible** to people with visual impairments, which can prevent them from being able to understand or benefit from any information conveyed by the image.



64

of pages have links that are not clear to people with some visual and cognitive impairments, which can make it difficult for them to navigate between pages or find the information they need.



25%

of **forms are missing clear labels**, which can make it difficult for people with disabilities to know what to enter into each field impacting key tasks like checkout or account creation.

And because not every issue can be found with technology alone, we also had our team of certified accessibility experts (including members of the disability community) audit the top sites in several industries, focusing on key site objectives like checkout pages for retail sites or customer portals for financial services sites. Here is a sampling of the significant barriers our testers found:

Retail

On checkout pages, non-sighted users did not receive any audible announcement that a form was missing required information which can leave them unaware that a form submission was unsuccessful.



Financial Services

Keyboard accessibility issues made it hard for screen reader users to navigate around pop-up windows (such as promotional offers) or access information about account policies and perks. **Travel**

Our testers encountered a number of accessibility issues that made it difficult to even look up flight times or prices, forcing them to visit other sites where they could start the process of booking travel.



Media

Frame titles help users with a screen reader quickly determine what information is on a page, and whether they want to keep reading. Yet, nearly 62% of pages on media sites have missing frame titles — 20% higher than the overall average.



Our testers encountered a number of issues that made it difficult to access pricing information, search for agents, or update their account information via customer portals.

ff Governme

Government

63% of government pages had at least one interactive element that could not be triggered by a keyboard, such as closing pop-up windows or pressing 'submit' buttons — all of which would stop a user in their tracks.

While these issues can feel dire, I'm filled with optimism. More and more companies are prioritizing digital accessibility, recognizing both the moral imperative to make the web accessible to all as well as the impact accessibility has on the overall user experience, customer loyalty, and revenue. I share the sentiment of a member of our <u>disability community</u>, who said:

"I think the future of digital accessibility is finally starting to look more hopeful. The industry is finally waking up to the fact that disabled users need to be included in the process for it to really work."

Please enjoy the inaugural Digital Accessibility Index. We've included many more data-backed insights, learnings, and best practices that will help your teams evaluate the accessibility of your website and take steps to ensure all your website visitors can accomplish their purpose in visiting your site — and reach their digital destination.

David Moradi

CEO, AudioEye



KEY INSIGHTS

Digital accessibility is still a challenge for the world's leading brands.

Given how much emphasis is placed on the user experience today, it's surprising more attention isn't paid to the accessibility barriers impacting the **1.3 billion people globally who live with a disability**.

Even when brands try to build inclusive websites, accessibility issues can slip through the cracks. And many of these barriers can be so disruptive to the user experience that people with disabilities are forced to abandon their task — and try to complete it elsewhere.



INDEX AVERAGE

Digital Accessibility Index

After scanning more than 2 million pages, we found that 100% of the pages had at least one accessibility error and the average page had **37 unique elements (such as images or links) that failed one of the Web Content Accessibility Guidelines (WCAG) success criteria**, the international standard for web accessibility.

We used the average number of failed elements per page as the basis of our Index Average. It helps people gauge the relative accessibility of a page, based on the number of errors a user might encounter.

As a business, your goal should be to get this number as close to zero as possible — because that represents the fewest number of accessibility errors.

TOP 3 INSIGHTS

The biggest roadblocks to digital experiences that work for all

Our automated scan revealed a number of significant barriers that are present on almost every site — and can make it harder for people with disabilities to reach their digital destination.

INSIGHT #1

56%

of images are not accessible to people with visual impairments.

The world's leading brands are increasingly turning to visual content to highlight their products and services — but inaccessible images are creating problems for the million-plus people in the United States who are blind.

After scanning more than 32 million images, we found that 56% of images were not accessible to people with visual impairments.

Tips on image accessibility \rightarrow

INSIGHT #2

64% of pages have links that are not clear to people with disabilities.

We all rely on links to help us reach the pages and content we want, but vague or non-descriptive links can make browsing websites a challenge for people with visual or cognitive impairments.

After scanning more than 357 million links, we found that 64% of sites had at least one page with an inaccessible link.

Tips on link accessibility →

"I run into accessibility barriers every day. It's frustrating. I have to ask myself 'How am I going to get around this?' on a regular basis."

Chris Preiman

AudioEye A11iance Member & Internet Security Professional

INSIGHT #3

1 in 4 forms are missing descriptive labels for people with disabilities.

From checkout flows to lead generation campaigns, the world's leading brands spend a lot of time figuring out how to reduce form friction — and get more people to take the action they want.

After scanning nearly 2 million forms, we found that **25% were missing descriptive labels for people with disabilities.**

Tips on form accessibility \rightarrow



IMAGE ACCESSIBILITY TIPS

Bold visuals can grab people's attention, but image accessibility lags behind.

You know the old adage "A picture is worth a thousand words"?

That might be an understatement today. In fact, research has shown that **91% of consumers prefer visual content over text-based content** (Forbes).

The world's leading brands have taken note. But as the web becomes increasingly visual, it raises an important question for accessibility: What are organizations doing to include people who cannot perceive images visually?

Unfortunately, the answer is often "not enough."

4 out of 7 images are not accessible to people with visual impairments.

4 out of 7 images (or 56% of all images scanned) **had faulty or missing image alternative text** — which can make it difficult for people with visual and cognitive impairments to understand what an image is supposed to represent.



After scanning more than 32 million images, we found that 93% of domains tested had at least one page with an inaccessible image. And of those domains, 69% of pages had at least one image that failed one of our tests.





