What do Primo users want?

or finding evidence to understand user behaviour in Primo

Megan Lee & Rachelle Orodio

IGeLU 2019
<table>
<thead>
<tr>
<th>Most important</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library staff provide accurate answers to my enquiries</td>
<td>1</td>
</tr>
<tr>
<td>I can get wireless access in the Library when I need to</td>
<td>2</td>
</tr>
<tr>
<td>I can get help from Library staff when I need it</td>
<td>3</td>
</tr>
<tr>
<td>The Library Search facility enables me to find Library resources quickly</td>
<td>4</td>
</tr>
<tr>
<td>Access to Library information resources has enabled me to perform better in my studies</td>
<td>5</td>
</tr>
<tr>
<td>Online resources (e.g. ejournals, databases, ebooks) meet my learning and research needs</td>
<td>6</td>
</tr>
<tr>
<td>When I am away from campus I can access the Library resources and services I need</td>
<td>9</td>
</tr>
</tbody>
</table>
USER FEEDBACK

• The online portal for accessing journal articles is very slow and bulky.

• Accessing articles through the library search portal takes way too many steps.

• Online resource availability tends to be very good although search results can be hard to navigate.

• Some links online for certain articles link to a different article, it makes it hard to find the actual journal article you need when the links don't work
STRATEGIC OBJECTIVES

• Develop discovery and access pathways to information
• Enhance the online Library environment
PROJECT OBJECTIVES

• Investigate if Primo user interface usability is improved by focusing on heavily used screen elements
• Investigate if Primo user interface usability is improved by simplify the number of elements present in the Primo screen design
• Based on user feedback, investigate if Primo search results are more relevant when search metadata is simplified
• Improve Primo search results by analysing zero search results
• Investigate user acceptance of FRBRisation
• Investigate user acceptance of application plug-ins to extend Primo functionality, eg Browzine integration at detail results screen
SUCCESS FACTORS

- Improved feedback on Primo usability in 2019
  Library user survey (in progress)
- Improved Primo user search metrics in 2019
  Library Annual Report (in progress)
- Improved user feedback collected either directly
during three month post implementation survey or
via ask.monash
- Positive feedback from Road Shows conducted at
various branches, reported to IRSC and LMC as a
result of Primo usability review
- Data collected from embedded feedback utility, as
a basis for the three month post implementation
review
<table>
<thead>
<tr>
<th>Month</th>
<th>Preparation</th>
<th>Analysis</th>
<th>Communication</th>
<th>Testing</th>
<th>Maintenance</th>
<th>Development</th>
<th>RELEASE</th>
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<tbody>
<tr>
<td>October</td>
<td></td>
<td>Analyze past user behavior log data</td>
<td>Report on Primo user patterns in log analysis to SDS &amp;</td>
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<td>Develop user testing scenarios</td>
<td>Install November Primo Service Pack</td>
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<tr>
<td>March</td>
<td>Test and evaluate third party plug ins</td>
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<td>May</td>
<td>analyze first round of user testing</td>
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<td>June</td>
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<tr>
<td>August</td>
<td>analyze second round of user testing</td>
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<tr>
<td>September</td>
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<tr>
<td>October</td>
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<tr>
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<td><strong>RELEASE</strong></td>
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</tbody>
</table>
PRIMO USER BEHAVIORAL TRENDS

• a year’s worth of Primo usage logs from our Primo server

• Primo and Alma analytics and

• Google analytics
RESEARCH DATASET 1

https://tinyurl.com/y5k4nzr4
RESEARCH QUESTIONS

• How do users search in Primo?
• Where do they start their searches?
• Which screen elements do they use most heavily, and which they ignore and
• What can we understand from how users structure their searches?
Primo landing page

Sign-in link

Source Primo analytics

Search launch Interface

Selected Scopes

Popular databases
- Advanced
- Citation linker

Online articles
- Basic
- Advanced
- Citation linker

Library collections & Rare Books
- Basic
- Advanced
- Citation linker

All resources

Sessions signed in
Sessions not signed in

Source Primo analytics
Primo result refining function categories

1. Narrowing search results
2. Broadening search results
3. Personalising search results and
4. Saving search results or user information for reuse
Navigating brief results

