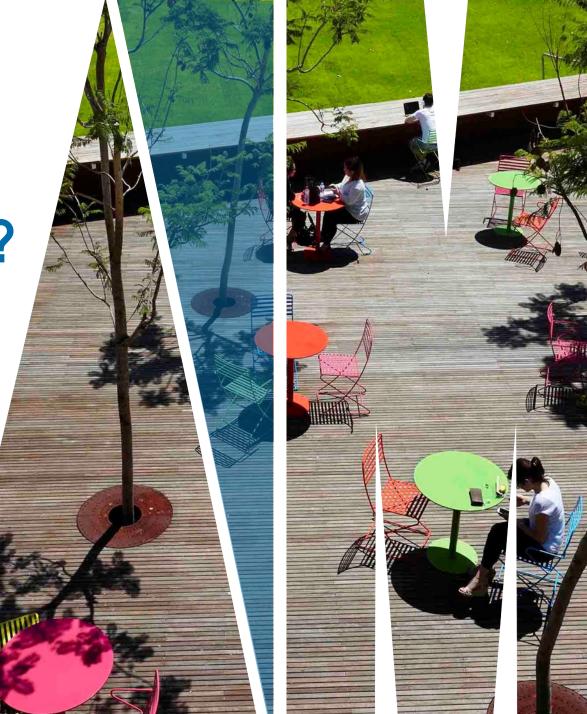


# What do Primo users want?

# or finding evidence to understand user behaviour in Primo

Megan Lee, Application Librarian Rachelle Orodio, Application Administrator Monash University

IGeLU 2019 Conference (27-29 August 2019) #igelu2019



# **PROJECT DRIVERS**

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



## **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



Primo I	IX Re∨iew t	timeframe									
2E+07											
		Preparation		Analysis	Communica	tion	Testing	Mainten and	Developme	nt.	RELEASE
2017	August		_				resting	I-lancenanc	Developme		TILLLAGE
R(	Sptemb	revew availabl Primo user avicur	MIL	<b>ES</b> 1	<b>ON</b>	ES					
	October			Analyse past user behaviour log data	Report on Primo user patterns in log analysis to SDS &						
	November	Build Primo beta test environments									
	December	Build Primo beta test environments	Develop user testing scenarios					Install November Primo Service Pack			
2018	January	Build Primo beta test environments									
	February		Develop user testing scenarios								
	March	Test and evaluate third party plug ins					mpenen				
	April						First round of user testing				
	May			Analyse First round of user testing	Report on first round user testing to SDS &						
	June								Update Primo configuration based on first round of	Add in third party plug in for user testing	
	July						second round of user testing	Install May Primo Service Pack			
	August			Analyse second round of user testing	Report on second round user testing to						
	September						Test new Primo User Interface in Innovation Studio		Update Primo configuration based on second		
	October				report on results of Innovation studio testing to				Update Primo look & Feel based on Innovation		
	November				Implement user communicati on plan to alert all users to upcoming changes to Primo UI	to alert all staff to upcoming changes to Primo Ul			Embed user feedback tool in new Primo UI		
	December	RELEASE	RELEASE	RELEASE	RELEASE	RELEASE	RELEASE	RELEASE Install	RELEASE	RELEASE	RELEASE
2019	January							November Primo Service Pack			
	Coherren										



# **PRIMO USER BEHAVIORAL TRENDS**

- a year's worth of Primo splunk>
   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** 4,000,000 3,500,000 3,000,000 2,500,000 2,000,000 1,500,000 Sign-in link 1,000,000 500,000 0



Source Primo analytics

84.7219%





12,077,773

000'00(

000'00(



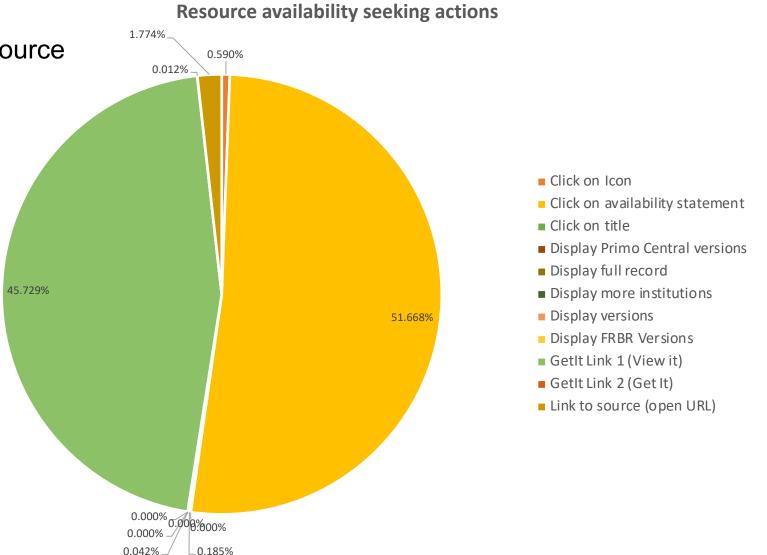
## Primo result refining function categories

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



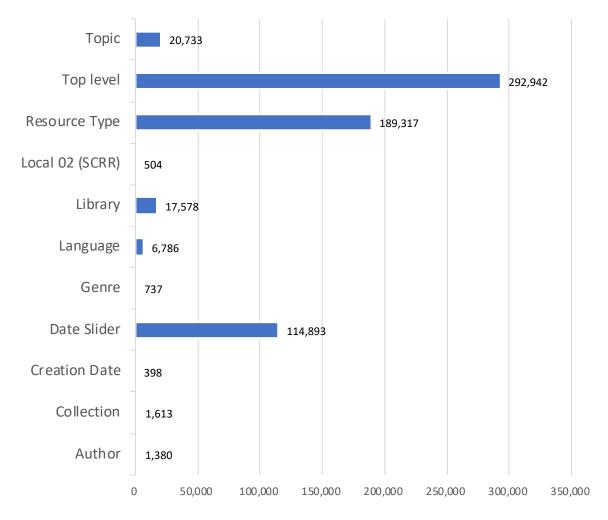
## Navigating brief results

45% of Primo actions were Resource availability seeking actions

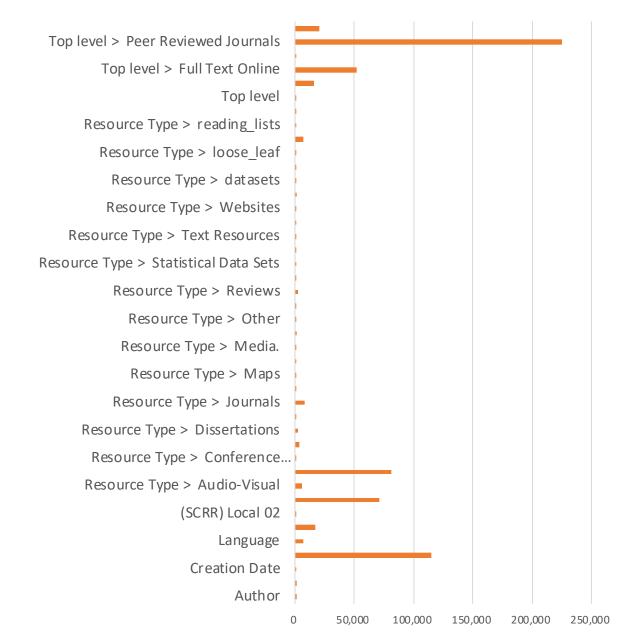


# Narrowing by facets

#### **Refining search results by facets**



#### Search results filtered by subfacet

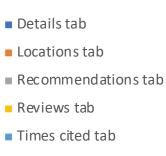


#### Narrowing by Item details

5% of Primo search actions were "Item detail" refining actions.