93%

32M

number of images tested across all domains

of domains had at least one page with faulty image alt text



69%

of pages had at least one image that failed one of our tests

When it comes to accessibility, the main culprit is image alternative text.

Image alternative text, or **alt text**, is a written description of an image that screen readers can read out loud — or convert to Braille — for people with visual impairments, sensory processing disorders, or learning disorders.

Done right, alt text can paint a complete picture of a website for people who cannot perceive images visually. However, many websites forget to provide alt text for each image. Or they write something that's so vague it doesn't provide any value to the user.



Imagine driving down a road and seeing a blank speed limit sign. Or one that simply said "Don't Speed." Neither sign would be all that helpful, without knowing the actual speed limit.

Unfortunately, that's the experience people with visual impairments have when they encounter an image with vague or missing alt text.



No Alt Text

alt: <blank>



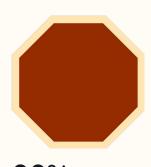
Bad Alt Text

alt: <don't speed>



alt: <speed limit sign indicating 25 miles per hour>

Our scan revealed that the average page had 8.6 images. And of those images, **56% had an accessibility issue**.



60% had no alt text



were not marked as decorative



had redundant text

BEST PRACTICES

Image accessibility tips

Lead with the most important info

Try to put the most important information first, so people aren't left wondering why you're describing every minute detail of an image.

✓

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Be descriptive

People using screen readers can ignore what you write, but they can't ignore what isn't there. Include key details and defining traits.

Don't start with "Image of" or "Picture of"

Screen readers will know from the preceding HTML tag to announce the alt text as an image — so including these phrases in the alt text will only disrupt the user experience.

Include readable text

If your images have text (for example: labels that explain product features or benefits), make sure they are either listed in the alt text or described nearby on the page.

LINK ACCESSIBILITY TIPS

Vague links can make browsing websites an (unwelcome) adventure.

When it comes to page links, most organizations default to short phrases like **Shop All** or **Learn More**.

And while this approach might be good enough for people who can take in the surrounding information on a page at a glance, it does little for screen reader users who typically browse a page by skipping from link to link.

In order to be accessible, all page links should tell users exactly where clicking it will take them — either in the actual link title or by adding a link title that screen readers and other assistive technology can read out loud.

64% of pages had links that lacked critical context for people with disabilities.

Our automated scan found that nearly 11 million links — or roughly 5 per page scanned — were inaccessible to people with visual or cognitive impairments, making it hard for them to quickly navigate between pages.





After scanning 357 million links, it's clear that **link** accessibility is a persistent issue for most enterprise sites. In fact, our scan revealed that 90% of sites had at least one page with an inaccessible link, and 64% of pages had at least one inaccessible link.



90%

of sites had at least one page with an inaccessible link



64%

of pages had at least one inaccessible link

00

· 5

number of links per page that are not clear to users

Images as links have their own set of rules.

Link accessibility doesn't end with text links, either. If an image is being used to link to another page, the alt text should describe what will happen when the image is clicked, rather than what it looks like.

For example, the alt text for an image of a headset that links to a customer support page should say "Contact Support" instead of "headset." During our scan, the average page had 9 images as links — and 21% of them were improperly labeled.



of images as links are improperly labeled, meaning they don't tell screen reader users where clicking the image will take them.

BEST PRACTICES

The 'link' between accessibility and descriptive links

To understand why descriptive links are so important for accessibility, it helps to understand how screen reader users typically navigate a web page.

Many screen reader users will skim through the entire page on their first visit, using their keyboard to jump between links and headers. It's similar to the way a sighted user might scroll through a page, glancing at links and headers to figure out what the page covers and where they want to click next.

If you think about driving, links on a page are kind of like GPS directions. A directive to "Turn!" isn't all that helpful, whereas "In 500 feet, turn left onto Main Street" tells you exactly what to expect.

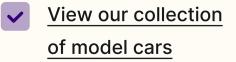


If the links on your page aren't descriptive, it forces screen readers to go back and read the text surrounding a link to (hopefully) understand where it's pointing, slowing them down and impacting the user experience. Example of a **non-descriptive** link:



Example of a **descriptive** link:





FORM ACCESSIBILITY TIPS

For people with disabilities, forms often mean extra friction.

The world's leading brands spend a lot of time figuring out how to reduce friction on their forms — and get more people to complete them.

But for people with disabilities, missing or vague field labels can make filling out forms an unpleasant guessing game. Without clear, descriptive labels (that are also announced to screen reader users), it can be hard for people with visual or cognitive impairments to know what information to enter in each field.

After scanning almost 2 million forms, we found that **nearly 25% are inaccessible to people with disabilities** — which can prevent them from making purchases, signing up for accounts, or requesting support.

1 in 4 forms are missing clear labels and instructions for people with disabilities.

Missing or non-descriptive form field labels is one of the most common accessibility issues. Of the roughly 2 million forms we scanned, nearly **25% failed to provide descriptive labels for their form fields**.

NAME	NAME	NAME
EMAIL	EMAIL	EMAIL
SUBMIT	SUBMIT	SUBNIT

Example of an inaccessible form field:

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	J

Example of an accessible form field:

	Email Address
~	

Keyboard traps can prevent people from taking the next step with your business.

