

# *The User Focused Implementation of YuFind (VuFind) at Yale*

Digital Library Federation  
November 13, 2008


# Today's Presentation

- Karen Kupiec, Director of Library Access Integration Services:
  - Background & Methodology, Benefits & Challenges
- Katie Bauer, Director of Usability & Assessment:
  - Impact of Usability & Assessment, Next Steps

# Why Here – Why Now?

- Expectations by users for Web 2.0 type features and functions – even in Library catalogs.
- Test ourselves – can we participate in and contribute to a flexible, agile open source development project? (we talk it – can we walk it?)
- Cultural change – from ‘product oriented’ to ‘process oriented’ – the product is never and should never be final – it will evolve.

# Benefits

- Spelling Suggestions
- Relevancy Ranking
- Faceted browsing
- Similar Items
- Integrated Web content (“mashups”) 
  - Google Books, WorldCat, Amazon, etc
- Integration of other digital collections (images)
- Etc.

# Background & Methodology

## Core Project Team

### Across the Library...

- Project Manager is Daniel Lovins - a Cataloger!
- Medical Library
- Technologists (lots)
- Usability & Assessment
- Cataloging & Metadata Services
- Public Services

# Aggressive Implementation Schedule

- Phase 1: 3 Months to Evaluate – Will this work here?
  - Spring 2008
  - 8-10 staff Core Project Team
- Phase 2: 3 Months to Implement – Make it work here!
  - Summer 2008 – August 15 Due Date
  - 10-12 staff Core Project Team & Resources from Medical (~3-4 Total FTE)
- First major Open Source Implementation of its type for the Library.

# The need for Agile Project Management (APM)

- Concepts of Agile Software Development on top of traditional Project Management tools & techniques
- Effective when the requirements are subject to change.
- APM is
  - a highly iterative and incremental process
  - developers and project stakeholders actively work together
    - they understand the business need
    - identify the tools/processes to be built
    - prioritize functionality

# When does APM work?

- project value is clear;
- customer\* actively participates throughout the project;
- the customer\*, designers, and developers/implementers are co-located
- incremental feature-driven development is possible;

The APM methodology and process will continue into the fall.

\*Customer represented by Usability & Assessment



# Phase 2 Milestones

- August 15 Go-Live - achieved!
- Phase 2 Usability & Assessment requirements – achieved or in progress.
- Skills/Knowledge Transfer across project team underway – ensure supportable, scalable, with moderate & acceptable risk to implementation.

# Challenges – Regardless of the Platform

- System Response Time (fixed?)
- Precision of Facets
- Comprehensiveness of Facets
- Extent of indexing
- Exposure of inconsistent/invalid metadata
- Local call number index
- Prioritizing requests for fixes and enhancements

# What's Next – PhaseFall

- Implement Tagging – CAS enabled – policies needed.
- Record clean-up – VuFind/Primo/whatever – all will highlight records that need to be fixed – what are the policies and priorities?
- Develop a process for evaluating and ranking feedback – and then implementing changes / updates.
- Evaluate Primo, maybe others – and decide on the right path.

# Conclusions

- Great tool ...
- Success proportional to how much and how wisely we invest
- Challenges are significant, but surmountable
- Opportunities for many new services and enhancements
- Prioritization should be driven by usability & assessment

# Report on Assessments of Yufind

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# Usability process

- Assess current behavior
- Conduct usability protocol testing
- Implement changes and re-assess
- Determine standards & priority functionality

Collecting evidence from Orbis log files.

# Log file line

12/2/07 20:06	20071202200646
---------------	----------------

Title Index
-------------

TALL	JOHN	DOGGET JNR
------	------	------------

0



# Log file sample descriptive data

- Most common search: title (41.8%) followed by keyword (31.4%)
- Average search phrase is 2.5 words long
- Most common phrase searched is united states
- Most common number of hits: 0 (21.4% )

