

A Proposal to Study User Perception Comparing Accessibility of Library Websites to their Mobile Web Counterparts

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ABSTRACT

The goal of this qualitative study is to determine user preference in accessing academic and public library websites on traditional desktop computers compared to mobile device platforms. The study will evaluate users' perspectives comparing interfaces, features of the two modes of access in browsing, searching and navigating tasks, and the library and information services provided. Data collection will be through semi-structured interviews of 21 participants between the age range of 18 and 55. Half the interviews will be attained from academic institutions and half from public library communities within the city limits of Edmonton. Participants will be required to have used a smartphone within six months prior to the commencement of the study. This study will contribute to the field of Library and Information Services by exploring user behavior and mobile devices, as well as user preference between desktop computers and mobile device interfaces of library websites.

KEYWORDS: mobile technology, accessibility, user perception

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1.0. RESEARCH PROBLEM

Recent research has investigated users' perspectives of accessing library websites through traditional desktop/laptop computers and alternatively using mobile technology (Aldrich 2010; Kim 2011, 67-69; Seeholzer and Salem 2011, 9). These studies do not examine user preference in a particular method of access in browsing, navigating and searching library websites. This study seeks to determine user preference in the mode of access of library websites and evaluate users' perspectives comparing interfaces, features of the two points of access and the library and information services provided.

This research study will compare web and mobile versions of library websites from the user perspective, explore user preferences in browsing, navigating and searching for content and discover whether users consider one of the interface types as more accessible for their information needs. It uses a qualitative framework, as the study will solicit, evaluate and interpret personal opinions from multiple users comparing library website interface choices.

With the increasing popularity of mobile technology and the mobile web, libraries are integrating mobile versions of their websites as a point of access for users to the resources and services they deliver. The study will investigate a deeper interpretation of user preference between desktop computers and mobile device interfaces of library website resources, benefiting the library and information studies field by examining user behavior and mobile libraries. Additionally, the study will survey participants from both academic and public library institutions, allowing for cross comparison.

2.0 REVIEW OF RELATED LITERATURE

The literature review will highlight three areas of study examining user perception of library websites: mobile technology, library and mobile library website features and the user perspective. There is limited research currently available studying academic library websites and user perception of the resources they offer. Research studies examining public library mobile websites is difficult to find. Further investigation is needed into comparing mobile versions of academic and public library websites from the user perspective and the services offered by these institutions on mobile library websites.

2.1 Mobile Technology

Although use of mobile devices is becoming ubiquitous, there are barriers to consider in the use of this technology in providing mobile library websites to users (Fox 8). These barriers include subscription to data plans, availability and maintenance of open source software, content choice and presentation and user needs (Hahn 276). Mobile devices are task-specific in use in comparison to websites, which are more free

form and flexible for the user to navigate, browse and search (Shrestha 187). Conversely, this technology provides unique learning opportunities and has advantages of mobility and portability. Academic, public and special libraries could use mobile technology in service innovations, m-learning, instruction in mobile device use, web lectures, reference services and catalog searching (Hahn 278-282). Vendors are now developing portals for the mobile platform; specifically, Gale Cengage now offers a series of library resource applications called AccessMyLibrary through the Apple AppStore (Gale Apps 2011; Martine 2010).

Smartphones are not the only mobile device used by libraries. Ebooks, readable on smartphones and ereaders depending on format, are becoming more prevalent, with indications that 66% of public libraries nationwide in the United States offer patrons free access to them (Emery 88). There are ongoing issues with this type of content provided to patrons on mobile devices, as libraries negotiate contracts and DRM licenses with content vendors and publishers. Mobile devices can be used to link to the Internet or mail clients through QR Codes, which are becoming more visible in libraries and library catalogs (Walsh 55). Mobile devices have been used in conjunction with QR codes to access instruction and subject guides and location-based information.

Further issues in the area of mobile technology and libraries includes the increasing popularity of tablets, especially the iPad, used by both patrons and library personnel. Libraries need to consider such aspects as time, resource investment and cost/benefit analysis in creating mobile applications of their library websites (Emery 89).

2.2 Library and Mobile Library Website Features

The number of universities with a web presence in the 111 English-speaking members of the Association of Research Libraries is 39, with 15 universities having only a university mobile site, 14 only having a library mobile website and 10 having both university and library websites (Aldrich 2010). Institutions often solicit feedback from students and faculty about the most useful features of their traditional library websites when considering developing mobile counterparts. Functions most commonly found on library websites include library hours, library directory, library catalog and contact us. "Mobile campus" type services include easy access to administration contacts, the library, email, news and search tools – more broadly provided services could be of the following types: individualized accounts, community information and resources, campus life and usage guides (Choi 17).

The Seeholzer and Salem (2011) study of the mobile web focused on one location: Kent State University. The purpose of the study was to determine which features of the traditional website would be most useful on a mobile device and how much time was spent using the web, library features they used and other available services users were interested in having access to (Seeholzer and Salem 9). Recurring themes included students desiring a more interactive, customizable experience, with the

ability to perform a variety of tasks, such as read, chat and connect to resources beyond the basics of finding library hours, locations and directions (Seeholzer and Salem 18).

Libraries are discovering that mobile devices are a new way to reach out to their communities (Seeholzer & Salem 9; Hahn 279). Mobile devices allow freedom of movement from one location to another and the ability to access the web to complete specific tasks of relatively short duration. Apps in mobile devices reduce information into prepackaged forms and are discrete units isolated from the larger context, which users can access depending on their information need (Aldrich 2010). Functions most commonly found on university mobile websites include event calendars, directories, news and campus maps (Aldrich 2010). Specific research studies reviewing mobile website functions in depth include MIT, Ball State University, Duke University, the universities of Texas, North Carolina and Nebraska and Rice University. The study by Aldrich (2010) suggests that more dynamic, interactive and student-centric features should be incorporated into university mobile websites, as well as functions that meet education needs and address access for people with disabilities (Aldrich 2010).

Weaknesses of mobile website design include their more simplistic format and more minimalized look, as well as lack of services provided (Seeholzer and Salem 18-19). Seeholzer and Salem (2011) found 10 links the upper limit on mobile website interfaces, with adequate spacing between them required, as well as a link to the full university library website (Seeholzer and Salem 19). Mobile devices have small screens with content formatted within one column, making it difficult to display interface-rich web pages, wireless connections can be slower, memory size smaller and graphics support lacking, such as the non-use of Adobe Flash by Apple mobile device products (Shrestha 187; West, Hafner, and Faust 103). These drawbacks influence the variety of features libraries can provide on their mobile websites. In developing mobile library websites, libraries need to ensure these applications are user friendly and functional in interface design.

There are institutions providing more comprehensive features and resources for the mobile device platform. *Library High Tech News* (2009) and *Multimedia Information & Technology* (2009) published articles highlighting Duke University was offering the most comprehensive digital image collection specifically formatted for the iPhone, which includes 32,000 images over 20 collections. Additional services include campus news feeds, a campus map and an expanded schedule of courses. Institutions such as Duke University stand as examples of libraries embracing innovative technologies to provide content to their communities and expanding the range of services they provide to their users.

