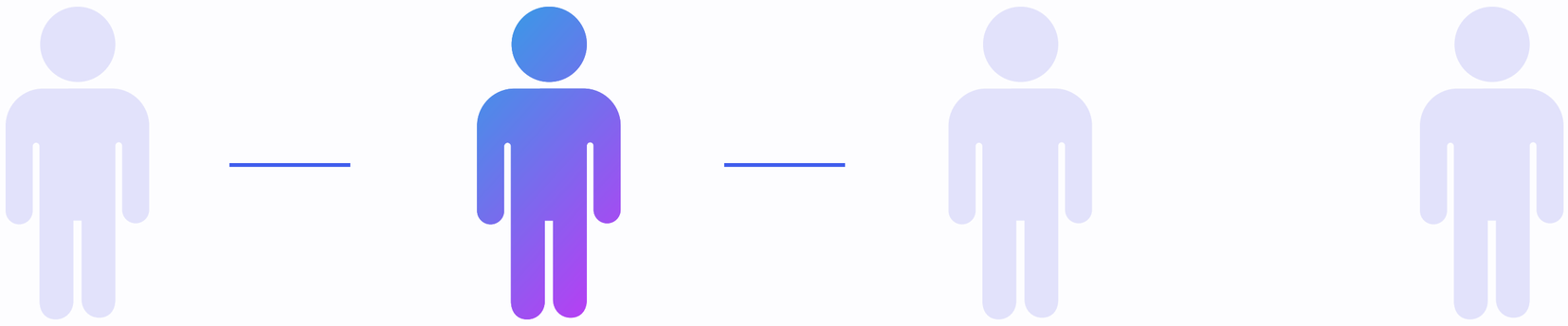
The Economic Impact of Inaccessibility

$16.8 Billion

Global e-commerce sales lost annually due to websites that are inaccessible to people with disabilities.

Why You Should Read This Report

1 in 4 adults live with a disability[1] (in the USA)



Most e-commerce websites aren’t designed to accommodate people with disabilities. Based on research conducted by UserWay, this problem is contributing to higher bounce rates and lower sales numbers for e-commerce sites. Because the holiday shopping season is critical for most retailers, even small accessibility improvements to their websites can lead to significant gains in revenue.

This report provides estimates of both year-round and Black Friday sales losses for the online commerce industry. The research is based on activations of UserWay’s accessibility technology across more than 1.4 million websites. The report concludes by explaining how enterprise and SMB e-commerce sites can rely on AI-powered accessibility to ensure an accessible shopping experience for people with disabilities.

Key Takeaways

Inaccessible Websites Will Cause Retailers to Lose an Estimated $828 Million this holiday shopping season

According to SimilarWeb data published August 19, 2021, bounce rates for the e-commerce industry average 41.7%.[3] An often overlooked strategy to reduce these numbers requires analyzing barriers to web accessibility and correcting standards violations, which is a straightforward path to improving shopping cart and check out conversions.

Accessibility Widget Engagement is 5x Higher on E-commerce Sites

UserWay reports that interactions with its accessibility widget, such as increasing text size, color contrast, applying a dyslexia-friendly font, and reducing seizure-inducing animations were considerably higher on e-commerce sites than across all others categories.

Accessibility Barriers Contribute to Unnecessarily High Bounce Rates

When blind and visually impaired people attempt to use a screen reader on an e-commerce site with accessibility barriers, they often encounter obstacles when navigating through product options, such as choosing a product color or size, interacting with add-to-cart buttons or completing their checkout process. These visitors have little choice but to leave the site (aka “bounce”) and try another retailer. Removing these types of access barriers is proven to significantly lift user engagement metrics, including time on site, conversions and sales.

The “Accessibility Gap” is Hurting SMBs

E-commerce giants like Target, Best Buy and Amazon have created teams of accessibility experts and established partnerships with disability rights organizations to help identify any accessibility barriers on their sites and remediate them. These actions ensure their sites are functional for users of all abilities. Unfortunately, SMBs are falling behind and don’t even know it because they can’t track accessibility metrics.

