

Minority Report: Usability studies for MetaLib interface optimisation

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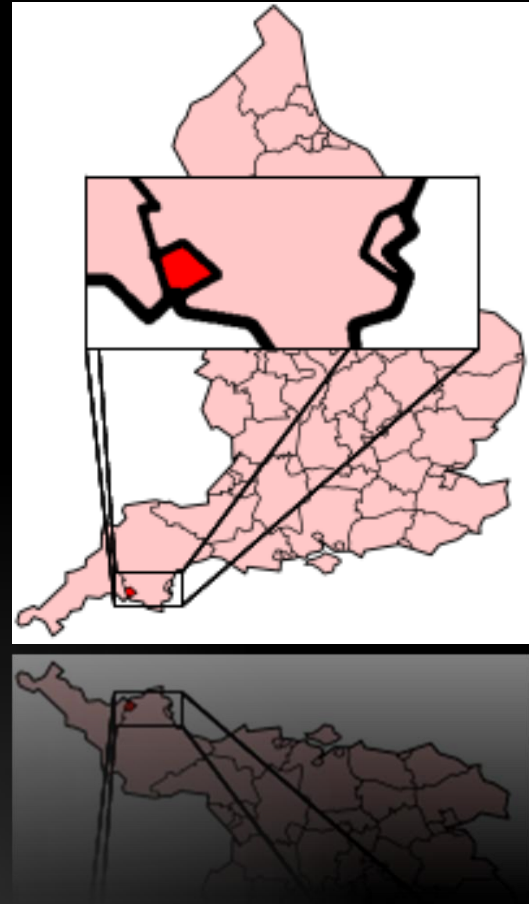
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IGeLU Conference 2008, Madrid, Spain
7-10 September 2008

- Background
- Implementing MetaLib
- Usability evaluation
 - Methodology
 - Findings
- User satisfaction survey
 - Methodology
 - Findings
- The value of talking to the user

- Plymouth, UK



Source: Wikipedia

Outline

Roland Levinsky Building (Faculty of Arts)
© www.plymouth.co.uk



The University

- 5th largest UK Higher Education Institution
- 22359 students*
- 1287 academic staff*
- 1606 non-academic staff*
- Strong regional links
- Distance learning / Mature
- Convergence and site redevelopment
- Space / Resources

*Source: SCONUL Return 2005-06

- ILS converged service
- 100+ staff*
- 500,000+ Books*
- 4300 unique serial titles*
- 32 Electronic Resource packages*
- Growing e-content provision

- Voyager (2004)
- SFX (2006)
- MetaLib (2007)
- Verde (2007)

The Library



*Source: SCONUL Return 2006-07



- A single point of access to all e-resources with cross-search options
- Challenges:
 - Subject requirements
 - User requirements
 - Database quirks
 - Search options
 - Complex out-of-the-box interface
 - One size fits all?

MetaLib



E-Resources Development (5)

Project management + Technical support

Subject Librarians (3)

Resource selection + configuration



Document Delivery Librarian (1)



Enquiries Librarian (1)

User



Implementation

User



- We already know...
 - More resources
 - More full-text
 - Easy access
 - Access everywhere
 - Fast and accurate search
- ... so what's the point in asking?
 - Observe users' behaviour
 - Build relationships
 - Establish priorities
 - We could be wrong!

What do they really want?

Yes but...

It will be expensive

We don't have the resource



Not necessarily – you can get excellent results with low budget

What if they say something we don't want to hear?



If you know about it you can find a solution

Will it make us redundant?