2.3 User Perspective

The user perspective is important in meeting user expectations of features available on mobile library websites. Kim (2011) suggests three varying perspectives of traditional library website usage, which include the user, website design and library service quality. Access to a library website enables users to optimize their time by allowing them to access information and online resources whenever and wherever needed (Kim 67). Users appreciate websites that offer the library services they are looking for including library catalogs and databases, reference services and campus news and information (Kim 68). Numerous studies mention the importance of the user perspective in the design process (Blandford and Buchanan 2003). Perspectives of website design are measured in simplicity and complexity, with users perceiving library website design as challenging (Kim 68-69).

Library resources users would likely access on their mobile devices include research databases and subject manuals, services such as contacting a librarian or the reference desk and logging into a personal library account (Seeholzer and Salem 14-17). Accessing library websites through the mobile device will provide users with new opportunities, such as social engagement, outreach programs and m-learning tools. Usability of mobile devices does pose a challenge on a variety of fronts for the user. Negative aspects for users of mobile websites include scrolling long pages of information, unclear organization of information and page structure, difficulty in typing in fields and forms, ease in selecting links and correcting mistakes (Shestha 191-192). Overall design and navigation of mobile library websites is an important consideration for the user.

Institutions developing mobile library websites should not only include the user perspective in the design stage but could look to the realm of digital libraries and the user perspective, as there are more studies available in this space than the user perspective of mobile library websites and the findings may be transferable. User preference in digital library features include: information should be easy and quick to find, simple to use visually-based interfaces, search results of one page in length and materials and resources classified in varying ways (Elahe, Ghinea and Chen 402-404). A structured and multi-leveled presentation of information relevant to the tasks users want to perform is also important (Tsakonas and Papatheodorou 1246). Menu structures representing information provided in mobile library website interfaces should be easy for the user to understand and navigate.

Users accessing library websites on mobile devices want more customizable features and interactive services such as chat and connecting to resources. Essentially, users are demanding features beyond the basics (Seeholzer and Salem 18). This is an important discovery as it leads to questioning whether mobile library websites will eventually succeed traditional library websites as users' first point of access to libraries.

3.0. RESEARCH QUESTIONS

The following research questions will be used to gather user perceptions comparing library websites to their mobile versions.

1. What are the perceptions of users when comparing an academic library website to its mobile version and when comparing a public library website to its mobile version?
2. Do users identify preferred features of library and mobile library websites, and further, are these features similar or dissimilar across the two types of institutions?
3. Are there differences in the library and information services users expect on library websites and their mobile counterparts?
4. What are users' perspectives of the constraints in accessibility and in browsing, searching and navigating each type of website?
5. Do users identify a bias in their mode of access of library websites, and if so, for what reasons?

4.0. DEFINITIONS

Accessibility. Accessibility is the ease with which a person may enter a library, gain access to its online systems, use its resources, and obtain needed information regardless of format (Reitz 2010).

Desktop computer. A desktop computer is a personal computer or any microcomputer designed for individual use, usually in a personal workspace or in travel, consisting of a CPU and associated peripheral devices. Laptops are small, portable battery-operated personal computers (Reitz 2010).

Interface. An interface is the point or process that joins two components of a data processing system, for example, the screen display that functions as intermediary between a software program and its human users (Reitz 2010).

Mobile device. A mobile device is a wireless handheld device or a durable, lightweight computer small enough to be held comfortably in the hand, designed to be used in a wireless network for applications requiring mobility (Reitz 2010).

M-learning or Mobile learning. Any sort of learning that happens when the learner is not at a fixed, predetermined location, or learning that happens when the learner takes advantage of the learning opportunities offered by mobile technologies (Wikipedia contributors).

M-library or Mobile library. M-library is a short form term to denote mobile library. A mobile library is a library in mobile digital form (Hahn 2008).

Mobile technology. Mobile technology is a collective term used to describe the various types of cellular communication technology (Wikipedia contributors).

Mobile web. The World Wide Web which is accessed through a mobile device ranging from a cellular phone to an iPod Touch mobile app (Kroski 2011).

Website. A group of related, interlinked Web pages installed on a Web server and accessible 24 hours a day to Internet users equipped with browser software (Reitz 2010).

5.0. DATA COLLECTION

The objective of this qualitative study is to gather and interpret user perspectives comparing the accessibility and features of academic and public library websites between desktop computers and mobile devices. As this research project seeks to gather data to understand the participant's point of view, as experienced by them, it corresponds to a phenomenological study (Leedy & Ormond 2010, 146). Phenomenological studies purposefully sample 5 to 25 participants in in-depth interviews (Leedy & Ormond 2010, 146).

As this research study is soliciting human participants for interviews, ethics approval will be obtained; participants will be chosen over the age of 18 to avoid delay and simply the ethics review process. The study will interview 18+1 or 20+1 participants between the ages of 18 and 55, who have owned, used extensively or are very familiar with smartphones. This participant number may approach saturation level of themes, although as participants will be from two types of institutions, a second phase of the study mirroring the first may be launched. Results from the initial participant interview will be used to assess and adjust the interview process as needed for future interviewees.

Candidates for the study must fulfill the following requirements. Participants from the University of Alberta will be registered students or members of faculty and identify themselves as such using official University of Alberta identification, such as a ONE-Card. University of Alberta candidates will be asked if they are library users and have visited the University of Alberta Libraries website or mobile website in the previous six months, and whether they have experience with, or own, a mobile device (smartphone). Public library candidate participants will be asked to provide proof of Edmonton Public Library membership by showing their library card. In addition, they will be asked if they have used the Edmonton Public Library's website or mobile website in the previous six months. Candidates whom have used either library's mobile website will not be asked to participate in the study, in order to avoid preformed biases influencing the results. All participants will be asked their proficiency levels with

computers and mobile devices. Participants must have good knowledge of the English language, in order to understand sufficiently content presented in library websites.

Permission to conduct onsite research will be obtained from the University of Alberta and Edmonton Public Library administrations and also to post flyers in high traffic or designated areas at locations for both institutions (Appendix E and Appendix F). Specific University of Alberta Libraries locations include Rutherford Humanities and Social Sciences, Cameron (Science & Technology), J.W. Scott Health Sciences and Herbert T. Coutts (Education & Physical Education). Edmonton Public Library locations include the central location Stanley A. Milner, as well as Sprucewood, Highlands, Londonderry, Jasper Place, Mill Woods, Castle Downs, Lois Hole and Capilano. Flyers will state the title of the study, desired age range of participants, the requirement of either a University of Alberta Libraries or Edmonton Public Library membership, required knowledge of mobile devices, contact information for the researchers and ethics statement (Appendix G). The advertisement will not describe in depth the objectives of the study in order to avoid bias.