Allon Mason

UserWay CEO

“The holidays will be even brighter for the e-commerce industry once it opens its eyes to the importance of accessibility. People with disabilities are an untapped market just waiting for retailers to accommodate them.”

A Blind Spot for E-commerce Sites

$100 Billion

E-commerce sales topped $100 billion for the first time in November 2020,[3] and according to a report by eMarketer, e-commerce is projected to account for 18.9% of all holiday sales for 2021.[4]

Covid-19 led to increases in online shopping during the holidays.

32.2% growth (USA), totaling $188.2 billion[3]

The most important time of year for e-commerce sites lasts from early November through the beginning of January. While attention in the news media is generally focused on Black Friday and Cyber Monday, most consumers continue to make purchases throughout the Christmas season into the next year.

Owners of e-commerce sites prepare for the holiday rush with elaborate strategies for online advertising purchases, sales funnel optimization, content plans, email campaigns and numerous social media posts.

When done well, the best sites efficiently draw visitors and generate conversions with fewer abandoned carts or complaints. Elaborate A/B tests are run to improve click rates for everything from account signups to add-to-cart buttons, as marketers are able to continually optimize for better results. For many segments of e-commerce, incremental conversion rate increases of even 0.5% can have a drastic impact on bottom-line results.[6]

With so much effort being placed on conversion efficiency in e-commerce, you may be led to believe that easy gains are no longer possible. That may be true for many areas of "well-optimized" e-commerce sites, but one strategy remains almost completely untapped: **ACCESSIBILITY.**

More than one billion people around the world have some form of disability and most websites are not built to accommodate them. In the United States, 1 in 4 adults live with a disability according to the CDC. That equates to more than 60 million people in the US who are potential internet shoppers that aren't being served by the sites they visit.

Inaccessible websites are also a lawsuit risk because they violate the Americans with Disabilities Act of 1990 (ADA) and the Web Content Accessibility Guidelines (WCAG), which are internationally recognized web accessibility standards. Domino's Pizza, Target, E-Trade.com, Carnival Cruises and 50 US Colleges are just a small sample of the organizations that have been sued. Legal costs for each of them surpassed hundreds of thousands of dollars, which could have easily been avoided by making their sites accessible.