Roles change

We might not be able to change things anyway



Important to manage expectations

Common objections

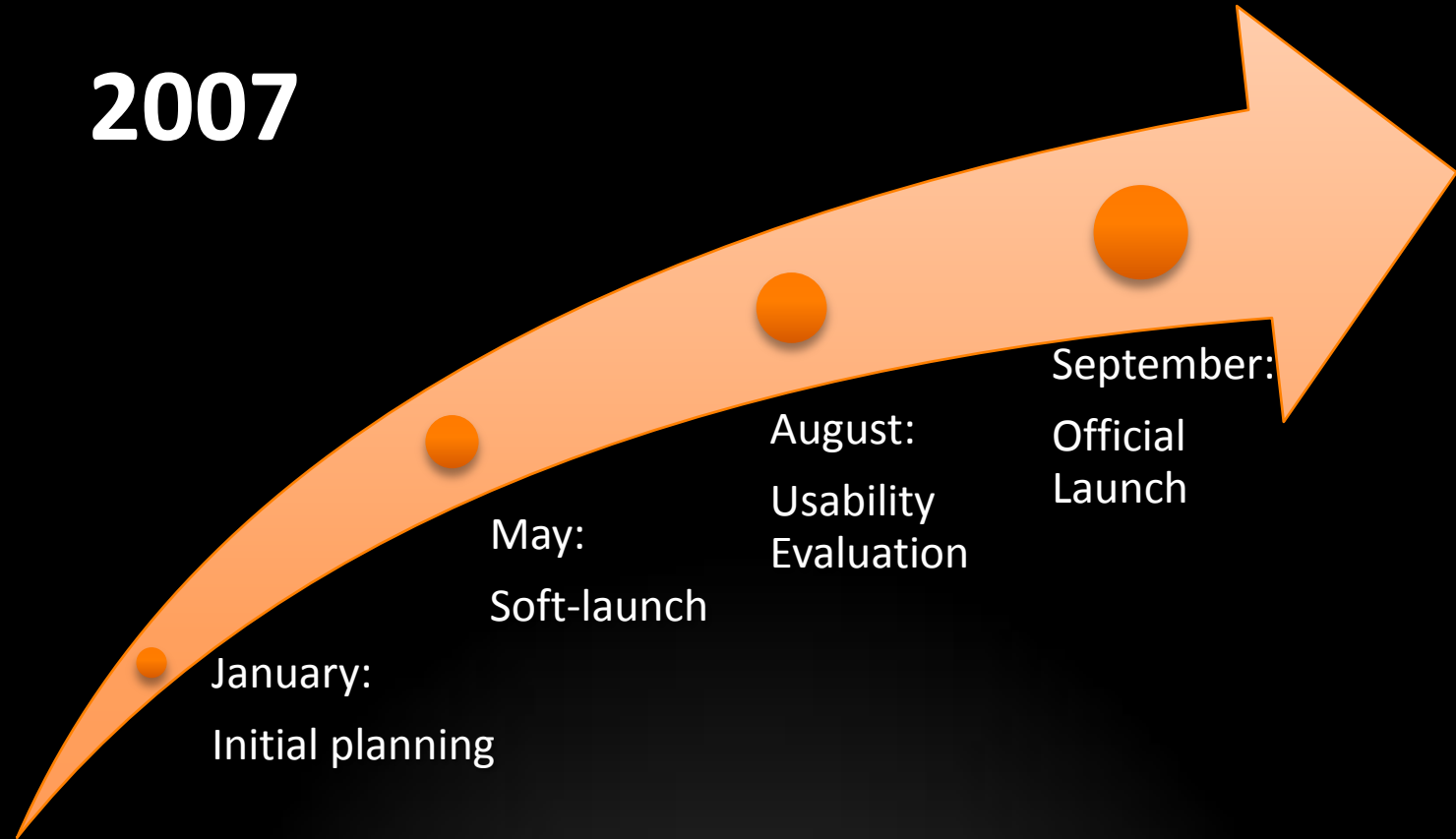
“The extent to which a product can be used by specified users to achieve specified goals **with effectiveness, efficiency and satisfaction** in a specified context of use.”

Part 11, ISO 9241 standard
(BSI, 1998)



Usability

2007



Project timeline

Task Description

For the purpose of this evaluation, please remember the following:

- Please think aloud during the whole evaluation, in particular if you find anything unusual and things don't work as you would expect.
- Although you will see a time estimate next to each task, you do not need to concern yourself with it. Each task (and the evaluation) will finish when you reach the end or when the evaluator tells you.
- Please remember it is the system and not you who is under observation.

Task 1. Explore MetaLib 5 min
You can click anywhere you like. While you explore, tell us what you are thinking.
What do you expect to see? Does MetaLib match this expectation?

Task 2. Log in to MetaLib 1 min

Task 3. Tab description 4 min
1. Looking at each tab:

- Basic Search
- Subject Resources
- E-Journals A-Z
- MetaSearch
- My MetaLib

2. Tell us what you think they do. What functions would you expect to access by clicking on each tab?
3. Now click on the tabs. Does what you see match your expectations?

PTO

Task 4. Find a resource in a subject of your choice 5 min
Tell us what you think. Does MetaLib behave as you would expect?

Task 5. Subject Resources 1 min

1. Go to 'Subject Resources'
2. Find the 'Times Digital Archive'.
3. Now find 'Web of Knowledge'

Task 6. Preset Search 9 min

1. Go to 'Basic Search'
2. Select the 'Health + Social Work' quickset
3. Enter 'diabetes and children' in the search box.
4. Select the 'GO' button
5. Explain the results you have obtained (follow some links and explore the page as you would in normal circumstances)

~ End of the Evaluation ~



2007

Usability Task Description - MetaLib.doc
 Created by: B. Henderson-King (BKH)
 Last revised: 24 August 2007

Page 1 of 2

- Users should be able to:
 - Login to MetaLib
 - Navigate MetaLib
 - Search within preset cluster
 - Advanced search selecting preferred resources
 - Interpret the results
 - Access resources in native interface via MetaLib

