

Web Accessibility

What does Web Accessibility mean?

Web accessibility is allowing all people equal access to online content, including those with visual and mobility impairment.

This means that people with all abilities and disabilities can perceive, understand, navigate, and interact with the web.

Are we achieving the web's potential?

Despite many efforts, the web's potential for people with disabilities is still a long way from being fully achieved. A clear example of this is that in most sites, the navigation of content can only be accessed by using a mouse. In addition, only a very small percentage of video content or multimedia have been captioned for the Deaf.

The internet can transform disability access to information and we should avoid placing obstacles along the way that could destroy that potential and leave people with disability just as discouraged and dependent upon others as before.

During the design of web content, many of the disability categories require specific types of adaptations. Each of the major categories of disability require different types of adaptations in the design of web content. In most situations, these adaptations benefit nearly everyone, not just people with disabilities.

Implementing Web Accessibility

Before thinking about making a web site accessible, those involved must understand and be fully committed to guaranteeing accessibility, understand their legal obligations, and learn how to implement accessibility.

The Web Content Accessibility Guideline (WCAG⁽¹⁾) provides an international set of guidelines that have been developed by the Worldwide Web Consortium (W3C), the governing body of the web. These guidelines are the basis of most web accessibility law in the world.

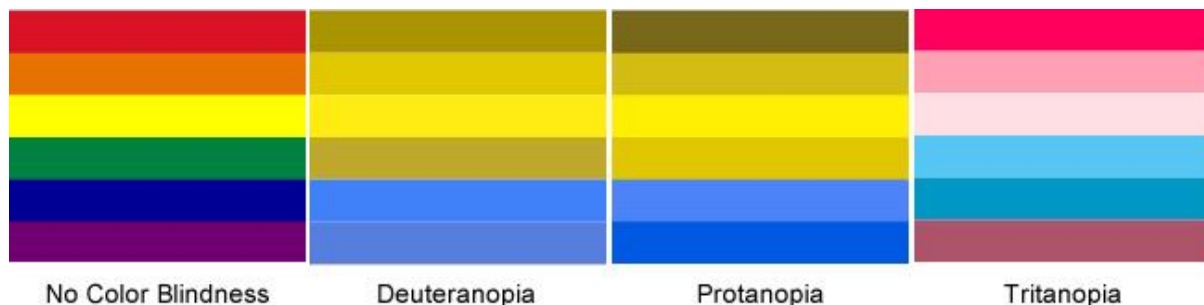
These guide lines are based on four principles, named POUR:

- **Perceivable**: Available to the senses (vision and hearing primarily) either through the browser or through assistive technologies (e.g. screen readers, screen enlargers, etc.)
- **Operable**: Users can interact with all controls and interactive elements using either the mouse, keyboard, or an assistive device.
- **Understandable**: Content is clear and limits confusion and ambiguity.
- **Robust**: A wide range of technologies can access the content.

1) <https://www.w3.org/TR/WCAG20/>

5 Simple rules to improve your Website's accessibility

1) Colour



The colour of the website is the first thing that needs to be considered. Deuteranopia and Protanopia are the most common types of colour blindness - people who have such problems face difficulty in distinguishing between green, red and similar colours. Therefore, while coding and designing your site, you should keep this factor in mind.

In addition, using a high colour contrast can also be of great benefit for general users. The purpose of following this guideline is not only for colour-blind people, but will bring benefit for regular users alike. As per Web Accessibility Guidelines, it is suggested to maintain 4:5:1 as the minimum contrast ratio. The ideal ratio would be 7:1 for standard sized text and would need to be in black with white background.

2) Links



Source: Blogger Templates

Furthermore, it is important to make sure that the contextual links in your website are more descriptive. Several different types of people with special needs make use of screen readers. Most screen readers today offer their users the option to navigate a web page by jumping through the links in order to find something that they are interested in.

3) Alternative Content

Provide alternative content. When developing a website, it is important to provide content that is available for everyone irrespective of what special needs they have. There are several techniques to accomplish this.

One of the simplest, yet most significant ways of doing it is by providing text for non-text content (using the HTML alt attribute) and vice versa. Users can also be provided with options to select larger fonts and higher contrast when viewing the site.