0.22% 7.95% 10.02% 0.00% 1.44% 80.37%

Item detail information

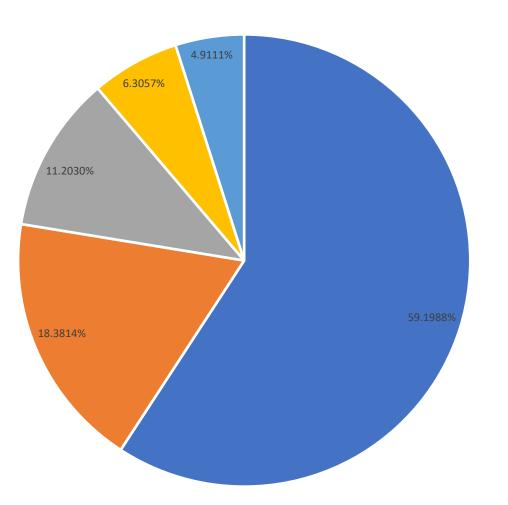


Virtual browse

# Navigating by sorting

0.35% of Primo search actions were "sort by" actions.

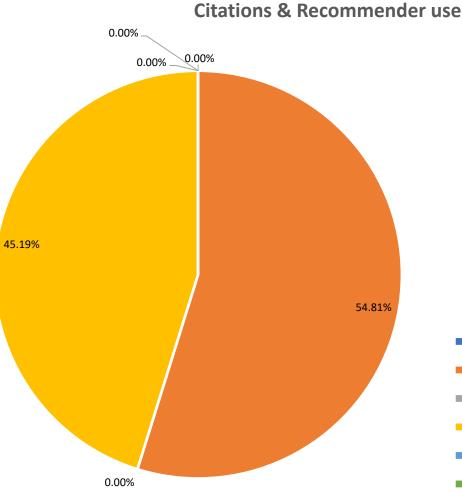
% sorts



- Sort by descending date
- Sort by rank
- Sort by popularity
- Sort by ascending date
- Sort by title

# Narrowing by citations & recommender

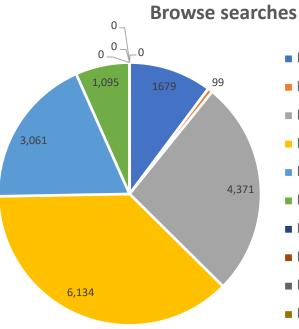
0.1% of Primo search actions were Citation & recommender activity



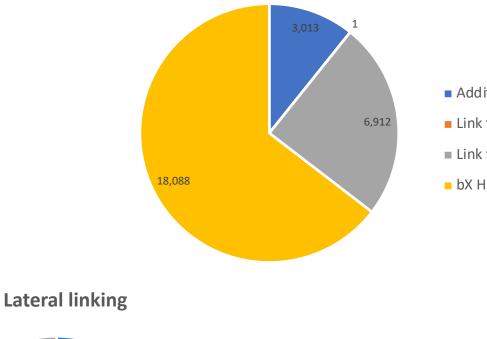
Display Citations from citation trailDisplay Citations from results list

- Display Cited By from citation trail
- Display Cited By from results list
- Click on recommended resource
- Click on bX recommendation

#### **Broadening search results**



- Browse authors
- Browse generic call numbers
- Browse page
- Browse related records
- Browse subjects
- Browse titles
- Browse Dewey call numbers
- Browse LC call numbers
- Browse SUDOC call numbers
- Browse NLM call numbers



#### **Enrichment linking**

- Additional link
- Link to TOC
- Link to Union catalog
- bX Hot Articles



Lateral Linking – Author

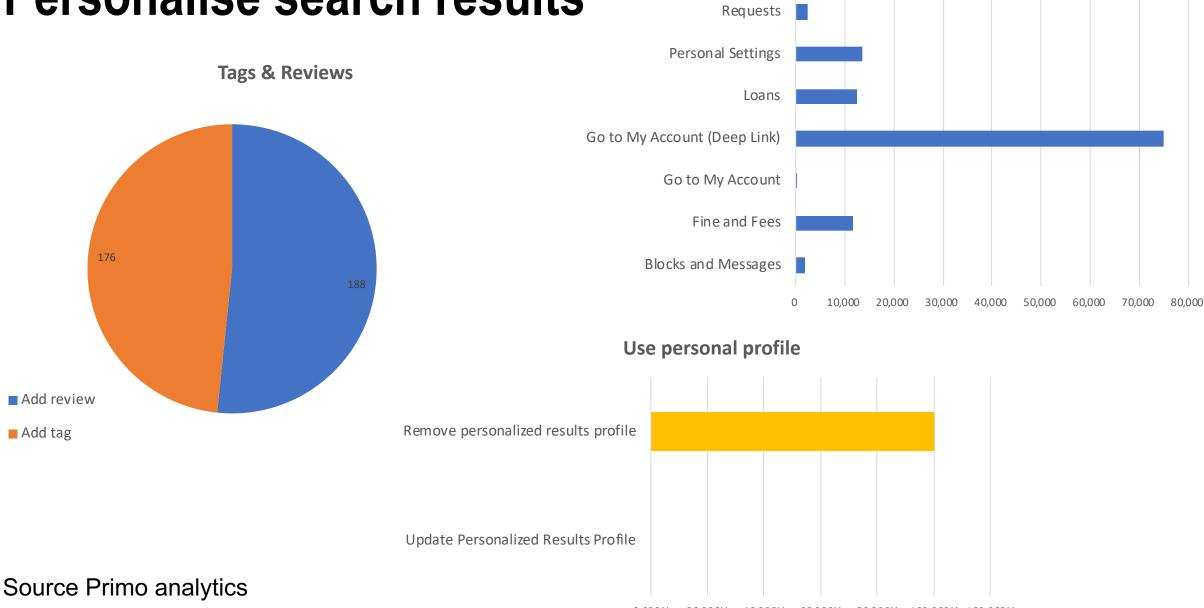
- Lateral Linking Local Field 30 (Check with Rachelle)
- Lateral Linking Subject

#### Source Primo analytics

11,364

#### **Personalise search results**

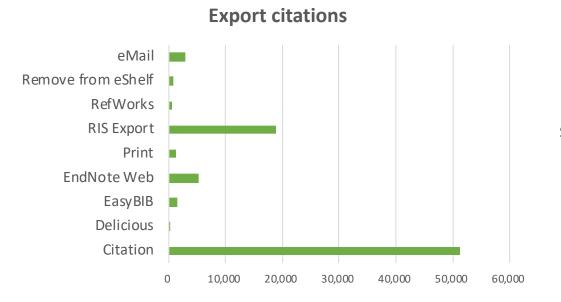
Use My Account



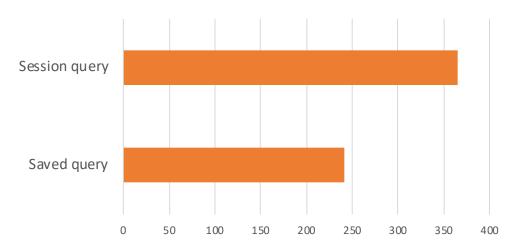
0.000% 20.000% 40.000% 60.000% 80.000% 100.000% 120.000%

