Laws Related to Web and Digital Application Accessibility

E

Holly Yu

California State University—Los Angeles, USA

INTRODUCTION

In the past three decades, the general method of delivering and receiving information has shifted from paper-based, typewriter-generated, hand-edited, and printing-press-produced publications to more technology-mediated, intelligent, Web-based and interactive design. The Web has expanded its horizon as a gateway in carrying and delivering information to include audio and video formats. The advent of social media and mobile applications and tablets has revolutionized the nature of the Web platform from an information carrier to an interactive tool for all to use, share, interact and participate. Consequently, the concept of delivery of, access to, and interact with information has changed to reflect this phenomenon. The new forms of utilizing the Web and digital applications that have made it easier for non-disabled people have often created barriers for people with disabilities because, in a large part, the standard methods of access, delivery, and interaction are inaccessible for people with disabilities. Since 1970s, the provisions of laws and standards relating to discriminatory practices on the basis of disability has improved for the better in accessibilities of Web and digital applications, but it is nowhere near barrier free for people with disabilities.

BACKGROUND

A person with a disability is defined in the Americans with Disabilities Act (ADA) as "someone who has a physical or mental impairment that substantially limits one or more major life activities, a person who has a record of such impairment, or a person who is regarded as having such impairment" (ADA, 1990). The Americans with Disabilities Act Amendments Act of 2008 (ADAAA) effectively expanded the individuals

covered by the ADA. The Profile of America Facts for Features of the U.S. Census Bureau indicates that in 2010 the overall percentage of people with disabilities of all ages in the United States is 19 percent, or approximately equivalent to 56.7 million (U.S. Census Bureau, 2013). Among the six types of disabilities defined in the 2011 American Community Survey (ACS), it estimates 6.6 million individuals with visual disability, representing 2.2% of the total population; 10.5 million with hearing disability, representing 3.4% of the entire population; and 14.1 million people identified with cognitive disability, representing 4.9% of the population (EDI, 2012).

The disability rights movement in the United States originated during the post World War II era when a large number of disabled veterans joined the efforts of parents seeking education and independent living options for their children with disabilities (Slatin & Rush, 2003). The notion of access to information involving the civil rights of people with or without disabilities arises from the fact that access to information through technology has increasingly become a necessary tool for success and a source of opportunity in education and employment. With the unprecedented opportunities they created for people with and without disabilities, it has become apparent that information technologies have a tremendous potential for allowing people with disabilities to participate in mainstream activities and to support their ability to live independently.

In defining Web accessibility, Hackett and Parmanto state that accessibility may be direct or through the use of assistive technologies, hardware or software that aids a person in accessing the information (2005). Booth further argues that "accessibility is the principle that fullest use of any resources should be given to the greatest number of individuals" (2013). Disabled people who benefit the most from accessible design and assistive technology in interacting with the Web and

DOI: 10.4018/978-1-4666-5888-2.ch294

digital applications, are those who are blind, visually impaired, people with hearing impairment, physical impairment, and learning difficulty such as dyslexia.

In recent years we have seen a growing body of significant laws, regulations, and standards concerning Web and digital application accessibilities that impact people with disabilities and their ability to fully overcome digital barriers and participate in the Web and digital environments. The legal foundation for protecting the right to access for persons with disabilities has been established through a series of federal and state laws, and regulations. These laws provide a legal ground on Web and digital application accessibility implementation.

LAWS, REGULATIONS, STANDARDS, AND GUIDELINES

Under the provisions of laws, some of the legal milestones that have a direct impact on Web and digital application accessibilities are Section 504 of the Rehabilitation Act of 1973, Americans with Disabilities Act (ADA) of 1990, Section 508 of the Rehabilitation Act of 1973, as amended in 1998, and the Twenty-First Century Communications and Video Accessibility Act (CVAA) of 2010.