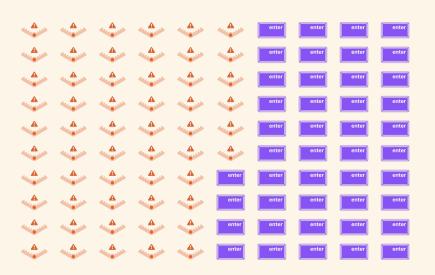
Keyboard accessibility is another common accessibility issue for most organizations — and it affects not just general site navigation, but also key actions like filling out forms.

Keyboard-only users should be able to tab between elements on a page (or form) without getting "trapped," i.e., being unable to move forward or backwards.

However, **81% of domains tested had at least one page** with keyboard functionality issues — and 56% of pages had at least one issue.

56% of pages scanned had at least 1 keyboard trap

Keyboard accessibility issues can prevent people with visual and motor impairments from jumping between sections of a page, clicking a link, or filling out a form.





BEST PRACTICES

Form accessibility tips

Don't use color alone to convey information

Websites today often use color to communicate different statuses (think red to indicate an error or missing field, or green to indicate success). Although these color-based cues are useful for many people, they can also present challenges for the 300 million people globally who have some form of color vision deficiency.

If you use color to indicate missing or required information, be sure to combine it with another element (such as an error message or symbol) to make sure that people who struggle to perceive color are not left behind.

Be careful with CAPTCHA

Most organizations today use CAPTCHA to filter out spam traffic. However, it's important to provide an accessible CAPTCHA alternative — for example, you don't want to force users to distinguish between letters, if they have a visual impairment, a cognitive impairment, or dyslexia.

Check for keyboard traps

When evaluating the accessibility of your forms, make sure that a keyboard-only user can tab between focusable elements (i.e., elements that can handle keyboard input, such as an input field) using keyboard commands alone.



INDUSTRY REPORTS

Where does each industry fall short on accessibility?

Our automated scan tested 25 WCAG criteria at scale across entire sites. However, that still leaves complex accessibility barriers that automation alone cannot identify.

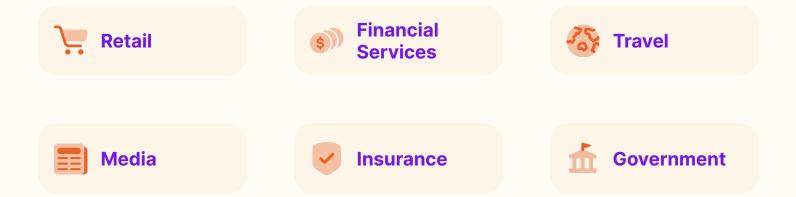
That's where our expert human testers come into play. Although they can't review hundreds of pages in real time, they can focus on critical use cases for each industry — like checkout flows for retailers or booking calendars for travel sites.

For the industries below, our team of certified accessibility experts (along with members of the disability community) reviewed 3-5 of the top brands in each space to build a more complete picture of their accessibility.

And while the number of errors uncovered in these audits is not as high as we find in automated scans, they often have a bigger impact on a person's ability to accomplish key tasks or reach their digital destination.

Key insights by industry

Find out the most common accessibility barriers by industry. Plus, learn what expert audits of the top 3-5 companies in each industry revealed about the user experience for people with disabilities.





RETAIL

Accessibility barriers are driving customers away.

Along with friends and family, people with disabilities control almost \$13 trillion in disposable income globally. Yet despite their buying power, **54% of assistive technology users believe online retailers don't care about earning their business**.

When we asked members of the disability community what it was like to shop online, many of them noted that accessibility barriers are a persistent challenge especially when it came to essential activities like viewing product photos, purchasing items, or managing their account information. "It's genuinely disheartening. And it's way too common. I could not tell you how many times I've been unable to access my cart, fill out my shipping information, or solve the CAPTCHA."

Chris Preiman

AudioEye A11iance Member & Internet Security Professional



EXPERT AUDITS: RETAIL

Breaking down the most significant barriers on the top retail sites.

Our expert review of the top retail sites revealed many of the same issues as our automated scan — plus a number of significant accessibility barriers that made it difficult for people to navigate between pages, add items to their cart, or be alerted to missing information on checkout forms.

Across the four sites audited, our testers found another **17 accessibility barriers across the login, product, and checkout pages** — including four consistent barriers that impacted their ability to make purchases.

1. No audible announcement when forms were missing required information.

Our experts found multiple forms on product and checkout pages that did not audibly announce when required information was missing, which can leave non-sighted customers unaware that their form was not submitted.

WCAG Criteria: <u>3.3.1: Error Identification;</u> <u>3.3.2: Labels or Instructions</u>

Disabilities Affected: Visual, Cognitive

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2. No alert when items were added to a user's cart.

Our experts encountered "Add to Cart" buttons that did not trigger an audible announcement when clicked, which can leave non-sighted customers unsure if an item has been successfully added — or if they've accidentally added multiples of an item.

WCAG Criteria: <u>3.3.1: Error Identification;</u> <u>3.3.2: Labels or Instructions</u>

Disabilities Affected: Visual, Cognitive





3. Buttons were not clearly labeled for people with visual impairments.

Our experts noted dozens of buttons that were not clearly labeled, meaning they had to click each one to figure out where it would take them. This can make it harder for non-sighted users to navigate a site, or take their desired action on a page.

WCAG Criteria: 4.1.2: Name, Role, Value

Disabilities Affected: Visual, Cognitive



4. Error messages on forms lacked contextual detail.

Our experts noted several instances where a form was missing required information, but there was no audible announcement of what information to enter. This can be confusing for non-sighted customers and people with cognitive impairments.