Usability requirements

- Video-camera
- Microphone
- Screen capturing software
- Other data collection
 - Pre-evaluation questionnaire
 - Evaluator notes
 - Post-evaluation questionnaire



The evaluation room

By Faculty		By Role	
Arts	1	Academic	4
Health + Social Work	1	PostGrad Student	3
Science	4	UnderGrad Student	3
Social Science + Business	2		
Technology	2		
Total	10		10

The participants

Setting up	Greetings	5 min
	Collect participant's consent form	
	Fit microphone and start recordings	
Introduction	Introduce participant to UI	5 min
	Brief them on task	
Observation	Observe participant completing task(s)	25 min
De-brief / Interview	Discussion and post- evaluation questionnaire	20 min
Close	Participant to complete claim form	5 min
	Thanks and closing session	
Total		60 min

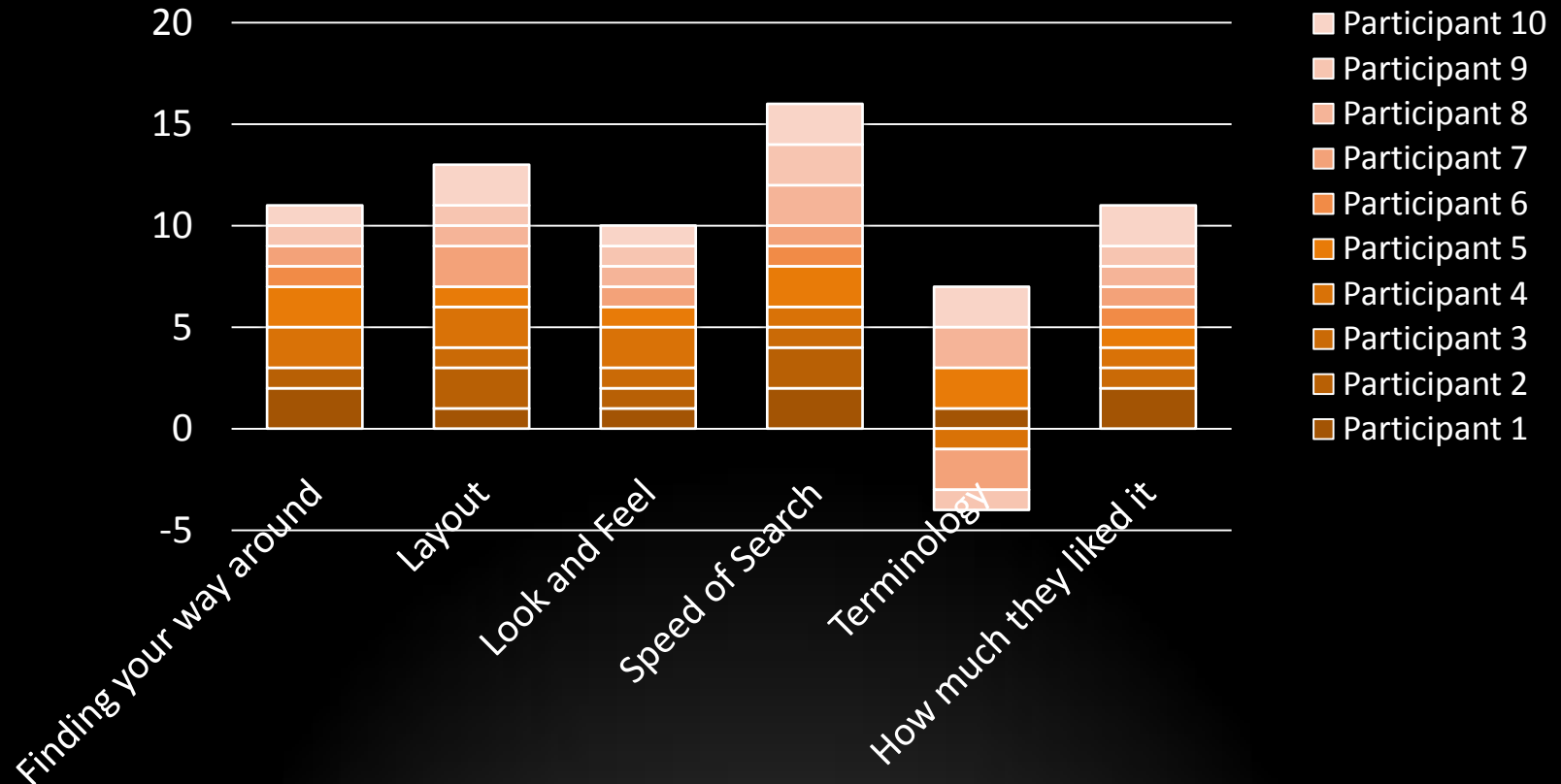
The session

- Source: Pre-evaluation questionnaire

Place	Feature	Score
1	Direct access to Full Text	48
2	Ease of use	46
3	Cross-search	44
4	Customise search	41
5	Save favourites	41
6	Direct access to citation	41
7	Save own searches	40
8	Look and feel	37