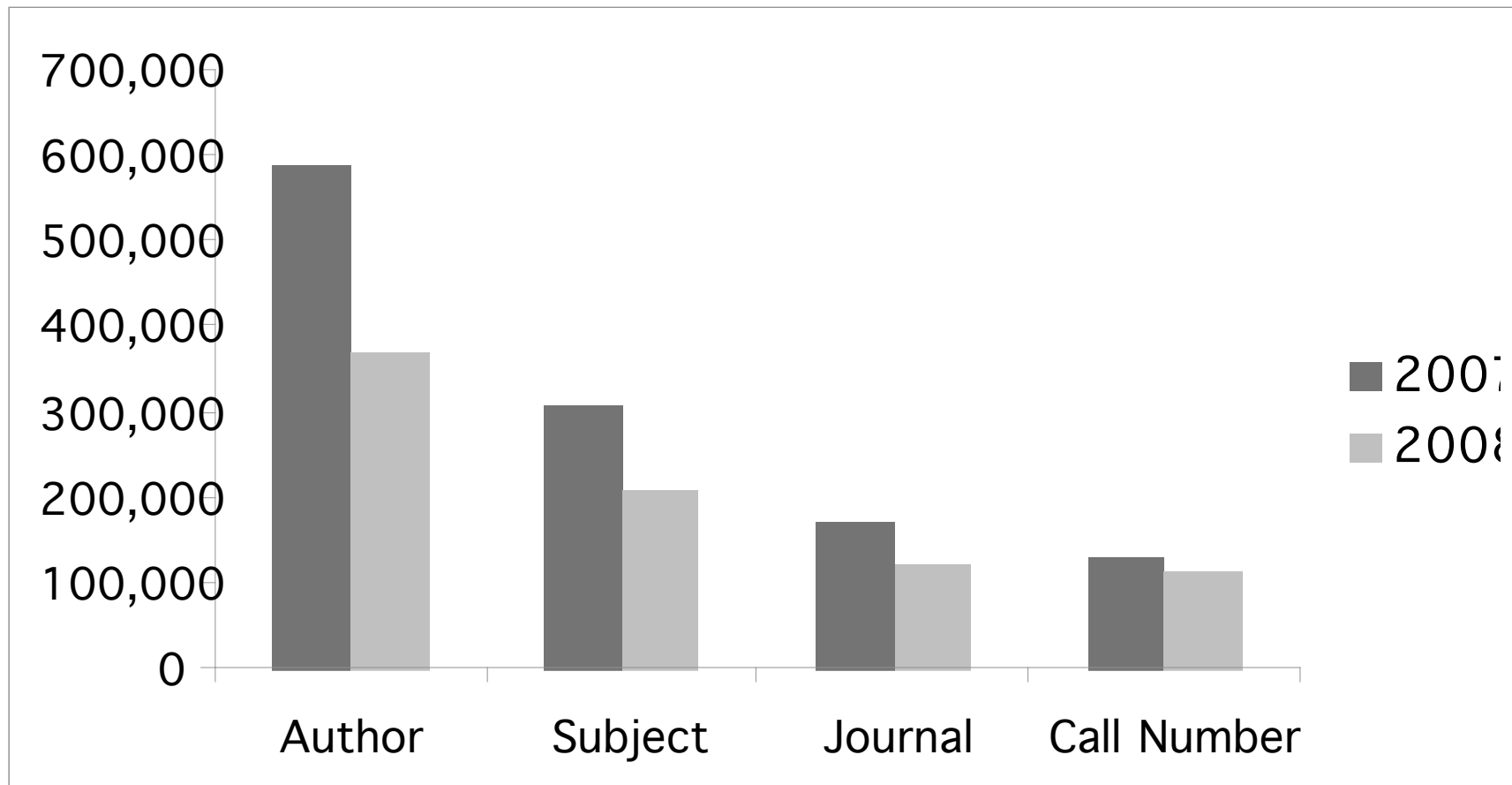
# Examples of title searches

- BOOKS ON PHOTOGRAPHY?
- ALABAMA 2004?
- PATHOPHYSIOLOGY CHILDREN? **Topic**
- JOHNSON, JAMES? **Name**
- INTRODUCTION TO AFRICAN  
AMERICAN STUDIES: A READER? **Close**

# Why do title searches get 0 hits?

Title 0 hits sample	Number in class	Percent of all 0 hits (N=506)
Topic or keyword	108	21.3%
Misspelling	93	18.4%
Author or person	87	17.2%
Correct no holdings	69	13.6%
Close	67	13.2%
Foreign language	32	6.3%
Unknown	27	5.3%
Article	14	2.8%
Other	9	1.8%


# Decreasing search types 2007-2008



# Some conclusions from log analysis

- Patrons commonly use field specific searches unsuccessfully
- Majority of searches don't use catalog metadata beyond title (decreasing)
- Errors happen a variety of ways and current Voyager system is not helpful in avoiding those errors

# Next Gen OPAC -- Yufind





[Advanced](#)


[Login](#)


☒ New Search ☐ Search Within



Showing 1 - 20 of 74791 Results for **civil war** Sort


[Civil wars](#)  
Civil wars (Online)  
Published 1998  
[Get full text](#)  
 **Electronic**

 [Add to favorites](#)


[The Civil War. an illustrated guide](#)  
Published 1987  
**Call Number:** Loading  
**Located:** Loading  
Loading...  
 **Book**

 [Add to favorites](#)

[The Ohio press in the Civil War](#)  
by [Harper, Robert S.](#) Published 1961  
**Call Number:** E525 O45 3 (LC)  
**Located:** LSF- click "Place Requests" for delivery to any Yale library  
 **Available**  
 **Book**

 [Add to favorites](#)

[Civil war](#)  
by [Castrén, Erik J. S.](#) 1904- Published 1966  
**Call Number:** A42h 76 142:2  
**Located:** SML, Stacks, Yale Classification

 [Add to favorites](#)

**Narrow Search**

**Author**  
[Henty, G. A. 1832-1902.](#) (108)  
[Bacon, Francis, 1561-1626.](#) (97)  
[Caesar, Julius.](#) (91)  
[Bunyan, John, 1628-1688.](#) (86)  
[Butler, Samuel, 1612-1680.](#) (83)  
[more...](#)

**Call Number**  
[D - World History](#) (13467)  
[E - United States History](#) (5734)  
[H - Social Science](#) (3809)  
[P - Language and Literature](#) (3475)  
[J - Political Science](#) (2855)  
[more...](#)

**Topic**  
[World War, 1939-1945](#) (5826)  
[World War, 1914-1918](#) (4953)  
[War](#) (2025)  
[United States. Army](#) (1395)  
[Indians of North America](#) (880)  
[more...](#)

**Language**  
[English](#) (68323)

After deciding to implement Yufind, use data from log files to help design usability tests

# Creating usability tests for Yufind

- Two opportunities for tests:
  - medical implementation of subject-based ebooks display
  - alternative interface for catalog (aimed at undergraduates)
- Objective: Would the participant see and choose facets? (more than 26% of the time)
- Objective: Would the participant use facets successfully?



