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Services/Departments/Libraries Organization - Card Sorting

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Usability Report Cover Sheet

Project
- Overall Project: MLibrary Website
- Project Title: Services/Departments/Libraries Card Sort

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Usability Report

This report describes a usability assessment performed by the MLibrary Usability Group and Task Force. Usability assessment is a part of the iterative design process used to develop new systems and services at MLibrary. This report describes one test in a series of tests performed at one point in the iterative design process. Sample sizes are small and findings serve only as clues to help guide decisions. Implementation of any recommendations should take these limitations into account.

I. Introduction

The Usability Group & its Usability Task Force conducted a series of evaluations of the library website during the Fall 2009 and Winter 2010 Semesters. This report highlights a series of card sorting exercises which were conducted in conjunction with other parallel studies. Reports for the other studies are also available on the Usability in the Library website: http://www.lib.umich.edu/usability-library/usability-library-library-gateway-reports

There are currently three separate pages of links on the library web site (http://www.lib.umich.edu) that are categorized as Services, Libraries and Departments. Links to both the list of Services and list of Libraries are available from every library page on the top banner. The list of library Departments is a second tier page, linked from the "About the Library" page, which is also available on the top stationary banner on each library web page.

The goal for these tests was to determine how users categorized a sample of pages (we will be referring to these as "items") currently grouped under Services, Libraries and Departments to see if there might be better ways to group and label these items.

The users for this test were undergraduate students, graduate students, faculty, and library staff.

II. Test Description

Under the three headings labeled Services, Libraries and Departments, there are 84 items. To determine whether these items are categorized according to users' needs and expectations with category labels that made sense to them, the Usability Task Force conducted a card sorting activity.

In order to have a sufficient number of cards to perform the test, yet stay within the time constraints available, the Usability Task Force selected a sample of 43 items from the total of 84. Each of these items was written on a card. Approximately half of the items listed under Services and under Libraries, and all Departments, were selected. Items from the current Services and Libraries pages were chosen somewhat randomly, but the group attempted to create a mix of items they considered easier to categorize (i.e. items with the word library or services in the label) with items which might not be as easy to classify (e.g. items that were locations but not libraries, like the Knowledge Navigation Center or Weill Reading Room, and more general items like

Copyright or Academic Integrity).

In order to provide an equal representation from each of the current three headings, all items listed under Departments were included in the sample. A list of the cards used and each item's current placement on the web site is available in Appendix A of this report.

III. Methodology

Methods for this card sort activity varied according to the groups and individuals tested. Participants either performed a paper card sort as a group, performed a paper card sort as an individual, or performed an online card sort as an individual.

For the online card sort, we used a tool called OptimalSort (http://optimalsort.com/). Participants see a list of cards on left side of the screen and can drag these into groups on the right side of the screen, and then label the groupings. There is also a place to comment on their groupings and labeling.

Test scripts and participant emails are available in Appendices B-D of this report.

Undergraduate Student Group Card Sort

A total of thirteen undergraduate students, divided into three groups, were recruited immediately prior to the tests. One group was recruited from the Shapiro Undergraduate Library and the other two from the Art, Architecture & Engineering Library. After agreeing to participate, individuals were randomly divided into small groups of four to five people. A member of the Usability Task Force introduced the exercise to participants and demonstrated a simple example of a card sort exercise before handing each group a stack of 43 cards. Each card was labeled on one side exactly as the represented service, library or department was labeled on the library web site. The back of each card gave a brief description of the item represented on the front.

Participants were given approximately 15 minutes to reach a consensus on how to group each card according to any number of categories of their choice. They were also asked to assign a label to each category they devised. A member of the task force took notes on the decision-making discussion for each group. Following this, the groups were asked to elaborate on their decision-making process and on what items were hard for them to categorize. As incentives, participants were offered water and soft drinks during the card