WCAG Criteria: <u>3.3.1: Error Identification;</u> <u>3.3.2: Labels or Instructions</u>

Disabilities Affected: Visual, Cognitive

"It can be hard because there's no public transportation where I live. So if I can't buy what I need online, I have to find a sighted person to drive me to the store and hope they can find what I'm looking for."

Wren Higginbottom AudioEye A11iance Member

AUTOMATED SCAN RESULTS: RETAIL

Most common issues, retail sites.

Our automated scan revealed that retail sites have an above-average rate of multiple accessibility issues, including some (like image accessibility) that are a key part of shopping online.

Studies show that 75% of online shoppers rely on product photos to help them make a purchase decision, **yet retail sites had one of the highest rates of inaccessible images across all industries**.

Retailers also struggle with things like button and link accessibility, which can make it difficult for customers to navigate between pages, add items to cart, and more.





72% of retail pages had at least one image with missing or inadequate alt text.

Without descriptive alt text on product photos and other graphics, people with visual and cognitive disabilities can have a hard time understanding what an image is supposed to illustrate.

WCAG Criteria: 1.1.1: Non-Text Content

Disabilities Affected: Visual, Cognitive



47% of retail pages with a form had at least one field that was not labeled.

Without descriptive field labels, it can be difficult for people with visual and cognitive impairments to add payment methods, enter shipping addresses, and more.

WCAG Criteria: 3.3.2: Labels or Instructions

Disabilities Affected: Visual, Cognitive





68% of retail pages had at least one link that did not clearly state where it would take users.

For people with visual and cognitive disabilities, clear, descriptive link text is a critical part of being able to navigate websites.

WCAG Criteria: 2.4.4: Link Purpose (In Context)

Disabilities Affected: Visual, Cognitive



44% of retail pages had at least one button that did not clearly state where it would take users.

For people with visual and cognitive disabilities, clear, descriptive buttons is a critical part of being able to navigate websites.

WCAG Criteria: 2.4.4: Link Purpose (In Context)

Disabilities Affected: Visual, Cognitive

Get expert insight into the accessibility of your product pages and checkout flows.

Uncover accessibility barriers that are making it hard for people with disabilities to compare products or make a purchase with an expert audit of your site. **Schedule Expert Audit**

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Get started at

k unknown> .com

FINANCIAL SERVICES

Accessibility barriers can make it easier to bank in-person.

When we talked to members of the disability community about their experiences with online banking and investment sites, several noted that accessibility barriers can make it hard to manage their accounts online forcing them to rely on in-person services or the help of friends, family, and even strangers.

In fact, accessibility barriers are one of the reasons that just 37% of households with a disability used online or mobile as their primary method to access their account, compared with 62% of households with no disability (National Disability Institute). "For banking, both personally and for work, the first step is always evaluating the accessibility of their online portals. And if a company is consistently unwilling to improve things, then it's kind of like 'Nope, this isn't going to work."

TJ Olsen

AudioEye A11iance Member & QA Tester

EXPERT AUDITS: FINANCIAL SERVICES

Breaking down the most significant barriers on the top finance sites.

After reviewing the top financial services sites, our expert testers noted that keyboard accessibility issues made it hard for screen reader users to navigate around pop-up windows (such as promotional offers) or access information about account policies or perks.

On average, our testers found another **10 accessibility barriers across the pages tested, which included account pages and ATM/branch locators** — including three consistent barriers that impacted their ability to sign up for or manage accounts.

1. Pop-up windows could not be closed using keyboard commands.

Our experts noted multiple pop-up windows that could not be closed with a keyboard meaning assistive technology users could get trapped inside the pop-up with no way to return to the main page content.

WCAG Criteria: 2.1.1: Keyboard

Disabilities Affected: Visual, Mobility

2. Missing skip links made site navigation difficult for screen reader users.

Our experts noted many pages were missing a "skip to main" link, which enables screen reader users to jump past a bunch of unwanted links (such as primary navigation links) and get to the main content on a page.

WCAG Criteria: 2.4.1: Bypass Blocks

Disabilities Affected: Visual



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3. Keyboard accessibility issues prevented users from accessing key information.

Our experts encountered several "accordion" elements (i.e., FAQ entries that can be expanded or collapsed by clicking a button) that did not respond to keyboard commands, which prevented screen reader users from accessing key information.

WCAG Criteria: 4.1.2: Name, Role, Value

Disabilities Affected: Visual, Cognitive

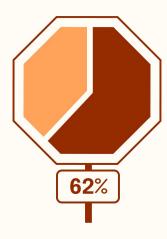
"A lot of times, there aren't any steps to take to [maintain financial privacy]. You just have to accept that you're about to give it up, because something you need to do isn't optional."

Chris Preiman AudioEye A11iance Member & Internet Security Professional

AUTOMATED SCAN RESULTS: FINANCIAL SERVICES

Most common issues, financial services sites.

Our automated scan revealed a number of significant accessibility issues on financial services sites, with the most frequent offenders being issues related to site navigation and filling out forms.



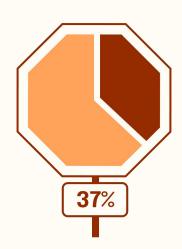
62% of pages on financial services sites had at least one link that did not clearly state where it would take users.

For people with visual and cognitive disabilities, clear, descriptive link text is a critical part of being able to navigate websites.