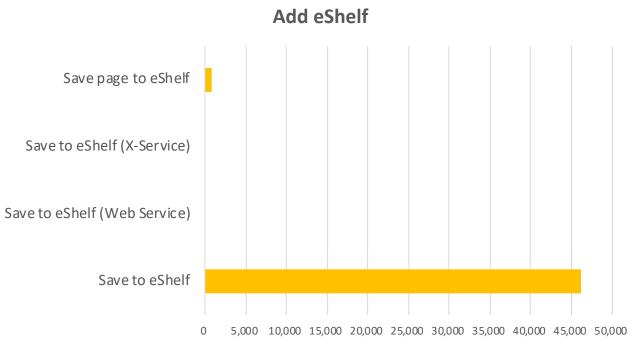
#### Source Primo analytics

# **Reusing search results**

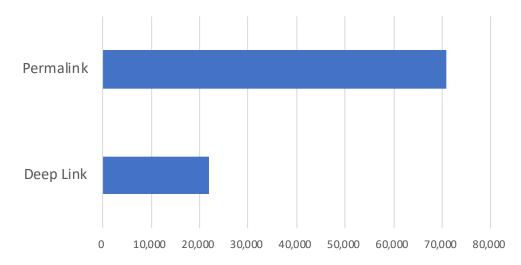


Save session or Saved query





**Deep link & Permalink** 

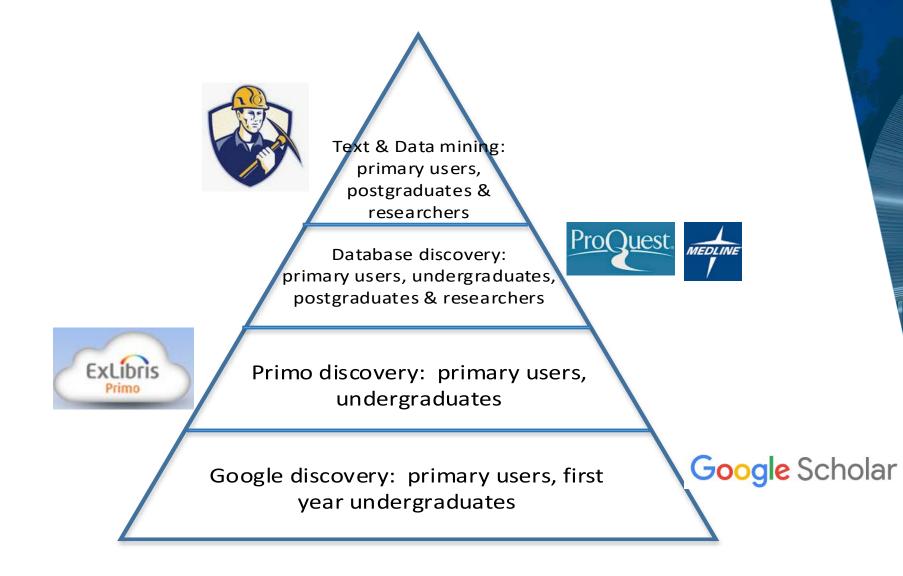


### Analysis of user search strategies

- 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, eg 'marketing mix' is the most commonly occurring search term
- 1.13% of all searches were unsuccessful



#### Library discovery application hierarchy



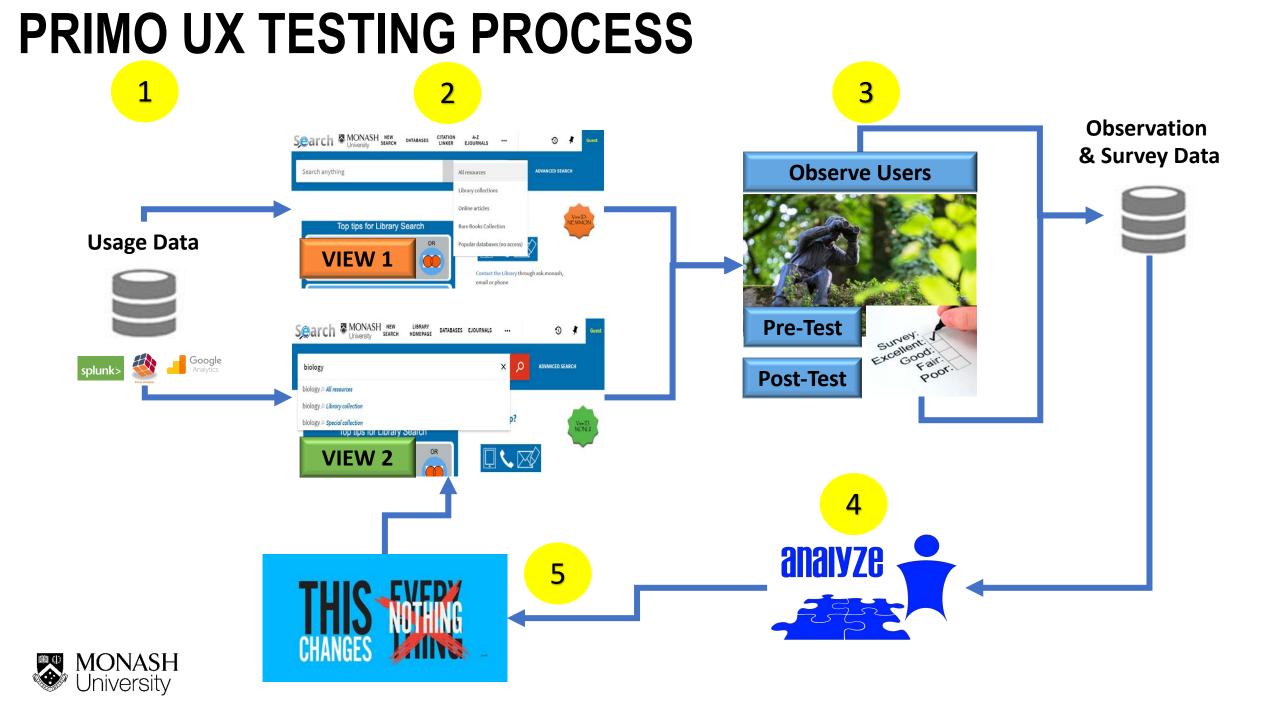


#### **PRIMO ENVIRONMENT**

- 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

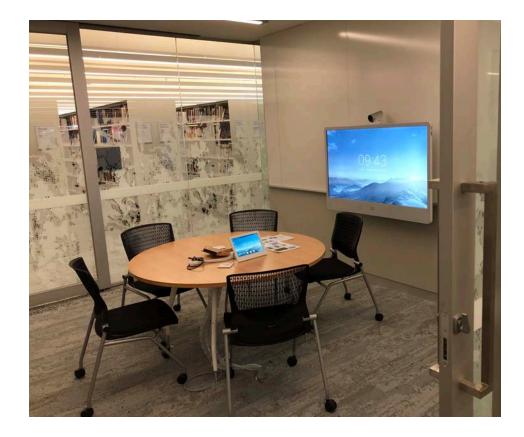






#### **VENUE OF UX TESTING SESSION**



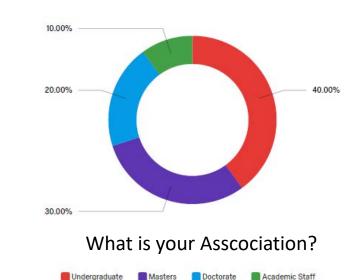


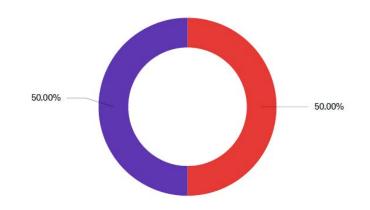
The observation setup at the <u>Monash University Innovation Studio</u> & <u>Monash University Caulfield Library.</u>



#### **USER DEMOGRAPHICS**

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





Are you an International Student?