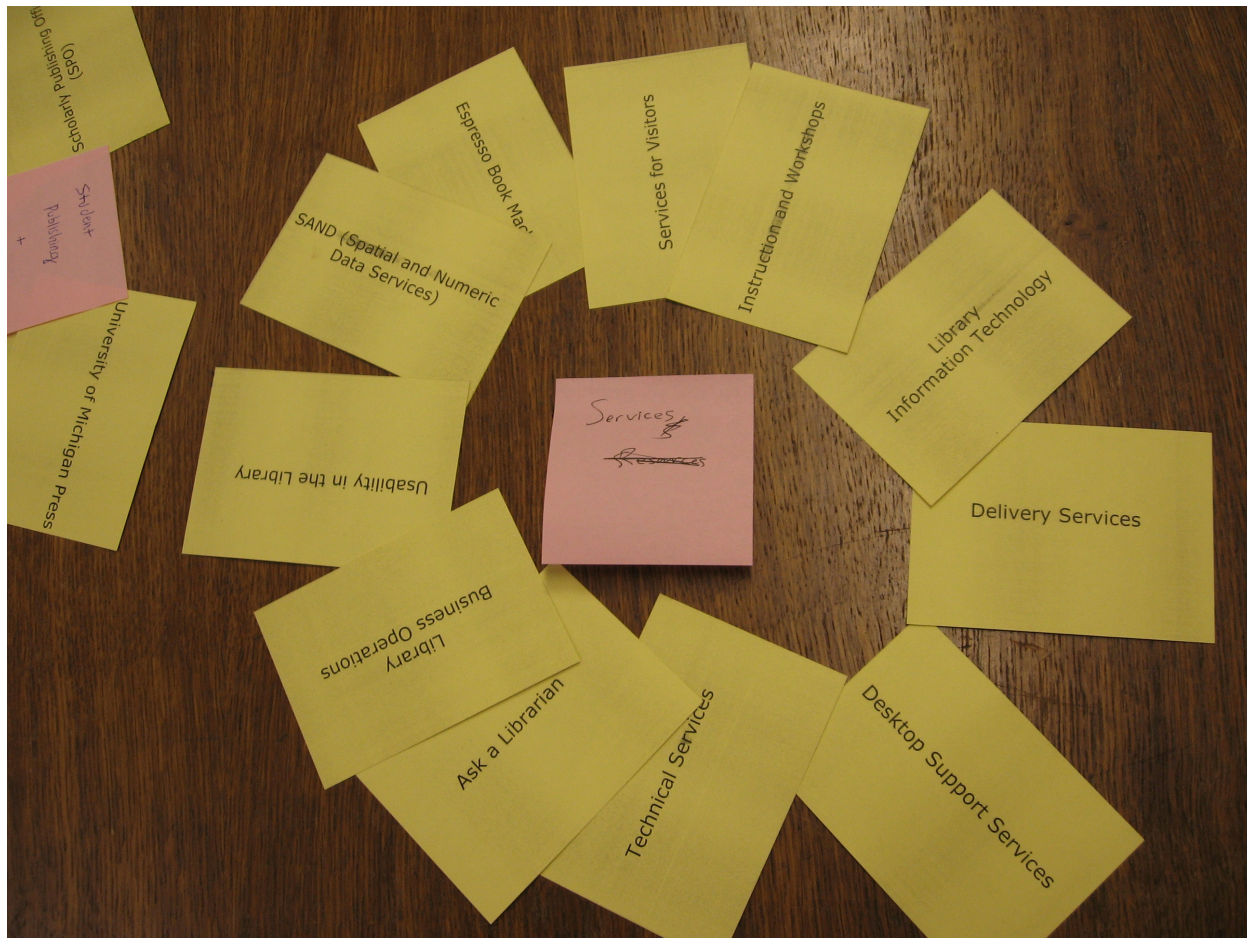sort activity and received five Blue Bucks for their time.

Figure 1. One category from one undergraduate student group's card sort.

Graduate Student Group Card Sort

A similar group card sort activity was held with a group of five graduate students. The methodology was the same used for the undergraduate student group. Independently, one graduate student individually participated in the online card sort.

The group card sort and labeling exercise took 16 minutes. The students completed the sort in two rounds, with the second round focusing on clarifying labeling and sorting amongst themselves.

Figure 2. All categories from the graduate student group's card sort.

Faculty Card Sort

Two faculty members were interviewed, independent of one another, by members of the Usability Core Group. This script is available in Appendix C. One individual completed the online card sort and the other individual sorted manually using the paper cards.

Staff Online Card Sort

The Usability Task Force emailed all library staff to participate in the online version of the card sort activity. One hundred and four University Library staff members participated by grouping the same 43 items used in the previous paper card sorts into categories of their own creation. The online card sort was made available to staff for a period of two weeks.

The Usability Task Force analyzed the list of categories into "unified

categories," by combining very similar categories that the participants had created, and organizing their categories using a more controlled vocabulary chosen by the project team.

IV. Results

Raw test results are available in the documents attached to this report. Because trends varied across the participant sessions, these are reported separately for each participant type.

Undergraduate Students

During the course of the 3 undergraduate sessions (13 undergraduates total) students turned over many of the cards to read the definitions on the back, in particular those cards for Espresso Book Machine, SAND, Library Administration, and Area Studies.

While the different undergraduate sessions took different approaches to how they sorted and labeled the categories, several solid trends emerged:

- Participants were particularly keen to separate library activities that directly affect them (such as access to resources, staff, and materials) from those that do not (administrative functions, facilities support, and marketing).
- Participants also showed a strong and consistent tendency to group items that pertained to publishing in the library.
- Other items that were generally grouped together were those that implied a place, usually libraries or reading rooms with obvious physical representations on campus.
- Some participants struggled with the relationship between some resources and services and physical locations, while some resources and services were perceived to be self-service or without connection to a specific physical building.

Labeling and Group Trends

- Each of the three undergraduate sessions created a category which included the word Services in the label (i.e. Academic Services, Technical Services, Services). The items included in these categories skewed toward activities that bring people to the library, such as Borrowing and Circulating, Course Reserves, Delivery Services, and Instruction and Workshops.
- Two of the three sessions distinguished between in-house, in-person assistance and more self-service, online assistance such as Mirlyn. These

categories were labeled with some variation of Services and Resources respectively.

- Each session created a category labeled Libraries, or one or more categories that strongly skewed toward facilities-related items. These categories sometimes included items that were not necessarily libraries but were closely associated with the brick-and-mortar aspects of the libraries, such as Library Floor Plans and Shapiro Undergraduate Library.
- Two sessions had identical categories that encapsulated publishing efforts (one was called "Student Publishing and Publishing" and the other "Publishing"). The items in these categories were Academic Integrity, Copyright, MPublishing, Scholarly Publishing Office, and University of Michigan Press. The third session combined 4 of these same cards but also included 6 other cards in a category called "Academic Services."
- For the cards representing services and departments, undergraduates mentioned they do not often use these. All of the student sessions exhibited a strong preference to combine these items into a kind of administrative category that would not need to be readily findable for them.
- No sessions created sub-categories.