# Questions

- ❑ Find books within a set by a particular author (John Adams).
- ❑ In a set of books about healthcare, find some that are about healthcare reform.
- ❑ Within a subject-based display of ebooks find a topic-based subset.

# Facets: key findings

- Were seen and sometimes used but
  - Subsets didn't always make sense
  - Hard to navigate (not alphabetical)
- Little use of call number facet
- Some preferred search refinement to facets
- Participants noted potential usefulness: format, language, and topic facets

# Did facets increase metadata YES use?

Opportunities for facet use	Facet Use Success	Search Refinement with 2 <sup>nd</sup> search Use Success
5 (question 2a undergraduate)	3 1	3 1
5 (question 5a undergraduate)	2 2	1 0
8 (question 5 medical)	4 4	4 1
All opportunities=18	9 7 50.0%   38.9%	8 1 44.4%   16.7%

# Relevance ranking and facets

of 56441 Results for **great depression**

Sort **Relevance** ▾

## Great Depression and New Deal

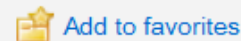
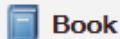
Primary sources

by [Hanes, Sharon M.](#) Published 2003

**Call Number:** E806 .H317X 2003 (LC)

**Located:** SML, Stacks, LC Classification

● Available



## Regulation, Market Structure, and the Bank Failures of the Great Depression

Published 1998

[Online Content](#)



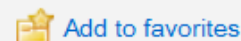
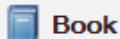
## Agriculture during the Great Depression

Published 1990

**Call Number:** HD1765 A34X 1990 (LC)

**Located:** SML, Stacks, LC Classification

● Available



## Education & the Great Depression : lessons from a global history

Education and the Great Depression



## Narrow Search

### Author

[Defoe, Daniel, 1661?-1731.](#) (297)

[Mather, Cotton, 1663-1728.](#) (110)

[Woodhouse, John.](#) (82)

[Lover of their precious souls.](#) (76)

[Edwards, Jonathan, 1703-1758.](#) (69)

[more...](#)

### Call Number

[D - World History](#) (3400)

[\](#) (3361)

[P - Language and Literature](#) (2196)

[B - Philosophy, Psychology, Religion](#) (2185)

[H - Social Science](#) (2079)

[more...](#)

### Topic

[World War, 1914-1918](#) (976)

[Bible](#) (875)

[Astrology](#) (650)

[Almanacs, English](#) (626)

[Ephemerides](#) (534)

[more...](#)

### Language

# Best practices for facets

- Implement a more narrowly focused search
- Suppress some facets pending metadata cleanup
- Display facets on left
- Develop consistent terminology between different applications
- Consistent order of display

# Survey (83 respondents)

- 79.3% found the results they expected and 75.6% found what they needed
- 41 respondents or 50% tried facets. Of these, 85.0% were positive about the results.
- 57.8% of respondents preferred Yufind to Orbis
- System Usability Score = 66

# First place you would look to find a book?

Answer Options	Response Count	Percent
Orbis	33	40.2%
Yufind	29	35.4%
Google	14	17.1%
Amazon	4	4.9%
Worldcat	2	2.4%
Comments	2	
Total answers	82	

# Standards & priority functionality

Staff need to engage with findings of usability testing and current behavior in Orbis to decide best practices and to build empathy for user experience.



# Patron empowerment

- Direct export to a variety of tools, including Refworks/Endnote
- Recommendations and weighted ranking based on circulation stats/reserves
- Display—sort or limit results, change number of results displayed per page, display for printing, save records to account
- Permanent links

# Error handling

- Spelling suggestions
- Search suggestions/hints using authority records (high priority)

# Effective and efficient search

- Integration with circulation/ordering/ILL
- Group similar results
- Provide alternative navigation through facets
- Visual shelf list

# Usability process

- Assess current behavior
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# Slides and Findings Available

[library.yale.edu/libepub/usability/studies/dlf\\_user.ppt](http://library.yale.edu/libepub/usability/studies/dlf_user.ppt)

[library.yale.edu/libepub/usability/yulstudies.html](http://library.yale.edu/libepub/usability/yulstudies.html)

[www.library.yale.edu/245](http://www.library.yale.edu/245)

Yale University Library Usability and  
Assessment Kathleen Bauer, Director  
Send questions to [kathleen.bauer@yale.edu](mailto:kathleen.bauer@yale.edu)