At point of initial contact, by telephone or email, the potential participant will be asked at which location they saw the study advertised and whether they have more familiarity with public or academic libraries. Candidates will then be screened to fit the criteria detailed above, including if they have membership at either type of institution. The goal of the study is to interview half of the participants comparing academic library websites and their mobile versions, and the other half of the participants comparing public library websites and their mobile versions. The interviewer may decline participant interest if half of the participants have already been fulfilled for one of the two parts of the study. Qualifying participants will be given a list of public locations to choose from, which include study rooms at University of Alberta Libraries or public areas at Edmonton Public Library locations, with the qualifier that there should be no overt distractions or noise and the locations will be safe and comfortable for both interviewer and interviewee.

Two-hour semi-structured interviews per participant will be conducted following an additional preliminary 15-minute discussion reviewing the Letter of Information and Letter of Consent, a broader description of the study, description of data collection methods, and instruction in use of the smartphone (an iPhone or iPad) if required. Participants will sign a Letter of Consent and a pseudonym will be assigned to each individual for all other aspects of the study to ensure privacy and confidentiality. The age of the participant will be used for demographic purposes. The Letters of Consent and any interview transcripts will be kept in a locked filing cabinet or drawer for five years and will only be viewed or accessed by the interviewer.

Semi-structured interviews will be the method of data collection, to allow participants freedom in how they will achieve some of the searching, navigating and browsing tasks asked of them and to aid in the participant's comfort level with the

interview process. There will be a general list of questions to be asked, although will not be strictly adhered to (Appendix H). The interviewer will try to achieve a fun and relaxed atmosphere in the interview, to acquire as much perspective and fully expressed opinion from the interviewees as possible. Data will be collected in three ways: using a digital audio recorder or audio recording software on a computer; screen activity recording software to capture the interviewee's activities on library websites and screen capture technology on mobile devices to take images at appropriate intervals in the interview.

In the preliminary discussion, the participant will be informed that the study seeks their perceptions, experiences and opinions about library websites and their mobile counterparts. In the interview, the participant will be asked questions related to specific tasks performed in comparing an academic or public library website using a desktop computer, such as a laptop, and their mobile website counterparts using an iPhone. Tasks may include navigating each website interface to access library and information services, searching for specific resources or content and browsing the interface features of each platform in general. The academic library studied will be the University of Alberta and the public library studied will be Edmonton Public Library. Users' opinions and perspectives of the two points of access of the institution's website, the available services, and the functions provided, will be solicited. Participants will not be asked questions about library websites or websites in general external from the two mentioned above.

An interview guide will be developed using multiple avenues to aid the researcher and research assistant. Initial questions will be formulated extrapolating from current research in the area of study and identifying gaps that exist where further questions can be posed. The preliminary questions will be sent to peers experienced in conducting research studies with semi-structured interviews for review and input. The study will recruit 19 or 21 participants, with the initial participant the assessment of the interview process and appropriateness and pertinence of questions.

Credibility will be supported by researcher first-hand knowledge and familiarity with current themes of research in the field being studied and through acquisition of a comprehensive collection of articles related to the topic of study. The researcher will also follow publications in journals and from conference proceedings to stay current with new research. Good methods to use for continual exposure to current topics include email alerts, newsletters, list serves and RSS feeds.

All interactions with participants will be professional and comfortable. The researcher will ensure the participant has full disclosure of all information contained within the Letter of Information and Letter of Consent as directed by ethical standards. The researcher will seek to put the participant at ease and keep stress to a minimum during all interactions with the participant.

Participants in the study will be from a broad age range. To confirm dependability, the researcher will study variant results in more depth than results that

conformed to normal and evaluate conclusions to include aspects of all results. Results of the study will be comprehensive and multi-level.

Transferability of this study can be achieved by conducting similar research studies for teenage and older adult populations, or for those marginalized and especially the visually and physically impaired. Results of the study can be provided to the administrations of the University of Alberta Libraries and Edmonton Public Library with recommendations for improvement or modification of their library websites and mobile library websites.

Confirmability will be assured with close attention to accuracy in transcription of results and attention paid to the organization and storage of the collected data. The research will be using data transcription software to transcribe results, which will be reviewed in final by the research assistant comparing the original digital audio versions to the transcribed versions.

The study will be extended with acquisition of additional resources, interviewing an additional 18 to 20 participants, adjusting for any themes and variations emerging from the results of initial study.

6.0. ETHICS REVIEW

Approval for the study will be required by the Faculty of Education, Augustana and Faculté St. Jean Research Ethics Board (EEASJ REB), as this research project will involve human subjects. The completed HERO ethics application is attached in Appendix A. Additionally, approval is required by the University of Alberta for research studies involving human subjects. Appendix B includes Section 66 of the University of Alberta General Faculties Council policy manual, which outlines policies when involving human subjects in research studies on campus.

To protect participant's privacy and confidentiality, according to the above policies, pseudonyms will be assigned and used in results and in transcription of digitally recorded data. Pseudonyms will be generic first names. The researcher and one research assistant will have knowledge of the participants personal names and their corresponding pseudonyms in the participant recruitment process and during the interviews. The same research assistant will be used for transcribing services. The researcher will explain to the research assistant verbally, ethics requirements for privacy and confidentiality of participant's personal information. A hardcopy package with the same details will also be provided to the research assistant as a reference source.

A secured locker will be used to store participant-related records. During the study, digital data acquired using digital audio recorders or audio-recording software, screen recording activity software and screen capture will be deposited in an encrypted, password protected folder on a computer and a copy stored in a secure locker on an

encrypted, password protected USB or DVD. After the study is completed, any data in digital form on the computer will be removed, though the USB/DVD copy will be securely stored in a filing cabinet or locker. After five years all participant records, such as letters of consent, as well as all digital data will be destroyed.

The Letter of Information, attached in Appendix C, outlines important information for participants regarding the research study's framework, scope and intentions. The Letter of Consent, attached in Appendix D informs the participant of their rights and responsibilities in the research study and acquires consent from the participant. Appendix E and Appendix F contain request letters for institutional permission for onsite research at University of Alberta Libraries and Edmonton Public Library locations. The recruitment flyer posted at University of Alberta Libraries and Edmonton Public Library locations is attached in Appendix G. Appendix H lists participant interview questions according to theme.

7.0. IMPLEMENTATION PLAN

The Gantt timeline of the Project Schedule is detailed in Appendix I. The study will start August 2, 2011, with writing, editing and the final document to be completed by December 13, 2011. Interviews of participants will occur between September 12, 2011 and October 17, 2011.

The estimated cost of the study will be ~\$13,500, as illustrated in Appendix J. If for any reason the study was required to be scaled back, the researcher would use alternative hardware and software choices, such as borrowing a lap top or using an onsite computer instead of the purchase of the Apple MacBook Pro and Apple iPad 2, which would provide a cost savings of \$2591.40. Another option would be to reduce the amount of hours per week the Research Assistant is required to work for the study, which is currently at \$2358.09 for 19 weeks, working 7 hours per week.

Essential elements of the study will be to interview 19 or 21 participants at locations for both the University of Alberta and the Edmonton Public Library. Transportation to all locations will be by using Edmonton Transit Services. There will be no other known associated costs with recruitment of participants and interviews at the locations chosen.