Undergraduate Student Comments

Many undergraduate student participants commented on the need for the following:

- More efficiency and conciseness when navigating the website. Shorter link lists in each category, fewer clicks, combining categories and/or individual links, etc.

- Creating subcategories, especially to help visualize when one location is within another location.

- Adding information about available computers and software on the library website.

A more in-depth summary of the comments may be found in Appendix E.

Graduate Students

All 6 of the participants had used some portion of the library website (including Mirlyn, site search, online journals, and ILL) within approximately the past month, some as recently as the day of the study.

During the card sort, discussion highlighted several topics. Interest in separating, as one participant put it, "spatially defined" and "topically defined" cards ended up guiding the sort, creating an initial divide between place-specific and other topics. Items that were perceived by the students as

not being aimed at them, but as behind-the-scenes, were also separated out.

During the sort, students were observed checking definitions for a number of topics, including:
- Area Programs
- Computer & Video Game Archive
- Desktop Support Services
- Knowledge Navigation Center
- Library Information Technology
- Marketing and Communications
- Michigan Union Libraries
- Preservation and Conservation
- SAND
- Technical Services

During the course of the sort, some students explained card topics for others in the group, notably the Buhr Remote Shelving Facility, the Askwith Media Library, and Library Administration.

Labeling and Group Trends

The graduate student session created 5 categories and was then asked to describe their rationale:
- Materials (6 items): mechanism for looking up materials, such as books and journals
- Publishing and Rules of Use (5 items): "Publishing stuff"
- Library Facilities (17 items): emphasis on physical locations "on campus"
- User Services/Technical Consulting (8 items): ways/places where patrons can learn how to ask for help or complete tasks (e.g. "how do I make a poster")
- Library Administration (7 items): items that students would not need in order to perform research

The student who performed the card sort online created 8 categories. While the student did not provide a rationale for each category, it is possible to infer some information about the participant's choices:

- Contribute (1 item): Giving to MLibrary
- Copyright and Publishing (4 items): MPublishing units related to copyright and publishing
- Facilities and Regulations (6 items): The participant appears to have construed some broad labels as being about topics and services, rather than labeling those services, and thus included items ranging from concepts

(e.g. Academic Integrity) to items that actually represent certain library units (e.g. Borrowing and Circulation, Preservation and Conservation).
- Libraries and Collections (13 items): items representing units and libraries that are clearly location-specific
- Library Administration (6 items): items related to library management, ranging from Library Information Technology to Library Human Resources
- Quick Resources (4 items): items the participant perceives as resources that are used frequently, including Ask a Librarian, Course Reserves, ILL, and Library Forms; this category seems akin to the current Quick Links list on the MLibrary homepage
- Technical and Support Services (8 items): items containing the word "Services" in the title, ranging from SAND to Desktop Support Services to Serials and Microforms Services
- Visitors (1 item): Services for Visitors

Some overlap exists between the individual and group sessions:
- Both sorts clearly delineated between locations and services or resources/materials, but one sort further separated content perceived to be about managing facilities from the facilities themselves.
- Both sorts identified a publishing-related group.
- Both sorts identified a category representing library administration.

Graduate Student Comments

Many graduate student participants commented on the need for the following:
- Dividing the items between things that UM affiliates need and things that visitors need.
- Dividing the items between spatially defined and topically defined.
- Recommendation for future studies to give nothing but the definition on a card, letting the participant choose a card name, category, subcategories, etc.

A more in-depth summary of the comments may be found in Appendix E.

Faculty Members

One faculty member completed the online card sort activity and the other faculty member sorted manually using the paper cards, as described in the Methodology section.

Labeling and Group Trends
- The highest duplication between the two respondents' categories were:

- o "List of Libraries" and "Places/Sites" – 11 duplicate items
- o "Things for people in the library to know" and "Administration" – 7 duplicate items
- One faculty member combined the majority of the same items under "publishing" which was used as a category by staff, undergraduate and graduate students.
- One faculty member created a services category that duplicated 7 of the 19 items currently categorized as Services.

Faculty Comments

Faculty participants' comments about this study emphasized:

- The importance of physical location when organizing the cards.
- The importance of separating cards meant specifically for library staff, as they tend to get in the way.
- The importance of highlighting ways of finding/getting information more than other cards.
- The belief that the library should not be the department in charge of promoting academic integrity.

A more in-depth summary of the comments may be found in Appendix E.

Library Staff

There were 104 university library staff members who participated in the online cart sort, as described in the Methodology section.

For the library staff results, the Usability Task Force condensed similar labels created by staff under a single label/category, in order to clarify the analysis.

All raw data is available in the attached documents.

Grouping Trends

After looking at the frequency with which each card was chosen for each category, some major grouping patterns surfaced:

- The 6 cards in the following table were added to an "Administration" category in 25-50% of the sorts.

