NYU LIBRARY SERVICES:
CARD SORT REPORT

HTTP://LIBRARY.NYU.EDU/SERVICES/
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PREPARED BY:
NGOZI OKORO, SAMANTHA RADDATZ, AND SUSAN YOUNG
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In order to choose items to include in the card sort, a basic content inventory was conducted. The inventory included the links within the NYU Library services’ landing page (http://library.nyu.edu/services/) and links within the next two levels of pages below that (see Table 1). This resulted in an index of 282 items. Of the three layers indexed, the team chose the links within pages that can be accessed from the services’ landing page (‘First Click’ column in Table 1) because it was the level of information that could be sorted into easily accessed categories. Items were removed that were repetitive and/or were deemed too obvious (e.g., FAQ, About, Policies) which narrowed the list to 108 items (see Appendix A). Some items were then renamed to better reflect the contents of their page.

<table>
<thead>
<tr>
<th>Services Home Page</th>
<th>First Click</th>
<th>Second Click</th>
</tr>
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<tbody>
<tr>
<td>Ask a Librarian (e-mail reference service)</td>
<td>How do I get started on a research paper?</td>
<td></td>
</tr>
<tr>
<td>For new undergraduates</td>
<td>How do I find books?</td>
<td></td>
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<td></td>
<td>How do I find articles?</td>
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<td></td>
<td>How do I cite sources?</td>
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<td></td>
<td>Help &amp; FAQ</td>
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<td></td>
<td>Video Tour of Bobst Library</td>
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<tr>
<td></td>
<td>Study Spaces</td>
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<tr>
<td>For faculty</td>
<td>Contact your Subject Librarian</td>
<td>Recommend book or media titles for purchase</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Schedule library research classes for your students</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Schedule a consultation to learn more about library services, procedures, and collections</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Request a library service update or demonstrations of discipline-specific databases for department meetings</td>
</tr>
<tr>
<td>Borrowing, Interlibrary Loan, Access to Other Libraries</td>
<td>Borrow books and paging and delivery services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Additional Borrowers form</td>
<td></td>
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<td></td>
<td>Audio / Video Loans</td>
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<tr>
<td></td>
<td>Interlibrary Loan (ILL)</td>
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<td></td>
<td>Borrowing at Columbia and NYPL Research Libraries - MaRLI</td>
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<td></td>
<td>Access to other Libraries</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Global Library Services</td>
<td></td>
</tr>
</tbody>
</table>

TABLE 1: SELECTION FROM CONTENT INVENTORY
The online program OptimalSort (http://www.optimalworkshop.com/) was chosen to carry out the card sort. Though card sorts can be conducted manually with index cards, a digital tool was chosen due to its efficient data analysis methods, which was especially important with the large amount of cards being included in this study. An open card sort was chosen, meaning no categories were prescribed, as they are most useful for restructuring existing sites.¹

The card sort was conducted during two Information Architecture classes, part of the School of Information and Library Science, at Pratt Institute in October 2013. Students were asked to conduct the sort as though they were a user of a library website, not an information professional. The students in the class completed the sort in pairs, which resulted in eighteen card sorts for analysis. On average, the sort took 36.9 minutes to complete and the cards were grouped into fourteen groups. The resulting data and reports generated by OptimalSort were then analyzed by the research team. Due to the large number of cards and study participants, the homogeneity of the results was limited. The most useful report that was generated by OptimalSort was the Participant Centric Analysis, or PCA (Appendix C). The PCA shows “the top … most acceptable [Information Architecture] submissions by participants in this card sort, as tested against all other participant [Information Architectures].”² These results were referenced when making decisions regarding the suggested categories and content.

In addition to the sort, the team conducted a soft competitive analysis (see Competitive Review, page 5) to discover how other university library websites successfully organized their services. The competitive analysis results were used to develop an ideal set of top-level categories for the NYU Library Services page. These categories were combined with the research team’s expertise to develop a suggested hierarchy of service categories (page 8).