45% of Primo actions were Resource availability seeking actions

Source Primo analytics
Narrowing by facets

Refining search results by facets

- Topic: 20,733
- Top level: 292,942
- Resource Type: 189,317
- Local 02 (SCRR): 504
- Library: 17,578
- Language: 6,786
- Genre: 737
- Date Slider: 114,893
- Creation Date: 398
- Collection: 1,613
- Author: 1,380

Source: Primo analytics

Search results filtered by subfacet:

- Top level > Peer Reviewed Journals
- Top level > Full Text Online
- Resource Type > reading_lists
- Resource Type > loose_leaf
- Resource Type > datasets
- Resource Type > Websites
- Resource Type > Text Resources
- Resource Type > Statistical Data Sets
- Resource Type > Reviews
- Resource Type > Other
- Resource Type > Media.
- Resource Type > Maps
- Resource Type > Journals
- Resource Type > Dissertations
- Resource Type > Conference...
- Resource Type > Audio-Visual
- (SCRR) Local 02
- Language
- Creation Date
- Author
5% of Primo search actions were “Item detail” refining actions.

Source Primo analytics
Navigating by sorting

0.35% of Primo search actions were “sort by” actions.

Source Primo analytics
Narrowing by citations & recommender

0.1% of Primo search actions were Citation & recommender activity

Source Primo analytics
Broadening search results

Browse searches

- Browse authors: 3,061
- Browse generic call numbers: 4,371
- Browse page: 1679
- Browse related records: 99
- Browse subjects: 1,095
- Browse titles: 0
- Browse Dewey call numbers: 0
- Browse LC call numbers: 0
- Browse SUDOC call numbers: 0
- Browse NLM call numbers: 0

Enrichment linking

- Additional link: 18,088
- Link to TOC: 6,912
- Link to Union catalog: 1
- bX Hot Articles: 0

Lateral linking

- Lateral Linking – Author: 11,364
- Lateral Linking – Local Field 30 (Check with Rachelle): 618
- Lateral Linking – Subject: 12,218

Source Primo analytics
Personalise search results

Tags & Reviews

- Add review
- Add tag

Source Primo analytics
Analysis of user search strategies

• 44% of user searches are two to four words long.
• 69% of searches are either under seven words long.
• 14% of searches include more than fifty words.
• Most searches are fairly simple, e.g., ‘marketing mix’ is the most commonly occurring search term.
• 1.13% of all searches were unsuccessful.
Library discovery application hierarchy

1. Text & Data mining: primary users, postgraduates & researchers
2. Database discovery: primary users, undergraduates, postgraduates & researchers
   - ProQuest
   - MEDLINE
3. Primo discovery: primary users, undergraduates
4. Google discovery: primary users, first year undergraduates
   - Google Scholar
PRIMO ENVIRONMENT

- Primo since June 2010
  - Direct Hosted Back Office (can SSH),
  - 3 Alma Institutions and 1 Primo Instance with 3 Views
  - Multi-search scopes
  - Alma & PCI + 3 additional local data sources
  - Authentication: SAML Okta (Multi-factor authentication)
- 2.1M Electronic + 1.6M Print Bibliographic Records
- 78K Students, 17K Staff, 206 Library staff
- 4.1M physical visits to the Library
PRIMO UX TESTING PROCESS

1. Usage Data
   - Observation & Survey Data

2. Observe Users
   - Pre-Test
   - Post-Test

3. Analyze
   - THIS CHANGES EVERYTHING

4. THIS
   - EVERYTHING

5. MONASH University
VENUE OF UX TESTING SESSION

The observation setup at the Monash University Innovation Studio & Monash University Caulfield Library.
USER DEMOGRAPHICS

- Faculties
- Year levels
- Local and International Students
- English as their first language
- Years at Monash
UX TESTING KITS:

• Test scenarios:
  • Known title
  • Subject
  • Journal article
  • Resource Type
  • Call Number
  • Availability
• Qualtrics Pre-testing Survey
• Qualtrics Post-testing Survey
• User Consent Form
• Observers questions

[https://tinyurl.com/y4fgwhhx](https://tinyurl.com/y4fgwhhx)
Q. WHERE TO SEARCH FOR AUTHORITATIVE INFORMATION?