4) Navigation

It is always recommendable when creating a web page that it is intuitive to navigate through and logically structured. The introduction of additional hierarchical cues is important as they indicate the varying degree of importance in content through the use of adequate styling. This assists the user to differentiate between content, subheadings and main headings. This is very easily achieved through proper use of HTML markup and (if necessary) CSS styling.

Another, often forgotten method, is the use of a tab index to facilitate the flow of form filling, which normally requires precise movements over the radio buttons and check boxes. This can be particularly useful for users with motor skills special needs.

5) Testing

Testing the accessibility of your website is a huge endeavour due to the wide array of users with special needs that potentially needs to be catered for. As with most methods of testing, there is no better approach than real user testing. However, there are also automated tools that can help in identifying accessibility issues by analysing your website's code.

Regulations and laws

Unfortunately, there is not a harmonised global approach in terms of Web accessibility legislation. Some countries have included web accessibility laws and policies even in their constitution while others recognize Web accessibility as a basic human right. Digital access issues are approached in many ways and vary depending on the country. The trend is that more and more adopted laws are putting strong constraints on enterprises so that their websites are becoming e-accessible. As an example, in countries like Australia or the United States, enterprises are starting to get sued or are receiving heavy fines if they do not make their websites e-accessible.

Business benefits

The benefits of producing an accessible website are that it can have a major positive impact on your business. From a business point of view, by increasing the overall number of people that can visit your website, ultimately you are bringing in more sales by creating more visibility in the virtual world. Many examples can be found to support this argument. In the USA, about 15 – 20% of website users have some form of disability, including: blindness, colour blindness, deafness, autism, dyslexia, learning disability, challenges associated with the very elderly, or other physical disabilities. This market segment has a combined spending power of \$996 billion*. Across the European Union (EU), improving accessibility for the elderly population, for example, means improving access to holders of more than €3 trillion, or approximately one-third of the European economy.

The positive benefits of an accessible website come not only from increasing access but also from reducing the risk of legal action and high legal expenses, avoiding negative image and

big fines for not complying with anti-discrimination legislation. Technical benefits include the positive impact on search engine optimization (SEO) from accessibility improvements and easy access to online shopping. In terms of marketing and public relations, it can be used as a powerful tool for demonstrating corporate social responsibility (CSR).

Finally, it can bring internal corporate benefits of increased productivity through supporting, retaining older employees and continuing to utilize their knowledge and experience.

*Sources: U.S Census, U.S. Labor of Statistics, Statistics Canada, Eurostat, FQA, in USD.

Impacts for the organization

Companies can take many different approaches when deciding to make their online content and services accessible. Depending on the approach, the financial and organisational impact will vary.

From a governance and/or organisational approach, there is a need to put in place “content guidelines” for every time new content is created. These will include the process, the persons responsible, the tasks involved and documentation needed. An Accessibility Committee or an Accessibility Manager should be appointed to make sure that these guidelines are applied during content creation and that the existent website is adapted to be fully compliant. Companies can decide which type of accessibility standards they wish to follow (A, AA or AAA – *See recommended reading for more detail.*) Finally, departments or business units impacted, should be trained and monitored to ensure that content will be accessible.

From a financial point of view, the impact of having e-accessible websites will increase cost as there are new factors involved such as the need to hire web accessibility experts such as web designers, e-accessible content creators and accessibility managers, the need to create more content and functionality that were not part of standard websites, the need to provide training to all employees involved in the creation of content etc.

It is very important that before incurring all those efforts and costs involved in developing web accessibility, a thorough analysis of the organisation should be performed to determine the benefits that will come to the organisation. As mentioned before, the approach and implementation could differ immensely depending on the level of accessibility the organisation wishes to accomplish.

Conclusion

As we have seen, when discussing accessibility, it is always worth remembering the relationship between usability and accessibility. For a website to be usable and achieve its full potential, it needs to be accessible. Implementing measures for accessibility in your website will be beneficial to all your users, irrespective of whether they have special needs or not. Sometimes the reasons why an organisation decides to make a website accessible is linked to a need. This need could be a business benefit or just a regulation that is compelling the organisation to adapt its website to be fully accessible to comply with national and international regulations and avoid financial penalties.

Recommended reading

For a full set of guidelines on how to make your links both usable and accessible please read [15 Usability Guidelines For Designing Web Site Links](#). For Testing [Free Web Based Accessibility Tools](#).