Can they scale?

Library discovery tools and new forms of scholarly communications, especially open access:)
A brief history of discovery
• ARL-OCLC Strategic Issues Forum
  – “...the need within the academic community for a scholars portal is high...”
  – “...the place to start for anyone seeking academically sound information.”
Association of Research Libraries (ARL®)
http://old.arl.org/resources/pubs/portals/report-may-01.shtml

Publications, Reports, Presentations

Portal Applications in Research Libraries

ARL Scholars Portal Working Group Report May 2001

User Scenario for the ARL Scholars Portal "Single Search" Option

A student is at her workstation at home on a holiday, and the library is closed. She logs on through her ISP and, since library orientation included information about the Scholars Portal, she already has the bullet/logo for it added to her own start page. She clicks into the SP search page and chooses the "single search" option, and types in a few keywords for her topic. (She could also have chosen a "restricted search" option, and limited it to full-text...
The case for a scholar’s portal

• “There is also no doubt that [today] represents a fleeting moment of opportunity to engage the effort. If the research library community accepts the challenge of and succeeds in creating the scholars portal, it will put a tool of immense value in the hands of the academic community.”

Google Plans New Service for Scientists and Scholars

By JOHN MARKOFF
Published: November 18, 2004

SAN FRANCISCO, Nov. 17 - Google Inc. plans to announce on Thursday that it is adding a new search service aimed at scientists and academic researchers.

Google Scholar, which was scheduled to go online Wednesday evening at scholar.google.com, is a result of the company's collaboration with a number of scientific and academic publishers and is intended as a first stop for researchers looking for scholarly literature like peer-reviewed papers, books, abstracts and technical reports.

Google executives declined to say...
Stand on the shoulders of giants

About Google Scholar - Google Home

◆ 2004 Google
I don’t want any trouble here...
Scholars portal update 2004

• “Although the three-year project is in its second year, progress has been very slow at USC. Some problems are common to all participants, such as delays in the establishment of the administrative project structure and the vendor’s software development, which is a year behind schedule.”

USC Libraries

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Undergraduate  Graduate  Faculty  Distance  Friends & Alumni

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Search USC Libraries' print and online collections

Advanced Search
What is Quick Search?

Popular Links
- Database quick links
- Resources by subject
- Research guides
- Journals A-Z
- HOMER catalog
- Try out new HOMER beta
- RefWorks
- USC Digital Library
- Specialized research collections

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- L.A. as Subject
- ONE National Gay & Lesbian Archives

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Mobile Site
• “…the emergence of Google Scholar demonstrates that creating a centralized search service of library-oriented scholarly resources may be more attainable than previously expected.”

Documents vs. users

• “The bibliographic paradigm is based on certainty and order, where users’ problems are characterized by uncertainty and confusion.”


Interior of the Library of the University of Leyden, from a print by Jan Cornelius Woudanus, dated 1610
Google’s mission is to organize the world’s information and make it universally accessible and useful.

Products - Company - Management

Ten things we know to be true

#1: Focus on the user and all else will follow.

Since the beginning, we’ve focused on providing the best user experience possible. Whether we’re designing a new Internet browser or a new tweak to the look of the homepage, we take great care to ensure that they will ultimately serve you, rather than our own internal goal or bottom line.

More about our philosophy

News from Google
Read up on our latest news, browse our blog directory, or choose to follow a number of Google+ pages for updates on various products and initiatives.

Google jobs
Ever wondered what life at Google looks like or what benefits you might expect as a Googler? Search for a job at Google or check out one of our locations worldwide.

