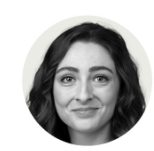# For Blind Internet Users, the Fix Can Be Worse Than the Flaws

Companies say their A.I.-powered tools are the best way to fix accessibility problems online, but many blind people find they make websites harder to use.

By **Amanda Morris**

July 13, 2022

Patrick Perdue, a radio enthusiast who is blind, regularly shopped for equipment through the website of Ham Radio Outlet. The website's code allowed him to easily move through the sections of each page with his keyboard, his screen reader speaking the text.

That all changed when the store started using an automated accessibility tool, often called an accessibility overlay, that is created and sold by the company accessiBe. Suddenly, the site became too difficult for Mr. Perdue to navigate. The accessiBe overlay introduced code that was supposed to fix any original coding errors and add more accessible features. But it reformatted the page, and some widgets — such as the checkout and shopping cart buttons — were hidden from Mr. Perdue's screen reader. Labels for images and buttons were coded incorrectly. He could no longer find the site's search box or the headers he needed to navigate each section of the page, he said.

Mr. Perdue is one of hundreds of people with disabilities who have complained about issues with automated accessibility web services, whose popularity has risen sharply in recent years because of advances in A.I. and new legal pressures on companies to make their websites accessible.

Over a dozen companies provide these tools. Two of the largest, AudioEye and UserWay, are publicly traded and reported revenues in the millions in recent financial statements. Some charge monthly fees ranging from about $50 to about $1,000, according to their websites, while others charge annual fees in the several-hundred-dollar or thousand-dollar range. (Pricing is typically presented in tiers and depends on how many pages a site has.) These companies list major corporations like Hulu, eBay and Uniqlo, as well as hospitals and local governments, among their clients.

Built into their pitch is often a reassurance that their services will not only help people who are blind or low vision use the internet more easily but also keep companies from facing the litigation that can arise if they don't make their sites accessible.

But it's not working out that way. Users like Mr. Perdue say the software offers little help, and some of the clients that use AudioEye, accessiBe and UserWay are facing legal action anyway. Last year, more than 400 companies with an accessibility widget or overlay on their website were sued over accessibility, according to data collected by a digital accessibility provider.

"I've not yet found a single one that makes my life better," said Mr. Perdue, 38, who lives in Queens. He added, "I spend more time working around these overlays than I actually do navigating the website."

Last year, over 700 accessibility advocates and web developers signed an open letter calling on organizations to stop using these tools, writing that the practical value of the new features was

"largely overstated" and that the "overlays themselves may have accessibility problems." The letter also noted that, like Mr. Perdue, many blind users already had screen readers or other software to help them while online.

AudioEye, UserWay and accessiBe said they shared the goal of making websites more accessible, acknowledging to some extent that their products aren't perfect. Lionel Wolberger, the chief operating officer of UserWay, said the company had apologized for the issues with its tools and had worked to fix them, pledging to do the same for anyone else who points out problems. AccessiBe declined to answer questions about specific criticisms of its product, but Josh Basile, a spokesman for the company, criticized the open letter against overlays, saying it was "pushing the conversation in the wrong direction." He added, though, that the company was willing to learn from feedback.

All three companies said their products would get better over time, and both AudioEye and UserWay said they were investing in research and development to improve artificial intelligence abilities.

David Moradi, the chief executive of AudioEye, said his automated service and others like it were the only way to fix the internet's millions of active websites — a vast majority of which are not accessible for people who are blind or low vision. "Automation has to come into play. Otherwise, we're never going to fix this problem, and this is a massive problem," he said.

Accessibility experts, however, would prefer that companies not use automated accessibility overlays. Ideally, they say, organizations would hire and train full-time employees to oversee these efforts. But doing so can be difficult.

