**DQ2: Accessible**

Judge whether there is a business case for spending additional money to make your organisation’s Web site more accessible to people with disabilities and the elderly. Choose a number of key arguments that you would present to your board or executive committee to support your recommendations.

1. Introduction
   1. W3C, 2005
      1. What is web accessibility?
         1. Web accessibility means that people with disabilities can use the Web. More specifically, Web accessibility means that people with disabilities can perceive, understand, navigate, and interact with the Web, and that they can contribute to the Web. Web accessibility also benefits others, including older people with changing abilities due to aging.
         2. Web accessibility encompasses all disabilities that affect access to the Web, including visual, auditory, physical, speech, cognitive, and neurological disabilities. The document "How People with Disabilities Use the Web" describes how different disabilities affect Web use and includes scenarios of people with disabilities using the Web.
         3. Millions of people have disabilities that affect their use of the Web. Currently most Web sites and Web software have accessibility barriers that make it difficult or impossible for many people with disabilities to use the Web. As more accessible Web sites and software become available, people with disabilities are able to use and contribute to the Web more effectively.
         4. Web accessibility also benefits people without disabilities. For example, a key principle of Web accessibility is designing Web sites and software that are flexible to meet different user needs, preferences, and situations. This flexibility also benefits people without disabilities in certain situations, such as people using a slow Internet connection, people with "temporary disabilities" such as a broken arm, and people with changing abilities due to aging. The document "Developing a Web Accessibility Business Case for Your Organization" describes many different benefits of Web accessibility, including benefits for organizations.
      2. Making the Web Accessible
         1. Much of the focus on Web accessibility has been on the responsibilities of Web developers. However, Web software also has a vital role in Web accessibility. Software needs to help developers produce and evaluate accessible Web sites, and be usable by people with disabilities.
         2. One of the roles of the Web Accessibility Initiative (WAI) is to develop guidelines and techniques that describe accessibility solutions for Web software and Web developers. These WAI guidelines are considered the international standard for Web accessibility.
      3. Making Your Web Site Accessible
         1. Making a Web site accessible can be simple or complex, depending on many factors such as the type of content, the size and complexity of the site, and the development tools and environment.
         2. Many accessibility features are easily implemented if they are planned from the beginning of Web site development or redesign. Fixing inaccessible Web sites can require significant effort, especially sites that were not originally "coded" properly with standard XHTML markup, and sites with certain types of content such as multimedia.
   2. W3C, 2013
      1. Why: The Case for Web Accessibility
         1. It is essential that the Web be accessible in order to provide equal access and equal opportunity to people with diverse abilities. Indeed, the UN Convention on the Rights of Persons with Disabilities recognizes access to information and communications technologies, including the Web, as a basic human right.
         2. Accessibility supports social inclusion for people with disabilities as well as others, such as older people, people in rural areas, and people in developing countries.
         3. There is also a strong business case for accessibility. Accessibility overlaps with other best practices such as mobile web design, device independence, multi-modal interaction, usability, design for older users, and search engine optimization (SEO). Case studies show that accessible websites have better search results, reduced maintenance costs, and increased audience reach, among other benefits. Developing a Web Accessibility Business Case for Your Organization details the social, technical, financial, and legal benefits of web accessibility.
   3. I currently work for Thermo Fisher Scientific Inc., which sells products and solutions used in the scientific analysis industry (E.g., biotechnology, patient diagnostics
   4. I do not see a strong business case for my organization to spend resources to make my organization’s website more accessible to those with disabilities and the elderly.
2. Justification 1
   1. The vast majority of our customers are not disabled.
      1. It is difficult, if not impossible for a disabled person to work in the laboratory. All senses are required. The consumables we sell work with instruments that require all senses.
   2. The elderly are no longer working.
      1. They will not be buying our products.
3. Justification 2
   1. The resources required for it. The cost-benefit analysis does not support it.
      1. Frase, 2009
         1. In the United States, it is estimated that less than 1 percent of the population is blind.
      2. Our customers are mainly STEM graduates, which makes the population that will benefit making our website more accessible even less.
      3. Deaf workers
         1. Science videos usually contain text captions.
         2. Video on our website demonstrating our products are also on YouTube. We have our own channel. They all had the annotations switch available, which enabled subtitles.
4. Justification 3
5. Conclusion
   1. I am in full agreement that the more people that can view the organization’s website, the better. However, the current market conditions do not justify our organization undertaking this massive effort alone. The paradigm of how scientists work would have to change. To work in the scientific industry, one needs to be able to see, hear, feel, and smell. Until advances in technology are made to somehow give these senses to those impaired, increasing our website’s accessibility is unlikely to benefit our organization and society at large.

References:

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