# **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

## **PRE-TESTING SURVEY**



#### Q. WHERE TO SEARCH FOR AUTHORITATIVE INFORMATION?

Google Scholar

1. First preference & discipline specific databases:





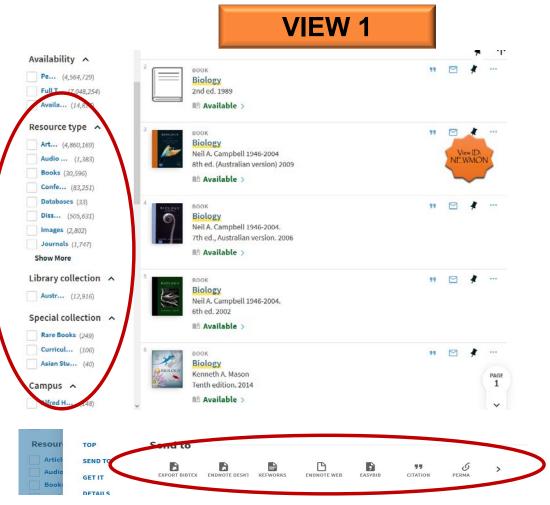
3. Discipline specific databases:







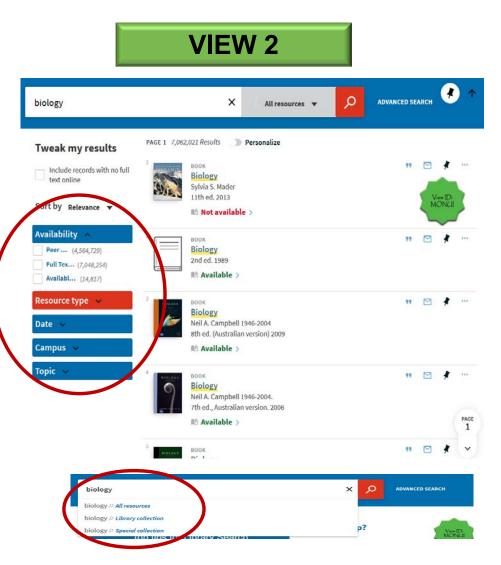
#### **POST-TESTING SURVEY**



• Facets, Scopes, design similar to Classic UI

MONASH

University

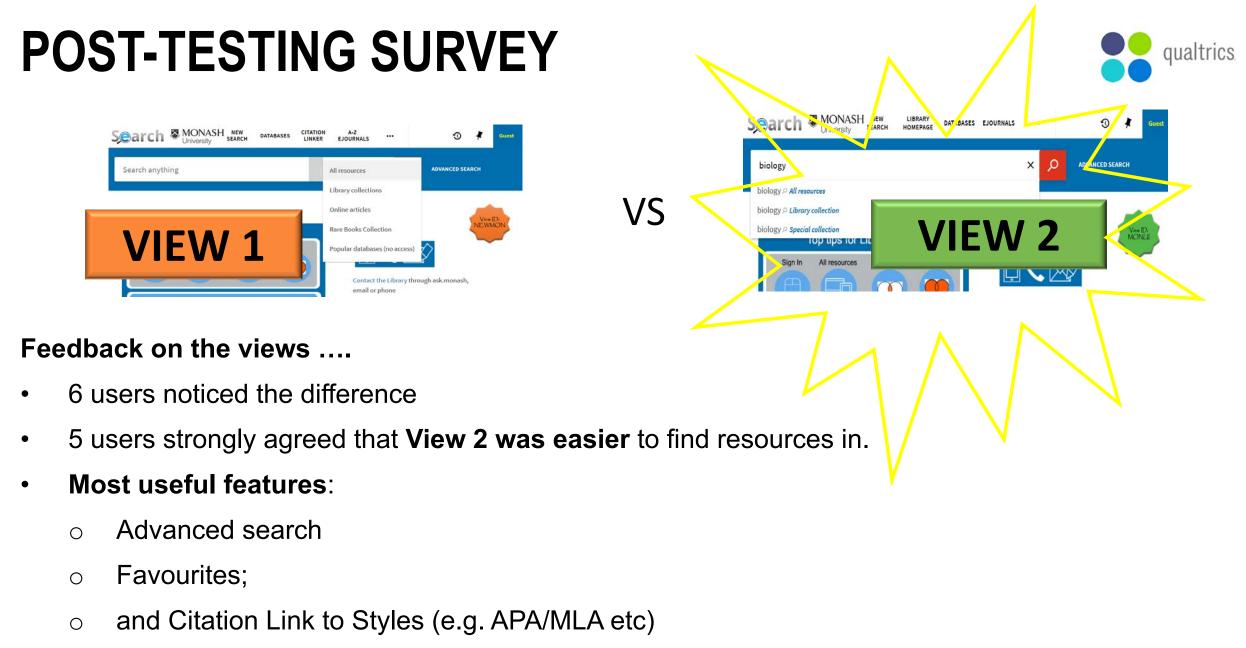


• Simplified & striped down view



VS

29







## **QUANTITATIVE + QUALITATIVE**



**Primo Analytics** 

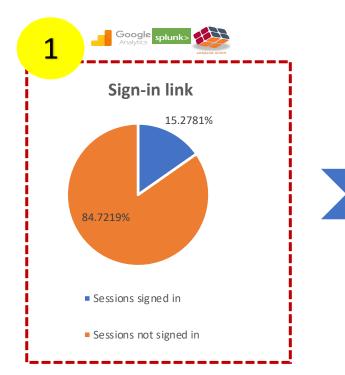
+





### USAGE DATA + OBSERVATION (Sign-In)

2





#### **UX Observations:**

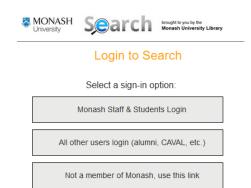
 Users did not sign-in unless they needed too (e.g. check loans, read an article)





#### **Recommendations:**

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





#### **USAGE DATA + OBSERVATION**

2

tool.

**UX Observations:** 

Basic search was

There were a few

Advanced Search.