Section 504, Rehabilitation Act, 1973

Signed on October 1, 1973, Section 504 of the Rehabilitation Act is regarded as landmark legislation and the first civil rights law prohibiting recipients of federal funds from discriminatory practices on the basis of disability. Core areas of this legislation consist of the prohibition of such activities as discriminatory employment practices, and discrimination in the delivery of educational offerings, health, welfare and social services, or any other type of program benefits, or service supported in whole or in part by federal funds.

Section 504 is currently applied to all entities that receive federal government funds, including states, counties, cities, towns, villages, and their political subdivisions, public and private institutions and agencies, and other entities that receive federal money. Each federal agency has its own set of Section 504 regulations that guide its own programs. Over the years, the Rehabilitation Act has been amended several times

to address the constant changes in technology and its impact on society. The amendments most relevant to the access to information technology are those made to *Section 508*. The significance of Section 504 lies not only in that it was the first statute applying civil rights protections to people with disabilities, but that it also "furnished the model for major subsequent enactments, including the ADA" (NCD, 2001). Section 504 was legislated too early to specifically address the issue of access to services and programs provided over the Web and digital applications.

Americans with Disabilities Act (ADA), 1990

Passed on July 26, 1990, the ADA establishes a clear and comprehensive prohibition of discrimination on the basis of disability. While Section 504 applies to federal government agencies and those that receive federal funds, the ADA extends the rights of equal treatment for people with disabilities to private sectors, to all places of public accommodation, employers, and entities that deliver government services. The core sections of the law are found in the first three titles: Employment, State and Local Government Activities, and Public Accommodation. Title II requires that state and local governments give people with disabilities an equal opportunity to benefit from all of their programs, services, and activities, such as public education, employment, transportation, recreation, health care, social services, courts, voting, and town meetings. Section 202, Title II indicates that "no qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by such entity" (ADA, 1990). Title II recognizes the special importance of communication, which includes access to information in its implementing regulation at 28 CFR Section 35.160(a). The regulation requires that a public entity must take appropriate steps to ensure that communications with persons with disabilities are as effective as communications with persons without disabilities. The ADA mandates for "effective communication, reasonable accommodations, and auxiliary aides and services" (ADA, 1990).

Web accessibility became prominent in 1996 when the Department of Justice (DOJ) responded to the

8 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/laws-related-to-web-and-digital-application-accessibility/112725

Related Content

Knowledge Engineering Methodology with Examples

Ronald John Lofaro (2015). Encyclopedia of Information Science and Technology, Third Edition (pp. 4600-4607).

www.irma-international.org/chapter/knowledge-engineering-methodology-with-examples/112902

Hindi Text Document Classification System Using SVM and Fuzzy: A Survey

Shalini Puriand Satya Prakash Singh (2018). *International Journal of Rough Sets and Data Analysis (pp. 1-31).*

 $\underline{www.irma-international.org/article/hindi-text-document-classification-system-using-svm-and-fuzzy/214966}$

Integrating Conceptual and Empirical Approaches for Software Engineering Research

Annette Lerine Steenkampand Theresa Kraft (2012). Research Methodologies, Innovations and Philosophies in Software Systems Engineering and Information Systems (pp. 298-319). www.irma-international.org/chapter/integrating-conceptual-empirical-approaches-software/63269

Performance Measurement of a Rule-Based Ontology Framework (ROF) for Auto-Generation of Requirements Specification

Amarilis Putri Yanuarifiani, Fang-Fang Chuaand Gaik-Yee Chan (2022). *International Journal of Information Technologies and Systems Approach (pp. 1-21).*

www.irma-international.org/article/performance-measurement-of-a-rule-based-ontology-framework-rof-for-autogeneration-of-requirements-specification/289997

A Framework for Understanding Human Use of Computers

Andrew Basden (2008). *Philosophical Frameworks for Understanding Information Systems (pp. 120-173)*. www.irma-international.org/chapter/framework-understanding-human-use-computers/28082