WCAG Criteria: 2.4.4: Link Purpose (In Context)

Disabilities Affected: Visual, Cognitive



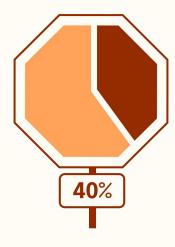


37% of pages on financial services sites had at least one button that did not clearly state where it would take users.

For people with visual and cognitive disabilities, clear, descriptive buttons is a critical part of being able to navigate websites.

WCAG Criteria: 2.4.4: Link Purpose (In Context)

Disabilities Affected: Visual, Cognitive



40% of pages on financial services sites with a form had at least one field that was not labeled.

Without descriptive field labels, it can be difficult for people with visual and cognitive impairments to sign up for an account or upload their personal information.

WCAG Criteria: 3.3.2: Labels or Instructions

Disabilities Affected: Visual, Cognitive

Get expert insight into the accessibility of your top pages and customer portals.

Uncover accessibility barriers that are making it hard for people with disabilities to manage their online banking needs with an expert audit of your site. **Schedule Expert Audit**

Dates available from

TRAVEL

Accessibility barriers are putting travel plans on hold.

When we asked members of the disability community what it was like to book travel online, they shared many of the same sentiments — and negative experiences.

- Forget about shopping around for the best deal on flights or hotels; even using the date picker to enter travel dates can be inaccessible.
- When people with disabilities encounter accessibility barriers on travel sites, they're quick to visit another site.

Given that feedback, it wasn't surprising that our automated scan and expert audits revealed that travel sites have some of the highest accessibility failure rates of any industry. "One time I knew my destination, I knew my dates. I was just going to get the ticket ... and I got stuck. It was a bad experience for me as a customer, because I had to switch platforms when I was almost done."

Charles Hiser AudioEye A11iance Advocate

EXPERT AUDITS: TRAVEL

Breaking down the most significant barriers on top travel sites.

After reviewing the top travel sites, our expert testers found a number of issues that made it hard for people with disabilities to book travel, such as hotel photos that were missing alternative descriptions for non-sighted users and pop-up windows (for selecting rooms and dates) that could not be closed by keyboard-only users.

On average, our testers found another **15 accessibility barriers across the pages tested, which included account pages and flight/room pickers** — including four consistent barriers that impacted their ability to book rooms and flights.

1. Pop-up windows contained no information for non-sighted users.

Our experts noted multiple pop-up windows that could trap keyboard-only users, with no audible explanation of what the window was for and no way for the user to close it. This forced testers to leave the site — and abandon any progress they'd made.

WCAG Criteria: 1.3.1: Info and Relationships

Disabilities Affected: Visual, Cognitive

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2. Alt text failed to paint a compelling picture for non-sighted users.

Our experts found that many images of hotel rooms and amenities were simply labeled "lobby" or "room" — instead of providing more descriptive alt text that would help non-sighted users better understand the experience of staying at that hotel.

WCAG Criteria: <u>1.1.1: Non-Text Content</u>

Disabilities Affected: Visual

3. Unclear labels made it difficult for non-sighted users to navigate between pages.

Our testers encountered numerous page elements that were missing descriptive labels (for example: a series of tabs that were each labeled "see more," instead of more descriptive labels like "reviews" and "amenities."

WCAG Criteria: <u>4.1.2: Name, Role, Value</u>

Disabilities Affected: Visual



4. Links without labels failed to provide critical context.

Our testers also encountered links without descriptive labels, which forced non-sighted users to stop, go back, and read the surrounding text to try and figure out where clicking the link would take them.

WCAG Criteria: 4.1.2: Name, Role, Value

Disabilities Affected: Visual

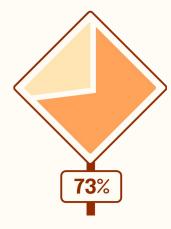
"Travel sites can do a lot of things well. But if the booking process is clunky, that's what [will] stick in everybody's mind."

Maxwell Ivey AudioEye A11iance Advocate

AUTOMATED SCAN RESULTS: TRAVEL

Most common issues, travel sites.

Our automated scan revealed a number of significant accessibility issues on travel sites, including missing image alt text that made it hard to look up seating charts, compare hotels, and more.



73% of travel pages had at least one image with missing or inadequate alt text.

Without descriptive alt text on product photos and other graphics, people with visual and cognitive disabilities can have a hard time understanding what an image is supposed to illustrate.

WCAG Criteria: 1.1.1: Non-Text Content

Disabilities Affected: Visual, Cognitive



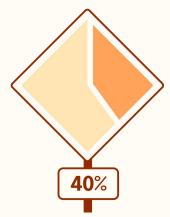


54% of travel pages were missing frame titles.

Travel sites had the second highest rate of missing frame titles across all industries scanned, which can make it difficult for screen reader users to find content or orient themselves within a page.

WCAG Criteria: 2.4.2: Page Titles

Disabilities Affected: Visual



40% of travel pages with a form had at least one field that was not labeled.

Without descriptive field labels, it can be difficult for people with visual and cognitive impairments to sign up for an account or upload their personal information.

WCAG Criteria: 3.3.2: Labels or Instructions

Disabilities Affected: Visual, Cognitive

Get expert insight into the accessibility of booking travel on your site.

Uncover accessibility barriers that are making it hard for people with disabilities to search for rooms or flights with an expert audit of your site. **Schedule Expert Audit**

2023 DIGITAL ACCESSIBILITY INDEX



MEDIA

Digital accessibility is making the wrong headlines.

Across all industries, media sites had some of the highest page failure rates for a number of key accessibility barriers, including image accessibility and page navigation.