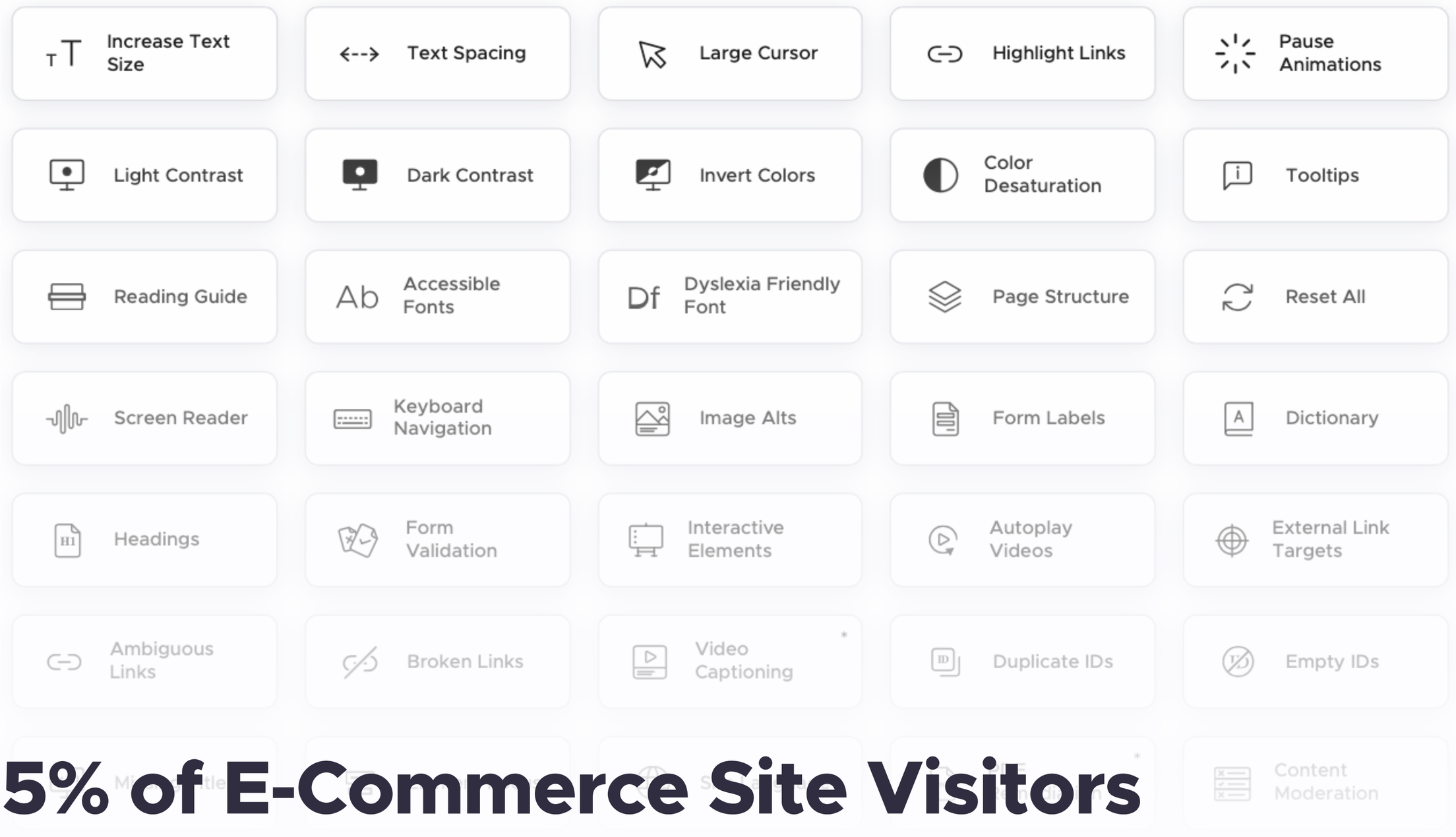
The Missing E-Commerce Metric:

Disabled People Are Invisible to Analytics Software and Session Recorders

Higher bounce rates and lost sales

Successful business leaders know what gets measured gets managed. However, few e-commerce sites are collecting data on the accessibility challenges their visitors face. For example, it's not uncommon for people who use screen readers to have no way to navigate the sites they visit. The code on most sites is not written to make navigation with these types of devices possible. When frustrated screen reader users abandon a site, they show up as a bounce statistic and as a lost sale, without reflecting the true reason. Since screen reader users behave differently to sighted visitors, the reason for an accessibility-driven cart abandonment cannot be understood by session trackers, analytics software or product marketing experts.

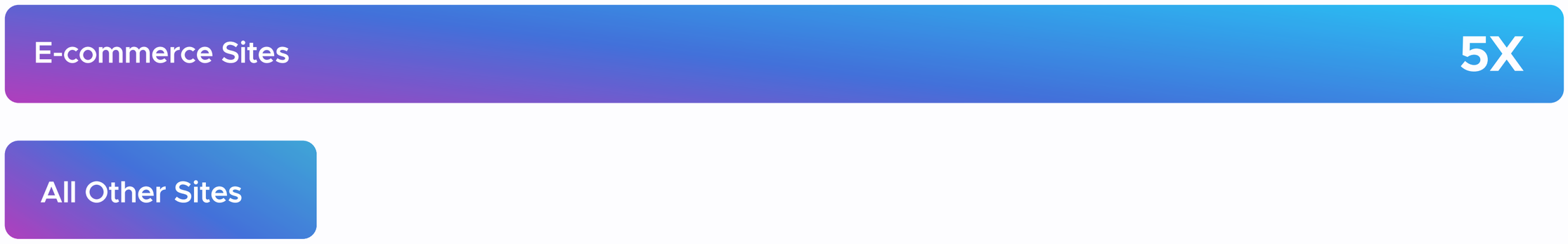
That is, of course, unless an e-commerce site has no accessibility violations. UserWay's AI-powered solutions automatically identify and fix web accessibility barriers, and offer user-triggered options that improve the online shopping experience for visually impaired and others who rely on assistive technologies to shop online.