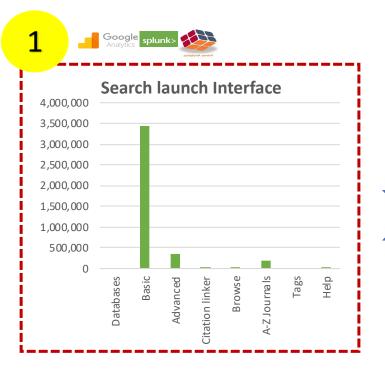
preferred searching

However Google

Scholar is their

mostly used by users

individuals who used









#### **Recommendation:**

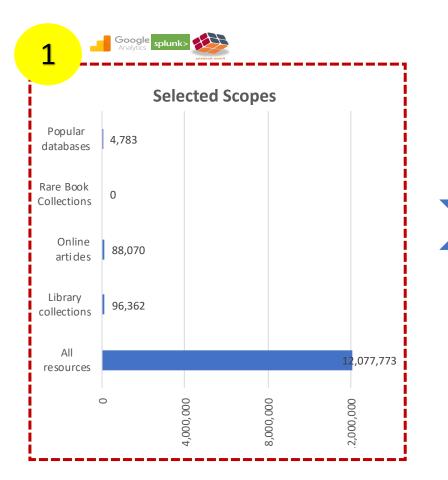
 Modify the embedded search box in the Library homepage to allow multiple ways users can run searches

All collections	Journals	Databases	Google Scholar		
Find books, articles, journals, databases and more					



#### **USAGE DATA + OBSERVATION (Scope)**

2



#### UX Observations:

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

biology <i>P All resources</i> biology <i>P Library collection</i> biology <i>P Rare books</i>	Q	
	7	
hiology O Pare books		
biology > Kare books		



3

n

#### **Recommendations:**

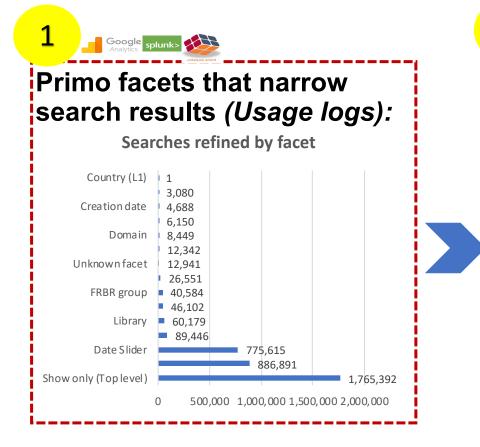
- Use the auto complete search box to make scopes more visible
- Rename labels to make the scope clearer

	big data	
	big data 🔎 Articles, books, databases, etc.	
	big data p Library special collections	
	big data	
a ł	big data application	
	big data <b>processing</b>	54



## **USAGE DATA + OBSERVATION (Facet)**

2





#### **UX Observations:**

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

Availability 🔨

 Pee...
 (4,835,144)

 Full T...
 (7,540,293)

 Availa...
 (14,875)

#### Resource type \land

Arti... (5,184,206) Audio V... (1,417) Book Chap... (93)

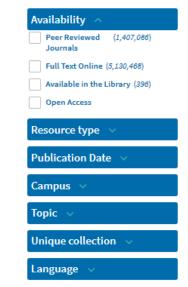






#### **Recommendations:**

- Strip down the facet list but keep it expanded.
- Use the top 5-6 used facets.

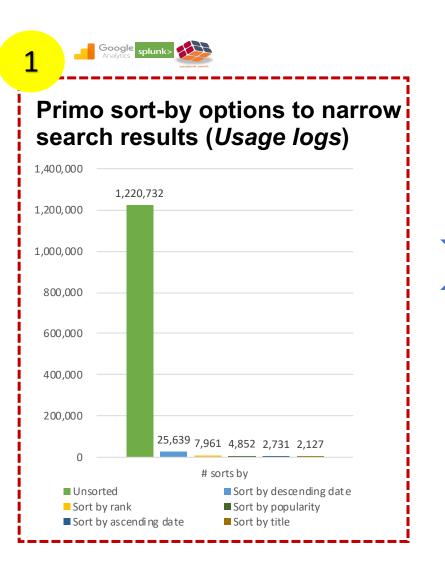


35



#### **USAGE DATA + OBSERVATION (Sorting)**

2



#### **UX Observations:**

- Confirmed that users do not change sorting order
- Default location wasn't visible

Sort by	Relevance
Availat	Date-newest
Peer Full 1	Title
Avail	Date-oldest



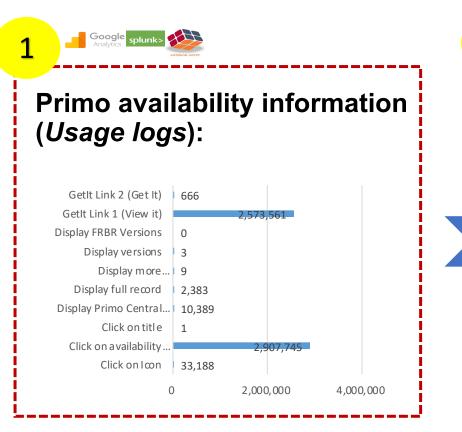


#### **Recommendations:**

- 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



#### **USAGE DATA + OBSERVATION (Availability)**



2

#### **UX Observations:**

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

#### BOOK Biology



Neil A. Campbell 1946-2004. 7th ed., Australian version. 2006

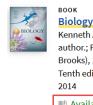
National Available >





#### **Recommendations:**

- **Display location &** availability information on the same page
- Educate users about Sign-in to make better use of this function.



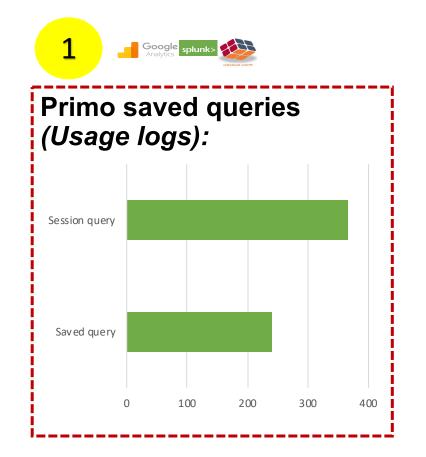
Kenneth A. Mason ; Jonathan B. Losos author.; Susan R. Singer author.; Peter H. Raven author.; George B Johnson (George Brooks), 1942-Tenth edition. Available at Bundoora General Collection (570 M398

2014) and other locations >



#### **USAGE DATA + OBSERVATION (Saved Query)**

2



UX Observations:

 Users are not familiar with the Saved Queries & Session Searches feature.

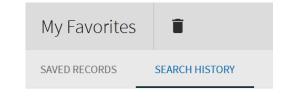


3



#### **Recommendation:**

 Educate users on how these features can help them.