8.0. DISSEMINATION PLAN

The researcher will be presenting the results of this study at the *Emerging Technologies for Academic Libraries* conference in Trondheim, Norway, organized by the Norwegian University of Science and Technology. This conference is a suitable forum to present this research study as the conference presents research on topics such as user-centric services, new literacies and mobile technologies. This study will be published in the scholarly journal *Library High Tech*, which focuses on computing and

technology for the library community. The journal has a reputation for publishing on recent and “hot” trends in information technology and coverage includes user perspectives on technology.

Computers in Libraries is a professional publication publishing articles on the subjects of information technology and library technology for the professional librarian. This publication is a suitable forum for this research study to be published in, as the study involves information technology. An appropriate professional conference venue to present this research study is the *Computers in Libraries Conference*, which is North America’s largest technology conference and exhibition for professionals in library and information services. The conference concentrates on leading-edge technology and all aspects of library technology.

9.0. PROJECT BUDGET

As detailed in Appendix J, this research study is estimated to cost approximately \$13,500.

10.1. APPENDIX A: HERO – NEW STUDY HUMAN ETHICS APPLICATION FORM

1.1 Study Identification – EEASJ Application

2.0 Study Title: ***A Proposal to Study User Perception Comparing Accessibility of Library Websites to their Mobile Web Counterparts***

5.0 Name of Principal Investigator (at the University of Alberta, Caritas, or Capital Health):
J. Nicole Mullings

6.0 Investigator's Supervisor (Required for graduate students, trainees, or researchers from Capital Health, Caritas who do not have an University of Alberta academic appointment):
Dr. Lisa Given

7.0 Type of study:
Graduate Student - In-class project, other projects (incl. CSL - Community Service-Learning)

1.3 Study Funding Information

1.0 Type of Funding:
Unfunded

1.4 Conflict of Interest

1.0 Are any of the investigators or their immediate family receiving any personal remuneration (including investigator payments and recruitment incentives but excluding trainee remuneration or graduate student stipends) from the funding of this study that is not accounted for in the study budget?
No

2.0 Do any of investigators or their immediate family have any proprietary interests in the product under study or the outcome of the research including patents, trademarks, copyrights, and licensing agreements?
No

7.0 Do you have any other relationship, financial or non-financial, that, if not disclosed, could be construed as a conflict of interest?
No

Important

If you answered YES to any of the questions above, you may be contacted by the REB for more information or asked to submit a Conflict of Interest Declaration.

1.5 Study Locations and Sites

1.0 Specify research locations: Enter all locations where the research will be conducted under this Research Ethics Approval (e.g. university site, hospital, community centre, school, classroom, participant's home, in the field, clinician's private office, internet website, etc. - provide details):

Specific locations participants can choose from include study rooms at the University of Alberta and branches of the Edmonton Public Library. University of Alberta Group

Study Rooms: Rutherford (Humanities and Social Sciences) Group Study Rooms (2-01A or 2-01B), Cameron Study Hall Group Study Rooms (B-05A -B-05J), or the Scott (Health Sciences) Group Study Rooms (Rooms 2K4.22 - 2K4.27). Edmonton Public Library branches include central location Stanley A. Milner, Sprucewood, Highlands, Londonderry, Jasper Place, Mill Woods, Castle Downs, Lois Hole or Capilano.

Participant recruitment posters will be posted on bulletin boards at the Edmonton Public Library branches and University of Alberta libraries listed above.

3.0 If the study involves researchers in other institution(s), will ethics approval be sought from other institutions/organizations (e.g. another university, Alberta Cancer Board, school district board, etc)?

Not Applicable

2.1 Study Objectives and Design

1.0 Proposed Start Date:

August 2, 2011

2.0 Proposed Start Date of working with human participants (can be the same as item 1.0):

September 12, 2011

3.0 Anticipated End Date of working with human participants:

October 17, 2011

3.1 Risk Assessment

1.0 After reviewing the Minimal Risk Criteria (inserted from User Help), provide your assessment of the risk classification for this study:

Per the Tri-council Policy Statement, the standard of minimal risk is commonly defined as follows: if potential participants can reasonably be expected to regard the probability and magnitude of possible harms implied by participation in the research to be no greater than those encountered by the subject in those aspects of his or her everyday life that relate to the research, then the research can be regarded as within the range of minimal risk. Above the threshold of minimal risk, the research warrants a higher degree of scrutiny and greater provision for the protection of the interests of prospective participants.

Minimal Risk

2.0 In a scale of 0 to 10 where 0 = No Likelihood, 5 = Moderate Likelihood and 10 = Extreme Likelihood, put a numerical rating in response to each of the following:

Rate Description of Potential Risks and Discomforts

- [0] 1 2 3 4 5 6 7 8 9 10 Psychological or emotional manipulations will cause participants to feel demeaned, embarrassed, worried or upset
- 0 1 [2] 3 4 5 6 7 8 9 10 Participants will feel fatigued or stressed
- 0 [1] 2 3 4 5 6 7 8 9 10 Questions will be upsetting to the respondents
- [0] 1 2 3 4 5 6 7 8 9 10 Participants will be harmed in any way
- [0] 1 2 3 4 5 6 7 8 9 10 There will be cultural or social risk – for example, possible loss of status, privacy, and/or reputation
- [0] 1 2 3 4 5 6 7 8 9 10 There will be physical risk or physiological manipulations, including injury, infection, and possible intervention side-effects or complications
- [0] 1 2 3 4 5 6 7 8 9 10 The risks will be greater than those encountered by the participants in everyday life

3.0 Provide details of short- and long-term risks and discomforts:

Questions regarding browsing activities on library websites and their mobile web versions may cause stress and discomfort.

4.0 Describe how you will manage and minimize risks and discomforts, as well as mitigate harm:

I will remind the participant periodically their right to opt out of participation at any point in time in the study.

5.0 If your study has the potential to identify individuals that are upset, distressed, or disturbed, or individuals warranting medical attention, describe the arrangements made to try to assist these individuals. Explain if no arrangements have been made:

Not Applicable

3.2 Benefits Analysis

1.0 Describe any benefits of the proposed research to the participants:

Participants benefit by gaining knowledge about functionality and usefulness of library websites and their mobile versions. Participants may gain more confidence in using library websites and mobile devices.

2.0 Describe the scientific and/or scholarly benefits of the proposed research:

With the increasing prevalence of mobile technology, the study compares preferences between library website features and mobile library website features.

3.0 Describe any benefits of the proposed research to society:

Benefits would include identifying strengths and weaknesses of traditional library websites in comparison with mobile library websites, such as task prioritization, most commonly used applications and most commonly accessed information, as well as insight into users opinions on customizable features. The University of Alberta Libraries and the Edmonton Public Library would be sent copies of the completed study.

4.0 Benefits/Risks Analysis - describe the relationship of benefits to risk of participation in the research:

Benefits include the opportunity for participants to become more comfortable with library websites. Risk of participation is slight, although the participant may experience stress from navigating library websites on mobile devices if they have not used mobile devices on a regular basis.