Cards that appeared in the same category in 25-50% of the sorts	Number of sorts these cards appeared in this category
Library Administration	51 out of 104
Library Business Offices	50 out of 104

Marketing and Communications	49 out of 104
Library Finance	49 out of 104
Library Human Resources	47 out of 104
Library Facilities	30 out of 104

- The 7 cards in the first column of the following table were added to a "Libraries" category in 50-100% of the sorts. The 6 cards in the third column of the following table were added to a "Libraries" category in 25-50% of the sorts.

Cards that appeared in the same category in 50-100% of the sorts	Number of sorts these cards appeared in this category	Cards that appeared in the same category in 25-50% of the sorts	Number of sorts these cards appeared in this category
Art, Architecture & Engineering Library	68 out of 104	UMTRI	45 out of 104
Shapiro Undergraduate Library	68 out of 104	Computer & Video Game Archive	44 out of 104
Askwith Library	65 out of 104	Government Documents	43 out of 104
Asia Library	64 out of 164	Area Programs	42 out of 104
Kresge Business Library	58 out of 104	Weill Hall Reading Room	39 out of 104
Buhr Remote Shelving Facility	57 out of 104	Audubon Room	27 out of 104
Michigan Union Libraries	55 out of 104		

- The 7 cards in the first column of the following table were added to a "Public Services" category in 50-100% of the sorts. The 5 cards in the third column of the following table were added to a "Public Services" category in 25-50% of the sorts.

Cards that appeared in the same category in 50-100% of the sorts	Number of sorts these cards appeared in this category	Cards that appeared in the same category in 25-50% of the sorts	Number of sorts these cards appeared in this category
Course Reserves	67 out of 104	Espresso Book Machine	51 out of 104
Interlibrary Loan for UM Community	67 out of 104	Serials and Microforms	41 out of 104
Delivery Services	64 out of 104	Knowledge Navigation Center	40 out of 104
Instruction and Workshops	60 out of 104	SAND	36 out of 104
Borrowing and Circulating	58 out of 104	Library Forms	32 out of 104

Cards that appeared in the same category in 50-100% of the sorts	Number of sorts these cards appeared in this category	Cards that appeared in the same category in 25-50% of the sorts	Number of sorts these cards appeared in this category
Ask a Librarian	57 out of 104		
Services for Visitors	57 out of 104		

The 3 cards in the following table were added to a "Publishing" category in 25-50% of the sorts.

Cards that appeared in the same category in 25-50% of the sorts	Number of sorts these cards appeared in this category
MPublishing	49 out of 104
Scholar Publishing Office	49 out of 104
University of Michigan Press	47 out of 104

Library Staff Comments

Most library staff participants' comments suggested:

- Making categories concise and easy to navigate (any category with more than 10 links is too big; emphasizing cross-links between locations and services available to them; combining items that are essentially redundant).
- Using subcategories for categories like Library Locations and Publishing.
- Certain items would be easier to find if they were placed in more than one category: Library Floor Plans, Knowledge Navigation Center, Ask a Librarian, Espresso Book Machine, and any department that could also be classified as a service (Askwith, Cooperative Access Services, etc.).
- Moving internal items, mostly internal library departments, in a place that is not prime real estate (e.g. staff intranet).
- Making academic integrity a departmental concern rather than a library concern.
- Making it clearer whether some of the items are internal or more relevant to the public (e.g. MPublishing, Library Floor Plans).
- Making suggestions as to items that should be more prominent (online directory, links to subject specialists, information about making a request to purchase a book or journal).

A more in-depth summary of the comments may be found in Appendix E.

Category Labeling Patterns

After looking at the condensed categories and comments generated, several major category labeling patterns surfaced, including:

- A large number of participants wanted to emphasize a separation between internal-use items and items often used by the public, evidenced by:
  - The popularity of category labels reflecting internal functions such as Administration (used by 55 participants) and For Library Staff (used by 28 participants).
  - The popularity of category labels reflecting public functions such as Public Services (used by 75 participants).
- Ten participants used an About the Library category, with 19 distinct items identified for this category by at least one participant.
- Twenty-one participants created a Giving category, with 3 unique items distinguished for this category by at least one participant.
- Seventeen participants used Help as a category, with 21 unique items distinguished for this category by at least one participant.
- A number of participants expressed frustration when trying to organize the items relating to Libraries and Departments. Most thought that Libraries was an appropriate category (seventy-five participants), and many emphasized libraries as Places (twenty-six participants). Several also separated various departments, collections and partners from the general Libraries category (e.g. "Library Departments" (fourteen participants), and "Other (libraries/collections/partners)" (fifteen participants)).
- Forty-seven participants distinguished Publishing as a separate category, with 9 unique items distinguished for this category by at least one participant.

Common Threads Among User Groups

Several similarities between categories surfaced across the various user groups performing the card sort, whether performing a paper sort or using the online tool. There was a marked preference for the following groupings.

- Physical Locations: libraries and/or services with a physical location and hours of operation.
- Publishing: MPublishing, SPO and University of Michigan Press.
- Services: a broad category used by all groups which ranged from getting help with library resources to internal services for library staff.
- Administration: background support for library staff or as one student said, "Stuff that students wouldn't necessarily need."

V. Recommendations

General Recommendations

We recognize that the content we're trying to organize is difficult to organize, and that there are limitations to what the participants may understand about the items presented to them due to the confusing nature of department and service names.