"There is absolutely a call for people with accessibility experience, and the jobs are out there," said Adrian Roselli, who has worked as a digital accessibility consultant for two decades. "The skills aren't there yet to match because it's been such a niche industry for so long."
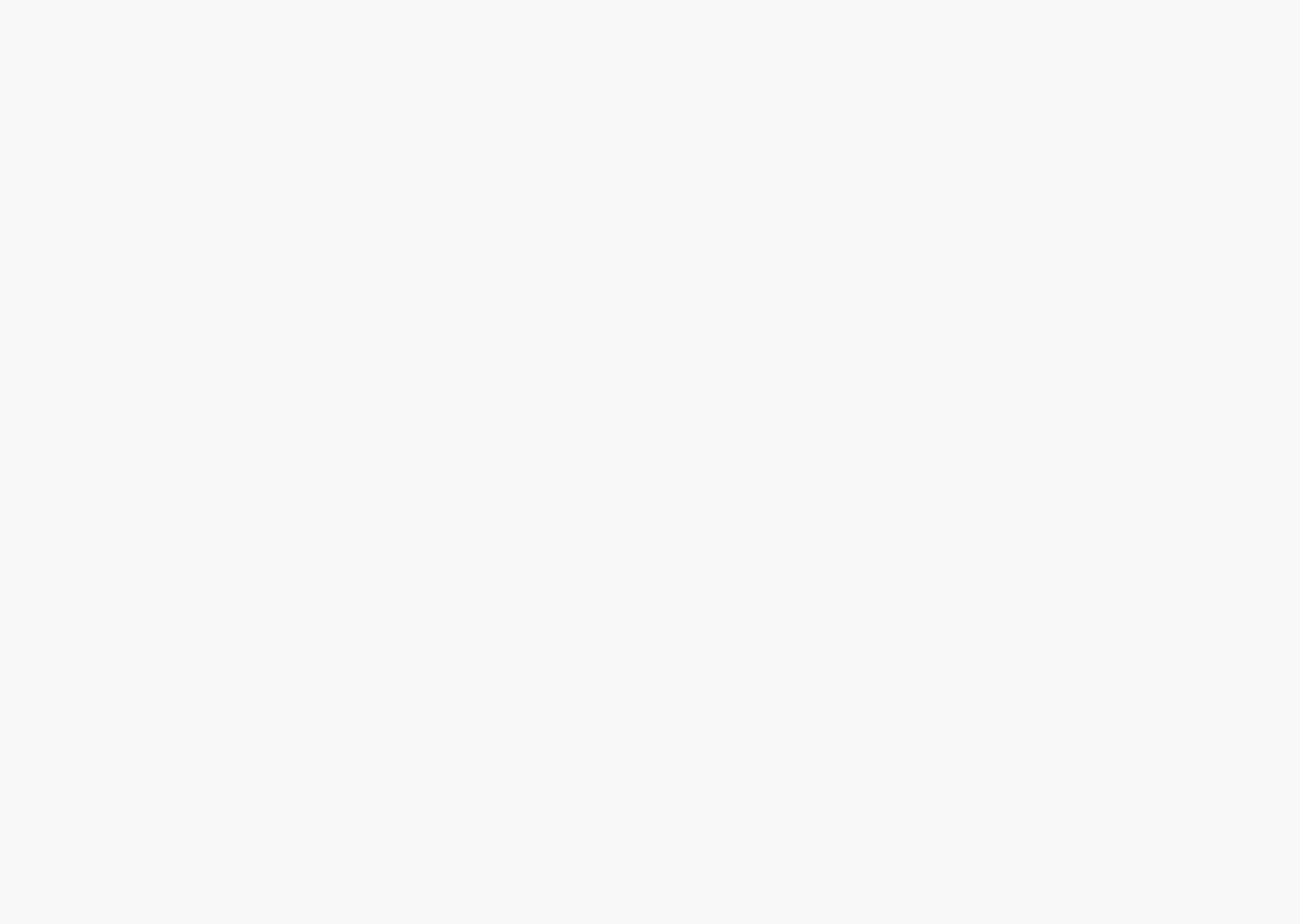
This gap, he said, has given the companies selling automated accessibility tools a chance to proliferate, offering websites seemingly quick solutions to their accessibility problems while sometimes making it harder for people who are blind to navigate the web.

On accessiBe's website, for example, the company claims that in "up to 48 hours" after its JavaScript code is installed, a client's page will be "accessible and compliant" with the American With Disabilities Act, which the Department of Justice made clear in recent guidance applied to all online goods and services offered by public businesses and organizations.

Mr. Moradi of AudioEye says the company advises its customers to use, in addition to an automated tool, accessibility experts to manually fix any errors. But AudioEye has no control over whether clients follow its advice, he said. He advocates a hybrid solution that combines automation and manual fixes, and says he expects automation abilities to gradually improve.