Results: Features of an Electronic Library

- Source: Post-Evaluation questionnaire



Results: Evaluation of MetaLib (quantitative)

Problem areas

1. Global
2. Login
3. Basic Search
4. MetaSearch
5. Subject Resources
6. Results
7. Other

Eg, Journal A-Z, My MetaLib,
search in progress...

Defect type

- Configuration
- Design
- System
- Terminology
- User Education

Defect severity

- Critical / high / medium / low

Results: Usability defects (qualitative)

USABILITY DEFECTS

Number	Area	Affected	Usability Defect Description
6.2	Results	6	Participant was confused by term “Add to basket” and associated feedback (system return after pressing the button)

RECOMMENDATIONS

Usability Defect Type	Rating	Evaluator’s comments and recommendations
Terminology / System	High	Change terminology Report to Ex Libris: user’s action should return appropriate feedback from the system

Results: Usability defects (qualitative)

Severity	Defect	Recommendations
Critical	Users could not differentiate between MetaLib screens	Reorder tabs Add descriptions to top of the page Help and training development
High	Ambiguous terminology	Review labelling throughout
High	Back button behaviour	Report to Ex Libris Rename “Table View” Help and training development
High	Information button not obvious	Redesign Reorder columns in Subject Resources
High	Login is not obvious to users	1. Force login page 2. Build single-sign -on

Examples of findings



MetaLib

ELECTRONIC LIBRARY

MetaLib is the gateway to all Library electronic resources. [Find out more](#)

Login to MetaLib

Please log in with your University username and password.

Username:

Password:

Login

Help and Support

[About MetaLib](#)

[Login problems?](#)

[MetaLib Help Guides](#)

[ILS Self-Help](#)

Useful Links

[E-journals A-Z](#)

[ILS Home](#) (access to other information and resources)

Interface changes: New login page

MetaLib ELECTRONIC LIBRARY

Basic Search | MetaSearch | Find Resources | e-Journals A-Z | My MetaLib | Log Out | Help

Search | Results | Elena Menendez-Alonso

Basic Search

Basic Search allows you to choose a subject 'quickset' to search a range of core resources. [Basic Search help guide](#)

1. Enter search term(s): **GO**

2. Select 1 set from the options below:

QuickSets

- ☐ **Arts**
Architecture+Design, Art+Perfor ...
- ☐ **Business/Management**
Tourism, Hospitality, Event ...
- ☐ **Biology/Life Sciences**
Marine Biology, Animal Science ...
- ☐ **Education**
Early Childhood Studies and ...
- ☐ **Computing/Comms+Electronics**
Electronics, Computing, ...
- ☐ **Earth/Ocean/Environment**
Chemistry, Geosciences, Marine ...
- ☐ **Health + Social Work**
Nursing and Allied Health ...
- ☐ **Engineering**
Construction, Civil, ...
- ☐ **Geography**
Human and Physical Geography
- ☐ **Maths + Stats**
Mathematics and statistical ...
- ☐ **Humanities**
English, History + American ...
- ☐ **Law**
All legal topics
- ☐ **Social Sciences**
Criminal Justice, Politics, ...
- ☐ **Medicine + Dentistry**
PCMD and Clinical Psychology ...
- ☐ **Psychology**
Clinical Psy included