5% of E-Commerce Site Visitors Activate Manual Accessibility Functions

For a site with one million monthly visitors, **50,000** may need a way to make adjustments to improve their browsing experience so they can consume a site's services. Without the accessibility options described here, they're more likely to exit quickly and not return.

Widget Engagement is Higher for E-commerce Sites



UserWay's statistics, gathered across millions of daily page loads, show that widget engagement is 5x higher for e-commerce sites than all other categories. This clearly reflects e-commerce visitors' need for personalization of content. The concept of "invisible disability" helps explain these numbers, and motivates e-commerce design, product and SEO teams to address these needs.

An invisible disability is a temporary or situational limitation of ability that the person does not consider a disability. Whether suffering from a migraine, age-related vision loss, or other invisible disabilities, such users do not think of themselves as disabled, and have not adopted assistive technologies, yet seek classic accessibility remediations (when made available, such as via the UserWay Widget) to improve their experience while on site.

Furthermore, people who are sensitive to distractions, seizure prone or who have epilepsy (and sensory processing disorders) need the ability to pause or hide animations. Without a way to do so, these users have no other option but to leave overstimulating sites. Disabled users, plus the larger population of users with invisible disabilities, explain the five-fold rate of widget interaction that UserWay sees across the sites that it serves.

During the Holiday Shopping Season

2X Widget **Usage**

Widget usage more than doubles.

More traffic means more visitors, magnifying the positive effects of accessibility remediations on the entire population. UserWay's global usage patterns report that on average, when shopping is at its peak from November through December, about double the number of site visitors make site customizations through the widget—an increase from 1-5% to 3-8%. These numbers reflect two related trends that underscore the enormous importance of accessibility remediations, an importance that may be overlooked by typical e-commerce performance, analytics and marketing teams.

The first trend involves the benefit to every user, disabled or not, that is received by proper accessibility coding. Every shopper on a physical street, whether in a wheelchair, wheeling a stroller, or just seeking an easier path to crossing the street, enjoys the benefit of the "curb cut" ramp at every street crossing. In the same way, online e-commerce visitors may read the captions of advertising videos with the sound off, or increase the screen contrast to see online information better in a bright light. These benefits, known collectively as the "curb-cut effect," show that accessibility-oriented capabilities such as the UserWay Accessibility Widget have positive impacts above and beyond just disabled individuals.

The second trend reflects shoppers' growing sophistication, and their expectation that sites will support their needs, whether for an acknowledged disability, or an invisible disability. UserWay's AI-Powered Accessibility Widget and similar technologies give assurance that a visitor accustomed to adjusting contrast or hearing sites announced will find the experience they were seeking and drive smoothly from product selection to check out. These two trends combine to create the nearly double engagement statistics that UserWay reports across the vast portfolio of its global customers.

Dyslexia is perhaps one of the largest and most common invisible disabilities. The Cleveland Clinic estimates that 15-20% of the US population has dyslexia,[9] which totals more than 40 million people. A dyslexia-friendly typeface changes the letters on websites so they appear slightly more narrow at the top but wider at the bottom. It also alters the design of some letters to reduce confusion, such as those that are mirrored like “d” and “b” as well as “p” and “q,” or overly similar such as “L,” “I” and “1.”

The Most Popular Automated Fix:

Image Alts

The Most Popular Human-Triggered Fix:

Df Dyslexia Friendly Font

Focusing first on image alts is sure to improve retention rates, and providing a dyslexia-friendly font will go a long way toward accommodating every visitor.