1 search queries

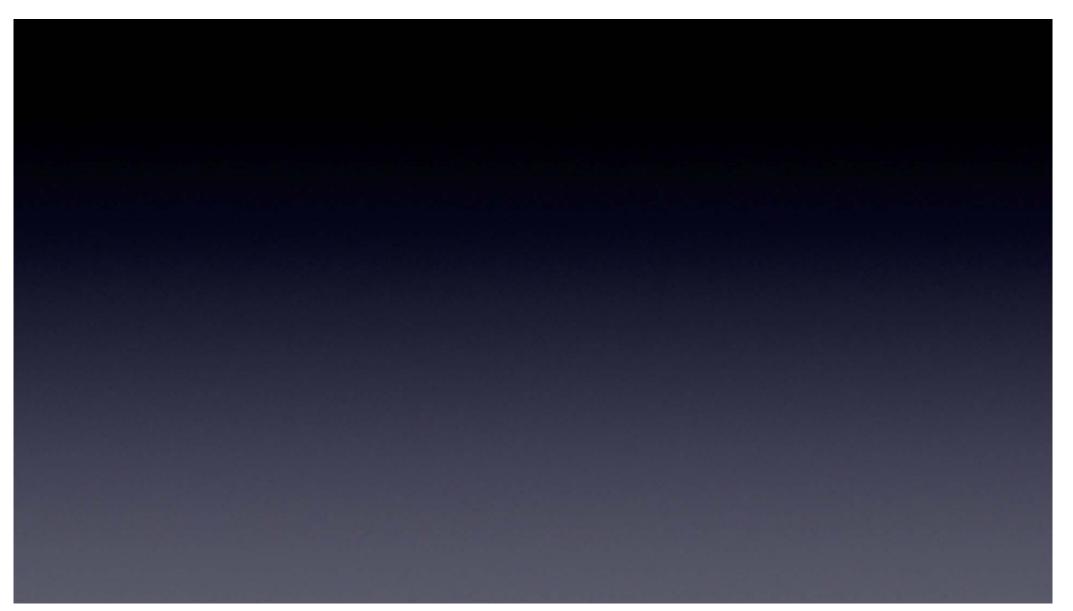
 1
 biology

 scope: Default / All resources

 20/6/2018 22:49:49



#### **UX TESTING: OBSERVER'S PERSPECTIVE**



## UX TESTING (2<sup>nd</sup> ROUND)

CHANGES MADE INCLUDED:

- Location information
- Browzine plugin
- FRBR
- Normalization Rule changes particularly for search fields





## UX TESTING (2<sup>nd</sup> ROUND)

CONFIRMATION OF INITIAL FINDINGS

- ✓ SIMILAR SURVEY responses to 1<sup>st</sup> round
- ✓ SIMILAR OBSERVATIONS to 1<sup>st</sup> round
- ✓ POSITIVE response to Browzine Plugin, FRBR, & Location information





#### UX TESTING (2<sup>nd</sup> ROUND) Q. WHAT ATTRIBUTES DID YOU LIKE ABOUT ANY OF THE VIEWS?

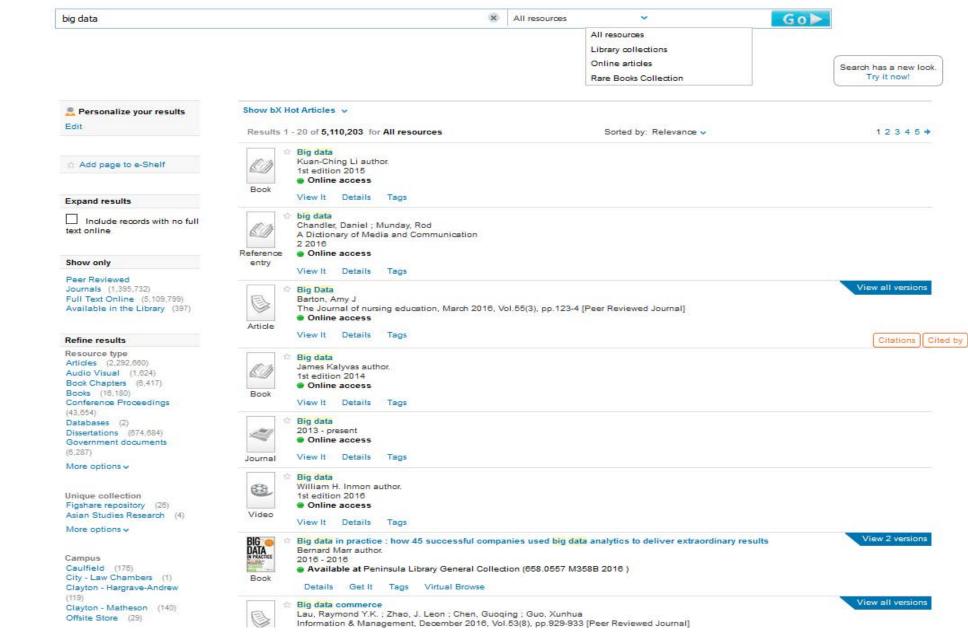


## From the busy Classic User Interface

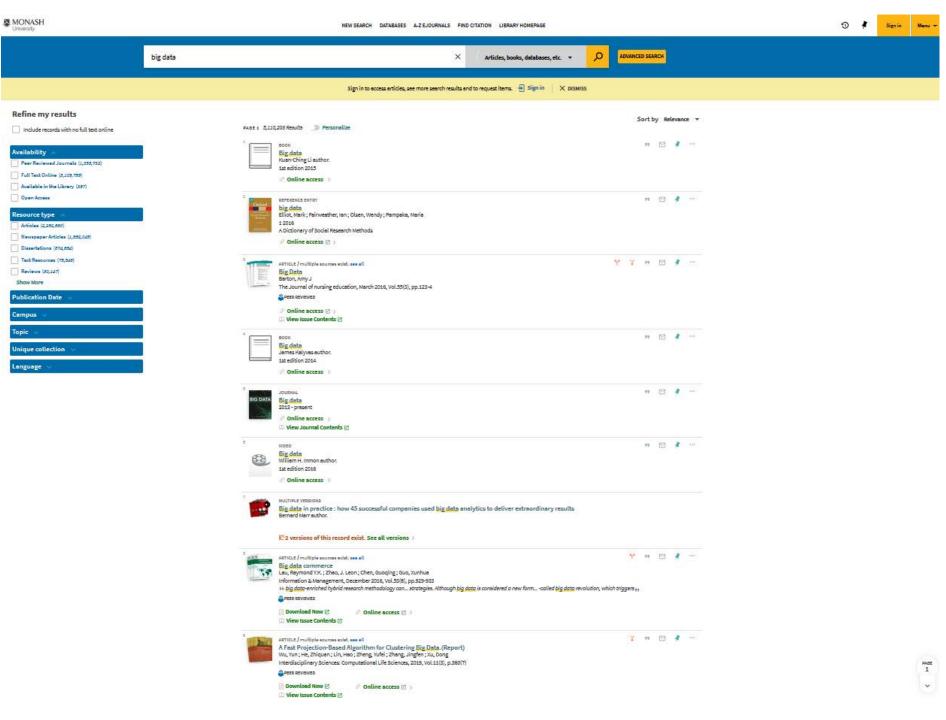
MONASH



Brought to you by Monash University Library Databases Basic Advanced Citation Linker Browse A-Z ejournals Tags Help



