Continual Assessment Leads the Way: Best Practices in Mobile Website Design and Maintenance

M-Libraries, Hong Kong
May 29, 2014
Laurie M. Bridges & Hannah Gascho Rempel
Oregon State University Libraries
USA
(Traditional) Mobile Site

• Focused on “quick” and “on the go” information
  – Hours
  – Location and directions
  – Computer availability
  – Quick research
• Limited choice
  – Few databases
  – Limited access to library account information

Flickr: "sms" by Toni
1% used feature phones in 2010

10% used feature phones in 2008
First User Survey
November 2012 - January 2013
OSU Mobile Site - 1st Usability Survey

Iteration of OSUL Mobile Site in use 2011 – Fall 2013
Second User Survey
December 2013 – February 2014
OSU Mobile Site - 2nd Usability Survey

iOS iPad 2

Android Kindle Fire

iOS iPhone 4

In use Fall 2013 - present
Survey Comparison

November 2012 – January 2013
December 2013 – February 2014
### Number of Participants

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012/2013</td>
<td>127</td>
</tr>
<tr>
<td>2013/2014</td>
<td>106</td>
</tr>
</tbody>
</table>
What are you searching for during this visit to the library’s mobile site?

- Library hours
- Something else
- A book
- Research on a topic
- Computer availability
- Contact information for a specific person in the library
- Java II Webcam
- A way to contact a librarian with a question
- Directions
- Study Room Reservations

First Survey - Percent of Responses
Second Survey - Percent of Responses
How often do you use the library’s mobile site?

- This is my first time (60%)
- Daily (0%)
- Less than once a month (10%)
- 2-3 times a week (10%)
- Once a week (10%)
- 2-3 times a month (20%)
- Once a month (5%)

Second Survey - Percent of Responses
First Survey - Percent of Responses
## Keyword Searches for Books

<table>
<thead>
<tr>
<th>First Survey</th>
<th>Second Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semiconductor</td>
<td>History of modern design</td>
</tr>
<tr>
<td>Oregon taxes</td>
<td>Semiconductor</td>
</tr>
<tr>
<td>Pomerania</td>
<td>Peter Elbow writing with power</td>
</tr>
<tr>
<td>Textbooks</td>
<td>Essentials of conservation biology</td>
</tr>
<tr>
<td>Beer and circus</td>
<td>Harry Potter</td>
</tr>
<tr>
<td>Accelerated c++</td>
<td>Women, science, and technology</td>
</tr>
<tr>
<td>Seafood quality</td>
<td>Rosenthal behavioral research</td>
</tr>
<tr>
<td>Writing a successful thesis and dissertation</td>
<td>Hip hop literacies</td>
</tr>
<tr>
<td>Autism spectrum in children</td>
<td>Foundation engineering</td>
</tr>
</tbody>
</table>
## Keyword searches for research on a topic

<table>
<thead>
<tr>
<th>First Survey</th>
<th>Second Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social justice</td>
<td>Article by Hirsh on anthropology</td>
</tr>
<tr>
<td>Ecological anthropology shared</td>
<td>Higher ed, identity, and social science</td>
</tr>
<tr>
<td>governance college</td>
<td>Foster care</td>
</tr>
<tr>
<td>NCAA history</td>
<td>Human sexual development</td>
</tr>
<tr>
<td>World War 1</td>
<td>Pediatric medicine ancient</td>
</tr>
<tr>
<td>Procurement and contract processes</td>
<td>Hip dysplasia in canines</td>
</tr>
<tr>
<td>Seafood quality</td>
<td>Sexuality. Motherhood.</td>
</tr>
<tr>
<td>Ethnobotany Oregon</td>
<td>Rainfall induced slope instability</td>
</tr>
<tr>
<td>Dye properties and peak wavelengths</td>
<td>Gut Microbes and the brain</td>
</tr>
<tr>
<td>Company info for Applebee’s</td>
<td></td>
</tr>
</tbody>
</table>
Survey Takeaways

• Not one size fits all:
  – Directions/Location low use
  – Users want to do in-depth research
  – Not necessarily looking for “quick” information
  – Not necessarily “on the go”
Analytics Comparison

November 2012 – January 2013
November 2013 – January 2014
Mobile Statistics via Google Analytics – 2012/2013 vs. 2013/2014

• Increase in mobile/tablet traffic = 15%
  – Mobile up 43%; Tablets down 19%
• Bounce rate increase = 14%
• Pages per visit increase = 55%
• Average visit length increase = 62%
Analytics Comparison

2012/2013
• Top Page Views:
  – Computer availability map
  – Mobile homepage
  – Research

2013/2014
• Top Page Views:
  – Library homepage
  – Patron info (broken link)
  – Zotero Tutorial Libguide
Google Analytics Limitations

• Comparison between years was compromised because of different analytics tools – Urchin vs. Google
• Highest percentage of page views were the homepage – where hours are located
• Analytics highlighted broken pages and errors.
Survey + Google Analytics Takeaways

• Different behaviors observed with Analytics
• Analytics don’t provide a “why”
• Survey only gives a snapshot
Best Practices for Keeping Users at the Center of Your Mobile Design

• Continual assessment
• Solicit feedback multiple ways
• Monitor the mobile landscape
• Listen to a variety of stakeholders

Flickr: "Lego Explorer" by JonoTakesPhotos
Future Work

- Assess in new ways
- Ask different questions
- Be responsive
- Watch for evolving device types