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.EDU DILEMA: THE WEB ACCESSIBILITY CHALLENGE FACING PUBLIC AND PRIVATE UNIVERSITIES

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ABSTRACT

In this paper we will demonstrate that although the web has become a fundamental, vital tool for universities, some of the fundamental aspects of the web -- combined with the history of how the web has been adopted on campuses -- results in a particularly daunting barrier to verifying and guaranteeing that all web pages used at the university are in compliance with the law and accessible to populations with disabilities.

LEGAL ENVIRONMENT FOR WEB ACCESSIBILITY

Congress passed the Americans with Disabilities Act ("ADA") in July of 1990 in an effort to eliminate discrimination, and to provide consistent, enforceable federal standards for addressing discrimination against persons with disabilities. The ADA extended the coverage provided by the Rehabilitation Act of 1973, which protects handicapped individuals from employment discrimination by the federal government and by private employers who either contract with the federal government or administer programs receiving federal assistance, to private entities in an expanded scope of activities. (Burgdorf, 1991). Yet it is estimated that as many as ninety-eight percent of websites are not accessible to individuals with disabilities. (Rich, et al., 2002). Is this situation problematic under the U. S. law? The answer at this stage would have to be "maybe," and dependent in part upon whether the site is maintained by a public or private entity, or by a recipient of federal funds.

Title I of the ADA requires employers to make reasonable accommodations for qualified employees with disabilities, so long as the accommodation would not result in an undue hardship, that is, one which entails significant difficulty or expense. Title II provides 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 any such entity." (42 U.S.C §12132 (2004)). Title III prohibits discrimination in the provision of goods and services by places of "public accommodation," which is defined in terms of twelve categories, which include, for example, places of lodging, establishments serving food or drink, places of exhibition or entertainment, places of public gathering, sales or rental establishments, service establishments, stations used for public transportation, places of public display, places of exercise or recreation, places of education, and social service centers. (42 U.S.C. § 12181(7) (2004)).

Presumably under Title I of the ADA, if state employees were required to utilize websites while performing job responsibilities, then web-accessibility could be viewed as potentially being a reasonable accommodation, depending upon the circumstances. Nevertheless, as a result of a recent Supreme Court decision, state employers in fact may have limited exposure to liability under Title I. (Rich, et al., 2002). In 2001 the Supreme Court held that state sovereign immunity under the Eleventh Amendment bars suits in federal court by state employees to recover money damages

by reason of the state's failure to comply with Title I (employment) of the ADA. (Board of Trustees of the University of Alabama v. Garrett, 2001). Although Congress would have the authority to subject state governments to private lawsuits under Title I of the ADA for the violation of Fourteenth Amendment rights (such as due process and equal protection), that result is only permissible if there has been a pattern of discrimination in hiring decisions, in this case involving persons with disabilities, which Alabama had not exhibited.

The Court in Garrett left open the question as to whether or not the Eleventh Amendment permits suits for money damages under Title II. In a subsequent case, the Court held that, at least as far as Title II of the ADA applies to cases implicating the fundamental right of access to state courts and the administration of justice, Title II of the ADA constitutes a valid exercise of Congress's authority under Section 5 of the Fourteenth Amendment, in order to enforce that Amendment's substantive guarantees. (Tennessee v. Lane, 2004). While the right of parents to direct the education of their children may be considered a fundamental one (Wisconsin v. Yoder, 1972), the right of access to education itself has not been so defined. Therefore, applying the mandates of Title II to public educational institutions, and derivatively their websites, indeed may be an unconstitutional exercise of Congressional power, because the right implicated in not a fundamental one, and the class of persons presumably discriminated against, that is, the disabled, are not (under Fourteenth Amendment jurisprudence) members of a suspect class, who historically have been discriminated against (as are racial minorities).

Congress may have more latitude under the Interstate Commerce Clause of the Constitution to regulate private entities under ADA. Title III of the statute prohibits discrimination in privately owned and operated places of public accommodation, such as private educational institutions. The critical inquiry then, is whether or not websites should be considered places of public accommodation. Clearly Congress did not intend to embrace virtual environments when the ADA was passed in 1990, as the passage of the Act preceded the establishment of the Internet as a mainstream form of communication and of access to goods and services. While the issue is as yet unsettled, several commentators have argued that websites should be considered places of public accommodation, or considered as such at least in those cases where the website has a connection, or nexus, to a physical place of public accommodation.