4.1 Participant Information

1.0 Describe and justify the inclusion criteria for participants:

Participants will be adults between the ages of 18 and 55, who have owned, used extensively or are very familiar with smartphones. Having prior experience with mobile devices is essential criteria for including participants, as participants should be comfortable navigating a library website application on the mobile device. Approximately half the participants will be academic library users and the other half will be public library users. Participants must also have accessed a library website (public or academic) on a desktop or laptop computer within the past six months, so they have some familiarity with navigating library websites.

2.0 Describe and justify the exclusion criteria for participants:

Participants will be over the age of 18 to simply the length of time for the ethics review process. Participants over the age of 55 will be excluded due to comfort level with technology and lack of knowledge of mobile devices. Participants will be residents of Edmonton, to reduce travel costs.

3.0 Are there any direct recruitment activities for this study?

Yes

4.0 Participants

Total number of participants you expect to enroll (if applicable): **20**

If this is a multi-site study, how many participants (including controls, if applicable) do you anticipate will be enrolled in the entire study? **0**

5.0 Justification for sample size:

The initial phase of the study would seek half the participant sample size as academic library users and the other half as public library users. The study should have equal sizes for each, as a basis for comparison between the two types. The participant size will allow for completion of the study in the time specified, with interviews of 2 to 3 hours in length. A second phase of the study would include an additional 20 participants to approach data saturation.

6.0 If possible, provide expected start and end date of the recruitment/enrollment period:

Expected Start Date: ***September 12, 2011***

Expected End Date: ***October 17, 2011***

4.2 Recruit Potential Participants

1.0 Recruitment

1.1 Will potential participants be recruited through pre-existing relationships with researchers (e.g. employees, students, or patients of research team, acquaintances, own children or family members, etc)?

No

2.0 Outline any other means by which participants could be identified (eg. response to advertising such as flyers, posters, ads in newspapers, websites, email, listservs; pre-existing records or existing registries; physician or community organization referrals; longitudinal study, etc):

Not Applicable

4.3 Recruitment Contact Methods

1.0 How will initial contact be made? Select all that apply:

Potential participants will contact researchers

2.0 If contact will be made through an intermediary (including snowball sampling), select one of the following:

Not Applicable

3.0 If contact will be made through an intermediary, explain why the intermediary is appropriate and describe what steps will be taken to ensure participation is voluntary:

Not Applicable

4.0 Provide the locations where participants will be recruited, (i.e. educational institutions, facilities in Capital Health or Caritas, etc):

Specific locations include University of Alberta libraries and branches of the Edmonton Public Library. University of Alberta Libraries includes Rutherford Humanities and Social Sciences, Cameron (Science & Technology), J.W. Scott Health Sciences and Herbert T. Coutts (Education & Physical Education). Edmonton Public Library branches include central location Stanley A. Milner, Sprucewood, Highlands, Londonderry, Jasper Place, Mill Woods, Castle Downs, Lois Hole and Capilano. Participant recruitment posters will be posted in high traffic or designated areas at the Edmonton Public Library branches and University of Alberta libraries listed above.

4.4 Informed Consent Determination

1.0 Describe who will provide informed consent for this study:

All participants will be competent to give informed consent

2.0 How is consent to be indicated and documented?

Signed consent form; Explicit oral consent

3.0 What assistance will be provided to participants, or those consenting on their behalf, who have special needs (e.g. non-English speakers, visually impaired, etc):

Participants chosen will be required to speak and understand the English language, as the websites studied likely will not be multilingual, and have no visual impairment, due to the graphics and text-based nature of websites. Physically impaired participants will be able to choose their location of choice for the interview.

4.0 If at any time a participant wishes to withdraw or not participate in certain aspects of the research, describe the procedures and the last point at which it can be done:

A participant can choose to opt out at any point in time in the study.

5.0 Describe the circumstances and limitations of data withdrawal from the study, including the last point at which it can be done:

Not Applicable

6.0 Will this study involve an entire group where non-participants are present?

No

7.0 Describe the incentives and/or reimbursements, if any, to participants and provide justification:

Not Applicable

4.5 Informed Consent Details

1.0 Provide justification for requesting a waiver of consent (if applicable): ***Not Applicable***

2.0 Oral consent: explain how oral consent will be documented (if applicable): ***Not Applicable***

3.0 Overt action: explain the overt action that will signify consent (if applicable): ***Not Applicable***

3.0 Inaction/non-objection: describe the procedures and justification for this type of consent (if applicable):

Not Applicable

4.6 Authorized Representative or Third Party Consent – if applicable

Not Applicable

4.7 Group Research Documentation – if applicable

Not Applicable

4.8 Study Population Categories

1.0 This study is designed to TARGET or specifically include the following (does not apply to co-incidental or random inclusion). Select all that apply:

Not Applicable (i.e., does not target any one group, specifically)

4.9 Aboriginal People – if applicable

Not Applicable

5.1 Research Methods and Procedures

1.0 This study will involve the following (select all that apply)

Interviews (e.g. in-person, telephone, email, chat rooms, etc)

4.0 Internet-based research

Not Applicable

5.5 Use of Deception or Partial Disclosure – if applicable

Not Applicable

5.6 Sound or Image (other than audio- or video-recorded interviews) or Material Created by Participants – if applicable

Not Applicable

5.7 Interviews, Focus Groups, Surveys and Questionnaires – if applicable

1.0 Are any of the questions potentially of a sensitive nature?

No

If YES, provide details:

Not Applicable

2.0 If any data were released, could it reasonably place participants at risk of criminal or civil law suits?

No

If YES, provide the justification for including such information in the study:

Not Applicable

3.0 Will you be using audio/video recording equipment and/or other capture of sound or images for the study?

Yes

If YES, provide details:

Either an audio recorder or a laptop with audio-recording software will be used to record participant interviews and aid in transcription of participant answers to interview questions and description of participant activity with computers and mobile devices. Software for screen recording of participant's browsing activity on desktop computers may be used. Screen shots may be taken of participant's browsing activity on mobile devices.

5.8 Internet-based Interaction with Human Participants – if applicable

Not Applicable

6.1 Data Collection

1.0 Will the study team know the participants' identity at any stage of the study?

Yes. On the signed consent form and during the interviews.

2.0 Primary/raw data collected will be (check all that apply):

All personal identifying information removed

3.0 If identifying information will be removed at some point, when and how will this be done?

A pseudonym (generic first name) will be assigned to the participant after the consent form is signed. The pseudonym will be used to identify the participant in transcribed data and in any results. If login details to library websites will be required, login information for the interviewer only will be used. No participant login credentials will be required.

4.0 If this study involves secondary use of data (i.e., data previously collected by another researcher for another study), list all sources:

Not Applicable

5.0 In research where total anonymity and confidentiality is sought but cannot be guaranteed (eg. where participants talk in a group) how will confidentiality be achieved?

Not Applicable

6.2 Data Identifiers

1.0 Personal Identifiers: will you be collecting any of the following (check all that apply):

***Full Date of Birth
Age at time of data collection
Email Address
Name***

If OTHER, please describe: ***Not Applicable***

3.0 If you are collecting any of the above, provide a comprehensive rationale to explain why it is necessary to collect this information:

Age at time of collection and date of birth will be used to compare results across age ranges, as age may be a variable influencing the ability of users to complete

browsing, navigating and searching activities, as well as specific tasks on library websites. Age range will be calculated in comparing participant populations between the University of Alberta and Edmonton Public Library.