COMPETITIVE REVIEW

The library service websites for Princeton University, Cornell University, and Columbia University were chosen to compare against the New York University (NYU) library services site. The evaluation rated each of the university websites on a scale of high, medium, or low for navigation and page layout, top-level menu categories, and links (see Table 1). These ratings are based on criteria developed by our team; for instance, a site received a rating of ‘high’ in the navigation and page layout category if “the navigation of the site is clearly visible and consistent at all levels of the site” (please see Appendix B for a full ratings breakdown).

<table>
<thead>
<tr>
<th></th>
<th>New York University</th>
<th>Princeton University</th>
<th>Cornell University</th>
<th>Columbia University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigation and Page Layout</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Top-Level Categories</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Links</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
</tr>
</tbody>
</table>

TABLE 2: EVALUATION OF ALTERNATE LIBRARY SERVICES WEBSITES

By evaluating the sites that had the highest ratings for all three evaluation criteria and combining this with our knowledge of the NYU Library Services content, we were able to develop a list of thirteen preferred categories for top-level navigation (see Services List in Figure 1). The provided top-level categories are ideal for the content and navigation of NYU’s Library Services website. The terms identified in Figure 1 allow a logical grouping of content,

reflected in the high ratings of comparable sites. The suggested top-level categories should be prominently displayed on the site with no competing navigational structure.

FIGURE 1: SUGGESTED LIBRARY SERVICES HOMEPAGE

Each category should be a link with an associated landing page describing the purpose of that particular category. On each category page the related secondary links should follow a logical hierarchy and be clearly displayed. Breadcrumbs or global navigation allowing the user to track their movement and return to the homepage and the thirteen categories should be visible and consistently available. In addition, the links on each page should clearly indicate if it allows the user to scroll down and view content on an existing page or if it will result in a new page opening.

The previously mentioned recommendations have been utilized on the sites that received high rankings in the three identified dimension and can be applied to the NYU Library Services site to improve the user experience and increase the visibility of relevant information.
After looking over the entire NYU Library website, the project team noticed redundancies in the menu contents on the homepage (http://library.nyu.edu/) and the contentions of the Services section. For example, there are currently many items within Services that refer to research best practices and assistance (e.g., Avoiding Plagiarism, Sharing with RefWorks) and they were grouped as such by card sort participants, but should instead be included in the Research Assistance area of the site that is accessible from the homepage. Details regarding collections and BobCat should be accessed under the Find Resources menu item, and items such as Video Tour of Bobst Library would be more appropriately found within the About menu item on the homepage. See Appendix D for a more comprehensive list of items that would be more easily accessible under the existing homepage headings.

After removing the redundant items from the card sort, and combining the remaining items with the categories developed from the competitive review and the knowledge of the project team, a map of proposed services categories was developed (see next page). There are thirteen proposed top level navigation categories of the NYU Library Services, which would be revealed in the Services drop down menu on the NYU Library’s homepage: Accessing NYU Libraries, Borrow & Renew, Interlibrary Loan, Course Reserves, Computers & Technology, Data Services, Study Spaces, Visitors, Undergraduate Students, Graduate Students, Faculty, Alumni and Friends, Disability Services. These sections are supported by the following Participant Centric Analysis categories: ILL, Reserves, Accessibility, Data Services, Technology, Circulation, Alumni & Friends, and Places & Spaces (see Appendix C).

The subcategories included within the site map have all been pulled directly from the items that were chosen for the card sort. These give an indication of the types of information that should be included within each subsection of the Services section of the NYU website.
To maximize the visibility of relevant information and reinforce the desired navigation scheme, the project team also suggests that the current layout of the NYU Library Services website be reevaluated. The landing page of the Library Services website has competing navigation. This is seen in the seventeen options within the drop down Services menu (highlighted in blue within Figure 2), the content list on the center of the page (highlighted in green), and the seventeen options within the vertical navigation menu on the left side of the site (highlighted in yellow). This redundancy of information is confusing for the user and detrimental to the logical hierarchy of the site.

FIGURE 2: SERVICES LANDING PAGE WITH SECTIONS HIGHLIGHTED
Alternatively, the team suggests that the vertical navigation be used to display the second level of hierarchy for each top-level category once selected (see Figure 5). This will clearly show the structure of the site and provide the user with necessary feedback on their progression through the site.