Only one case to date has considered the issue directly. In Access Now, Inc. v. Southwest Airlines, Co. (2002) a federal district court concluded that Southwest.com was not a place of public accommodation under Title III of the ADA, determining that the unambiguous language of the statute does not include Internet websites among the definitions of "places of public accommodation." The court reasoned that the ADA applied only to physical, concrete structures, and "[T]o expand the ADA to cover 'virtual' spaces would be to create new rights without well-defined standards." (Access Now, Inc. v. Southwest Airlines, Co., 1318 (2002)).

What does this mean for private educational institutions? Included among the private entities considered to be public accommodations under the ADA are "a nursery, elementary, secondary, undergraduate, or postgraduate private school, or other place of education." (42 U.S.C. § 12181(7)(j) (2004)). But are their websites included? It would seem that in the circuits in which courts use the nexus approach, their websites would have to be made accessible, providing the institution had a "brick and mortar" physical presence. In other jurisdictions, courts might limit the application of the ADA mandate to the physical structures of the institution only.

In addition to the ADA, Section 504 of Rehabilitation Act provides that "[N]o otherwise qualified individual with a disability in the United States…shall, solely by reason of her or his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance or under any program or activity conducted by any Executive agency or by the United States Postal Service." (29 U.S.C. § 794(a) (2002)). The phrase "program or activity" is defined as including a college, university, or other postsecondary institution, a public system of higher education, a local educational agency, a system

of vocational education, or other school system. (29 U.S.C. § 794(b)(2)(A)&(B (2002)). It would seem that this section could put covered institutions at risk, if the manner in which they offered their online services to their constituents were not equally available, either through web accessibility or by some other format, to the disabled.

Independent of federal law and federal financing concerns, an overwhelming majority of states require their governmental agencies, which could include publicly funded universities, to make their websites accessible and develop guidelines to that end. (Sweeney, 2000). Almost all states have developed web-accessibility policies or standards. (Poynter, 2003). Moreover, states could decide to waive their sovereign immunity, like Illinois, in order to allow claims brought under civil rights legislation, such as the ADA. (Roy, 2004). Yet, even assuming that there is a legal obligation to make websites accessible to the disabled for private institutions under the ADA, or for states or state institutions seeking federal funds, or as required by state law, some might argue that there are no clear parameters to establish compliance. (Quinn, 1999).

SUMMARY OF SITUATION FACING UNIVERSITYACCESSIBILITY PLANNERS

Since the legal environment for required web page accessibility is so complicated and unclear, perhaps a better question for technology managers is whether or not the need for accessible web pages is likely to lessen or disappear. There are a number of factors that seem to indicate that the answer to this question is a strong, No!

First, there is no reason to believe that the number of traditional age students with disabilities will decline in the near future. In fact, given the current increase in the overall number of students graduating high school, if the percentage of disabled students remains constant, then the number of disabled students in the traditional age range will increase.

Second, there is a growing population of web users who do not (yet) fit into the disabled category, but share many of the impairments and hence difficulties in accessing the web. This is the aging baby boomer population, which increasingly will experience some visual, auditory, mobility or cognitive impairment, which will impact their ability to use the web.

Finally, as web-based distance education courses become increasingly standard fare for universities to offer, the ability of disabled groups to take such courses hinges on the web pages being accessible to them. This will be a growing concern for traditional-age students who take some of their courses on-line, non-traditional, working students want to be able to take courses while working, as well as retirees who decide to return to school for additional courses.

WHY IS THIS A PARTICULARLY DIFFICULT PROBLEM FOR UNIVERSITIES

What is it about university pages that make the goal of accessibility particularly difficult to achieve? The answer to this question lies with a combination of the de-centralized technology architecture behind the web and the unique organizational characteristics of the modern university.