After data from all of the card sorts were collected and compared, the Usability Task Force arrived at a list of "unified categories" that carry the general scope of the categories suggested by our participants. We recommend conducting a follow-up labeling & organization study starting with these general groupings and category labels:

- Administration
    - o Examples: Library Finance, Desktop Support Services, Library Information Technology
- Libraries/locations
    - o Examples: Taubman Health Sciences Library, SAND, Knowledge Navigation Center, Hatcher Graduate Library, Weill Hall Reading Room
- Publishing
    - o Examples: MPublishing, Copyright, Deep Blue, SPO
- Getting help
    - o Examples: Ask a Librarian, Instruction and Workshops, Knowledge Navigation Center
- Getting things
    - o Examples: ILL, Circulation, Serials, Course Reserves

Our decision was based on the categories the participants created, as well as the comments they made during the card sort and during the discussion period immediately following the card sort. We also took into account our knowledge of the spectrum of services and functions offered in the library. Far outliers and categorizations that were clearly based on a misunderstanding on the part of the participants were ignored during this process.

The suggested categories do have some correlation to the current categorization system for the website. Libraries would remain as a category label in the suggested system, as would Services. New areas are Administration, containing pages pertaining to library business, finance, and other internal functions, and Publishing, containing pages related to

MPublishing units, as well as academic integrity resources.

Some participants had a strong sense of difference between things they access physically in the library (such as librarians, instruction sessions and workshops, and other in-house academic support features) and things they access digitally or that pertain to acquiring materials (Mirlyn, ILL, serials, etc.). Others had some difficulty sorting physical locations versus the types of things that are done in the library. This was described by one participant as "slipperiness." We recommend placing items in multiple categories, so that users can access them from different entry points.

During the course of the sorts, some page titles were found to be difficult to classify because the label was not meaningful enough (i.e. Copyright). During the group card sorts, we noticed how often participants turned cards over to read the description of the item on the reverse side, likely because the label didn't provide enough clues. We recommend adding descriptive text to labels on category pages, as that is possible (much like http://www.lib.umich.edu/about-mlibrary). Further information about this issue is discussed in Next Steps. The list of problem page labels is provided in Appendix F.

Population Specific Recommendations

- The undergraduate students preferred grouping library buildings together, and then defining what services and resources are available in those libraries. Exploring ways to map between locations and services on the website would perhaps be fruitful.
- One graduate student was interested in having clearly delineated content for visitors and other non-student/staff/faculty individuals.
- Graduate students were not opposed to listing multiple resources in multiple places on the site, citing how it would make disambiguating the labels better, and it would make finding the same resource again easier.

VI. Next Steps

We recognize there is often further testing to be done as an outcome of the current testing results and recommendations. We identified the following as potential future research and/or tests.

- As possible, review page labels that were identified as being confusing or ambiguous to see if there are methods for making them easier to understand out of context (e.g. as they appear on the website's search results). A list of the labels that participants found confusing can be found in

Appendix F.
- Perform another sort activity with the categories defined in the General Recommendations section to see how users (undergraduate students, graduate students, faculty) sort the same items within defined categories.

VII. Lessons Learned

In addition to gaining insight into the organization of the site, we also learned more about our tools and methods.

- Although we did not explicitly encourage a particular grouping behavior in the paper card sort, participants did not create subcategories. While one student group did ask if they were allowed to do so and we said they could, they ultimately included no subcategories. Our demonstration card sort did not include an example of a subcategory, so it is possible that we implicitly indicated that subcategories were not in bounds. OptimalSort did not allow subcategories, and some participants commented that they wanted to subdivide.
- OptimalSort does not allow us to record thinking-out-loud; follow-up interviews (in-person or online), linked from the "thank you" screen, might have been helpful.
- OptimalSort has a variety of templates for data analysis; the one contributed by Donna Spenser seemed the most helpful and easiest to use when analyzing our data.

VIII. Appendices

Raw data for each test has been stored as separate attachments to this report.

Appendix A: List of Cards Used in Card Sort

Services
- Academic Integrity
- Ask a Librarian
- Audubon Room
- Borrowing and Circulation
- Computer & Video Game Archive
- Copyright
- Course Reserves
- Delivery Services
- Espresso Book Machine
- Instruction and Workshops
- Interlibrary Loan for UM Community

- Knowledge Navigation Center
- Library Floor Plans
- Library Forms
- Preservation and Conservation
- SAND (Spatial and Numeric Data Services)
- Scholarly Publishing Office (SPO)
- Serials and Microforms Services
- Services for Visitors
- Usability in the Library

Libraries

- Art, Architecture & Engineering Library
- Asia Library
- Askwith Media Library
- Buhr Remote Shelving Facility
- Government Documents Center
- Kresge Business Administration Library
- Michigan Union Libraries
- Shapiro Undergraduate Library
- University of Michigan Transportation Research Transportation (UMTRI) Library
- Weill Hall Reading Room

Departments

- Desktop Support Services
- Giving to MLibrary
- Library Administration
- Library Business Operations
- Library Facilities
- Library Finance
- Library Human Resources
- Library Information Technology
- Marketing and Communications
- MPublishing
- Technical Services
- University of Michigan Press

Appendix B: Undergraduate Student Group Card Sort Script

[Check that they are 18 when come in the room.]

Hello and thank you for volunteering to help the University Library reorganize part of our web site.

