Minority Report: Usability studies for MetaLib interface optimisation

Elena Menéndez-Alonso
Electronic Resources Development Officer
Information and Learning Services
University of Plymouth (UK)

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

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

Plymouth, 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)

*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?
E-Resources Development (5)
Project management + Technical support

Subject Librarians (3)
Resource selection + configuration

Document Delivery Librarian (1)

Enquiries Librarian (1)

Implementation
What do they really want?

- 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!
Yes but...

<table>
<thead>
<tr>
<th>Objection</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>It will be expensive</td>
<td>Not necessarily – you can get excellent results with low budget</td>
</tr>
<tr>
<td>We don’t have the resource</td>
<td></td>
</tr>
<tr>
<td>What if they say something we don’t want to hear?</td>
<td>If you know about it you can find a solution</td>
</tr>
<tr>
<td>Will it make us redundant?</td>
<td>Roles change</td>
</tr>
<tr>
<td>We might not be able to change things anyway</td>
<td>Important to manage expectations</td>
</tr>
</tbody>
</table>
“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)
Project timeline

2007

January:
Initial planning

May:
Soft-launch

August:
Usability Evaluation

September:
Official Launch

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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
<table>
<thead>
<tr>
<th>By Faculty</th>
<th>By Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td>Academic</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Health + Social Work</td>
<td>PostGrad Student</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Science</td>
<td>UnderGrad Student</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Social Science + Business</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

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

The session
Results: Features of an Electronic Library

- Source: Pre-evaluation questionnaire

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

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Results: Evaluation of MetaLib (quantitative)

Source: Post-Evaluation questionnaire

- Finding your way around
- Layout
- Look and Feel
- Speed of Search
- Terminology
- How much they liked it

Participant 10
Participant 9
Participant 8
Participant 7
Participant 6
Participant 5
Participant 4
Participant 3
Participant 2
Participant 1

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Results: Usability defects (qualitative)

<table>
<thead>
<tr>
<th>Problem areas</th>
<th>Defect type</th>
<th>Defect severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Global</td>
<td>• Configuration</td>
<td>• Critical / high / medium / low</td>
</tr>
<tr>
<td>2. Login</td>
<td>• Design</td>
<td></td>
</tr>
<tr>
<td>3. Basic Search</td>
<td>• System</td>
<td></td>
</tr>
<tr>
<td>4. MetaSearch</td>
<td>• Terminology</td>
<td></td>
</tr>
<tr>
<td>5. Subject Resources</td>
<td>• User Education</td>
<td></td>
</tr>
<tr>
<td>6. Results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eg, Journal A-Z, My MetaLib,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>search in progress…</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Results: Usability defects (qualitative)

### Usability Defects

<table>
<thead>
<tr>
<th>Number</th>
<th>Area</th>
<th>Affected</th>
<th>Usability Defect Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2</td>
<td>Results</td>
<td>6</td>
<td>Participant was confused by term “Add to basket” and associated feedback (system return after pressing the button)</td>
</tr>
</tbody>
</table>

### Recommendations

- **Usability Defect Type**: Terminology / System
- **Rating**: High
- **Evaluator’s comments and recommendations**
  - Change terminology
  - Report to Ex Libris: user’s action should return appropriate feedback from the system
<table>
<thead>
<tr>
<th>Severity</th>
<th>Defect</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical</td>
<td>Users could not differentiate between MetaLib screens</td>
<td>Reorder tabs&lt;br&gt;Add descriptions to top of the page&lt;br&gt;Help and training development</td>
</tr>
<tr>
<td>High</td>
<td>Ambiguous terminology</td>
<td>Review labelling throughout</td>
</tr>
<tr>
<td>High</td>
<td>Back button behaviour</td>
<td>Report to Ex Libris&lt;br&gt;Rename “Table View”&lt;br&gt;Help and training development</td>
</tr>
<tr>
<td>High</td>
<td>Information button not obvious</td>
<td>Redesign&lt;br&gt;Reorder columns in Subject Resources</td>
</tr>
<tr>
<td>High</td>
<td>Login is not obvious to users</td>
<td>1. Force login page&lt;br&gt;2. Build single-sign-on</td>
</tr>
</tbody>
</table>