For example, page titles help screen reader users quickly determine what information is on a page, and whether they want to keep reading. Yet nearly 62% of pages on media sites have missing frame titles — **a rate that is 20% higher than the overall average**.

In fact, one member of the disability community said that her local paper's website is so inaccessible, she has to get her news from the local Facebook group. Which, as she described it, is "insane." "If I really want to read an article, it's like 'Okay, do I need to download an app? Can I read it on the website? How interested am I really?"

Lia Stone

AudioEye A11iance Member & *QA Tester*



EXPERT AUDITS: MEDIA

Breaking down the most significant barriers on top media sites.

After reviewing the top media sites, our expert testers noted that accessibility barriers made it hard for non-sighted users to navigate between articles or fully engage with multimedia content, like slideshows and in-article images.

On average, our testers found another **17 accessibility barriers across the pages tested, which included individual articles and contact pages** — including three consistent barriers that made it difficult to read articles.

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1. Keyboard accessibility issues prevented users from clicking between articles.

Our experts noted several instances where multimedia content (such as slideshows) was inaccessible to keyboard-only users, who were unable to tab between slides using keyboard commands.

WCAG Criteria: 2.1.1: Keyboard

Disabilities Affected: Visual, Mobility

2. Missing skip links made site navigation difficult for screen reader users.

Our experts noted many pages were missing a "skip to main" link, which enables screen reader users to jump past a bunch of unwanted links (such as primary navigation links) and get to the main content on a page.

WCAG Criteria: 2.4.1: Bypass Blocks

Disabilities Affected: Visual





3. Unlabeled video player controls made it difficult to play/pause/stop/hide video.

Our experts encountered several video players that had unlabeled control buttons, meaning screen reader users weren't able to play, pause, or stop video content.

WCAG Criteria: 2.2.2: Pause, Stop, Hide

Disabilities Affected: Visual, Cognitive

"Media newsletters tend to be really inaccessible. It's like they pay less attention to compliance for things like email."

TJ Olsen

AudioEye A11iance Member & QA Tester

AUTOMATED SCAN RESULTS: MEDIA

Most common issues, media sites.

Our scan revealed a number of significant accessibility issues on media sites, with the most frequent offenders being missing page titles and a lack of image alternative text on images.



73% of pages on media sites had at least one image with missing or inadequate alt text.

Without descriptive alt text on images and other graphics, people with visual and cognitive impairments can struggle to understand what each one is supposed to illustrate.

WCAG Criteria: 1.1.1: Non-Text Content

Disabilities Affected: Visual, Cognitive





67% of pages on media sites had at least one link that did not clearly state where it would take users.

People tend to browse media sites by navigating to a specific section, like 'Health' or 'Entertainment'. When these sections are not clearly labeled, or when related articles are not clearly labeled, it can be difficult for screen reader users to navigate the site.

WCAG Criteria: 2.4.4: Link Purpose (In Context)

Disabilities Affected: Visual, Cognitive



62% of pages on media sites were missing frame titles.

Media sites had the highest rate of missing frame titles across all industries scanned, which can make it difficult for screen reader users to find content or orient themselves within a page.

WCAG Criteria: 3.3.2: Labels or Instructions

Disabilities Affected: Visual, Cognitive

Become the go-to news source for people with disabilities.

Uncover accessibility barriers that are making it hard for people with disabilities to read articles or manage their account with an expert audit of your site. **Schedule Expert Audit**

Insurance you can trust

<form field error>

INSURANCE

Accessibility barriers can make getting coverage a total loss.

For people with disabilities, keyboard and form accessibility barriers can make it difficult to compare plans, request a quote, or even look up coverage rates for their address. Often, the path of least resistance is to reach out to customer support — although several of our community members noted that pushing them into a phone queue should not be mistaken as an accessibility strategy. "Every kind of insurance I've ever had, I have to reach out by phone or email because the process of signing up or updating my personal information is wildly inaccessible."

Lia Stone

AudioEye A11iance Member & QA Tester



EXPERT AUDITS: INSURANCE

Breaking down the most significant barriers on the top insurance sites.

After reviewing the top insurance sites, our expert testers noted that keyboard accessibility issues could prevent screen reader users from taking key actions on the site, such as looking up coverage maps, searching for agents, or logging into their account.

On average, our testers found another **7 accessibility barriers across the pages tested, which included policy pages, FAQs, and agent profiles** — including four consistent barriers that impacted their ability to create or manage accounts.



1. Screen reader users were unable to interact with coverage maps.

Our experts noted that interactive maps on several pages had limited accessibility, with screen reader users unable to zoom in or out, gain basic street information, or understand what the map was highlighting.

WCAG Criteria: <u>1.1.1: Non-Text Content</u>

Disabilities Affected: Visual



2. Screen reader users were unable to get in touch with agents.

Our experts encountered multiple "Find an Agent" buttons that directed them to a new page without any agent information. This made it difficult to connect with prospective agents or get a quote.

WCAG Criteria: 4.1.2: Name, Role, Value

Disabilities Affected: Visual, Mobility



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3. Vague link descriptions made site navigation a challenge.

Our experts encountered multiple links that were simply labeled "Go," which made site navigation a difficult task and forced them to spend time clicking on links to see if they would be taken to the right page.

WCAG Criteria: 4.1.2: Name, Role, Value

Disabilities Affected: Visual, Cognitive



4. Broken buttons stopped keyboard-only users in their tracks.

Our experts noted multiple instances where they were unable to log into their account using a keyboard alone. Clicking the log-in button did not trigger any kind of announcement or focus change for screen reader users.