My name is _____. I'm a librarian at the University and will be coordinating our session today. I'm joined by _____, and _____who are here to observe and take notes.

First, some basic information…

Thank you for agreeing to participate in a usability study for the MLibrary website. We appreciate your contribution to our research and to the improvement of our libraries. We will use the information you provide anonymously and combine it with similar information from other participants. Then, we will interpret the data to draw conclusions about how library resources are used and how the library can improve our websites. A summary of our findings will be reported to library staff and may be made public on our website but the report will not include any information that could identify you.

We have water and soda for you to drink. In addition, at the end of the session, you will each receive 5 Blue Bucks that can be used at any University Unions location (including Bert's Cafe / Mujo's / Beansters).

So here is what we would like you to do. We will give you a stack of cards. Each card represents a page on the Library website. We would like you, AS A GROUP, to put these into categories that make sense to you. You can create as many or as few categories as you feel are needed. There are no right or wrong answers and you are not being tested or graded in any way. After you've put them in categories, create a label that makes sense to you for each category. Use the post-it notes and pens to do that.

Do you have any questions?

We will spend 15 minutes on this part. If you have questions along the way, please ask. If you are confused by a card, a description of it is on the back of the card. My colleagues will be taking notes and observing the discussion. Please make sure you discuss your groupings as you go.

[Show the example.]

If you're ready, please begin.

[Group card sort happens.]

OK, it's been about 15 minutes. Are you done, or do you need a few minutes to

finish up?

Follow Up Questions
Please describe the group/s that you came up with, and why you came up with
them?

Were there any items that were particularly hard to put into groups?

Do you have any other comments?

Conclusion
Thank you once again for your participation and your input. I have Blue Bucks
for each of you.

Appendix C: Faculty Card Sort Script

My name is _____. I'm a librarian at the University and will be
coordinating our session today. I'm joined by
who is here to observe and take notes.

[Collect their names, status, specialization and give them their gift.]

First, some basic information. Thank you for agreeing to participate in a
usability study for the MLibrary website. We appreciate your contribution to
our research and to the improvement of our libraries.   We will use the
information you provide anonymously and combine it with similar information
from other participants. Thank, we will interpret the data to draw conclusions
about how library resources are used and how the library can improve our
websites. A summary of our findings will be reported to library staff and may be
made public on our website but the report will not include any information that
could identify you.

Card Sort
You will be taking an online survey to evaluate the organization of the website.
The survey will ask you to put items into categories that make sense to you.
You can create as many or as few categories as you feel are needed. There are
no right or wrong answers. We would like you t create labels for your
categories, you can do this as you create categories or at the end of the
process.

This survey should take ten minutes. If you have any questions please ask.   If
you are confused by an item, let us know and we'll define the item for you. My
colleague will be taking notes and observing your work.

[Be prepared to show example if they are uncertain about the use of the online tool.]

If you're ready, please begin. Once you are finished, please do not hit Done, just let us know that you have finished, we will be asking a few follow up questions.

http://libraryusability.optimalsort.com/linksfaculty/

[Take survey. If they are stumbling through the task, ask them to describe their difficulty.]

Follow Up Questions
Please describe the group/s that you came up with, and why you came up with them.

Were there any items that were particularly hard to put into groups?

Do you have any other comments?

Conclusion
Thank you once again for your participation and your input. Is there anything you would like to add?

Appendix D: Email Sent to Library Staff Inviting Participation in the Online Card Sort

The Usability Task Force is currently evaluating how the Library website organizes information about services, libraries, departments and units and we would love your input! The Task Force has created a simple online sorting exercise which asks you to organize a number of items into groups and then give the groups a name (further instructions for this activity are available on the exercise website).

We've put this exercise in front of several groups of undergraduates and are also planning to do this for graduate students and faculty. By collecting data from a wide strata of website users the Usability Group hopes to determine the best way to categorize certain areas of the site for easier, more intuitive navigation.

This is a quick activity which should take no more than 5 minutes of your time.

The answers are completely anonymous. To take part, go to http://libraryusability.optimalsort.com/linksstaff/and follow the instructions.

Every library staff member is welcome to participate. The activity will be available until Friday, March 12. If you have questions about this activity, please contact ul-usability@umich.edu.

Appendix E: Participant Comments

A summary of the comments given by participants are listed below. For more specific comments, see the attached data documents.

Staff Comments

Unless otherwise noted, each bullet point describes the comment of 1 participant. Within sub-bullet points, separate comments are separated with a semi-colon.

- Cards that were reported as challenging to place into categories:
    - Library Information Technology
    - Technical Services (2 participants)
    - All libraries that aren't in our system
    - Library Floor Plans
    - Copyright
    - Academic Integrity
    - Giving to Library
- Cards that were reported as unclear based on their names:
    - Serials and Microforms Services (2 participants)
    - Academic Integrity (4 participants) - Plagiarism, copyright, or what?
    - Preservation and Conservation - is it a service, or info about it?
    - Library Forms (5 participants) - are they internal or public forms? Borrowing and circulation?
    - Ask a Librarian - should be renamed Help
    - Copyright
    - Instruction and Workshops
    - Area Programs (4 participants) - rename Area Programs Library or Area Programs Services; list some of the areas separately instead; How does it relate to the Library?
    - Espresso Book Machine - sounds like a coffee machine
    - Weill Reading Room
    - Audubon Room
    - UMTRI - how does it relate to the Library?