Email address and name of participants will be collected in order to schedule interviews.

4.0 Specify information that will be RETAINED once data collection is complete, and explain why retention is necessary. Include the retention of master lists that link participant identifiers with de-identified data:

Age of participants linked to their pseudonyms will be retained to compare results for participant populations between the University of Alberta and Edmonton Public Library. Signed consent forms will be retained for five years as per GFC Policy.

6.3 Data Confidentiality and Privacy

1.0 How will confidentiality of the data be maintained? Explain the steps you propose to maintain data confidentiality and privacy. (For example, study documents must be kept in a locked filing cabinet and computer files encrypted, etc.)

Confidentiality will be maintained by keeping all participant records in a locked filing cabinet as per GFC Policy. Throughout the study any digitally recorded information will be kept in a password protected, encrypted folder. Once the study is completed and retired, all digital information will be kept on a password protected, encrypted USB key/external hard drive - the digitally recorded information stored in a password protected folder on a computer will be removed permanently.

2.0 Describe what will happen to the data once the study is completed. Indicate your plans for the destruction of the identifiers at the earliest opportunity consistent with the conduct of the research and/or clinical needs:

Signed consent letters will be kept for five years in a locked filing cabinet and shredded thereafter.

3.0 If you involve colleagues, assistants, transcribers, interpreters and/or other personnel to carry out specific research tasks in your study, how will you ensure that they properly understand and adhere to the University of Alberta standards of data privacy and confidentiality?

All assistants will be verbally informed of the ethical guidelines for confidentiality and privacy, as directed by the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans and GFC Policy. All team members will be provided a hardcopy research study package, which would include detailed privacy and confidentiality requirements.

4.0 Data Access

4.1 Will the researcher make raw data that identify individuals available to persons or agencies outside of the research team?

No

4.2 If YES, describe in detail what identifiable information will be released, to whom, why they need access, and what safeguards will be used to protect the identity of subjects and the privacy of their data.

Not Applicable

4.3 Provide details if identifiable data will be leaving the institution, province, or country (eg. member of research team is located in another institution or country, etc.)

Not Applicable

6.4 Data Storage, Retention, and Disposal

1.0 Where will the research data be stored? Specify the physical location and how it will be secured to protect confidentiality.

During the study, the researcher will store all physical records, including signed consent forms, in a secured locker as per GFC Policy. Digital data will be saved in a password protected folder on the researcher's computer and on a password protected USB key, to ensure all data is not lost if one or the other device should fail. Digital audio recorders will be reformatted after all data has been transcribed.

2.0 Describe what will happen to the data once the study is completed. Indicate your plans for the destruction of the identifiers at the earliest opportunity consistent with the conduct of the research and/or clinical needs:

Signed consent letters will be kept for five years in a locked filing cabinet and shredded thereafter. At the completion of the study, the digitally recorded information stored in a password protected, encrypted folder on a computer will be transferred to a password protected, encrypted USB key/external hard drive, wiped from the computer and stored in a locked filing cabinet. After 5 years the digital data will be destroyed as per GFC Policy.

3.0 You must keep your data for a minimum of 5 years according to GFC Policy 92.2. How will you provide for data security during this time?

Signed consent letters and digital data will be stored in a locked filing cabinet until their destruction.

7.1 Documentation

Attach the following documents (as appropriate for your study) to this application, along with any other relevant documents pertaining to your project.

1.0 Recruitment Materials: ***Appendix G***

2.0 Letter of Initial Contact: ***Not Applicable***

3.0 Information Letter: ***Appendix C***

4.0 Consent Forms: ***Appendix D***

5.0 Assent Forms: ***Appendix E (University of Alberta) & Appendix F (Edmonton Public Library)***

6.0 Questionnaires, Cover Letters, Surveys, Tests, Interview Scripts, etc.: ***Appendix H***

10.0 Confidentiality Agreement (e.g., for hired transcriptionists): ***Not Applicable***

10.2. APPENDIX B: UNIVERSITY OF ALBERTA GENERAL FACULTIES COUNCIL (GFC) POLICY MANUAL SECTION 66

The University of Alberta's General Faculties Council Policy Manual Section 66 details the following standards for protecting human research participants.

Note from the University Secretariat: The Post-Secondary Learning Act gives General Faculties Council (GFC) responsibility, subject to the authority of the Board of Governors, over "academic affairs" (section 26(1)). The Act further provides that "[a] university may conduct pure research and applied research and may foster innovation" (section 104(1)).

The Act also provides that the Board "may require a student...to provide personal information to the [B]oard if the personal information relates directly to and is necessary for an operating program or activity" (section 65(a) of the Act). GFC has thus enacted a policy concerning Human Research, as set out below.

The complete wording of the section(s) of the Post-Secondary Learning Act, as referred to above, and any other related sections, should be checked in any instance where formal jurisdiction or delegation needs to be determined.

The complete GFC Policy Manual can be found at the below link:
<http://www.uofaweb.ualberta.ca/gfcpolicymanual/index.cfm>

10.3. APPENDIX C: INFORMATION LETTER

Letter of Information

A Proposal to Study User Perception Comparing Accessibility of Library Websites to their Mobile Web Counterparts

With the increasing popularity of mobile technology and the mobile web, libraries are integrating mobile versions of their websites as a point of access for users to the resources and services they deliver. The purpose of this study is to determine user preference in the mode of access of library websites, comparing web and mobile versions of library websites from the user perspective.

Participants will be between 18 and 55 years of age, have accessed an academic or public library website within the previous 6 months, have good familiarity with a smartphone mobile device and good knowledge of the English language. There will be 19 to 21 participants interviewed at ~2.5 hours each. Participants will have their choice of interview location in public areas at either the University of Alberta Libraries or Edmonton Public Library. Interviews will take place between September 12, 2011 and October 17, 2011.

There is minimal risk to the participants of the study. Participants will be required to sign a Letter of Consent, after which a pseudonym will be assigned to protect their privacy. Any additional personnel will be required to sign a confidentiality agreement. Participants may withdraw from the study or have their data removed at any point in time without consequence. Personal information and collected data will be kept in a locked filing cabinet for 5 years, after which time it will be destroyed.

Digital-audio recorders or audio-recording software, screen activity recording software, or screen capture will be used to collect data. The data collected may be published as research articles in scholarly journals in the researcher's field of study. The researcher may also present results of the study in condensed reports and conference presentations. The researcher seeks no commercial gain from results of the study.

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension, Augustana and Campus Saint Jean Research Ethics Board (EEASJ REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEASJ REB c/o (780) 492-2614. The researcher will comply with University of Alberta standards for the protection of human research participants: <http://www.uofaweb.ualberta.ca/gfcpolicymanual/policymanualsection66.cfm>.

The researcher is a Masters student at the School of Library and Information Studies at the University of Alberta. This Letter of Information provided to participant candidates for interview is part of a course assignment instructed by Dr. Lisa B. Given, a Professor at the School of Library and Information Studies.

