



## **DESIGN FOR ACCESSIBILITY**

*Helping 1 Billion People and Your Business*

*by Ross Engelhardt (he/him)*



## Digital Organizations are “Customer Focused”

The digital industry achieved a 20%+ CAGR (*PR Newswire*) over the last decade by prioritizing the user and creating value-adding experiences. Digital executives heavily invest in capabilities to stay close to their customer and evolve their business strategies around what the market commands to stay relevant. It's not just the business strategy that is tied to the customer - many of the biggest advancements in the way technology is engineered have been born from a need to provide a consistently positive user experience. Some organizations release updates to their digital products daily to stay ahead of the competition and to meet ever-changing customer demands. It's clear that a customer obsession is critical for a digital organization to succeed, however this fixation also raises important questions: which customers are these companies so focused on? And perhaps more importantly, which customers are these companies not focused on?

One frequently overlooked customer segment is the ~ 1 billion people worldwide that have some form of a disability (*World Health Organization*).

## The Importance of Digital Accessibility

Persons with disabilities\* have a substantially different experience when leveraging technology to make their lives easier, faster, more fun, and more effective. Many people take for granted the barriers for entry to use an application on a common mobile device. Accessing your favorite social media site on a touch-screen device implies the ability to see the screen, hold the phone, gesture to command the screen, comprehend the text, and more. While laws and regulations exist to promote designing digital experiences for persons with various disabilities, the user base is still extremely underserved.

This article will showcase how designing for disabilities can produce measurable business value, shifting the case for inclusivity from compliance to competition, and doing the right thing.

## Creating a Competitive Advantage

Of the top 1 million websites used today, 98% of them have one or more violations of the Web Content Accessibility Guidelines (WCAG) (*WebAIM*). Within the European Union, only ~1% of all websites have been identified as fully accessible. This means that for your business, there is substantial opportunity to differentiate from your competitors by making your digital experiences accessible to all. This does not only relate to businesses that primarily generate revenue through digital products. It can be your website, your ordering experience, the way you send invoices, collect signatures, and much more.

\* At the time of this publication, the language has been informed by the Disability-Inclusive Language Guidelines. These guidelines have been prepared by the United Nations Office at Geneva as part of efforts to implement the United Nations Disability Inclusion Strategy.



In the United States alone, persons with disabilities have an estimated buying power of about \$490 billion (*Return on Disability*). This population is often not included in a total addressable market analysis and serves to increase a business's serviceable and obtainable markets. Studies show that when digital products and websites have an accessible design, market share can grow by as much as 20% (*The Global Economics of Disability*).

The cost to capture this market share is extremely low compared to other markets of this size. The cost to make a customer facing, revenue generating website WCAG compliant can be as low as \$3-5k. Of course, this is just one way to serve this customer segment. Mobile and enterprise applications carry a higher cost to enable accessible experiences, however these costs are far lower when accessibility design is part of the software development lifecycle as opposed to a disruptive, brand damaging litigation.

## **Accessibility as Prudent Risk Management**

In 2019, Domino's Pizza was successfully sued by a visually impaired individual for not having any accommodations to order pizza online. By court order, the company retrofitted their web and mobile experiences to have a more accessible and inclusive design. In this setting, the digital accessibility investment is disruptive, time consuming, costly. It also created significant technical debt and derailed roadmaps, budgets, and financial forecasts. According to UK's Business Disability Forum, early and iterative design enhanced accessibility can save organizations up to 80% of the costs of implementing accessibility features compared to doing so at once after the need arises. If you've ever built a DIY furniture kit at home, you may have had an experience where you got to the last step and found a leftover part – and to correct this, had to take everything you built apart again. Much like the furniture example, technology can be challenging and expensive to retrofit. Furthermore, settlements for these cases may range from \$50k to \$20 million (*UsableNet*).

## **Accessibility for Social Impact**

It is clear designing for digital accessibility will help drive business value however persons with disabilities benefit the most. Aside from improved inclusion, there are several real benefits to those with disabilities, namely using technology to close the education and employment gap. The National Institute on Disabilities found that people with disabilities are up to 50% less likely to earn a college degree. By providing modern technological resources in an accessible way, this group can leverage the same tools many students use to prepare and apply for a higher education. This in turn provides more competitive opportunities for job placement after earning a degree. Moreover, the quality of life for persons with disabilities may be improved by providing greater digital access. Persons with disabilities are on average lonelier and experience greater degrees of social isolation. As a result, there are greater rates of depression within the community. With improved social connection comes healthier physical, mental, and emotional lifestyles. With equal access to social media, online tools, and mobile applications, there is a real opportunity to improve the daily lives for this largely underserved community.