E-commerce sites seeking the benefits of increased accessibility, including lower bounce rates and other advantages detailed above, should look first to the alternative text (alt-text) descriptions they provide for images. UserWay’s data clearly shows that its customers rely on UserWay to provide and simplify the workflow regarding such alternative descriptions. Such “alt tags” act in many different ways to increase user engagement, lower bounce and exit rates, and retain site visitors. The curb-cut effect is felt as mobile phones show alternative text when pressing an image, or when an image is not yet fully rendered due to bandwidth limitations. Invisible disability users will see the alternative texts, or hear them read to them, and finally blind users absolutely rely on these as they cannot see the images at all.

Billions of Dollars in Lost Sales

Real-word projections

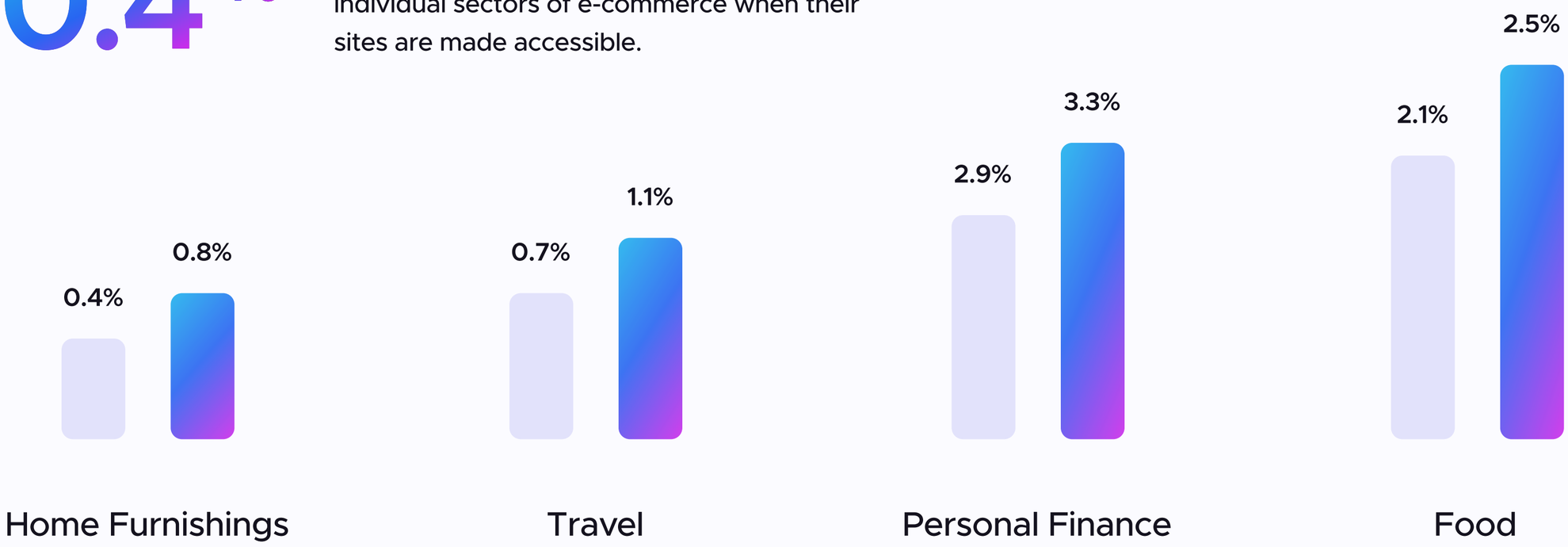
The data gathered by UserWay demonstrates that financial losses due to lack of accessibility enhancements are chronic within online commerce. To provide more clarity for business leaders on the scale of these losses, this section combines publicly reported sales stats with UserWay data to provide estimates for the consequences of inaccessible e-commerce websites.

Globally, $16.8 Billion in Online Sales are Lost Annually Due to Web Accessibility Violations

Statista reported that in 2020, more than two billion people purchased goods or services online, with e-commerce sales surpassing $4.2 trillion U.S. dollars worldwide.[11] Based on the UserWay data shared here, a **0.4% increase** in sales can be won by integrated web accessibility solutions alone, translating into **$16.8 billion** in sales being lost to accessibility barriers.