1. First preference & discipline specific databases:
   - Google Scholar
   - ProQuest
   - ScienceDirect
   - EBSCO
   - MEDLINE

2. Then Primo:
   - Search

3. Discipline specific databases:
   - MEDLINE
   - ProQuest
   - EBSCO
   - HOST
   - ScienceDirect
**POST-TESTING SURVEY**

**VIEW 1**
- Facets, Scopes, design similar to Classic UI

**VIEW 2**
- Simplified & striped down view
Feedback on the views ....

- 6 users noticed the difference
- 5 users strongly agreed that **View 2 was easier** to find resources in.
- Most useful features:
  - Advanced search
  - Favourites;
  - and Citation Link to Styles (e.g. APA/MLA etc)
QUANTITATIVE + QUALITATIVE
UX Observations:

- Users did not sign-in unless they needed to (e.g. check loans, read an article)

Recommendations:

- Educate users to sign-in
- Auto-login users when clicking on Primo.
UX Observations:

- Basic search was mostly used by users.
- There were a few individuals who used Advanced Search.
- However Google Scholar is their preferred searching tool.

Recommendation:

- Modify the embedded search box in the Library homepage to allow multiple ways users can run searches.
UX Observations:

- Most users use the default All Resources scope.
- The auto complete search box helped make the scopes visible.

Recommendations:

- Use the auto complete search box to make scopes more visible.
- Rename labels to make the scope clearer.
**Usage Data + Observation (Facet)**

Primo facets that narrow search results (*Usage logs*):

<table>
<thead>
<tr>
<th>Facet</th>
<th>Searches refined by facet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country (L1)</td>
<td>1,765,392</td>
</tr>
<tr>
<td>Creation date</td>
<td>886,891</td>
</tr>
<tr>
<td>Domain</td>
<td>775,615</td>
</tr>
<tr>
<td>Unknown facet</td>
<td>89,446</td>
</tr>
<tr>
<td>FRBR group</td>
<td>60,179</td>
</tr>
<tr>
<td>Library</td>
<td>46,102</td>
</tr>
<tr>
<td>Date Slider</td>
<td>40,584</td>
</tr>
<tr>
<td>Show only (Top level)</td>
<td>26,551</td>
</tr>
<tr>
<td></td>
<td>12,941</td>
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<td></td>
<td>12,342</td>
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<td>8,449</td>
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<td>6,150</td>
</tr>
<tr>
<td></td>
<td>4,688</td>
</tr>
<tr>
<td></td>
<td>3,080</td>
</tr>
</tbody>
</table>

UX Observations:

- Users preferred the expanded list of facets
- However facet navigation was limited

Recommendations:

- Strip down the facet list but keep it expanded.
- Use the top 5-6 used facets.
Usage data + Observation (Sorting)

Primo sort-by options to narrow search results (Usage logs)

UX Observations:
- Confirmed that users do not change sorting order
- Default location wasn’t visible

Recommendations:
- Move the location of sort-by so it is visible
- Educate how to use sorting feature
- Understand what relevance ranking means
- Educate how to identify new materials
**Primo availability information (Usage logs):**

- GetIt Link 2 (Get It): 666
- GetIt Link 1 (View It): 0
- Display FRBR Versions: 0
- Display versions: 3
- Display more...: 9
- Display full record: 2,383
- Display record: 10,389
- Display Primo Central...: 1
- Click on title: 33,188
- Click on availability...: 2,916,041
- Click on Icon: 0
- Click on availability...: 2,916,041

**UX Observations:**

- The lesser the clicks the better
- Have location & availability on the brief results page

**Recommendations:**

- Display location & availability information on the same page
- Educate users about Sign-in to make better use of this function.
UX Observations:
- Users are not familiar with the Saved Queries & Session Searches feature.

Recommendation:
- Educate users on how these features can help them.
UX TESTING: OBSERVER’S PERSPECTIVE
UX TESTING (2nd ROUND)

CHANGES MADE INCLUDED:

- Location information
- Browzine plugin
- FRBR
- Normalization Rule changes particularly for search fields
UX TESTING (2\textsuperscript{nd} ROUND)

CONFIRMATION OF INITIAL FINDINGS

✓ SIMILAR SURVEY responses to 1\textsuperscript{st} round

✓ SIMILAR OBSERVATIONS to 1\textsuperscript{st} round

✓ POSITIVE response to Browzine Plugin, FRBR, & Location information
Q. WHAT ATTRIBUTES DID YOU LIKE ABOUT ANY OF THE VIEWS?
From the busy Classic User Interface
To the new simplified User Interface.
IMPLEMENTATION PROCESS