**Examples of findings**
Interface changes: New login page
Aiding navigation and usability
- Reordered pages
- Added page description
- Added link to user guide
- Added step by step instructions
Interface changes: MetaSearch

- Aiding navigation and usability
  - Labelling
  - Moved button next to database name
  - Removed unnecessary detail from information popup
Interface changes: Find Resources

- Terminology
  - Find Databases →
  - Subject Resources →
  - **Find Resources**

- Aiding navigation and usability
  - Labelling
  - Added links to Subject / Title
Interface changes: Find Resources

• Terminology
  Add to clipboard >>
  Add to selected resources

• Aiding navigation and usability
  ◦ Moved button next to database name
  ◦ Added key to
### Terminology

- **Table View >> Results**
- **Brief View >> Results**
- **List**
- **Full View >> Single Record**
- **Add to basket >> Add to selected Results**

### Aiding navigation and usability

- **Facets column:** "Narrow your search:"

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**Interface changes: Results**
Interface changes: My MetaLib

- Terminology
  - My Space >> My MetaLib
  - eShelf >> My Results
  - My Databases >> My Resources
  - History >> My Searches
  - eShelf Advanced >> Manage
  - eShelf Selected >> Export
• Optional online survey
• Run 2 weeks in January 2008 (3 months after official launch)
• Open to all
• Incentive: iPod shuffle
• 8 questions

User satisfaction survey
By role

- 1272 responses in total (5%)

By Faculty / Department

<table>
<thead>
<tr>
<th>Department</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td>7%</td>
</tr>
<tr>
<td>Education</td>
<td>4%</td>
</tr>
<tr>
<td>Health &amp; Social Work</td>
<td>18%</td>
</tr>
<tr>
<td>Science</td>
<td>33%</td>
</tr>
<tr>
<td>Social Science &amp; Business</td>
<td>22%</td>
</tr>
<tr>
<td>Technology</td>
<td>5%</td>
</tr>
<tr>
<td>Peninsula College of Medicine and Dentistry</td>
<td>1%</td>
</tr>
<tr>
<td>University of Plymouth Colleges</td>
<td>4%</td>
</tr>
<tr>
<td>Support Services</td>
<td>4%</td>
</tr>
</tbody>
</table>
**MetaLib functions**

**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
Search Preferences

- Default: Basic Search

- Keep as it is: 64%
- MetaSearch: 20%
- Find Resources: 16%
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.

Yes: 46%
No: 54%
MetaLib Performance

Log-in: 29% Very good, 18% Good, 12% No opinion, 12% Poor, 3% Very poor
Search speed: 58% Very good, 12% Good, 10% No opinion, 12% Poor, 2% Very poor
Quality of results: 54% Very good, 12% Good, 13% No opinion, 26% Poor, 8% Very poor
Ease of use: 51% Very good, 12% Good, 12% No opinion, 5% Poor, 5% Very poor
Help and support: 48% Very good, 13% Good, 23% No opinion, 8% Poor, 2% Very poor
Layout and navigation: 50% Very good, 12% Good, 13% No opinion, 8% Poor, 2% Very poor
Look and feel: 8% Very good, 12% Good, 12% No opinion, 8% Poor, 2% Very poor

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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
Other findings

- 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
• Added “Full Text”
Quick Set

Interface changes
Other outcomes

- 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?
• 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
• MetaLib Project Implementation Team:
  ◦ Stephanie Burrell
  ◦ Fiona Greig
  ◦ Vicki Maguire
  ◦ Jayne Moss
  ◦ Peter Price
  ◦ George Vernon
  ◦ Amanda Southam
  ◦ Graham Titley
  ◦ Kate Wheadon

• Technical support and audio/video editing:
  ◦ Garren Baker

• University of Plymouth participants

• Ex Libris

>> you <<

Thank you