# To the new simplified User Interface





#### **IMPLEMENTATION PROCESS**

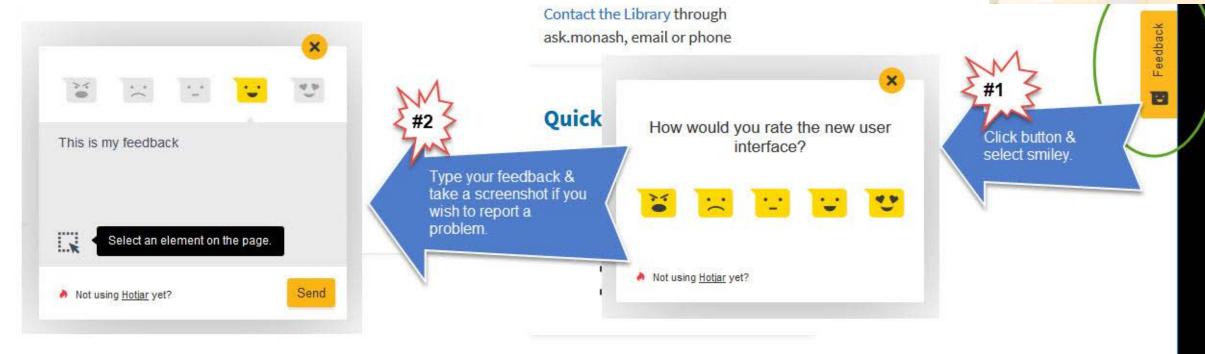


- BETA: Dec & Jan
- PROD: Feb 2019
- Roadshows: Jan & Feb 2019
- Monthly Communications via Staff Blog



#### **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 **<u>supported browsers</u>**
- Visitors with **disabled JavaScript**
- Visitors that have <u>opted out</u> 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

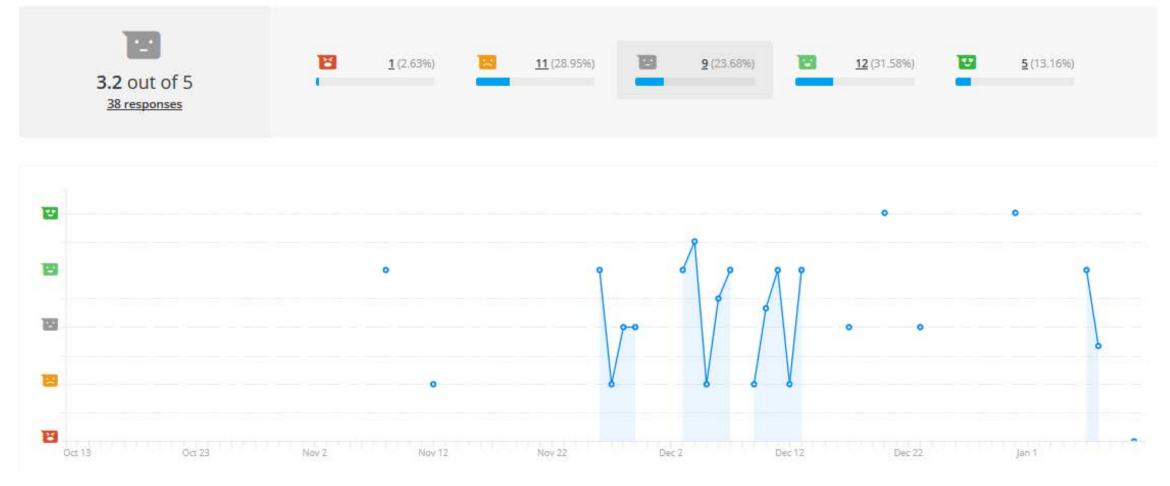




#### **BETA RELEASE FEEDBACK**



#### User feedback collected through HotJar from Dec 2018 to Jan 2010.





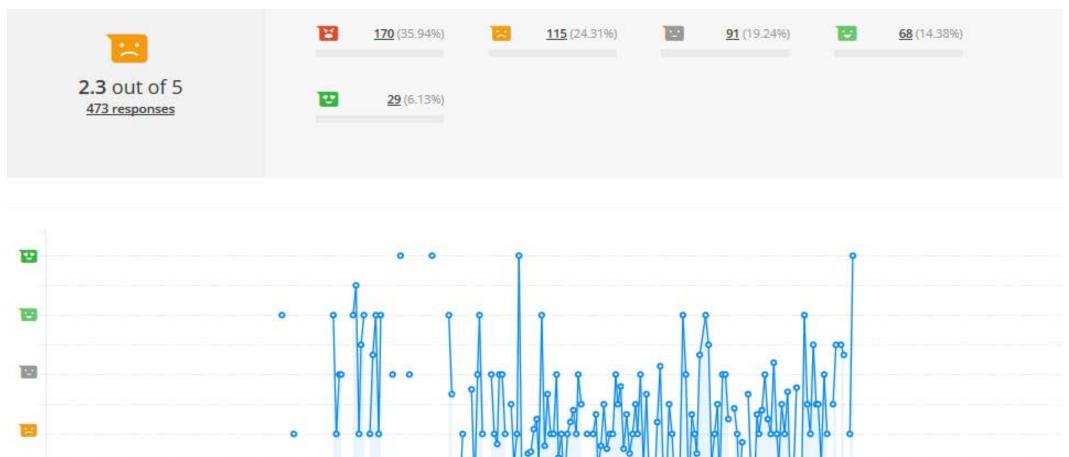
#### **PROD FEEDBACK**



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

Dec 9

Jan 15



Feb 21

Mar 30

May 7

Jun 13



E

Aug 20

Sep 26

Nov 2



## INCOMING FEEDBACK FEATURE

/primo-explore/search?qu	C.S.	
	Electron	-
	B3	
	Barrense	
	There are a second seco	

115

/primo-explore/search?sor...

/primo-explore/search?vid...

 $\sim$ 

" too slow! Slowness makes it feel clunky. Not obvious how to delete from favourites.... "

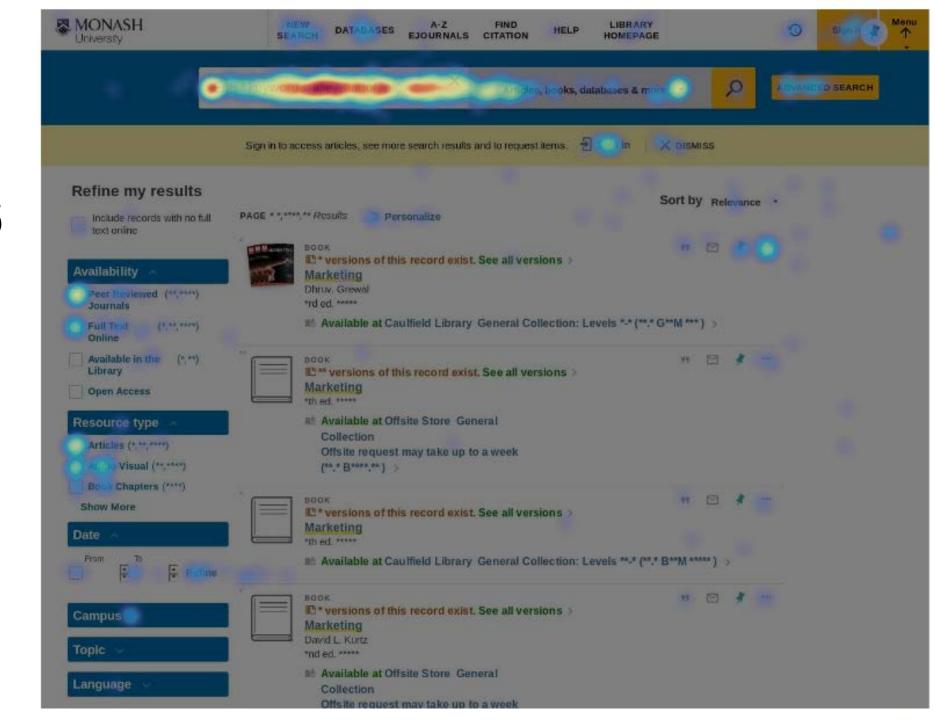
" What is with "library special collections" as a drop down option? How confusing. How will a patron be able to differentiate between rare books (now special collections), and all the other special collections available at Monash (which aren't searchable). "

" 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.

