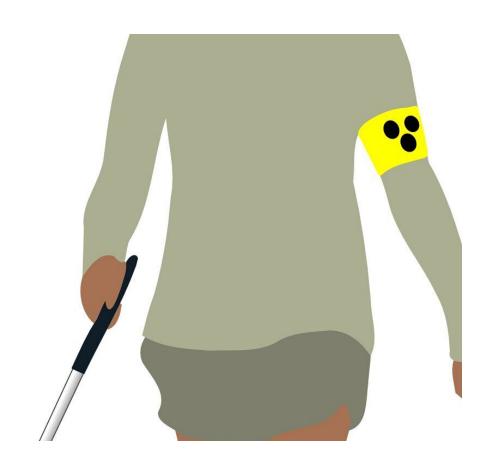# Blind and low-vision people have powerful technology but still face barriers to the digital world

December 19 2023, by Michele McDonnall

Credit: Pixabay/CC0 Public Domain

Imagine that you have low vision and you're completing an online job application using screen reader software.

You get through half the form and then come to a question with drop-down options the [screen reader](#) cannot access because the online form doesn't conform to accessibility standards. You're stuck. You can't submit the application, and your time has been wasted.

Assistive technologies like screen readers go a long way toward closing the gap between people who are blind or have low [vision](#) and their sighted peers. But the technologies often hit roadblocks because the information they are designed to work with—documents, websites and [software programs](#)—don't work with them, leaving the [information inaccessible](#).

There are [8 million people with blindness or low vision in the U.S.](#) More than 4.23 million of them are working age, but [only about half of that working-age population are employed](#). Employment rates for people with blindness or low vision have historically been [much lower than for the general population](#).

An [overwhelming majority](#) of jobs across all industries require digital skills. Assistive technologies such as screen readers, screen magnifiers and braille notetakers provide people who are blind or have low vision a chance to succeed in school and the workplace.

Assistive technology has improved, and new technology for people with blindness or low vision is being developed all the time. The technology developed today by big tech companies for the general population often [incorporates built-in accessibility features](#) like VoiceOver in the iPhone and Narrator in Windows, both text-to-speech functions. These assistive technology advances have expanded job opportunities, and the percentage of people who are blind or have low vision in the labor force has [increased over the past decade](#).

Out of sight, out of mind for the sighted

But despite the abundance of assistive technology, people who don't rely on it are typically unaware of how it's being used at work and the challenges users experience with it. My colleagues and I are conducting [a five-year longitudinal study](link) to increase knowledge in this area that, we hope, can help prepare [unemployed people](link) who are blind or have low vision to enter the workforce. The study is slated to continue through 2025, with the last survey starting in late 2024.

While most of the people we surveyed reported being satisfied with the assistive technology they use at work, almost all also reported [challenges with it](link). The most significant [challenges related to assistive technology](link) centered on the [inaccessible digital environment](link): documents, software, websites, graphics and photos.

Digital content is sometimes technically accessible but unusable by people who use [assistive technology](link). For instance, online job application systems [often generate accessibility and usability challenges](link). Inaccessible and unusable company software means those who are blind or have low vision are often left out of jobs they could easily perform simply because the employers' software doesn't work with screen readers.

People who are blind or have low vision have been harder to place in jobs than people with other types of disabilities due to inaccessible company software, Ross Barchacky, vice president of business development and strategic partnerships at [Inclusively](link), told me. The organization supports companies who want to hire people with disabilities, including matching them with qualified job seekers with disabilities.

Digital accessibility

Although the Americans with Disabilities Act does not mention the digital environment explicitly, the Justice Department has taken the position that Title III of the ADA, which covers public accommodation for people with disabilities, applies to websites and mobile apps. Thousands of digital accessibility lawsuits are filed under the ADA each year, and the number has increased substantially in the past five years.

Digital standard-setters have begun paying attention. The World Wide Web Consortium developed standards for accessible web content: the Web Content Accessibility Guidelines, just revised in a 2.2 version. The guidelines provide free guidance to help developers make their digital content accessible. Two related standards are the U.S. government's Section 508 and the European Telecommunications Standards Institute's EN 301 549. Global Accessibility Awareness Day was established in 2012 to encourage people to learn and think about digital inclusion for people with disabilities.

For example, in the following chart, homepages and websites should be one word. Also, we generally use 1 million rather than 1,000,000.

!function(){"use strict";window.addEventListener("message",(function(a){if(void 0!==a.data["datawrapper-height"]){var e=document.querySelectorAll("iframe");for(var t in a.data["datawrapper-height"])for(var r=0;r