Web Design for Customer Usability

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Johns Hopkins University

Sheridan Libraries Profile

- Support schools of Arts & Sciences, Engineering, Business and Education
- Large and growing part-time and distant student population
- Other Hopkins libraries (medical, international studies, music, etc.) manage their own Web sites

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• Computing & Printing
• Connecting from Home or on the Road
• Eisenhower Express Document Delivery
USE IT
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• Use It Legally Copyright
• Use It Accurately Citing Sources
• Writing for Publication Tools for Getting Started
• New Scholarly Publishing Models
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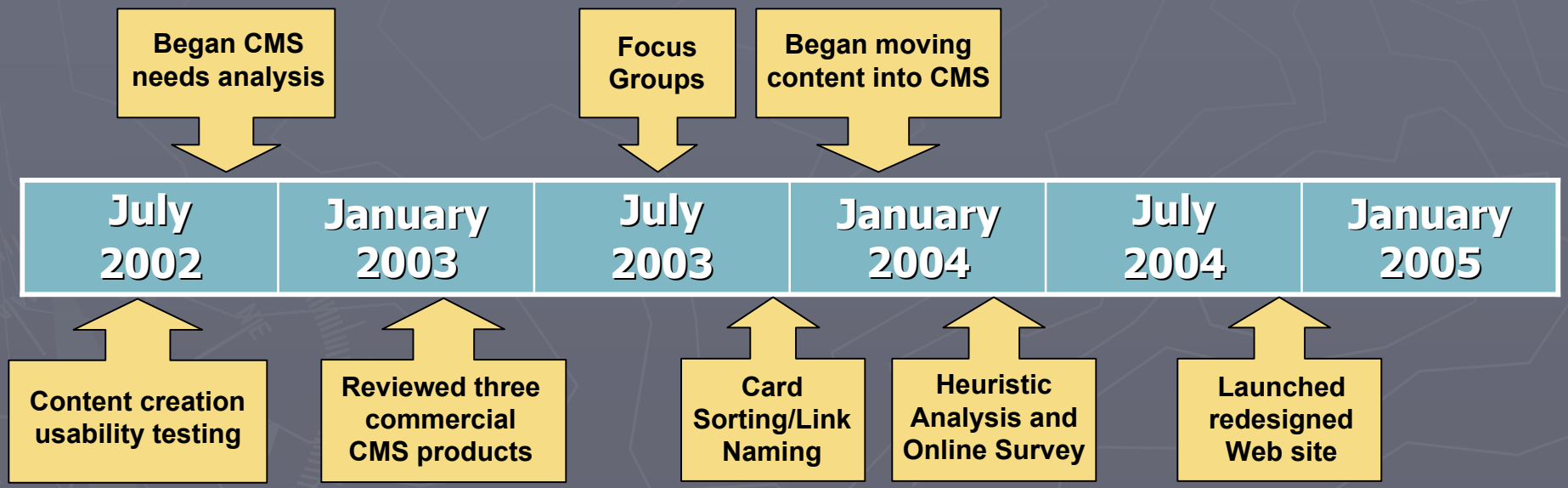
Sheridan Libraries Web Redesign Timeline



Challenge 1: Home-grown CMS did not work for content creators

- Difficult to create and publish Web content
- Performed needs analysis for commercial CMS
- Content creator analysis confirmed need for CMS and helped drive selection process

Heuristic Evaluation and Field Observation

- Problems with consistency, ambiguity, and efficiency
- Limited system communication
- Supported decision to conduct CMS needs analysis

Content Creators Survey

- Many content creators lack Web publishing skills
- Overlap of roles
- Duplication of effort

Challenge 2: Conceptual framework not effective

- "Find it, get it, use it" concept was confusing
- Functional analysis and focus groups reinforced need for change
- Card sorting/link naming exercise provided better data about users' conceptual models

