ABSTRACT

This article examines the user help and service navigation features in government Web sites and compares them across levels of government. These features are critical to ensuring that users unfamiliar with government are able to successfully and easily access e-government services and information. The research finds clear patterns in the use of similar help and navigation features across governments, leading to a conclusion that these features are diffusing in the public sector Web development field. The article concludes by stating that Web developers should work to overcome a second digital divide, one of a lack of knowledge of Web site organization and government structure. Users need to be actively assisted to find information by Web developers.

This article reports on efforts to make American state, local, and federal e-government portals more user-friendly by providing user help, service navigation, and organizational structures to assist potentially novice users in finding e-government information and services.

Once users have access to the Internet and learn how to use computers, they still have to understand how to navigate Web sites and find the information or services they need. Then, they have to understand how to interact with the Web site so that they can access those services. Governments need to provide more proactive user help features, service navigation features, and organizational structures to actively assist users in finding information and services they desire; otherwise, they can create a second digital divide, one between those who understand Web site structure and organization structure, and those who do not. As Hargittai (2003, p. 3) puts it, many a Web developer “wrongly assumes that gaining access to the Internet obliterates any potential inequality that may result from lack of access to the new medium. There are factors beyond mere connectivity.
that need to be considered when discussing the potential implications of the Internet for inequality. In addition to relying on basic measures of access to a medium, one needs to consider more nuanced measures of use such as user ‘skill’. ‘Skill’ is defined as the ability to locate content online effectively and efficiently”.

**USABILITY IN PUBLIC SECTOR WEB SITES**

Today, West (2005) suggests that there is a great degree of variation among the organization and structure of current public sector Web sites, and that not all sites are organized in a user-friendly fashion. Indeed, there is little formal focus on these elements, and their importance sometimes goes unheeded. Many government portals and Web sites are designed with government workers in mind, not the ordinary users without experience in government or with the use of Internet services.

Bridging the “digital divide” does not mean just making computers themselves accessible, but also involves making the Web sites themselves more user-friendly and easy to use — removing barriers due to lack of experience with the Internet (Nielsen, 2000; Rosenfeld & Morville, 1998). Designers and developers of public sector Web sites must assume that those using their sites have limited training and experience and will need sites that are easy to use and designed with usability and effective information architecture in mind. They must also consider that the design lessons developed for private sector e-commerce sites might not necessarily work for public sector sites.

User help, service navigation, and organizational structure are critical features of any public sector main portal that is dedicated to having users find its services and information. The presence or absence of these features on public sector sites can greatly affect the ability of a user to find information and services that might be available on the site and to effectively use those services.

The usability of the e-government portal interface is an important feature of human-computer interaction; to many users, the interface of the main portal is, in fact, the only important part (Singh & Kotze, 2002). Usability is typically defined as “the measure of the quality of a user’s experience when interacting with a product or system — whether a Web site, a software application, mobile technology, or any user-operated device. Usability is a combination of factors that affects the user’s experience with the product or system, including: ease of learning, efficiency of use, memorability, error frequency and severity, and subjective satisfaction” (U.S. Department of Health and Human Services, 2005).

Other factors that can be incorporated into usability include effectiveness, a match between the system and the real world, user control, safety, utility, flexibility, robustness, and consistency and usefulness of navigation (Nielsen, 2000; Singh & Kotze, 2002). We can also argue that usability includes adequate help features (including embedded help, interactive help, or manuals) and an information architecture that is descriptive, broad, and shallow for users to “click through” rather than relying upon a deep structure (Kitajima, Blackmon, & Polson, 2000, 2005; Nielsen, 2000).

Since the beginning of the World Wide Web, empirical studies have reported low rates of successful information and retrieval (Nielsen, 2000) and wide variation in the lengths of time taken for success (Hargittai, 2003). When Hargittai (2003) tested user ability to find the IRS 1040 tax form (given an unlimited amount of time), 93% could find the form, but the time required varied from 30 seconds to almost nine minutes. Of those participating, 60% used a search engine and 40% tried a specific URL. Among the problems encountered, particularly by those who were significantly older and by more recent users, were confusion about URLs and about page design layout.

Jenkins, Corritore, and Wiedenbeck (2003) identified four groups of users who utilized different search strategies based upon their level of expertise in subject matter and with the World Wide Web. Those who were domain or content and Web novices searched broadly first but did little evaluations of their findings. Domain experts but Web novices searched broadly first but were