"We try to be very transparent about this and say, 'Automation will do a lot, but it won't do everything. It's going to get better and better over time,'" he said.
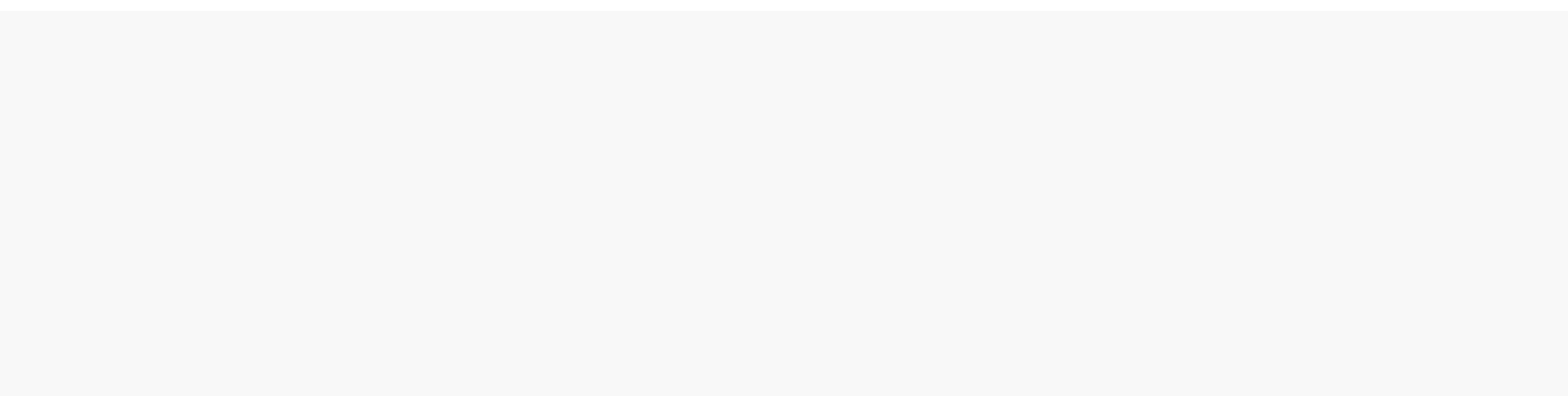
Blind and low vision people say it is unreasonable to ask them to wait for automated products to get better when using websites is increasingly required for everyday tasks. Common issues, such as buttons and images that are not labeled despite the use of an overlay, can prevent Brian Moore, 55, who is blind and lives in Toronto, from ordering a pizza, he said.

In addition to poorly labeled images, buttons and forms, blind users have documented issues with overlays that include being unable to use their keyboards to navigate web pages either because headings on the page are not properly marked or because certain parts of the page are not searchable or selectable. Other times, automated tools have turned every piece of text on a page into a heading, preventing users from easily jumping to the section of a website they want to read.

Mr. Moore said he had experienced trouble completing tasks like buying a laptop, claiming his employee benefits, booking transportation and completing banking transactions on websites that had overlays.

"If the object is to make it more accessible, and you can't fix the basic issues, what value are you adding?" he said.

Issues with accessibility can also make it challenging for people to do their jobs. LightHouse for the Blind and Visually Impaired, a nonprofit advocacy and education organization in San Francisco, recently sued the human-resources software company [Automatic Data Processing](#), which had been using an automated accessibility tool from AudioEye. Despite the overlay, there were "many, many instances where blind employees could not do their jobs," said Bryan Bashin, the organization's chief executive. The lawsuit was settled through a [deal](#) in which ADP agreed to improve its accessibility and to not rely solely on overlays.

ADP did not respond to questions about the lawsuit but said it "highly values digital inclusion."

"We're in a state of the Wild West right now," Mr. Bashin said, referring to the array of accessibility software, the quality of which he said could vary widely.

Even so, he said LightHouse for the Blind and Visually Impaired was not against these types of tools. He could imagine a future in which automated software drastically improved online experiences for blind people — that's just not the reality at the moment.

"I think A.I. will get this right, even if it is a mixed bag right now — just like A.I. is going to eventually give us autonomous vehicles," he said. "But, if you've noticed, I'm not driving one right now."