0.4%

Estimated conversion rate increases for individual sectors of e-commerce when their sites are made accessible.



Average conversion numbers for each e-commerce sector are based on data collected from the Digital Marketing Institute[6]

Web Accessibility Issues Will Cost Retailers $828 Million this Holiday Season

In the 2021 Adobe Holiday Shopping Forecast, total online holiday e-commerce spending is projected to reach $207 billion.[12] An estimated 0.4% increase in sales by removing digital accessibility barriers could increase this total by $828 million.

$113 Million in Sales are Lost From Thanksgiving to Cyber Monday Due to Accessibility Violations

This graphic includes data from Adobe,[5] the CDC[16] and UserWay.[12]

$38 Million

Black Friday sales losses for retaillers due to web accessibility issues.

Total online spending for Black Friday is projected to reach $9.5 billion.[13] By removing digital accessibility barriers, sales would increase by approximately 0.4%, which would bring the total to $9.54 billion.

Small Online Retailers are Losing Millions in Sales to Amazon, Target and Other Large E-commerce Businesses Due to the “Accessibility Gap”

The high cost and difficulty traditionally associated with providing an accessible user experience has proven to be a significant barrier to small online retailers competing against e-commerce giants. For example, Target formed a partnership with the National Federation of the Blind to make its website fully compliant for people relying on assistive tech like screen readers. Similarly, Amazon offers screen reader users an alternative, uncluttered and easier to navigate version of their website at www.amazon.com/access. Until recently, few small online retailers have had the resources to make these types of accessibility remediations, or fixes, driving away visitors with disabilities. The advent of automated accessibility providers, such as UserWay, are a critical new development that promises to close the Accessibility Gap.

Even Fortune 500 Companies Find Accessibility Elusive and Expensive, with Many Sites Still Not Accessible

Even the largest companies, following enormous investments in accessibility, fall short of the mark. In a recent study performed by UserWay, which analyzed the list of Fortune 500 websites, only 2.6% had no severe accessibility violations. The other 97.4% had at least one, with some sites totalling more than 200, and one more than 1,000 accessibility violations. However, as these companies make web accessibility a priority, the gap is being filled with automated solutions like UserWay’s AI-Powered Accessibility Widget.

A11Y Automation Tech Ensures Rapid Website Accessibility

AI-Powered Accessibility Solutions

Before automated tools like UserWay's AI-Powered Accessibility Solutions became available, building and maintaining accessible websites was labor-intensive and expensive. Stakeholders in the production chain, from designers to brand managers, and developers to quality assurance, lacked accessibility training in their original education and needed to play catch-up at the expense of their employers. Sites that were coded without accessibility in mind needed to be refactored with every page continually updated as accessibility standards changed. Companies hired expensive manual audit teams and accessibility experts, and personnel changeover required ongoing investment in accessibility training.

Automation Streamlines the Process

Automation has advanced rapidly in the last five years to fill the gaps in accessibility training and implementation mentioned above. Every accessibility practice today relies heavily on automation. Manual accessibility auditors use automatic scanning tools to accelerate their work. Software developers rely on automated accessibility remediation. The field has progressed to a point where automated solutions are able to detect and solve most problems. They also monitor any new content that gets added and change the underlying DOM (document object model, or website code) to meet accessibility standards, if any violations are present. Today, at every stage of the website development process, automation is contributing to making accessibility better and more affordable.

As with all human/AI interaction, the ability of human actors to tweak automated results vastly increases the quality and usefulness of the result. On-page accessibility inspection and remediation solutions such as UserWay's AI-Powered Accessibility Widget offer an inviting human-in-the-loop editing function to ensure that the UserWay-provisioned technologies are performing as expected.

Website authoring tools such as Wix, Shopify and Duda have recently become more aware of the importance of accessibility,[17] but the process can still be manual and time-consuming for site administrators. The automation revolution brings a level of accessibility once reserved to large organizations within reach of SMBs. AI-powered decision-making and automation smooths out the process and inevitable oversights.