The participant may contact the individuals below at any point in time, for any reason, if they have any concerns or complaints, or wish to obtain a copy of the research findings.

J. Nicole Mullings (MLIS Candidate)
SLIS, University of Alberta
(403) 830-0634
jmulling@ualberta.ca

Dr. Lisa B. Given (Professor)
SLIS, University of Alberta
(780) 492-2033
lisa.given@ualberta.ca

10.4. APPENDIX D: LETTER OF CONSENT

Letter of Consent

A Proposal to Study User Perception Comparing Accessibility of Library Websites to their Mobile Web Counterparts

Date: _____

Participant's Name (Please Print): _____

As a participant in this interview, I verify I have read the Information Letter provided to me by the researcher, had any questions posed answered to my satisfaction and understand the following:

- I understand I have the right to decline participation at any point in time or at a specified time in the study, without penalty, prejudice or being required to provide a reason for opting out.
- I understand a pseudonym will be used in data collection to prevent identification of my participation in the research study.
- I understand I can request at any time for data collected about me to be removed from the study results and destroyed by removal from any devices used or shredded.
- I understand I may refuse to answer any of the questions asked during the interview.
- I understand that the interview may be captured using any of the following: a digital audio-recorder, audio-recording software, screen activity recording software or screen capture.
- I understand that any notes, interview transcripts and recordings will be used solely for educational and research purposes.
- I understand two copies of the Letter of Consent and the Letter of Information will be provided: one to be signed and returned to the researcher and one for the participant to keep for their own records.
- I understand the researcher will secure the signed copy of my consent letter in a locked filing cabinet and my identifying information will only be known by the researcher and the research assistant.
- I hereby give my permission to be interviewed.

Participant's Signature: _____

Researcher's Signature: _____

Ethics Approval Statement: "The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension, Augustana and Campus Saint Jean Research Ethics Board (EEASJ REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEASJ REB c/o (780) 492-2614."

10.5. APPENDIX E: LETTER TO REQUEST PERMISSION FOR ONSITE RESEARCH – UNIVERSITY OF ALBERTA

Request Permission for Onsite Research – University of Alberta Libraries

My name is J. Nicole Mullings and I am a Masters of Library and Information Studies Candidate at the University of Alberta's School of Library and Information Studies. I am contacting you to request permission to recruit participants for onsite research at University of Alberta Libraries locations Rutherford Humanities and Social Sciences, Cameron (Science & Technology), J.W. Scott Health Sciences and Herbert T. Coutts (Education & Physical Education).

User preference will be examined comparing the University of Alberta Libraries website with its mobile version, as well as the Edmonton Public Library website and its mobile application version. Comparison categories to be studied include browsing, navigating and searching for content, interface features and types, accessibility and functionality, as well as evaluating users' opinions about the information services and resources provided. This study will investigate a deeper interpretation of user preference between desktop computer and mobile interfaces of library website resources, benefiting the library and information studies field by examining the user perspective of mobile libraries.

Recruitment will be by posting flyers advertising the research study at the above-mentioned locations. The flyer will provide contact information to participate in the study. I will not be recruiting participants in any other format at the University of Alberta Libraries. Participants will be able to decline to participate at any point the project is in progress. The study will be of minimal risk to participants. Pseudonyms will be assigned after the Letter of Consent is signed to ensure participant confidentiality and privacy.

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension, Augustana and Campus Saint Jean Research Ethics Board (EEASJ REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEASJ REB c/o (780) 492-2614.

I hope to start conducting interviews as of September 12, 2011, with an end date of October 17, 2011. Thank you for considering this request. For more information about the researcher or this study, please contact:

J. Nicole Mullings (MLIS Candidate)
SLIS, University of Alberta
(403) 830-0634
jmulling@ualberta.ca

Dr. Lisa B. Given (Professor)
SLIS, University of Alberta
(780) 492-2033
lisa.given@ualberta.ca

10.6. APPENDIX F: LETTER TO REQUEST PERMISSION FOR ONSITE RESEARCH – EDMONTON PUBLIC LIBRARY

Request Permission for Onsite Research – Edmonton Public Library

My name is J. Nicole Mullings and I am a Masters of Library and Information Studies Candidate at the University of Alberta's School of Library and Information Studies. I am contacting you to request permission to recruit participants for onsite research at Edmonton Public Library locations Stanley A. Milner, Sprucewood, Highlands, Londonderry, Jasper Place, Mill Woods, Castle Downs, Lois Hole and Capilano.

User preference will be examined comparing the University of Alberta Libraries website with its mobile version, as well as the Edmonton Public Library website and its mobile application version. Comparison categories to be studied include browsing, navigating and searching for content, interface features and types, accessibility and functionality, as well as evaluating users' opinions about the information services and resources provided. This study will investigate a deeper interpretation of user preference between desktop computer and mobile interfaces of library website resources, benefiting the library and information studies field by examining the user perspective of mobile libraries.

Recruitment will be by posting flyers advertising the research study at the above-mentioned locations. The flyer will provide contact information to participate in the study. I will not be recruiting participants in any other format at the Edmonton Public Library. Participants will be able to decline to participate at any point the project is in progress. The study will be of minimal risk to participants. Pseudonyms will be assigned after the Letter of Consent is signed to ensure participant confidentiality and privacy.

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension, Augustana and Campus Saint Jean Research Ethics Board (EEASJ REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEASJ REB c/o (780) 492-2614.

I hope to start conducting interviews as of September 12, 2011, with an end date of October 17, 2011. Thank you for considering this request. For more information about the researcher or this study, please contact:

J. Nicole Mullings (MLIS Candidate)
SLIS, University of Alberta
(403) 830-0634
jmulling@ualberta.ca

Dr. Lisa B. Given (Professor)
SLIS, University of Alberta
(780) 492-2033
lisa.given@ualberta.ca

10.7. APPENDIX G: RECRUITMENT POSTER



Image credit: theOBE, iPhone Januar 10, 2007 via Flickr, Creative Commons Attribution.

If you are between the ages of 18 and 55 and have used an academic or public library website in the past six months, we need you for our exciting study comparing library websites on smartphones and desktops.

Participants should be members of either the University of Alberta Libraries or the Edmonton Public Library.

Are You Smartphone Savvy?

If you wish to participate in this research study please contact:

J. Nicole Mullings
MLIS Candidate
School of Library and
Information Studies
University of Alberta
(403) 830-0634
jmulling@ualberta.ca

Dr. Lisa B. Given
Professor
School of Library and
Information Studies
University of Alberta
(790) 492-2033
lisa.given@ualberta.ca

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension, Augustana and Campus Saint Jean Research Ethics Board (EEASJ REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEASJ REB c/o (780) 492-2614.

10.8. APPENDIX H: INTERVIEW QUESTIONS

Participant Qualification

1. What is your age? Please provide your year of birth.
2. Have you used a library website in the previous six months?
3. Have you ever used the mobile websites for the University of Alberta or Edmonton Public Library?
4. Did you use an academic or public library website?
5. Have you ever accessed the mobile library website for the University of Alberta or the Edmonton Public Library mobile application?