Powered by MetaLib

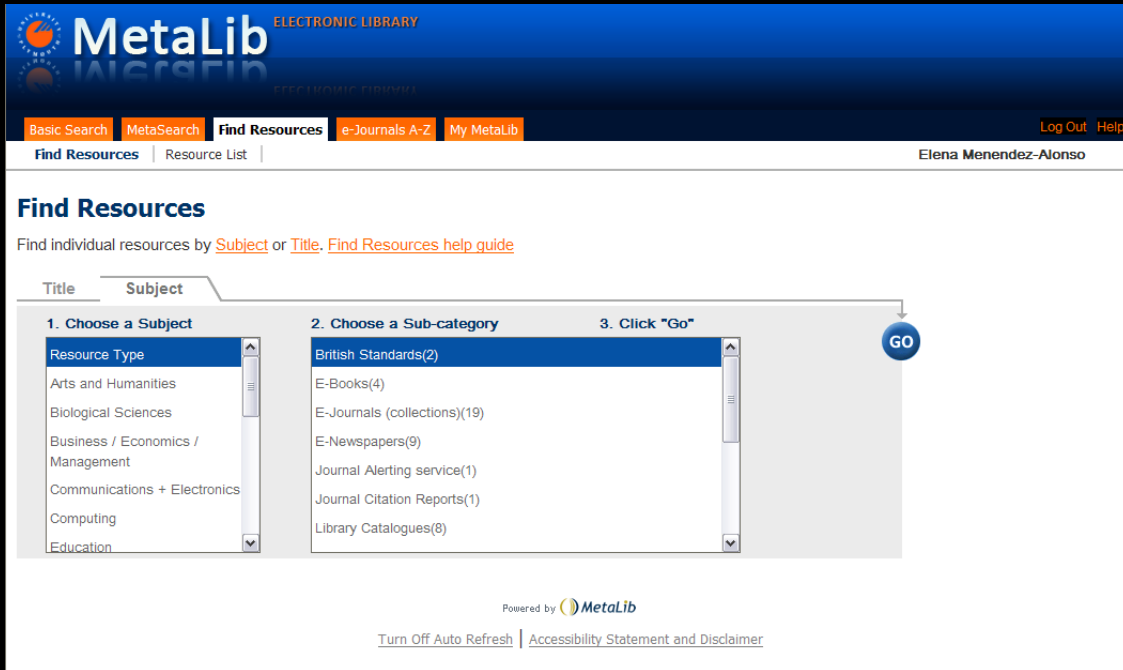
[Turn Off Auto Refresh](#) | [Accessibility Statement and Disclaimer](#)

- Aiding navigation and usability
 - Reordered pages
 - Added page description
 - Added link to user guide
 - Added step by step instructions

Interface changes: All pages

- Aiding navigation and usability
 - Labelling
 - Moved ⓘ button next to database name
 - Removed unnecessary detail from information popup

Interface changes: MetaSearch



- Terminology
 - Find Databases →
 - Subject Resources →
 - Find Resources**
- Aiding navigation and usability
 - Labelling
 - Added links to Subject / Title

Interface changes: Find Resources

MetaLib ELECTRONIC LIBRARY

Basic Search | MetaSearch | Find Resources | e-Journals A-Z | My MetaLib | Log Out | Help

Find Resources | **Resource List** | Elena Menendez-Alonso

Resource List

Search for "Subject=Science, Sub-Category=Chemistry" found 27 Resources

① Information & access details

Results Table [Results List](#)

ABAFR - Voyager Go to [MetaSearch](#) <Previous [Next](#)>

Resource Name	Actions
ABAFR (Aquatic Biology, Aquaculture & Fisheries) ①	+
ACM Digital Library ①	+ 🔍
Alchemist ①	+
ANTE (CSA) ①	+ 🔍
ASSIA (CSA) ①	+ 🔍
Blackwell Synergy (Now WILEY INTERSCIENCE) ①	+ 🔍
British Humanities Index (CSA) ①	+ 🔍
Business Source Premier (EBSCO) ①	+ 🔍
Chemdex ①	+
EurekAlert ①	+

- Terminology

Add to clipboard >>
Add to selected
resources

- Aiding navigation
and usability

- Moved ① button
next to database
name
- Added key to ①

Interface changes: Find Resources

MetaLib ELECTRONIC LIBRARY

Basic Search | MetaSearch | Find Resources | e-Journals A-Z | My MetaLib | Log Out | Help

Search | Results | Elena Menendez-Alonso

Basic Search Results

Search for ""twelfth night"" in "Full Text" found 112791 results

[Search & Link Results](#) [Summary](#)

Results Table [Results List](#) [Single Record](#) Sort by: Rank

1- 10 of 50 records retrieved ([retrieve more](#)) [MetaSearch](#)

No.	Rank	Author	Title	Year	Database	Action
1		THOMAS, CATHERINE	Nunn's Sweet Transvestite: Desiring Viola in <i>Twelfth Night</i>	2008	SwetsWise	Full Text
2		Gross, Kenneth.	Twelfth Night (review)	2002	SwetsWise	Full Text
3		Merwin, Ted.	Twelfth Night	1999	SwetsWise	Full Text
4		Mulhall, Stephen	A solemn combination of souls: a reading of Twelfth night	1998	SwetsWise	Full Text
5		Stephen Mulhall	A solemn combination of souls: a reading of Twelfth night	1998	Taylor & Francis Full Text Collection	Full Text
6		Charles, Casey.	Gender Trouble in Twelfth Night	1997	SwetsWise	Full Text
7		Daalder, Joost	Perspectives of madness in twelfth night	1997	SwetsWise	Full Text
8			1 TWELFTH NIGHT	1994	Taylor & Francis Full Text Collection	Full Text
9			'And all is semblative a woman's part': body politics and Twelfth Night	1993	Taylor & Francis Full Text Collection	Full Text
10			8 - INTERCULTURALISM IN CONTEMPORARY MISE EN SCENE: THE IMAGE OF INDIA IN THE MAHABHARATA, THE INDIAN TWELFTH NIGHT AND FAUST	1991	Taylor & Francis Full Text Collection	Full Text