FIGURE 3: SAMPLE TOP LEVEL CATEGORY LANDING PAGE
APPENDIX A: CARD SORT ITEMS

Access to NYU Libraries for Polytechnic Students
Access your account to renew ILL material
Access your account to renew NYU library books
Adding References to a Research Paper
Are there any services for people with hearing impairments?
Avery Fisher Center for Music and Media, Services for Students
Avoiding Plagiarism
Bibliographies & Citations
Bobst Library Interlibrary Loan
Classroom and Teaching Support
Complete Circulation Policies
Computer Locations for Research
Contact your Subject Librarian
Copy Cards/Campus Cash
Course Reserves Hours
Data Services Research Consultation
Data Services Supported Software
Data Services Tutorials
Digital Media Collections
Division of Libraries Physical Delivery Services
Do I have to pay for ILL Services?
E-Books
E-Journals
Electronic reserves for language courses
Electronic Resources
Electronic Resources for NYU Alumni
English as a Second Language (ESL) Materials
Find an Item on Reserve
Fines
Foreign and Non-English Language News & Newspapers
Foreign Language Materials
Friends of Bobst Library
Getting Started with RefWorks
Giving to NYU Libraries
Glossary of Library Terms
Graduate Student Services
Grants, Scholarships, and Financial Aid
Guidance for researchers about creating data management plans
How can I check the status of my ILL request?
How can I renew books?
How do I checkout a reserve item?
How do I cite sources?
How do I download a document or e-book to my e-reader, tablet, or mobile device?
How do I find articles?
How do I find books?
How do I get started on a research paper?
How do I make a request?
How do I recall a book that's checked out or in offsite storage?
How do I renew my ILL material?
How long can I check out books? How many books can I check out?
How long can I keep my ILL item?
How long can I use reserve items?
How long does ILL delivery take?
How long will my ILL request take?
How many requests can I make?
How to Connect from Off-Campus
I am not an NYU student, faculty member, or staff, but need something from NYU's collection. How do I request it?
Imaging/Scanning
Information About Study Spaces
Information About the Bobst Library Computer Center
Information About the Library Renovation
Information for faculty who wish to place items on reserve
Information on our lending services to other libraries

NYU Library Card Sort
Intro to Research at Bobst
Is Bobst physically accessible?
Language Dictionaries
Laptops
Library Privileges for the Class of 2013
Managing RefWorks References
Media Viewing Area
Microform Printing
NYU GIS Services and Spatial Data Resources
NYU Global Library Services
NYU Global Students Visiting Bobst Library
NYU Libraries Newsletter - Progressions
Once I'm finished with ILL materials, where do I return them?
Photocopying
Physical Document Delivery
Printing
QuickCheck Self-Service Checkout
Request or Renew an ILL
Research, Scholarly Communication and Publishing Support
Reserve Readings / e-reserves
Reserving a Group Study Room
Reserving an Individual Study Room
Search for a book with BobCat
Sharing with RefWorks
Specialized Services
Storing Files with RefWorks
Study Spaces in the Research Commons
Training Resources by Software
Video Tour of Bobst Library
Videos, Sound Recordings, Musical Scores
What are reserve readings?
What can't I request through ILL?
What do I need to check books out?
What happens if an ILL becomes overdue?
What happens when my materials arrive at Bobst Library?
What if I'm disabled and need research assistance?
What technology does the Library offer?
Where are Bobst Library's Computers?
Where are reserve readings located and how do I find them?
Where do I return borrowed materials?
Where do I return reserve items?
Who can borrow books at Bobst Library?
Who may use Delivery Services?
Who may use interlibrary loan?
Writing and Style Guides
APPENDIX B: CRITERIA FOR COMPETITIVE EVALUATION

NAVIGATION AND PAGE LAYOUT

Level: High
Characteristics:
The navigation of the site is clearly visible and consistent at all levels of the site.
Users are able to easily maneuver back with the use of a global navigation or breadcrumbs.
The layout of information on the site is consistent.
Major categories and subcategories are clearly defined.
The information on the category landing page is brief and informative with relevant links.