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Functional Analysis

- Web site used to complete specific tasks
  - Catalog searching
  - Using other electronic resources
- Not usually interested in exploring site
- Site too cluttered; should be simplified
- Problems with repetition, terminology

Focus Groups

- Customers use site for very specific purposes
- Most used: “Find It.” Least used: “Use It”
- Little interest in customization, “My Library”
- Web site reflects “culture of helpfulness”

Challenge 3: Home page "too democratic"

- Focus groups felt Web site should help rank relative importance of items
- Insufficient usability work at outset led to "too democratic" home page
- Non-usability considerations overly influenced design decisions

Strategies

- Card sorting and link naming
- Heuristic evaluation of other library sites
- Survey/ballot of page designs

Card Sorting & Link Naming

- Used an online card sorting and link naming tool (available from NIST)
- Asked users to sort links from home page as they would expect them to be organized
- Asked users to name items based on functionality

Link Naming

This card-sorting and naming study involves two steps. The first step is naming. Please read the description for each of these link names. Think about what you would call that page. If you would change the name of the page, please write the new name that you would suggest in the "Better name?" text box next to that link name.

Please don't use leading and trailing spaces or double quotes or ~, as they will be removed from any names which you enter.

Link name: **Connecting from Home or on the Road** Better name?

Description: Links to options for using library resources away from campus.

Link name: **Call Number Locations** Better name?

Description: Table of Call Numbers and their corresponding floor locations.

Link name: **Find out if we have electronic access to a specific journal** Better name?

Description: Link that helps you find out if the library has an electronic version of a specific journal.

Link name: **ICPSR, Census, Health, Business** Better name?

Description: Links to statistical resources for Census, Health, Business and more.

Link name: **Eisenhower Express Photocopy Order Form** Better name?

Description: Form for Eisenhower Express.

Link name: **New Tools for a New Publishing Era** Better name?

Description: Information about the JHU Scholarly Communications group and open access initiatives at JHU.

Link name: **Archives** Better name?

Description: Links to information about the JHU archives in Special Collections.

Link name: **Use It Accurately. Citing Sources** Better name?

Description: Information on how to cite a source correctly.

Link name: **Sheet Music** Better name?

Description: Links to digitized historic sheet music collection in Special Collections.

Link name: **Guidelines for the Preparation of Dissertations and Theses** Better name?

Description: Guidelines for the preparation of JHU dissertations and theses.

Link name: **Area Libraries** Better name?

Description: Find links to local college, university, public, and other research libraries.

Link name: **LexisNexis Congressional, LexisNexis State ...** Better name?

Description: Links to the Lexis/Nexis Congressional and Lexis/Nexis State database.

Link name: **Popular CD ROMs** Better name?

Description: Link to list of popular government CD ROMs.

Link name: **Newspapers** Better name?