1- 10 of 50 records retrieved ([retrieve more](#)) [MetaSearch](#)

[Narrow your search:](#)

TOPICS

- [Twelfth Night](#) (13)
- [X201d](#) (3)
- [Bibliography](#) (2)
- [Prelims](#) (2)
- [Men Who Love Themselves...](#) (2)

DATES

- [2008](#) (4)
- [2007](#) (3)
- [2005](#) (2)
- [1999](#) (12)
- [1998](#) (5)

JOURNAL TITLES

- [Shakespeare Without Wo...](#) (10)
- [As She Likes It, Shake...](#) (9)
- [Shakespeare](#) (6)
- [The Lancet](#) (6)
- [Theatre Journal](#) (3)

- Terminology

Table View >> Results Table

Brief View >> Results List

Full View >> Single Record

Add to basket >> Add to selected Results

- Aiding navigation and usability

- Facets column: "Narrow your search:"

Interface changes: Results



- Terminology

My Space >> My
MetaLib

eShelf >> My Results

My Databases >> My
Resources

History >> My
Searches

eShelf Advanced >>
Manage

eShelf Selected >>
Export

Interface changes: My MetaLib

- Optional online survey
- Run 2 weeks in January 2008
(3 months after official launch)
- Open to all
- Incentive: iPod shuffle
- 8 questions

Metalib Survey

The purpose of this survey is to collect information about your experience and usage of the library. Your responses are confidential and will be used for research purposes only.

1. What is your current use of the library?

☐ Regularly
☐ Occasionally
☐ Rarely
☐ Never

2. What factors influence your library usage?

Rate: Frequency: Quality: Value: Cost: Other:

3. What factors influence your library usage?

Factor	Rate	Frequency	Quality	Value	Cost	Other
Staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Location	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. What factors influence your library usage?

☐ Cost
☐ Quality
☐ Frequency

5. What factors influence your library usage?

☐ Cost
☐ Quality
☐ Frequency

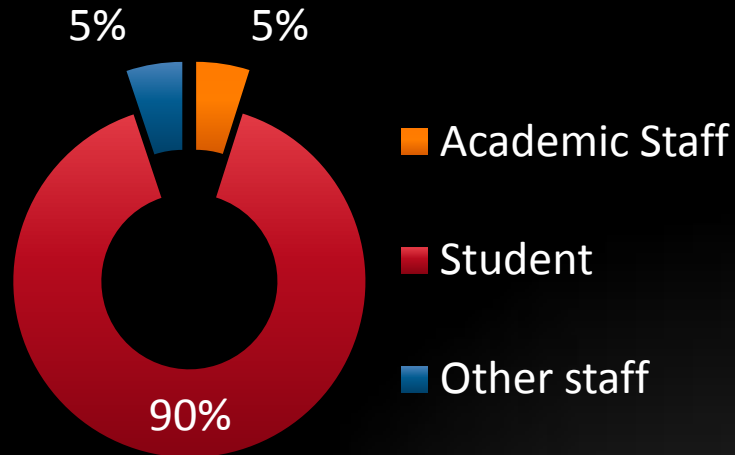
complete our
MetaLib survey
and you could win an...



User satisfaction survey

By role

- 1272 responses in total (5%)



Response

By Faculty / Department

Arts	7%
Education	4%
Health & Social Work	18%
Science	33%
Social Science & Business	22%
Technology	5%
Peninsula College of Medicine and Dentistry	1%
University of Plymouth Colleges	4%
Support Services	4%

Most used

- Basic Search
- E-Journals A-Z
- Find Resources
- MetaSearch

Least used

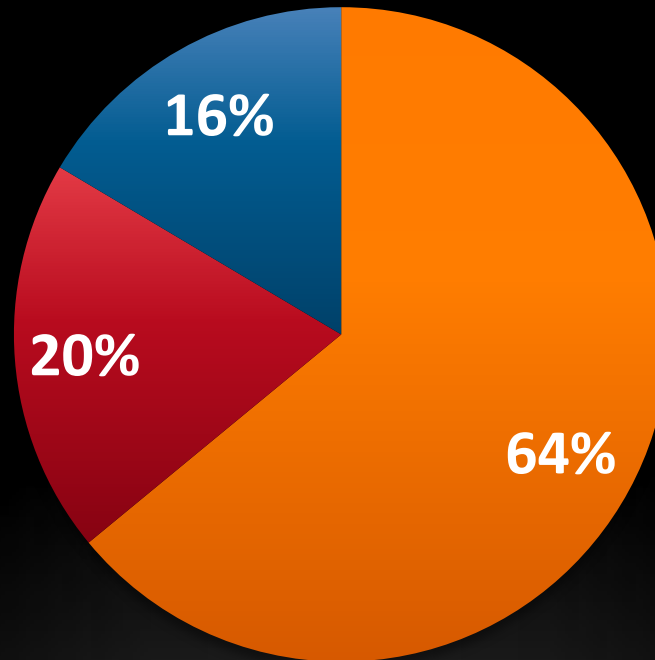
- Help guides
- Built-in help
- Personal quick sets
- My MetaLib