Level: Medium
Characteristics:
The navigation of the site is somewhat inconsistent.
The ability to navigate back is not consistent or intuitive.
The layout of the information on the site is somewhat inconsistent.
The hierarchy of the site is somewhat unclear.
The category landing page does not effectively communicate the purpose of the category.

Level: Low
Characteristics:
The navigation of the site is not easily identifiable.
There is no navigation on the site that allows users to easily maneuver back.
The information and layout of the site is inconsistent.
There are no category landing pages and no clear hierarchy.

TOP-LEVEL CATEGORIES

Level: High
Characteristics:
There are intuitive and logical top-level categories organizing the information on the site.
The categories are clearly labeled and consistent throughout the site.
The hierarchy of information is visible, understandable and follows a logical relationship.
**Level: Medium**
Characteristics:
The top-level categories are mostly understandable.
The categories are moderately inconsistent throughout the site.
The hierarchy of information if mostly clear and consistent.

**Level: Low**
Characteristics:
The top-level categories are not easily identifiable.
The hierarchy of information is inconsistent and not clearly labeled.

**LINKS**

**Level: High**
Characteristics:
There is no unnecessary duplication of links.
The wording of links effectively communicates to the user where and what content it links to.
The hierarchy and visibility of the available links are clear.

**Level: Medium**
Characteristics:
There is some duplication of links.
The wording of links is somewhat ambiguous.
Links are mostly visible and follow a hierarchy.

**Level: Low**
Characteristics:
There are a large number of duplicated links.
The wording of links is confusing to the user.
Links are not clearly visible and there is no clear hierarchy.
# APPENDIX C: PARTICIPANT CENTRIC ANALYSIS

## Research Resources
- Reference
- Research Writing
- Research Taxes
  - How do I get started on a research paper?
  - Adding References to a Research Paper
  - Avoiding Plagiarism
  - Bibliographies & Citations
  - Contact your Subject Librarian
  - Glossary of Library Terms
  - How do I cite sources?
  - How do I find articles?
  - How do I find books?
  - Intro to Research at Bobst
  - Research, Scholarly Communication and Publishing Support
  - Search for a book with BobCat
  - Writing and Style Guides

## Student Services
- Graduate Student Services
- NYU Global Library Services
- NYU Global Students Visiting Bobst Library

## Collections
- Library Features
- Collections, e-Resources and Databases readings
  - Digital Media Collections
  - E-Journals
  - E-Books
  - Electronic Resources
  - English as a Second Language (ESL) Materials
  - Foreign and Non-English Language News & Newspapers
  - Foreign Language Materials
  - Language Dictionaries
  - Videos, Sound Recordings, Musical Scores

## Data Services
- Dealing with Data
  - Data
  - Guidance for researchers about creating data management plans
  - NYU GIS Services and Spatial Data Resources
  - Data Services Tutorials
  - Data Services Research Consultation
  - Data Services Supported Software

## Reserves
- Materials on Reserve
  - RESERVES
    - Reserve
    - Course Reserves Hours
    - Electronic reserves for language courses
    - Find an item on Reserve
    - How do I checkout a reserve item?
    - How long can I use reserve items?
    - Information for faculty who wish to place items on reserve
    - Reserve Readings / e-reserves
    - What are reserve readings?
    - Where are reserve readings located and how do I find them?
    - Where do I return reserve items?

## Technology
- Technical Services
  - UTILITIES
    - Computers and Printing
    - Copy Cards/Campus Cash
    - Imaging/Scanning
    - Laptops
    - Microform Printing
    - Photocopying
    - Printing
    - Training Resources by Software
    - What technology does the Library offer?

## News
- Library News
  - NEWS
  - Information About the Library Renovation
  - NYU Libraries Newsletter - Progressions

## Alumni and Donors
- NYU Alumni
  - NYU Alumni & Friends
  - About the Library
  - Electronic Resources for NYU Alumni
  - Friends of Bobst Library
  - Giving to NYU Libraries

## Circulation
- Check out and Renew
  - Borrowing, Checking Out, and Renewing Books
  - Checkout
  - Access your account to renew NYU library books
  - Complete Circulation Policies
  - How to Connect from Off-Campus
  - Fines
  - How can I renew books?
  - How do I download a document or e-book to my e-reader, tablet, or mobile device?
  - How do I make a request?
  - How do I recall a book that's checked out or in offline storage?
  - How long can I check out books? How many books can I check out?
  - How many requests can I make?
  - QuickCheck Self-Service Checkout
  - What do I need to check books out?
  - Where do I return borrowed materials?
  - Who can borrow books at Bobst Library?