Investor relations
Find out about investor news, financial information or corporate governance. Learn more
## Discovery products total installed 2012

<table>
<thead>
<tr>
<th>Service</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summon Web-Scale Discovery Interface</td>
<td>504</td>
</tr>
<tr>
<td>WorldCat Local</td>
<td>1683</td>
</tr>
<tr>
<td>Primo</td>
<td>1151</td>
</tr>
</tbody>
</table>

*No data available for EBSCO Discovery Service (EDS)*

• “Another one of my colleagues finds Summon a woefully inadequate search tool, and notes that the [new] site practically gives Summon a monopoly over all kinds of search. In other words, Summon is now the default search, but more than that, it's pretty much the only one.”

— Anonymous English faculty member
US Faculty Survey 2012

Discovery: Starting Point

- Specific electronic research resource
- General purpose search engine
- Library catalog
- Library building

US Faculty Survey 2012

“The perceived decline in the role of the library catalog noted in previous cycles of this survey has been arrested and even modestly reversed, driven perhaps to some degree by significant strategic shifts in library discovery tools and services.”

Inevitability of Open Access?

- Information wants to be free...

Figure 4  Per cent of freely available peer-reviewed papers, 2004-2011
Source: Computed by Science-Metrix using DOAJ, PubMedCentral, and Scopus.
Faculty and Open Access

FIGURE 17
“When you think about the journal articles and scholarly monographs that you routinely use — for research as well as for teaching — how important are each of the following sources?” Percent of respondents who indicated that each of the following is a very important source for journal articles and scholarly monographs.

- My college or university library’s collections or subscriptions
- Materials that are freely available online
- My own personal collection or subscriptions
- Collections or subscriptions of other institutions
- My academic department’s collections or subscriptions

0% 20% 40% 60% 80% 100%
Its complicated...

• Complex continuum of ways to offer papers online
  – Gold OA (everything from a particular journal is freely available)
  – Green OA (embargoes of different durations)
  – Hybrid OA (restricted access and Gold OA mixed in same journal)
  – Transient availability (collections opened up for a specific amount of time)
• “Our environment is getting richer and more diverse but this also comes with challenges to track and identify places where material is freely available.”

– Christine Stohn, Ex Libris
• Earnings-neutral transition to Open Access

• Open access does not mean free access

OA and discovery

• “Summon has a whopping 60+ Million records tagged as "Open Access" ranging from Journal Articles to Books to Patents to Photos…”
  – Nagy, Senior Product Manager, Discovery Services at Serials Solutions

• OCLC’s OAIster includes more than 25 million records representing digital resources from more than 1,100 contributors
Harvest content

• MARC catalog records
  – Can be aggregated at the network level
  – Records to OA resources exist in most catalogues
  – Nothing in MARC to indicate OA status

• Institutional Repositories via OAI-PMH
  – Multi-tenancy means records can be shared
  – Does not index full-text (Google Scholar does)
  – OAIster (OCLC)
OA and academic libraries?

• “One key finding was that in 2012, nearly 58% of the bibliographic references to journal articles were freely available from 229 unique sources but that academic libraries provide over half of this content, possibly either through subject or institutional repositories.”

  – Budd, J. Free or open access to scholarly documents: Google Scholar or academic libraries. University of Missouri-Columbia. 2013 Dissertations. http://hdl.handle.net/10355/37582
Make OA collections part of knowledgebase
Links and OpenURL

- Access works via direct links or OpenURL
- OpenURL deals with the appropriate copy issue, but has trouble with complex OA
“OpenURL is one of the most exciting information technology innovations from recent years to link journal indexes to full-text articles. However, as more Green OA articles become available on the Internet, it is time that OpenURL link resolvers advance to the next level...”

Google Scholar

- “Google Scholar and PubMed are far better than subscription-based indexes in indicating and linking to OA full text. Both Google Scholar and PubMed can be configured to link to libraries’ OpenURL link resolvers; thus, they have no problem linking to libraries’ full-text subscriptions.”