- 36% had not heard of Quick Sets
- 15 – 18 % were not aware of MetaLib help, help guides or My MetaLib

MetaLib functions

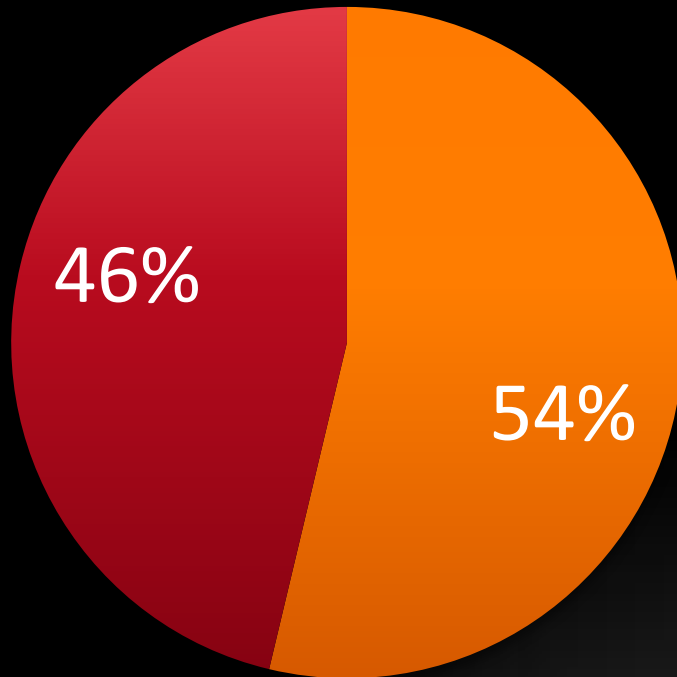
- Default: Basic Search

■ Keep as it is ■ MetaSearch ■ Find Resources



Search Preferences

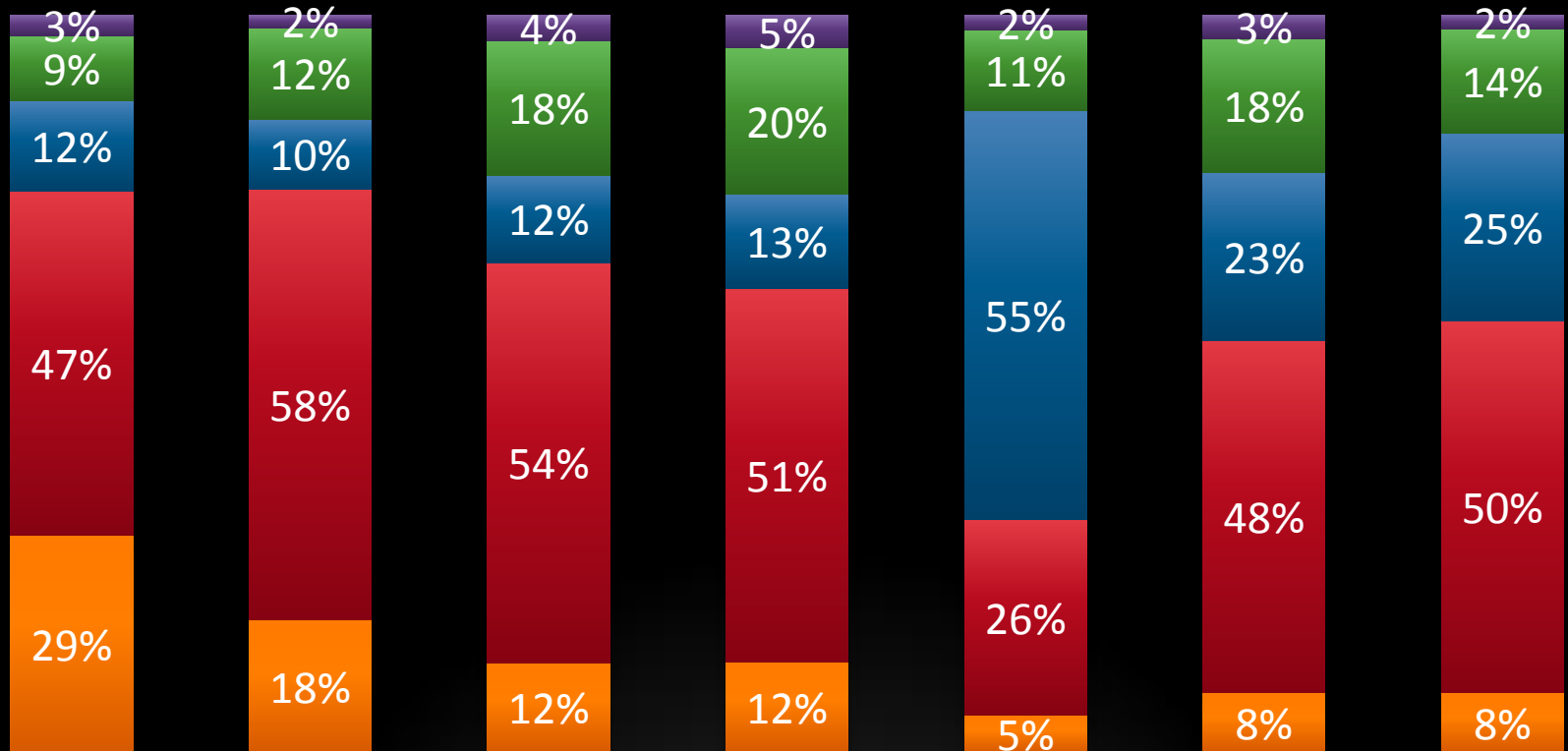
■ Yes ■ No



Training

- Reasons:
 - Unaware (35%)
 - Unsuitable time / location (24%)
 - Not needed (23%)
 - None available (12%)
 - Personal preference (6%)
- Of those who attended training, **94%** found it **helpful** or very helpful

■ Very good
 ■ Good
 ■ No opinion
 ■ Poor
 ■ Very poor



Log-in Search speed Quality of results Ease of use Help and support Layout and navigation Look and feel

MetaLib Performance



- How does MetaLib compare to previous system?
 - Better → 28%
 - The same → 27%
 - Worse → 20%
 - Can't compare* → 25%

*MetaLib first experience of e-resources

- Taking out those who can't compare:
 - Better → 37%
 - The same → 36%
 - Worse → 27%
- 53% Academics thought their experience with MetaLib was worse

System preference

- Responses varied by Faculty and role
- Areas of concern:
 - Too many steps
 - Too many logins
 - More full-text needed
 - Articles incorrectly labelled full-text
 - Difficult to use (mostly coming from those who had no training)
 - Time-out is annoying
 - Prefer to go directly to database

Other findings

- Added “Full Text” Quick Set

MetaLib ELECTRONIC LIBRARY

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QuickSets

- ☒ **Full Text**
- ☐ **Arts**
Architecture+Design, Art+Perfor ...
- ☐ **Biology/Life Sciences**
Marine Biology, Animal Science ...
