## USABILITY STUDY OF LIBRARY.CONCORDIA.CA

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CONCORDIA UNIVERSITY LIBRARIES' 12<sup>TH</sup> ANNUAL RESEARCH FORUM APRIL 14, 2014

#### PROJECT BACKGROUND

- Summer 2011: First proposed project plan for website redesign created by the Web Team (Danielle Dennie (chair), Tomasz Neugebauer, Susie Breier, Luigina Vileno, Jared Wiercinski, Jean-Marc Edwards)
- 2011-2013: Revisions to the project plan
- Fall 2013: Applications approved for:
  - Ethical acceptability for research involving human subjects
  - Funding from the Library Research Fund
  - Practicum student from McGill's SIS
- Winter 2013-2014: Internal data gathering
- January-March 2014: Study conducted

### THE PHILOSOPHY: USER-CENTRED DESIGN

# Norman (2002) describes **user-centred design** as:

A philosophy based on the needs and interests of the user, with an emphasis on making products usable and understandable (p.188).

#### REVISED & EXPANDED EDITION

## The DESIGN of EVERYDAY THINGS

"The Design of Everyday Things is even more relevant today than it was when first published."

-TIM BROWN, CEO of IDEO, author of Change by Design

DON

NORMAN

#### THE STANDARD: HUMAN-CENTRED DESIGN PROCESS



#### THE ELEMENTS OF USER EXPERIENCE (UX)





### CONCORDIA UNIVERSITY LIBRARY WEBSITE

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	Find books, articles	Research Guides by Subject	Help & Instruction	Using the Library	About the Libraries		

Hours A-Z Index Quick Links »

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#### 🗍 Mobile site

#### What's New

Find

- Hounded by exam stress? Meet one of our pet therapy dogs during your next study break
- Let us know more about how you use the library's website
- Share your opinions on the vision for the Webster Library Transformation

	Hours
ind books, articles	Suggestion box 🧨
CLUES Library Catalogue (Books & more)	Library tips
Course Reserves	Top 5 Things to Know About the Library
Databases (Articles & more)	
E-Journals	How do I
Interlibrary Loans (COLOMBO) & Article Delivery	<u>Renew books, etc.</u> <u>Print, Photocopy</u> and <u>Scan</u>
MetaFind	Use my laptop in the library
Online Reference (Dictionaries, Encyclopedias, & more)	<ul> <li><u>Connect to library resources from</u> off-campus</li> </ul>
Other Collections (Government information, Maps, & more)	<u>Suggest a purchase</u>
Spectrum Research Repository (Open Access)	Laptop/Tablet Availability (info)

#### METHODS







Pam, Tomasz, Danielle, and Luigina

- Goal: Learn about how participants use the library and uncover any knowledge gaps we might be able to fill with the library's website.
- Method: Semi-structured interview with 7-12 questions.



- Majority of students were searching for articles (more than books)
- Some students commented on their difficulty in finding the right database
- Every student (except engineers) were using citation guides
- Students were generally unaware of research guides and chat



- Goal: To gauge the user's level of understanding for items on our website.
- Method: Reviewing screenshots of the home page and "information for undergrads/grads" pages and telling us what they thought each link was for.



- Users are experiencing cognitive overload because we're presenting them with too much information
  - we have a tendency as librarians to make exhaustive lists
- Conceptual understanding of search
- Users don't understand library jargon and vague category labels



- Goal: Discover the natural language used by participants to describe library-related items.
- Method: Participants looked at eighteen different scenarios and got the opportunity to choose a name for a library service, place or thing from a multiple choice list or come up with their own name.





# **SITUATION:** YOU'RE LOOKING FOR A PLACE TO STUDY THAT'S SEMI-PRIVATE, QUIET, AND FREE OF DISTRACTIONS.

Thing: There is an area with this furniture.

#### What do you call this furniture?

## POSSIBLE ANSWERS



- a) Cubicle desk
- b) Study cubicle
- c) Study carrel
- d) Study desk
- e) Other:

#### **FINDINGS**

- Article delivery = Request PDF Delivery
- Information for undergraduates = Undergraduate Services
- Circulation desk = Checkout desk
- Workshops = Research training sessions
- Passarelle = Passageway
- Study carrel = Study cubicle
- Interlibrary loan = Interlibrary borrowing service
- Suggestion box = Feedback

- CLUES library catalogue = Library catalogue
- MyCLUES = My library account
- Discovery layer = Library search engine
- Research guides by subject = Library guides for your department
- Spectrum Research Repository = Concordia scholarship research repository
- CREPUQ/BCI card = Borrow from Quebec libraries



- Participants looked at index cards that were all labeled with a piece of web content (e.g. library fines) and asked to sort them twice.
- I. Sort them from most important to least important
- 2. Sort them into the groups you would like to see on the library website homepage and then name these groups.

### CARD SORTING TERMS - EXAMPLES

Search for articles in databases

Search for books in the library catalogue

My library account (log in)

Renew books

Login to RefWorks

Citation guides

How to print at the library

Look up library hours

Get card for borrowing books at other Quebec university libraries

sorting &

library thing

Library laptops + iPads

Search JSTOR, EBSCO and other databases

Book a study room

Request books and articles from libraries around the world

Find a study space in the library

I. Search for journal articles in databases	2. Search for your course textbooks on reserve		
3. My library account (log in)	4. Citation guides		
5. Search JSTOR, ProQuest, EBSCO and other databases	6. Search for books in the library catalogue		
7. Research guides by subject	8. Log in to RefWorks		
9. Request books and articles from libraries worldwide	10. Book a study room		
II. Renew books	12. Get card for borrowing books at other QC libraries		
13. Library laptops + iPads	14. Find a quiet study space in the library		
15. Look up library hours	16. Get help with writing		
17. Live chat with a librarian	18.Who's your librarian?		
19. How to print at the library	20. Library fines		
WHAT IS THE MOST	Calculated by adding the sum of all 24		

IMPORTANT TO USERS?

Calculated by adding the sum of all 24 participants' ranking of each term.

Frequent Item Sets			Card		
I. Citation guides $\rightarrow$ Get help with writing		Student interviews	Sorting & ranking		
2. Library fines $\rightarrow$ Look up library hours		Name	that library thing		
3. Research guides by subject $\rightarrow$ Search JSTOR, EBSCO and	d other databases	that library thing			
4. How to print at the library $\rightarrow$ Look up library hours		uning -			
5. How to print at the library $\rightarrow$ Book a study room					
6. How to print at the library $\rightarrow$ Find a study space					
7. Search for articles in databases $\rightarrow$ Search JSTOR, EBSCO and other databases					
8. Library laptops + iPads $\rightarrow$ Book a study room					
9. Library laptops + iPads $\rightarrow$ Find a study space in the library					
10. Book a study room $\rightarrow$ Find a study space in the library	<i>,</i>				
HOW USERS GROUPED	Calculated using freque	ent dat	tern mining		

CONTENT

# Calculated using frequent pattern mining with software R and an Excel spreadsheet.



### GENERAL OBSERVATIONS

- We only had I part-time faculty member participate and we didn't have anyone from fine arts
- Also a teaching experience, and an opportunity for marketing and outreach
- Students want contextual help
- Team work!
- Now we can make evidence-based decisions



#### ACKNOWLEDGEMENTS

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ISO. (2010). ISO 9241-210:2010: Ergonomics of human-system interaction – Part 210: Human-centred design for interactive systems. Geneva: International Standards Organization.

# QUESTIONS AND COMMENTS?

Thank you

omg math! much data mining so natural language very statistical analysis such real-world application