The Fast Lane to Making an E-commerce Site Accessible

It’s not too late for e-commerce providers wishing to rapidly close the accessibility gap on their sites in time for the current holiday season to make meaningful changes. There are just three steps you need to follow:

1

Get a Site Scan

Use a scanner tool such as UserWay’s Accessibility Scanner (visit https://userway.org/scanner/ for a free scan) to check your website for accessibility violations. The ideal scanner lists every violation and categorizes them by severity. This is your roadmap to making your site fully accessible.

2

Install an Automated Solution

Install an on-page automated solution such as UserWay’s AI-Powered Accessibility Widget (visit https://userway.org/get/ to start a 10-day free trial). Generally, these solutions require a simple process of installation and begin working immediately.

UserWay has video tutorials for every platform, including Wordpress, Shopify, Wix and Squarespace, so it’s easy to get the widget running. You’ll know it's working when you see the universal symbol for accessibility in the corner of your homepage.

3

Check the Automated Changes

An ideal automated solution widget will edit the code on your site as it's loaded in your visitors’ browsers, so you won’t see code changing on your backend server. It will also create alt-text for all of your images and buttons and allow your content editors to easily tweak these messages to ensure they communicate well and are aligned with your brand’s voice.

The Best E-Commerce Websites Get Accessible for the Holiday Season

Make Accessibility a priority

Accessibility is a critical deciding factor in whether many people enjoy and complete a purchase on an e-commerce site. Yet current user behavior analysis often overlooks accessibility even though a huge number of visitors expect an accessible experience. The accessibility conversation is no longer one to be left to lawyers and a company's compliance department. UserWay's statistics on widget engagement, when multiplied by overall online traffic, and the reduced cost of today's automated solutions, prove the value of coding for accessibility. Making your website standards-compliant will help boost your bottom line.

To learn more about how the UserWay Accessibility Widget complies with ADA, WCAG and other international standards, please visit https://userway.org/.

Methodology

All estimates in this report are based on data collected by UserWay across more than one million websites that have run UserWay's technology, combined with publicly available research.

Sales Loss Estimates Formulas

On average, 1-5% of website visitors activate the UserWay Accessibility Widget on the sites that have implemented it. For the purposes of this study, we used a 3% activation rate. To connect sales losses to accessibility widget activations, average e-commerce website conversion numbers were used from data published by Unbounce. It found the average conversion rate for e-commerce sites to be 12.9%.[15]

The 0.4% sales boost is calculated by applying the average conversion rate to the improved retention rate of a barrier-free site. This latter number is inferred by widget activation rates, taken as both a direct indication of accessibility barriers, and an indirect proxy for the larger number of people who experience barriers and silently bounce without activating the widget. To represent this total population, the 12.9% average conversion rate was subtracted from the 3% widget activation rate resulting in a slightly rounded-up 0.4% boost to average conversion rates that can be directly attributed to widget activations.

The 0.4% addition to conversion rates was then added to publicly reported sales data to determine a dollar amount in sales that were lost due to inaccessibility. The formula can be written as: (Reported sales data + 0.4% widget user conversion rate estimate) - Reported sales data = Total sales lost due to inaccessibility.

Limitations

While up to 5% of site visitors will voluntarily activate a widget's accessibility functions, blind users are not counted in the tracking data because they do not manually activate the widget. That is because blind users don't require user-triggered controls that tweak a site's color contrast, typefaces, or font sizes. Instead, they use assistive technology that in turn interprets the accessibility-oriented coding of a website to ensure seamless interaction with the site's contents. These include accessible navigation, well-structured hierarchical headings, accessible popups, product images with clear descriptions, informative link targets and other clear, succinct and accurately-coded interactive elements. All of this code must be available when a webpage loads for an assistive technology and its downstream interpreters (e.g., a screen reader or a braille keyboard). Due to this limitation, actual sales losses for e-commerce sites are likely higher than the numbers used in this report.

Endnotes

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