WCAG Criteria: <u>4.1.2: Name, Role, Value</u>

Disabilities Affected: Visual, Cognitive

"It can be really stressful having to call support. You never know what kind of service you're going to get. Sometimes they're super helpful, and other times you have to hang up and hope for someone better."

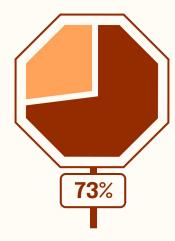
Marche Roberson AudioEye A11iance Member



AUTOMATED SCAN RESULTS: INSURANCE

Most common issues, insurance sites.

Although insurance sites performed better than average for most of the tests conducted by our automated scan, they still had a high rate of accessibility issues that affected people's ability to request a quote, enter personal information, or navigate to specific pages.



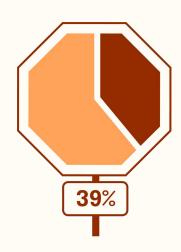
73% of pages on insurance sites had at least one image with missing or inadequate alt text.

Without descriptive alt text on images and other graphics, people with visual and cognitive impairments can struggle to understand what each one is supposed to illustrate.

WCAG Criteria: 1.1.1: Non-Text Content

Disabilities Affected: Visual, Cognitive



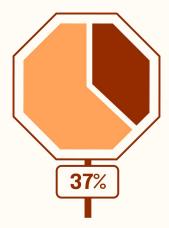


39% of insurance pages with a form had at least one field that was not labeled.

Without descriptive field labels, it can be difficult for people with visual and cognitive impairments to request a quote or update their account information.

WCAG Criteria: 3.3.2: Labels or Instructions

Disabilities Affected: Visual, Cognitive



37% of pages on insurance sites were missing frame titles.

Missing frame titles can make it difficult for screen reader users to find content or orient themselves within a page.

WCAG Criteria: 2.4.2: Page Titles

Disabilities Affected: Visual

Get expert insight into the accessibility of your top pages and customer portals.

Uncover accessibility barriers that are making it hard for people with disabilities to sign up or manage their account with an expert audit of your site. **Schedule Expert Audit**



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GOVERNMENT

Government sites may be for the people, but they don't work for all.

When we asked several members of the disability community about their experience with state and federal government websites, each one shared a similar story.

Government sites tend to be less accessible than the private industry (or, as one member of the disability community put it, "atrocious across the board"), which can be especially problematic because there usually isn't an alternative. If they need to file a police report or register to vote, there's only one place to go. And if that site isn't accessible, they're stuck. "I had to go on the immigration website about a year ago. The first page was pretty accessible. But the second I needed to put in a case number, check statuses or change addresses, it broke down pretty quickly."

Christina Campbell AudioEye A11iance Member



EXPERT AUDITS: GOVERNMENT

Breaking down the most significant barriers on the top government sites.

After reviewing the top government sites for things like healthcare and retirement benefits, our expert testers noted that keyboard accessibility issues made it difficult to look up information, log into personal accounts, or submit official documents.

On average, our testers found another **10 accessibility barriers across the pages tested, which included account profiles and contact pages** — including three consistent barriers that impacted their ability to use government services.

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1. No audible announcement when forms were missing required information.

Our experts found a number of forms that did not audibly announce when required information was missing, which can leave non-sighted customers unaware that their form was not submitted. Instead, the page simply reloaded with no announcement that a form was missing required information.

WCAG Criteria: <u>3.3.1: Error Identification;</u> <u>3.3.2: Labels or Instructions</u>

Disabilities Affected: Visual, Cognitive



2. Unclear labels made it difficult for non-sighted users to navigate between pages.

Our experts encountered numerous links that lacked descriptive labels to aid in navigation (for example: a series of consecutive links were all labeled "learn more," instead of informing users that one link pointed to small business coverage and another to Medicaid coverage.

WCAG Criteria: <u>4.1.2: Name, Role, Value;</u> <u>2.4.4: Link Purpose (In Context)</u>



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3. Keyboard-only navigation was a consistent challenge across sites.

Our experts noted a number of keyboard accessibility issues that can impact site navigation, such as an inability to use arrow keys to tab between page sections (the most widely used method of navigation for screen reader users).

WCAG Criteria: 2.1.1: Keyboard Accessibility

Disabilities Affected: Visual, Cognitive

"For some government websites, you can tell they've put a lot of work into accessibility. And for others, it's like they just threw things together and whatever happens, happens."

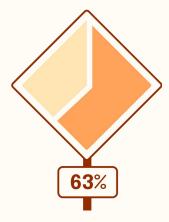
Jennifer Piening AudioEye A11iance Member



AUTOMATED SCAN RESULTS: GOVERNMENT

Most common issues, government sites.

Government sites struggled in a number of key areas that made it difficult for people with disabilities to access online services, obtain information, and fill out required forms and information.



63% of government pages had at least one interactive element that could not be manipulated by keyboard.

Many of these barriers affected user actions like tabbing between form fields, closing pop-up windows, or pressing 'Submit' buttons.

WCAG Criteria: 1.1.1: Non-Text Content

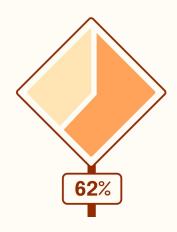
Disabilities Affected: Visual, Cognitive

"In general, government sites lag behind the private industry. Even making a required payment for my business can be hard."