The de-centralized architecture of the web means that as long as you have a computer that is running web server software and is connected to the Internet, you can publish your web pages. In a corporate setting, this factor is not typically that important because corporations tend to (wisely) feel that web pages are part of their brand image and need to be managed as such. Typically all company web pages will be hosted on one server (a computer running web server software). The situation is quite different in a typical university setting. The difference starts with what an Internet name means in a university setting versus in the corporate world. A university Internet name (i.e., wcu.edu) very rarely represents one individual computer. Instead it represents a network of hundreds or thousands of computers. Only a small percentage of those computers will be used as web servers, but any of them could be.

The next factor is the control of the web server(s). In a corporate setting the IT group would typically have control over the web server and grant permissions to web creators on a strictly controlled, as-needed basis. Again, this is very different than a university setting where computers are controlled by administrative groups, colleges, schools, departments, programs, instructors and sometimes students, rather than the university IT group. So while the task of inventorying a typical corporate website and guaranteeing that the web pages in it are accessible is not necessarily an easy, quick or costless task, it is possible. The same process for all pages that have some sort of university affiliation could be essentially impossible, particularly in the short-term.

CONCLUSION

The need to create accessible web pages is a problem for universities that is unlikely to go away. In fact, it seems more likely to present significant problems in the near future to universities that fail to react and prepare for a population, which will increasingly demand that all web pages be accessible to disabled populations. There are solutions to make web pages accessible to disabled individuals, but they have a cost. An important role for university technology planners is to build an awareness of this problem, convince administrators, staff, faculty and students that it is a real problem that must be addressed and build and implement plans for providing the training needed so that all university web page creators can create web pages that will be accessible to disabled individuals.

REFERENCES

Access Now, Inc v. Southwest Airlines, Co. (2002). United States District Court for the Southern District of Florida, 227 F. Supp.2d 1312.

Board of Trustees of the University of Alabama v. Garrett (2001). United States Supreme Court, 531 U.S. 356.

Burgdorf, R.L., Jr. (1991). The Americans with Disabilities Act: Analysis and Implications of a Second-Generation Civil Rights Statute. Harvard. Civil Rights-Civil Liberties Law Review, 26, 413.

Poynter, L. (2003). Setting the Standard: Section 508 Could Have an Impact on Private Sector Web Sites Through the Americans with Disabilities Act. *Georgia State University Law Review*, *19*, 1197-1226.

Quinn, J. (November 2, 1999). Management and Technology, *New York Law Journal,* 5.

Rich, R.F., & Erb, C.T., & Rich, R.A. (2002). Critical Legal and Policy Issues for People with Disabilities. *DePaul Journal of Health Care Law*, *6*, 1-53.

Roy. S. (October 2004). Suits Against States: What to Know About the 11th Amendment. *Arizona Attorney, 41*, 18-26.

Sweeney, D. (August 2000). ADA Fed Struggles With Web Accessibility; States Take Action. *E-Commerce, 17*(4), 1.

Tennessee v. Lane. (2004). United States Supreme Court, No. 02-1667, slip opinion.

Wisconsin v. Yoder (1972). United States Supreme Court, 406 U.S. 205.

I'M ON BEALE STREET, BUT MY LUGGAGE IS IN MEMPHIS…EGYPT?: DEPLOYING RFID-ENABLED BAGGAGE TRACKING SYSTEMS TO IMPROVE AIRLINE CUSTOMER SERVICE

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ABSTRACT

This article examines the adoption of Radio Frequency Identification (RFID) technology in the commercial aviation industry, focusing on the role of RFID systems for improved baggage handling and security. Based upon secondary and trade literature, the article provides a timely overview of developments with regard to the implementation of the technology in commercial aviation. Particular attention is given to the initiative of Delta Airlines, an industry leader in the testing and development of RFID systems for improved operations in baggage handling.

The article focuses on two major contributions that RFID promises commercial aviation: (1) improved customer service though better operational efficiency in baggage handling, and, (2) increased airport and airline security. RFID's promise in matching checked-bags with passengers as an anti-terrorist measure is explained; this has generated interest from both government and industry associations. Though RFID technology is experiencing widespread adoption across many industries, the authors find that commercial aviation is poised to be a leader in full-scale adoption of RFID systems for baggage handling operations. It is concluded that RFID technology holds distinct advantages over the currently used bar-code system for baggage handling.

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