## Accessibility
- Accessability
  - Access and Disability
  - Accessibility FAQs
  - Are there any services for people with hearing impairments?
  - Is Bobst physically accessible?
  - What if I’m disabled and need research assistance?

## Welcome
- Video Tour of Bobst Library

## RefWorks
- RefWorks Help
  - Using RefWorks
    - Getting Started with RefWorks
    - Managing RefWorks References
    - Sharing with RefWorks
    - Storing Files with RefWorks

## Non-NYU Students
- Access for outside researchers
  - Access to NYU Libraries for Polytechnic Students
  - I am not a NYU student, faculty member, or staff, but need something from NYU's collection. How do I request it?

## Places and Spaces
- Building Information and Services
  - Bobst Library
    - Avery Fisher Center for Music and Media, Services for Students
    - Classroom and Teaching Support
    - Computer Locations for Research
    - Media Viewing Area
    - Information About the Bobst Library Computer Center
    - Study Spaces in the Research Commons
    - Reserving a Group Study Room
    - Reserving an Individual Study Room
    - Information About Study Spaces
    - Where are Bobst Library's Computers?

## NYU Library Card Sort
## APPENDIX D: ITEMS TO REMOVE FROM SERVICES

<table>
<thead>
<tr>
<th>Non-Services Items</th>
<th>Proper Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information About the Library Renovation</td>
<td>About</td>
</tr>
<tr>
<td>Video Tour of Bobst Library</td>
<td>About</td>
</tr>
<tr>
<td>Complete Circulation Policies</td>
<td>About</td>
</tr>
<tr>
<td>NYU Libraries Newsletter - Progressions</td>
<td>About</td>
</tr>
<tr>
<td>Who can borrow books at Bobst Library?</td>
<td>About - FAQ</td>
</tr>
<tr>
<td>Videos, Sound Recordings, Musical Scores</td>
<td>Find Resources</td>
</tr>
<tr>
<td>Digital Media Collections</td>
<td>Find Resources</td>
</tr>
<tr>
<td>Avery Fisher Center for Music and Media, Services for Students</td>
<td>Find Resources</td>
</tr>
<tr>
<td>E-Journals</td>
<td>Find Resources</td>
</tr>
<tr>
<td>Language Dictionaries</td>
<td>Find Resources</td>
</tr>
<tr>
<td>Search for a book with BobCat</td>
<td>Find Resources</td>
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<td>English as a Second Language (ESL) Materials</td>
<td>Find Resources</td>
</tr>
<tr>
<td>Foreign and Non-English Language News &amp; Newspapers</td>
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<tr>
<td>Foreign Language Materials</td>
<td>Find Resources</td>
</tr>
<tr>
<td>E-Books</td>
<td>Find Resources</td>
</tr>
<tr>
<td>Polytechnic Institute of NYU</td>
<td>Find Resources</td>
</tr>
<tr>
<td>Access your account to renew NYU library books</td>
<td>My Library Account (Homepage Link)</td>
</tr>
<tr>
<td>Avoiding Plagiarism</td>
<td>Research Assistance</td>
</tr>
<tr>
<td>Research, Scholarly Communication and Publishing Support</td>
<td>Research Assistance</td>
</tr>
<tr>
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<td>Managing RefWorks References</td>
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<tr>
<td>Guidance for researchers about creating data management plans</td>
<td>Research Assistance</td>
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<tr>
<td>How do I cite sources?</td>
<td>Research Assistance</td>
</tr>
<tr>
<td>Intro to Research at Bobst</td>
<td>Research Assistance</td>
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<tr>
<td>Contact your Subject Librarian</td>
<td>Research Assistance</td>
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<tr>
<td>Getting Started with RefWorks</td>
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<td>Writing and Style Guides</td>
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