## Tactical Ways to Improve Digital Accessibility

So how can you start to turn what was once a compliance discussion into a competitive business advantage? Its surprisingly simple and achievable. Below are three ways to help 1 billion people and your bottom line:

- Implement Keyboard Navigation
- Include Persons with Disabilities in User Testing
- Update Audio/Visual Content with Alternative Options

### Implement Keyboard Navigation

Individuals with motor impairments or who cannot use a mouse rely on keyboard-driven access to navigate a website. To do this, work with your product and/or engineering team to define all functionalities that are mouse-dependent and implement browser friendly keyboard shortcuts to command those actions. This is a very quick, low-cost, and impactful start to improving your accessibility design.

Organizations that have implemented keyboard accessibility not only provide an inclusive digital experience, but they also find significant business benefits. 71% of organizations that have implemented these accessible designs have cited reduced support costs due to lower ticket volumes and call center interactions. The investment for some has become self-funding due to these optimizations. Moreover, Google and other top search engines reward websites for their accessibility by promoting inclusive websites and enhancing their SEO scores – all without marketing budget.

### Include Persons with Disabilities in User Testing

Nearly all technology organizations or departments rely on user testing to meet their user-centricity commitments. Before releasing new functionalities or experiences real users perform testing, provide feedback, and inform the design. By including persons with disabilities in these tests, organizations can learn directly from this customer segment how to best serve their needs.

Less than 25% of testing includes those with disabilities today (Forbes). There are multiple marketplaces designed to raise this bar and connect technology teams with testers who can share/inform where designs need accessibility options. Inclusive testing makes the most of existing quality assurance budgets and unlocks valuable feedback from a critical customer segment.



## Update Audio/Visual Content with Alternative Options

Today's digital experiences are rich with digital assets such as landing-page audio, full-screen video, and immersive images. Review all digital assets for alternative consumption models. For videos and images, provide alternative text descriptions so those who cannot take in the content as designed, can understand what is being shown. By adding these simple and low-to-no cost experiences, leaders can help the 85% of people with disabilities who have challenges engaging in digital media today (*State of Digital Accessibility*).

For audio, it is recommended to implement closed captioning so that people do not have to rely on audio capabilities alone when engaging with technology. Best in class organizations do not stop at closed captioning, they invest in audio descriptions for those with vision impairments. Audio descriptions voiceover the content being shown so someone can hear what is on the screen. 43% of those with disabilities leverage audio descriptions to navigate websites and applications (*State of Digital Accessibility*) and almost always return as loyal customers to that business for making the experience more inclusive.

## It's 'Low Hanging Fruit'

Designing for digital accessibility is much simpler than most think and provides real business benefits. From unlocking a large and loyal customer segment to reducing operational costs, minimizing risks, and

creating differentiated experiences, executives must prioritize more inclusive design. Mature organizations that prioritize accessibility design conduct routine audits and evolve their software development process to include personas of those with disabilities. They incorporate simple practices such as testing user journeys for accessibility and as a result measure on average high number of daily active users. It is possible to do good for the world and business at the same time. 1 billion people can enjoy technology and improve their lives with just design alone and businesses can significantly expand their addressable market.



## About the Author



**Ross Engelhardt (he/him)** is an industry leading digital business expert that has launched and scaled numerous successful technology products around the world (some which you may have used today). Leading C- suite executives from top enterprises and start-ups engage Ross as an advisor to maximize their most strategic technology investments. Ross has generated significant revenues and/or cost savings by building strong business models and has delighted millions of users by crafting beautiful digital experiences. He has multiple degrees from NYU, an MIT Design Thinking Executive degree, is Six Sigma Certified, a Certified Scrum Product Owner, and a Certified Coach.

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TechPACT envisions a world where anyone with a passion for technology has the opportunity to succeed. Founded by a group of impassioned technology CxOs, TechPACT is committed to raising diversity, equity, inclusion, and belonging (DEIB) across the technology community.

TechPACT empowers members to foster a culture of belonging by building awareness of diversity and equality opportunities and providing actionable strategies and tools to create inclusion. In their effort to expand the pipeline of diverse talent, TechPACT is inspiring youth to pursue careers in technology and providing resources to support diverse professionals throughout their careers. We support teachers and community outreach programs to enable STEAM programs and partner with organizations who are dedicated to closing the digital divide by contributing funding and/or sharing expertise.

TechPACT creates accountability through community and achieves its mission through the collective efforts of its members. Our members are a community of technology CxOs and leaders committed to making a difference. Members take "The Pledge," a personal promise to accept accountability and take action to increase representation and reduce the digital divide. TechPACT members recognize themselves as force multipliers and understand that each action they take creates an unstoppable network effect that will benefit the lives of millions across the globe.

To learn more about TechPACT's mission and to take the TechPACT pledge, visit [www.techpact.org](http://www.techpact.org).