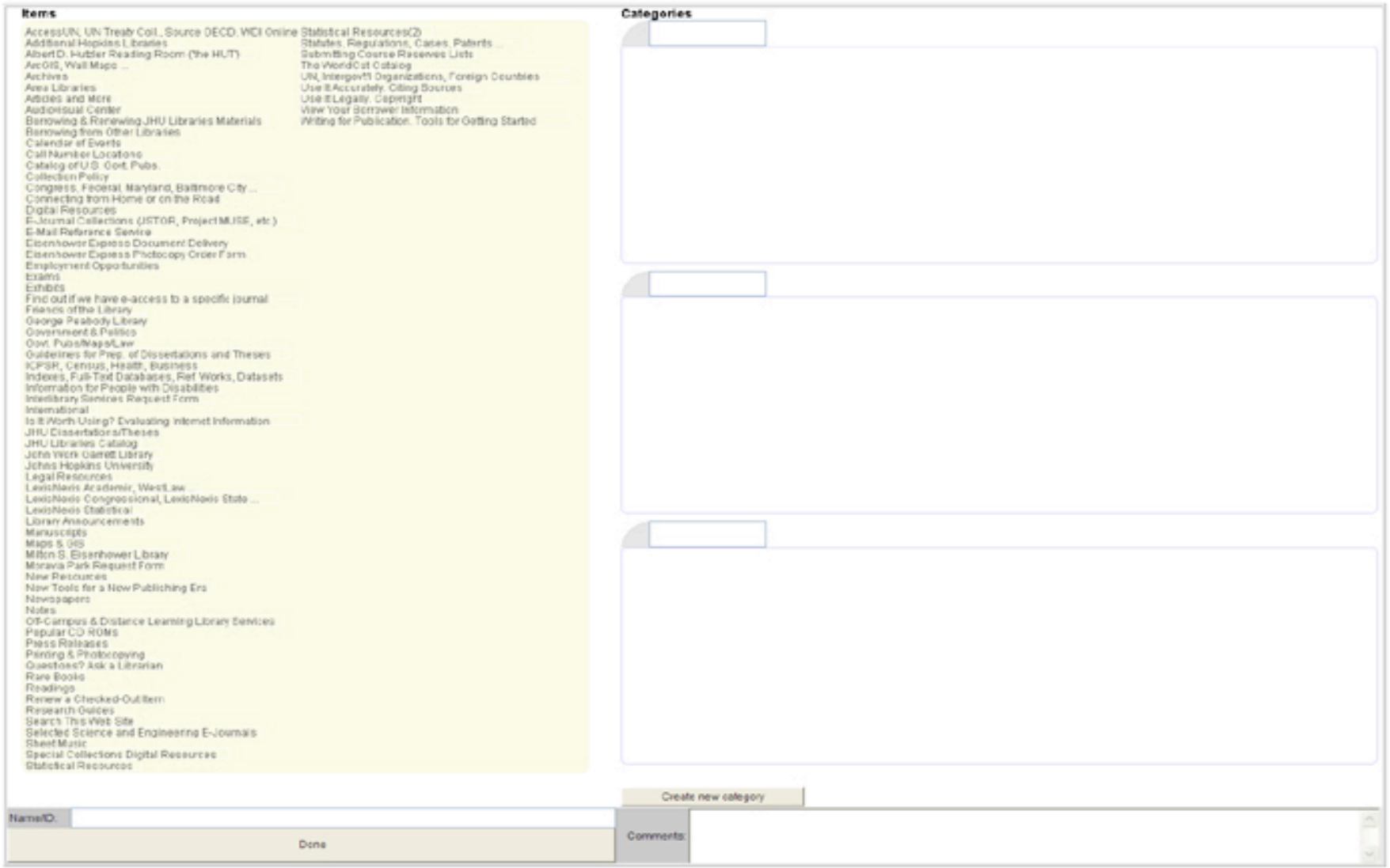
Description: Links to electronic newspapers or databases of newspaper articles citations.