- - SAND
  - Usability in the Library - help for the disabled? information about the usability committee?
- Eight participants recommended that we use subcategories
  - Put Scholarly Publishing Office, Copyright, and UM Press in a subcategory under MPublishing
  - Could make an instruction support category using some of the cards in Services
  - Should make subcategories in the Libraries category for libraries, and departments within libraries underneath them (2 participants)
  - Any category with more than 10 cards is too long, should create subcategories
  - Library locations could be a subcategory within Catalog
  - Some of the cards were category names themselves, and there should be an option to organize them into a hierarchy of sorts
  - Crosslinks between Places and Services available to them would be useful
- Seven participants recommended that certain cards should be placed in 2 or more categories
  - Library Floor Plans
  - Knowledge Navigation Center (2 participants): both a Place, and a place that offers Services; place in Specialized Units and Help
  - Administrative Departments (Examples: Cooperative Access Services, Askwith): should be placed in a Departments list as well as any Services they might offer
  - Ask a Librarian could be linked from several places - Contacts, Help, Services, etc.
  - Espresso Book Machine: place in Publishing category and elsewhere
- Two participants commented that certain cards could go into either one category or another:
  - Espresso Book Machine could go into Services or Publishing
  - Copyright could go into Services or Publishing
- One participant suggested that we combine redundant cards into one:
  - Library Information Technology and Desktop Support Services
  - Library Finance and Library Business Offices
- Six participants commented that we have too many links
  - Put internal links somewhere else that's not prime real estate. Examples given: BUHR, Technical Services, Library Finance, Preservation
  - Library Departments should be visible only internally

- o Academic Integrity is more of a university/departmental concern than a library concern (2 participants)
  - o Desktop Support Services is too internal to be placed in the Services or Centers list
  - o Some of these cards can be dropped altogether (no examples)
  - o Internal links could just be placed in the staff intranet
- Two participants commented that it's not clear from many of the card names if it contains internal information, or information relevant to the public
  - o MPublishing - probably more about the organization than the services they offer
  - o Library Floor Plans - assumed to be internal, wasn't sure what kinds of forms patrons might need. Usability In The Library and Copyright - who is the user of this information?
- One participant suggested that certain links could be made even more prominent (Quick Links):
  - o Online Directory
  - o List of Subject Specialists
  - o Information about making a request to purchase a book or journal
- One participant commented that it's probably not necessary for everything in the library category to have the word "Library" at the end of its name

Staff Comments Related to the OptimalSort Tool

- One participant expressed confusion about whether the order of items in each category mattered
- One participant suggested that we explain each card using mouse-over balloons
- Four participants expressed compliments on the exercise and/or the tool
- One participant thought the tool was fun but probably not useful

Faculty Comments

- Cards that were reported as challenging to place into categories:
  - o Library Forms (1 faculty member)
  - o Area Programs (2 faculty members)
- Cards that were reported as unclear based on their names:
  - o Computer & Video Game Archive (1 faculty member)
  - o Espresso Book Machine (1 faculty member)
  - o Area Programs (1 faculty member)
  - o Ask a Librarian (1 faculty member)
  - o Desktop Support Services (1 faculty member)
  - o Library Administration (1 faculty member)

- o BUHR Shelving Facility (1 faculty member)
- o Weill Hall Reading Room (1 faculty member)
- One faculty member commented that physical location was a huge factor when organizing cards initially.

- One faculty member commented that gifts and things for people who work in the library aren't personally important and don't need to "get in my way."
- One faculty member commented that help with finding/getting materials is the most important thing.
- One faculty member commented, "Why do visitors have services, I just get everyone an MCard, visitors don't need their own services."
- One faculty member commented that the library shouldn't be in charge of promoting academic integrity.
- One faculty member commented that "It would be useful to have a list of reading rooms – place where its quiet and I don't have to participate in activities (e.g. the reading room at UMMA)."
- One faculty member commented, with reference to digitizing books, "How is it supposed to work?" Used MPublishing to reprint a book from the 60's, had a very difficult time with this – tried to determine if it had been digitized already, but couldn't.

Specific comments:
- "It would be nice if there's a place to type in title of book or author name to determine if the book has been digitized."
- "Used Google books, but was dismayed when Google linked back to Michigan library."
- Tried to use Mirlyn to search for the book, "but it was a mess, it was very difficult."
- "How is limited use useful?" Has not tried to use the digitized books tool since.
- One faculty member commented, "Photocopy machines are now scanners, but they only make single copies, not multiple page copies.   You have to log in to the machine for each page you scan; it would be a lot easier if you could swipe your MCard and have the machine associate your email address, so you wouldn't have to type in your email address every time."
- One faculty member expressed an interested in having the current periodicals moved back to Mathematics – "it's too much of a pain to walk all the way over here to browse; it used to be a social space."   Proximity is what is important, which is why they don't see the library as a social space,

"if the periodicals are just downstairs [in their building] it would just be so much easier."