- ☐ **Business/Management**
Tourism, Hospitality, Event ...
- ☐ **Computing/Comms+Electronics**
Electronics, Computing, ...
- ☐ **Earth/Ocean/Environment**
Chemistry, Geosciences, Marine ...
- ☐ **Education**
Early Childhood Studies and ...
- ☐ **Engineering**
Construction, Civil, ...
- ☐ **Geography**
Human and Physical Geography
- ☐ **Health + Social Work**
Nursing and Allied Health ...
- ☐ **Humanities**
English, History + American ...
- ☐ **Law**
All legal topics
- ☐ **Maths + Stats**
Mathematics and statistical ...
- ☐ **Medicine + Dentistry**
PCMD and Clinical Psychology ...
- ☐ **Psychology**
Clinical Psy included
- ☐ **Social Sciences**
Criminal Justice, Politics, ...

Powered by **MetaLib**

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Interface changes



- Working on “single-sign on”
- Measures to increase uptake from support services
- Address misconceptions
- Communications
- “Personalised” and targeted training
- Local Faculty action plan
- Staff / student portal?

Other outcomes

- Was it worth it?
 - Yes
 - Learnt about MetaLib and our users
 - Lessons learnt:
 - Resource demands (volume of data per usability participants)
 - Manage expectations
 - Some changes not possible without Ex Libris
 - Weigh everyone's views
 - "Minority report"
 - Iteration

Conclusions

- MetaLib Project Implementation Team:

- Stephanie Burrell

- Jayne Moss

- Amanda Southam

- Fiona Greig

- Peter Price

- Graham Titley

- Vicki Maguire

- George Vernon

- Kate Wheadon

- Technical support and audio/video editing:

- Garren Baker

- University of Plymouth participants

- Ex Libris

>> you <<

Thank you