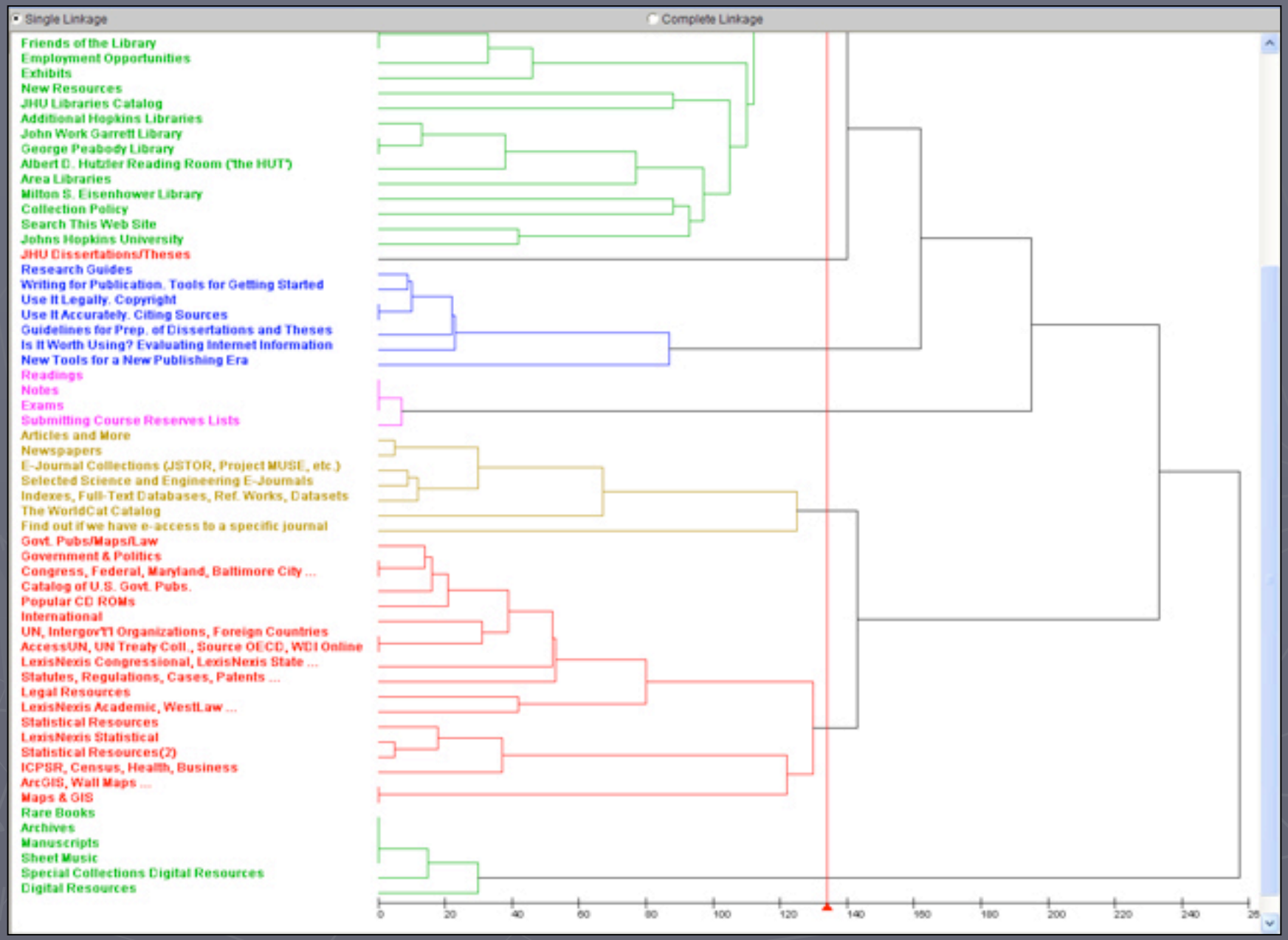
Go to card sort

Card Sorting Exercise

Instructions:

The second step is sorting. Please assign each of the items in the list on the left to one of the category boxes on the right, putting items that you think belong together into the same category. After all the items have been sorted, name each category by typing in the box at the upper left hand corner. You may make as many categories as you wish. Please put every item into a category. You may make changes until you decide that you are finished and hit the Done bu

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LexisNexis Academic, WestLaw ...
Statistical Resources
LexisNexis Statistical
Statistical Resources(2)
ICPSR, Census, Health, Business
ArcGIS, Wall Maps ...
Maps & GIS
Rare Books
Archives
Manuscripts
Sheet Music
Special Collections Digital Resources
Digital Resources
0
20
40
60
80
100
120
140
160
180
200
220
240