TJ Olsen

AudioEye A11iance Member & QA Tester



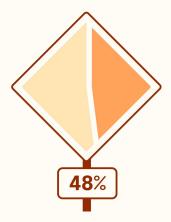


62% of government pages had at least one image with missing or inadequate alt text.

Without descriptive alt text on product photos and other graphics, people with visual and cognitive disabilities can have a hard time understanding what an image is supposed to illustrate.

WCAG Criteria: 1.1.1: Non-Text Content

Disabilities Affected: Visual, Cognitive



48% of government pages with a form had at least one field that was not labeled.

Without descriptive field labels, it can be difficult for people with visual and cognitive impairments to obtain government services, such as registering to vote, applying for benefits programs, or filing taxes.

WCAG Criteria: 3.3.2: Labels or Instructions

Disabilities Affected: Visual, Cognitive

Discover how close your government site is to WCAG conformance.

Uncover accessibility barriers that cannot be found by automation alone with an Expert Audit of your most important pages. **Schedule Expert Audit**

METHODOLOGY

How we calculated our Index Average.

In the real world, it takes both people and tools to keep our roads in good condition. It may be heavy equipment doing most of the digging, but it's people planning where to dig next.

We think about digital accessibility the same way. There's a clear need for tools like AI-driven automation to help us find and fix the majority of accessibility barriers. But there's an equal need for people to identify certain issues and come up with solutions that deliver the best possible user experience.

Our **Digital Accessibility Index** reflects this perspective. We started with an automated scan, then had human experts audit the top sites in each industry, focusing on the most important page elements and user actions.

AUTOMATED SCAN



2M+ pages

We scanned more than 2 million pages across 40,000 enterprise domains.



3B+ elements

We tested more than 3 billion page elements (e.g., images and links) against the Web Content Accessibility Guidelines (WCAG) 2.1 criteria.



74M errors

Our scan revealed 74 million page elements that failed one of the WCAG criteria for accessibility.

EXPERT AUDITS



21 sites

Our expert testers audited 18 sites in the S&P 500 — plus 3 of the most-trafficked government sites.



102 pages

We tested up to 5 pages per site, focusing on pages that supported key industry goals (e.g., product pages for retailers, booking pages for travel sites).



In total, our testers found 274 significant accessibility barriers, many of which prevented users from accomplishing key tasks on that page.

2023 DIGITAL ACCESSIBILITY INDEX



TOP BARRIERS

The top accessibility barriers driving our key insights.

Our automated scan revealed **70 different types of accessibility barriers**, based on 25 of the 78 WCAG criteria. The number of barriers identified exceeds the number of criteria tested because some WCAG criteria address multiple page elements. For example: <u>WCAG</u> <u>Success Criterion 1.1.1: Non-text Content</u> requires that all images have a text alternative. But it also applies to emoticons, map areas, images as links, and more.

We limited our scan to 25 criteria because some barriers cannot be reliably tested by automation alone. For that reason, the true number of issues per page is likely higher. And it's why we always stress the importance of backing automated scans with expert audits by human testers — including members of the disability community.

Of the 70 barriers that could be detected by automation, the most frequent were related to **image accessibility**, **keyboard accessibility**, **and descriptive links or labels**.



1. MISSING ALT TEXT

69% of pages had at least one image with inadequate or missing image alternative text.

Vague or missing alt text can make it hard for some people with visual and cognitive impairments to understand what an image is supposed to illustrate.

WCAG Criteria: 1.1.1: Non-Text Content

Disabilities Affected: Visual, Cognitive



2. VAGUE LINKS

64% of pages had at least one link that did not clearly describe where it would take users.

Without clear, descriptive links, it can be hard for screen reader users and people with cognitive impairments to confidently navigate between pages.

WCAG Criteria: 2.4.4: Link Purpose

Disabilities Affected: Visual, Mobility



3. KEYBOARD BARRIERS

54% of pages had at least one page action that could not be completed with a keyboard alone.

Keyboard-only users must be able to interact with every link and dropdown list on a page using keyboard commands (e.g., pressing the **Tab** or **Page Down** keys).

WCAG Criteria: 2.1.1: No Keyboard

Disabilities Affected: Visual, Mobility



4. MISSING PAGE TITLES

44% of pages lacked a title that described its topic or purpose.

Without clear, descriptive page titles, it can be hard for screen reader users to quickly determine if the information on a page is relevant to their needs.

WCAG Criteria: 2.4.2: Page Titled

Disabilities Affected: Visual, Cognitive, Mobility



5. MISSING FORM LABELS

43% of pages failed to provide a descriptive label for every form field.

Missing or non-descriptive form labels can make it hard for screen reader users to know what information to enter into each field.

WCAG Criteria: 2.4.6: Headings and Labels

Disabilities Affected: Visual, Cognitive

NEXT STEPS

Find out how your site compares.

Today, digital is how the world works. But it doesn't work for all. **Digital experiences are broken for the 1.3 billion people globally who live with a disability**.

And as our automated scan and manual audits revealed, even companies that invest in digital accessibility often fall short. Largely because they only rely on one side of the equation either automation-only solutions or manual, consultative approaches. Neither of which are sufficient on their own.

That's why AudioEye combines **Al-driven automation with expert manual testing**, including members of the disability community.

Together we can make a huge difference in the lives of the people within the disability community and create digital experiences that actually work for everyone.



Find out how your website stacks up.

Scan any URL today to identify accessibility issues on your site.

Scan your site

THANK YOU

This wouldn't have been possible without the expertise and support of:

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