Graduate Student Comments

- Cards that were reported as challenging to place into categories:
    - Library Floor Plans (1 group)
    - Scholarly Publishing Office (1 group)
    - MPublishing (1 group)
    - Espresso Book Machine (1 group)
    - Askwith Media Library (1 group)
    - Audubon Room (1 group)
- Cards that were reported as unclear based on their names:
    - Technical Services (1 group)
    - Library Administration (1 group)
- One student recommended dividing things into 2 general (and distinct) categories: things that UM affiliates need to use often, and things that visitors need.
- One student stressed the need to differentiate between spatially defined and topically defined cards.
- One group, when asked if it would be problematic to list multiple resources in multiple places, replied, "No, but maybe it would be easier to disambiguate the labels," and "It's not that you see the same thing twice but that you can't find the same thing again."
- Two students commented about the exercise in general: "Why aren't you recording this?" and "The online exercise failed because the cards are the names they would have given an entire category; having no ability to create subcategories was difficult; naming is really important, a lot of the cards were very vague. It would have been better to create a sort where you give the definitions, how would you name, how would you sort and then create/rename a category."
- Two students made the general comment that it would be nice to be able to access a list of what they have recently checked out, similar to the Amazon list.
- Two students: "It would be nice to have a social network for people to opt in with books they have checked out; to limit the emails back and forth between the department looking for resources that are checked out by individuals"; "Can we create groups [e.g. social groups, for people who want to opt in] based on things we've checked out?"

Undergraduate Student Comments

- Cards that were reported as challenging to place into categories:
    - Academic Integrity (1 group)
    - BUHR Shelving Facility (1 group)
    - Library Facilities (1 group)
    - Library Floor Plans (1 group)
    - Library Forms (1 group)
    - Preservation and Conservation (1 group)
    - Scholarly Publishing Office (1 group)
    - Weill Hall Reading Room (1 group)
- Cards that were reported as unclear based on their names:
    - Academic Integrity (1 group)
    - Area Programs (2 groups)
    - Espresso Book Machine (2 groups)
    - Interlibrary Loan for UM Community (2 groups)
    - Library Administration (1 group)
    - Library Facilities (2 groups)
    - Library Human Resources (1 group)
    - Library Information Technology (2 groups)
    - Preservation and Conservation (2 groups)
    - SAND (1 group)
    - The difference between MPublishing and University of Michigan Press (1 group)
- One group recommended that we add computer locations and software on them to the website: "was looking for Matlab computer locations and couldn't find them."
- One group expressed confusion when trying to decide whether something was a location, a place within a location, etc.
- One group recommended that we use subcategories
- One group recommended that we keep the lists small on each page
- "None of the categories can be combined? Can any of the individual cards/links be condensed to create fewer links?" (1 group)
- One group stressed the importance of less clicking - fewer steps, better navigating

Appendix F: Problem Card Labels

The following list includes card labels (taken from titles of pages on the library website) that participants found confusing, with information about how many people or groups had difficulty, as well as the questions asked and comments made about those labels during the course of the sorting exercises, when those

were specifically recorded.

Problem Label	Comment 1	Comment 2	Comment 3
Academic Integrity (4 participants)	Plagiarism, copyright, or what?		
Area Programs (5 participants, 2 groups)	Rename Area Programs Library or Area Programs Services	How does it relate to the Library?	"Not sure what this means"- even after explaining it he was unsure; at the end of the sort, went back to the Area Programs card and said "I guess I didn't understand it, terrible name."
Ask a Librarian (2 participants)	Should be renamed Help	"What's this again?"	
Audubon Room (1 participant)			
BUHR (1 participant)	"People can't go here can they?"		
Computer & Video Game Archive (1 participant, 1 group)			
Copyright (1 participant)			
Desktop Support Services (1 participant, 1 group)	"What's this for?"		
Espresso Book Machine (1 participant, 2 groups)	Sounds like a coffee machine	What is this?	
Instruction and Workshops (1 participant)			
Interlibrary Loan for UM community (2 groups)	What is it?		
Knowledge Navigation Center (1 group)			
Library Administration (1 participant, 1 group)	What is that?	"This is for Mr. Courant, right?"	

Problem Label	Comment 1	Comment 2	Comment 3
Library Facilities (2 groups)	What does facilities mean?	I don't get Library Facilities - what info is on it?	
Library Forms (5 participants)	Are they internal or public forms? Borrowing and circulation?		
Library Human Resources (1 group)	Human resources more like - what is it?		
Library Information Technology (3 groups)	Support technology - LIT what is it?	So what exactly is LIT?	
Marketing and Communication (1 group)			
Michigan Union Libraries (1 group)			
MPublishing (1 group)	MPublishing? What's the difference between MPublishing and University of Michigan Press?		
Preservation and Conservation (1 participant, 1 group)	is it a service, or info about it?		
SAND (1 participant, 2 groups)	Description [on back of card] didn't help much on SAND	What is SAND?	
Serials and Microforms Services (2 participants)			
Services for Visitors (1 participant)	"I don't even know where to put this. Why do visitors have services, I just get everyone an MCard, visitors don't need their own services."		
Technical Services (1 group)			
UMTRI (1 participant)	How does it relate to the Library?		

Problem Label	Comment 1	Comment 2	Comment 3
University of Michigan Press (1 group)	What's the difference between MPublishing and University of Michigan Press?		
Usability in the Library (1 participant)	Help for the disabled? Information about the usability committee?		
Weill Reading Room (2 participants)	"Is this the big one out there?" [referencing the Hatcher Reading Room]		