MONASH University

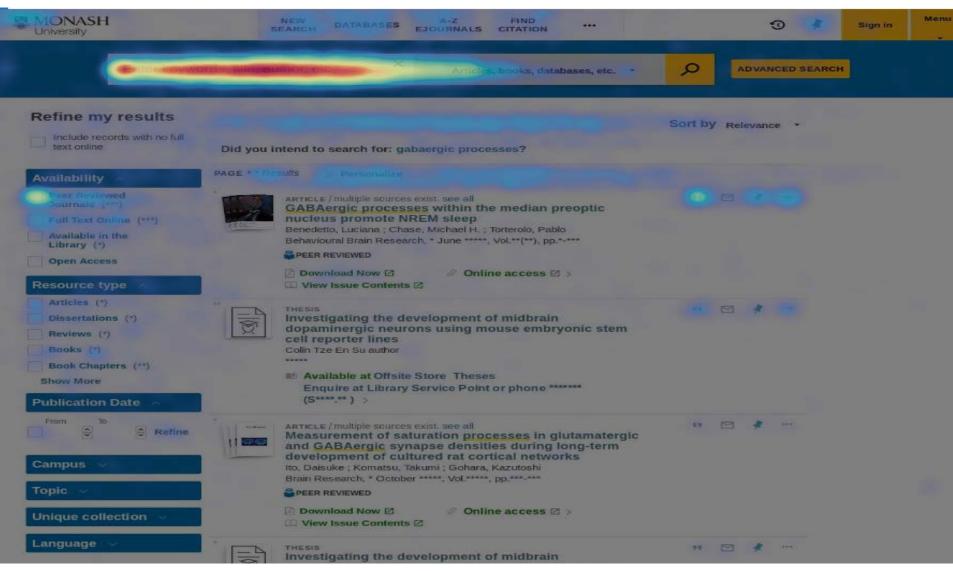


#### HEATMAPS FEATURE





#### SEARCHING







#### **FULL DISPLAY**

Aktricus /multiple sources exist, see all A Simple Synchrophasor Estimation Algorithm Considering IEEE Standard C\*.\*\*\*\*.\*.\*\*\*\*\*\* and **Protection Requirements** thes, Second Sidhu, Iarlocher ILLE Transactions or Instrumentation and Measurement, October \*\*\*, Vol \*\*\* [\*]. pp. ...... PEER REVIEWED Online access E > Details Title and Pentoction Frequencies Author Subjects TEStatem Damerran Physical Administration of Lindon Decaying DC Components leee Standard Chineseesees Loass Error Squares -> Physics Measurement Units





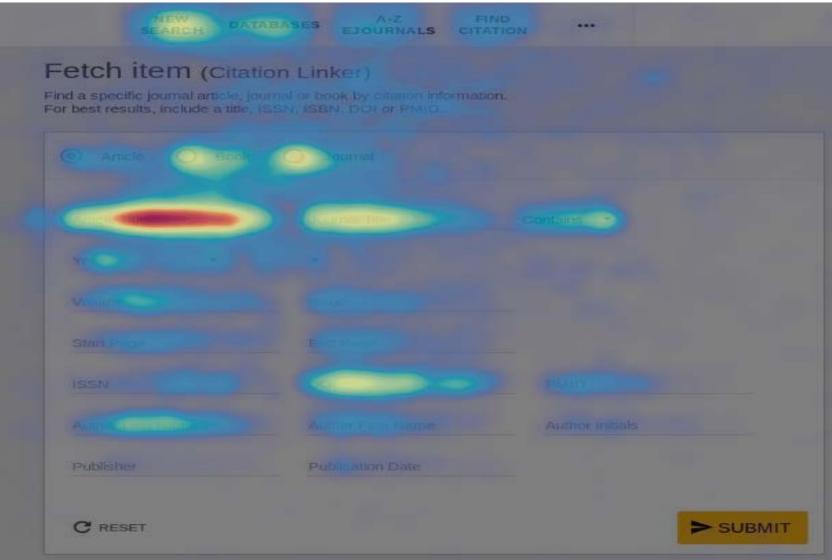
#### FAVOURITES

University	NEW DATABASES A-Z FIND HELP LIBRARY SEARCH DATABASES EJOURNALS CITATION HELP HOMEPAGE	۲
	Enter Ley vol dS. Itilis, null for x 🌂 Articles, books, databases & more 🔹	ADVANCED SEARCH
	My Favorites ADD LABELS	
	SAVER EDORDS SAVER CENTRES SEARCH LISTORY	
		000
	Contraction author.	Sort by Date added
	Available at Caulfield Library General Collection: Levels *-**     (**.***** W**L *** )     Things to get from Caul	Things to get from Cau
	BOOK I am not a number Jenny Kay Dupuis author.	
	Available at Caulfield Library General Collection: Levels *-** (**.** D**.I *****) Things to get from Caul	

MONASH University



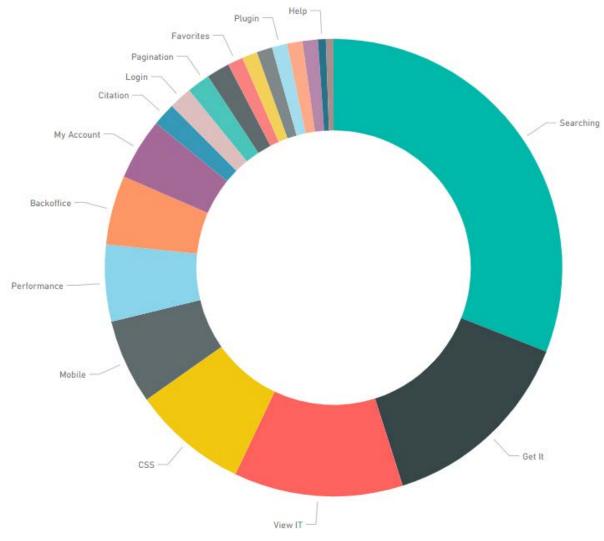
#### **CITATION LINKER**







## Feedback themes



Themes	Total Count
Searching	57
Get It	26
View IT	22
CSS	15
Mobile	11
Performance	10
Backoffice	9
My Account	8
Citation	3
Login	3
Pagination	3
Scope	3
Favorites	2
FRBR	2
Full Display	2
Plugin	2
Time Out	2
Virtual Browse	2
Help	1
Metadata - PCI	1





## SAMPLE FEEDBACK

	Status	Total Count	
	No Action	269	
	Reviewed Done	58	
	User Education	53	
	Reviewed No Action	46	
	Review Further	21	
	Reviewed Action Required	16	
	System Limitation	6	



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



## 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:**

#### Megan.Lee@monash.edu

#### Rachelle.Orodio@monash.edu