Heuristic Evaluation of Library Sites

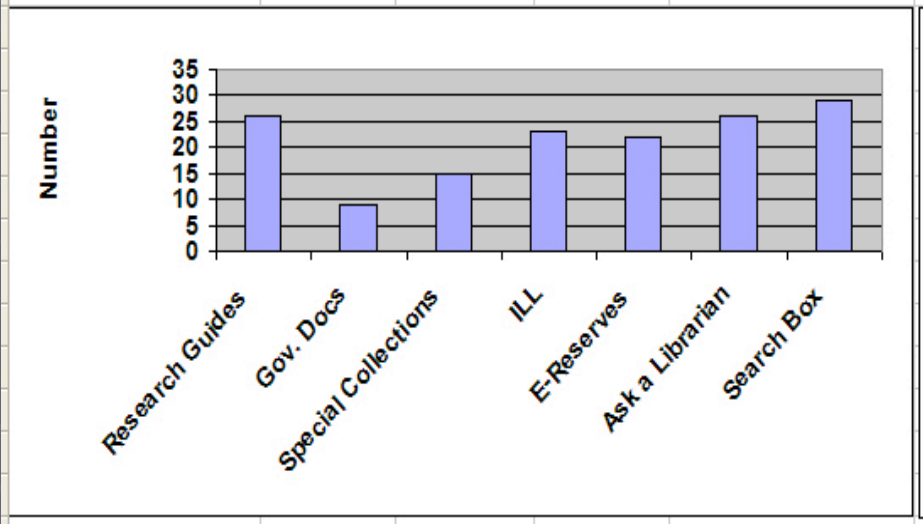
- Used ***US News and World Report's*** list of universities
- Rated features, site architecture and general layout of library sites for top 40 universities
- Identified three design types to show users

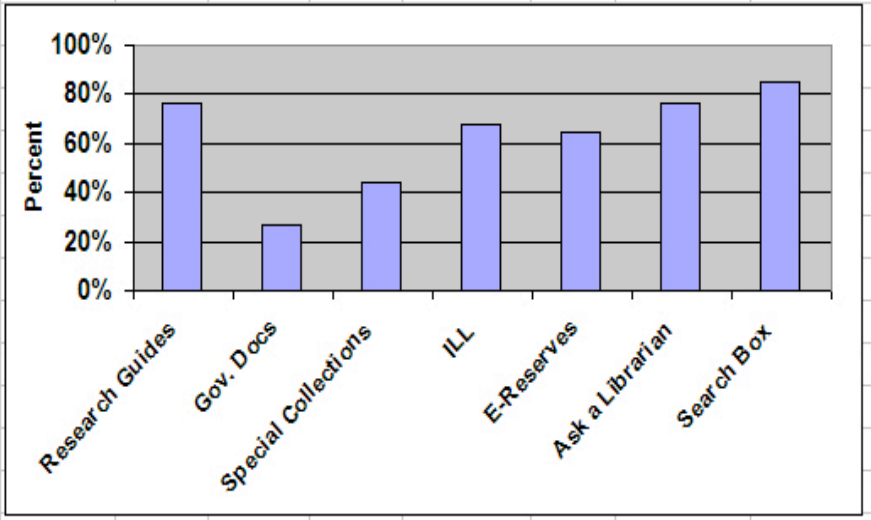
Other Library Web Site Evaluation Summary

Link to	Number of Libraries	Percent
Research Guides	26	76%
Gov. Docs	9	26%
Special Collections	15	44%
ILL	23	68%
E-Reserves	22	65%
Ask a Librarian	26	76%
Search Box	29	85%

Links

Average Number	66.3	**High**	202	**Low**	16	
To Lib Depts	1Link	20	More than 1	14		
Lib Info Pages	Single Link	14	Many Links	14	Average for Many	7.8





Survey/Ballot of Page Designs

- Created three designs based on types from heuristic evaluation
- Asked users to rate designs and give opinion of each
- Held drawing for MP3 player as participation incentive

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Space for Friends of the Libraries info.

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Lessons Learned

- Users wanted items organized by activities they perform
- Features and design trends identified in other library sites informed our own
- Preferred design emerged, based on nearly 1300 user submissions

August 2004 - present

Questions?

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