Depending on the answer to question three, the interviewer will ask all the below questions either with respect to the University of Alberta Libraries website and its mobile version OR the Edmonton Public Library and its mobile application version.

Desktop Library Website Features

1. Can you show me the features of the academic/public library website you use the most often?
2. What features of the library website do you find the most useful? Are there any features you would never use?
3. Are there any features or tools of the library website missing that you wish were available?
4. Are there any aspects of the library website interface you like or dislike (such as colors, layout, menus)?

Desktop Library Websites - Accessibility, Functionality, Resources & Services

1. What kind of information resources do you look for most often on the library website?
2. Are there any library services you access through the library website (such as reference service, chat, appointment, social networking, My Account)?
3. Are there services/information resources you expect a library website to provide?
4. Can you show me the types of activities when browsing, searching or navigating the library website you find the most appealing? Confusing or unhelpful?

Mobile Library Website Features

1. Are there any aspects of the library website interface and navigation you like or dislike (such as colors, layout, menus)?
2. Are there application features of the mobile library website you like or dislike? Find the most useful or least useful?
3. What features of the mobile library website could you see yourself using the most often? The least often?
4. Are there mobile application features of the library website missing you wish were provided?
5. Are there any features of the mobile library website you identified as unique to the mobile device?

Mobile Library Websites - Accessibility, Functionality, Resources & Services

1. Are there services (such as text, social networking, reference services) in the mobile library website you would use? Which ones and why?
2. Are there any features/services/information resources of the mobile library website that you identify as unique to the device application?
3. Are there services and information resources you expect to see in the library mobile website that are missing?
4. Are there services/information resources you expect a mobile library website to provide?

User Perception

1. Now having viewed both types of library websites, is there a type you prefer depending on your activity? For what reasons do you prefer this type of website for that activity?
2. Are there similar features you would use on both types of platforms? Unique?
3. Are there any constraints you identified in accessibility and functionality (browsing, searching and navigating) for each type of library website?

10.9. APPENDIX I: PROJECT SCHEDULE

Project Assignment Key

- = Researcher
- = Research Assistant

Start date: 08 / 02 / 2011

Project: User Perception Comparing Accessibility of Library Websites to their Mobile Web Counterparts

Current Week	08/02 to 08/09	08/09 to 08/16	08/16 to 08/23	08/23 to 08/30	09/06 to 09/13	09/13 to 09/20	09/20 to 09/27	09/27 to 10/04	10/04 to 10/11	10/11 to 10/18	10/18 to 10/25	10/25 to 11/01	11/01 to 11/08	11/08 to 11/15	11/15 to 11/22	11/22 to 11/29	11/29 to 12/06	12/06 to 12/13
Tasks																		
Ethics Application																		
Grant Applications																		
Purchase of Supplies																		
Ethics Approval Process																		
Preparation																		
Recruitment - UofA																		
Recruitment - EPL																		
Initial Interview																		
Interviews																		
Transcriptions																		
Transcription Review																		
Data Analysis																		
Paper Preparation																		
Writing & Editing																		
Tasks																		
Current Week	08/02 to 08/09	08/09 to 08/16	08/16 to 08/23	08/23 to 08/30	09/06 to 09/13	09/13 to 09/20	09/20 to 09/27	09/27 to 10/04	10/04 to 10/11	10/11 to 10/18	10/18 to 10/25	10/25 to 11/01	11/01 to 11/08	11/08 to 11/15	11/15 to 11/22	11/22 to 11/29	11/29 to 12/06	12/06 to 12/13

10.10. APPENDIX J: PROJECT BUDGET

Project Budget					
Expense Item	Description/Notes	Source	Price	Quantity	Total
Supplies					
Sharpie Pen Set	Black, blue and red. Package of 4.	Grand & Toy	\$7.89	1	\$7.89
Uni-Ball Vision Rollerball Pen	Black, red and blue. Fine point. Package of 4.	Grand & Toy	\$9.75	1	\$9.75
Bic Mechanical Pencils	Set of 5.	Grand & Toy	\$4.46	1	\$4.46
Cambridge Office Pads	Wide-ruled. 3-hole punched.	Grand & Toy	\$3.54	2	\$7.08
Case File	A-Z and Home subject headings. Carrying handle and clasp lock for secure portability. 15 1/4"W x 5"D x 10"H.	Grand & Toy	\$11.56	2	\$23.12
				Subtotal	\$44.41
				5% GST	\$46.63
Printing & Posters					
Printing (Regular Format)	per sheet	University of Alberta	\$0.12	2000	\$240.00
Printing (Large Format)	large posters, banners, 42" Cardboard tubes with capped ends.	University of Alberta			\$400.00
Carrying Tube		University of Alberta	\$5.00	2	\$400.00
Banner Stand	32X72 Adjustable banner stand.	University of Alberta	\$25.00	2	\$400.00
				Subtotal (No GST)	\$1,440.00
Hardware & Software					
15-inch: 2.0 GHz MacBook Pro	Free shipping.	Apple Canada Online	\$1,849.00	1	\$1,849.00
iPad 2 with Wi-Fi	Connects to the Internet via Wi-Fi. 32 GB.	Apple Canada Online	\$619.00	1	\$619.00
iPhone 4	16 GB.	Apple Canada Online	\$659.00	1	\$659.00
Sanyo Digital Transcription Kit	Load audio files for transcription from most digital recorders. 2 GB built-in flash memory. Recording time of up to 566 hours (SLP). 1-touch, voice-activated recording. AAA Battery.	Grand & Toy	\$359.99	1	\$359.99
Philips Digital Voice Tracer Recorder		Grand & Toy	\$137.49	1	\$137.49
Energizer Advanced Alkaline Batteries	Package of 8.	Grand & Toy	\$22.19	1	\$22.19
				Subtotal	\$3,646.67
				5% GST	\$3,829.00
Personnel					
Research Assistant	Master's Hourly Rate. Part-time 7 hrs per week @ 19 weeks.	University of Alberta	\$17.73	133	\$2,358.09
				Subtotal	\$2,358.09
Travel					
2012 Emerging Technologies in Academic Libraries Conference	October 1-3, 2012. Conference Fees.	Norwegian University of Science and Technology	\$750.00	1	\$750.00
Round Trip Flights Calgary (YYC) to Trondheim (TRD)	Connect in Frankfurt am Main (Frankfurt), Oslo (Gardermoen)	Lufthansa.			\$3,612.16
Rica Nidelevven Hotel	Accommodation for 4 nights.				\$1,054.93
Food					\$150.00
Transportation					\$175.00
Miscellaneous					\$90.00
				Subtotal	\$5,832.09
				Grand Total	\$13,505.81

11.0. REFERENCE LIST

- Aldrich, Alan. 2010. "Universities and Libraries Move to the Mobile Web." *EDUCAUSE Quarterly* 33. Accessed February 8, 2011. <http://www.educause.edu/login.ezproxy.library.ualberta.ca/EDUCAUSE+Quarterly/EDUCAUSEQuarterlyMagazineVolum/UniversitiesandLibrariesMoveto/206531>.
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