• BETA: Dec & Jan
• PROD: Feb 2019
• Roadshows: Jan & Feb 2019
• Monthly Communications via Staff Blog
POST-IMPLEMENTATION FEEDBACK

• Feedback from users from: Dec 2018 to May 2019 via Hotjar on Primo New UI
HOTJAR LIMITATIONS:

- Visitors not using one of the **supported browsers**
- Visitors with **disabled JavaScript**
- Visitors that have **opted out** from our opt-out page.
- Visitors with **disabled cookies**.
- Visitors using **Private mode** in some browsers, such as Firefox and Safari - or when localStorage and sessionStorage are not available
- Visitors who run browser **plugins such as Ghostery, unlock or Adblock** which explicitly excludes them from loading tracking scripts such as ours
- Visitors that have **DO NOT TRACK enabled in their browser**
- Visitors have their **IP blocked** within the Hotjar settings
- Visitors live in country, like UAE, where **government blocks** the use of Hotjar.
- **NOTE:** Data is stored in EU & are in full commitment to **GDPR Compliance**
BETA RELEASE FEEDBACK

User feedback collected through HotJar from Dec 2018 to Jan 2019.

3.2 out of 5
38 responses
PROD FEEDBACK

User feedback collected through HotJar from Dec 2018 to early May 2019.

2.3 out of 5
473 responses

170 (35.94%)
115 (24.31%)
91 (19.24%)
68 (14.38%)
“too slow! Slowness makes it feel clunky. Not obvious how to delete from favourites....”

“What is with "library special collections" as a drop down option? How confusing. How will a patron be able to differentiate between rare books (now special collections), and all the other special collections available at Monash (which aren't searchable).”

“Could you please change eBook to ebook in the drop down option: "Books, ebooks, multimedia & more" It doesn't need an upper case B as none of the other options have an initial upper case apart from the words at the beginning of the phrases.”
HEATMAPS FEATURE
Heatmap showing mouse movements.
Heatmap showing mouse movements.
Heatmap showing mouse movements.
Feedback themes

<table>
<thead>
<tr>
<th>Themes</th>
<th>Total Count</th>
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<tbody>
<tr>
<td>Searching</td>
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</tr>
<tr>
<td>Get It</td>
<td>26</td>
</tr>
<tr>
<td>View IT</td>
<td>22</td>
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<tr>
<td>CSS</td>
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<td>Mobile</td>
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<td>Performance</td>
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<tr>
<td>Backoffice</td>
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<tr>
<td>My Account</td>
<td>8</td>
</tr>
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<td>Citation</td>
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<td>Login</td>
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<tr>
<td>Scope</td>
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<tr>
<td>Favorites</td>
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<tr>
<td>FRBR</td>
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<tr>
<td>Full Display</td>
<td>2</td>
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<td>Plugin</td>
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<td>Time Out</td>
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<td>Virtual Browse</td>
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<tr>
<td>Help</td>
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SAMPLE FEEDBACK

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<tr>
<td>Reviewed Done</td>
<td>58</td>
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<tr>
<td>User Education</td>
<td>53</td>
</tr>
<tr>
<td>Reviewed No Action</td>
<td>46</td>
</tr>
<tr>
<td>Review Further</td>
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<tr>
<td>Reviewed Action Required</td>
<td>16</td>
</tr>
<tr>
<td>System Limitation</td>
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</tr>
</tbody>
</table>

2. Having difficulty accessing my loans record
1. Where's the "request purchase" button?
1. Where can I place my request?
1. Where is docdel hidden?
1. I can't request to on hold the books. I don't know what happened
1. Not user friendly, doesn't even have a renew button
1. I have a lot of trouble finding a book - there may be 50 reviews in journals but separating books from journal articles is awkward

MONASH University
REFLECTIONS
Library expectations of Primo

a SHOWCASE for Library resources
SIMPLE to search
provide INTUITIVE search results
offer a SEAMLESS experience from searching to access
EMPOWER our users
If Primo doesn’t meet our users needs

They’ll look for a solution outside of Primo & the Library
CONTACT US:

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