Assessment and Evaluation of Public Library Websites in Australia, Canada and U.S.

Evaluation of library websites began as early as 1994, when the internet and World Wide Web were in their infancy. Empirical studies are available on websites which may not be related to libraries, but these studies are informative on what questions to ask and the frameworks needed to move forward with the current study (Cao, Zhang & Seydel, 2005; Chua & Goh, 2010; Teo, et al., 2003).

Evaluating a website and assessing its quality is in large part evaluating its usability. According to Poll (2007), "contents, language, structure, design, navigation, and accessibility" of websites are key areas of focus for libraries (p. 1). Determining what usability is can be different for each member of the community. Past research based on users' acceptance of a particular system has shown that usability is based upon the way the site functions or works (Goodwin, 1987; Wang & Senecal, 2007).

Usability has been defined as 'how well and how easily a visitor, without formal training, can interact with an information system of a website' (Benbunan-Fich, 2001, p. 151). According to Nielsen (2012) usability is defined by looking at it as a 'quality attribute that assesses how easy user interfaces are to use' (para. 3). Nielsen (2012) goes on to discuss that usability refers to the methods used for improving the ease of use during the design process. He further defines this as the five quality components of 'learnability, efficiency, memorability, errors, and satisfaction' (Nielsen, 2012, para. 4). Implementing Nielsen's (2012) usability heuristics will make any website better.

Methodology

The project methodology partially replicates Powers' (2011) study in Pennsylvania where a random sample of public library websites were evaluated and assessed against 18 specific criteria. Powers used 10 basic elements based upon another study done in Idaho that determined what basic elements a public library website should have (Persichini, Samuelson

& Zeiter, 2008; Powers, 2011). The remaining eight criteria were based upon an article Brian Matthews (2009; Powers, 2011) wrote for the *Library Journal* that is considered desirable for library websites. Powers (2011) put the two sets of criteria together and used it in a spreadsheet protocol to assess the sample of Pennsylvania websites by answering either yes or no for each criterion. Powers broke the two sets of criteria into basic or desirable (Powers, 2011).

To determine the assessment and evaluation of the websites six groups of postgraduate students worked over eight semesters on 1300 Australian, Canadian and U.S. public library websites using a pre-determined protocol based upon Bonnie Powers' 2011 research of Pennsylvania public libraries. Each student was assigned 25 public libraries and required to write a 1500-2000 word literature review on any aspect website usability. This was part of the student capstone project course under supervision of the lecturer in charge of the course.

The paper will present three phases of Australian, three phases of Canadian, and two phases of U.S. results from March 2013 to November 2016.

References

Benbunan-Fich, R. "Using Protocol Analysis to Evaluate the Usability of a Commercial Web Site." *Information & Management,* 39, no. 3, (2001) : 151-163.

Cao, M., Zhang, Q., & Seydel, J. "B2C E-Commerce Web Site Quality: An Empirical Examination." *Industrial Management & Data Systems,* 195, no. 5, (2005) : 645-661.

Chua, A. Y. K., & Goh, D. H. "A Study of Web 2.0 Applications in Library Websites. *Library &*

Goodwin, N. "Functionality and Usability." *Communications of the ACM,* 30, no. 3, (1986) : 229-233.

Mathews, B. Web Design Matters: Ten Essentials for Any Library Site. *Library Journal,* 134, no. 3, (2009) : 24-25.

Nielsen, J. "Usability 101: Introduction to Usability." (2012). http://www.nngroup.com/articles/usability-101-introduction-to-usability/

Persichini, G., Samuelson, M., & Zeiter, L. B. (2008). E-Branch in a box: How Idaho libraries created an easy and sustainable web presence. *PNLA Quarterly, 72*(2), 6, 18-19.

Powers, B. S. "Oh, What a Tangled Web We Weave! An Evaluation of Pennsylvania's Public Library Websites for a Basic Level of Web Presence and Beyond." *Current Studies in Librarianship,* 31, no. 1, (2011) : 21-35.

Teo, H-H., Oh, L-B., Liu, C., & Wei, K-K.. "An Empirical Study of the Effects of Interactivity on Web User Attitude." *International Journal of Human-Computer Studies,* 58, no. 3, (2003) : 281-305.

Wang, J., & Senecal, S. "Measuring Perceived Website Usability." *Journal of Internet Commerce,* 6, no. 4, (2007) : 97-112.