NISO

- Provide OA availability indicators through innovations or collaborations

**NISO Launches New Initiative to Develop Standard for Open Access Metadata and Indicators**

**Interested participants from all library types, publishers, and funding agencies are encouraged to contact NISO**

February 7, 2013 - Baltimore, MD - The National Information Standards Organization (NISO) voting members have approved a new project to develop standardized bibliographic metadata and visual indicators to describe the accessibility of journal articles as well as potentially describe how "open"
Work directly with publishers

• Ex Libris, for example, has worked with Oxford and others to add open access articles from hybrid journals to Primo Central
• NISO standard might make this easier at scale
The future of search
Confirmed: Elsevier Has Bought Mendeley For $69M-$100M To Expand Its Open, Social Education Data Efforts

Educational publisher Elsevier is diving deeper into the world of open and social educational data: it has bought Mendeley, the London/New York-based provider of a platform for academics and organizations to share research and collaborate with others via a social network. The terms of the deal have not been publicly disclosed but we understand it is for a sum between $69 million and $100 million. We first broke the news of this deal when it was still being negotiated, in January.

The acquisition will heat up competition between Elsevier and other large publishers moving into ed-tech, among them Thomson Reuters, which owns EndNote, a competitor to Mendeley.

Mendeley is both a technology/platform acquisition as well as an acqui-hire for Elsevier. CEO Victor Henning, one of the three PhD co-founders of Mendeley, tells us in an interview that all of Mendeley's 50 staff are coming over to Elsevier, and Henning will become VP of strategy for the company — a sign that Elsevier may be prepping up for more activity and possibly acquisitions in this space. (Picture of that Mendeley team.)
"I think Elsevier's role as the bogieman [sic] of science publishing, while probably deserved, misses the point. They aren't really publishers – they are a knowledge company. The next battle will be not over whether we can read for free, but whether we can gain access to knowledge for free."

– Roderick Page, professor of taxonomy and the University of Glasgow
Beyond the index

• “We’re transitioning from a world where it’s not just content but the value-added services…”

• “…I think more and more revenue from publishers will come from these services…”
Discover papers and public groups

Search millions of papers
Search one of the world's largest crowdsourced research catalogs on Mendeley. Get related research, refine your search to full-text PDFs and add papers to your library in one click.

Public groups
Read up on new topics, find ongoing research, follow curated bibliographies and get involved in discussions in public groups.

Build an online presence
Create an academic profile, upload your papers and publicize your research. Show the world your professional research profile.
Insight engines?
“Things not strings”
Meat Loaf - Wikipedia, the free encyclopedia
en.wikipedia.org/wiki/Meat_Loaf
Meat Loaf (born Marvin Lee Aday; September 27, 1947) is an American musician and actor. He is noted for the Bat Out of Hell album trilogy consisting of Bat Out...
Discography - Meatloaf - Bat Out of Hell - But I Won't Do That

Meat Loaf - IMDb
www.imdb.com/name/nm0001533/
Reverend Hadley Jorgensen (as Meat Loaf Aday). 2009 Citizen Jane (TV movie) ...
Richard Valbruno (as Michael Meat Loaf Aday). 2005 Extreme Dating

I'd Do Anything for Love - MEAT LOAF - YouTube
www.youtube.com/watch?v=3EMk52FWaAQ
May 14, 2010 - Uploaded by abrahamovich
Michael Lee Aday (born Marvin Lee Aday; September 27, 1947), better known by his stage names Meat ...

Meat Loaf Biography - Facts, Birthday, Life Story - Biography.com
www.biography.com › People
Sep 28, 2011
Meat Loaf (originally: Marvin Lee Aday) was born September 27, 1947, in Dallas, Texas. Meat Loaf struck ...

Meat Loaf
meatloaf.net/
Jul 31, 2013 - Includes a biography, news on current events, concert information, a live chatroom, and fan club information. [Paid membership required to ...

Happy Birthday, Meat Loaf! So, How DID He Get That Name ...
music.yahoo.com/.../happy-birthday-meat-loaf-did-name-161218009.html...
Sep 27, 2012 - What is the real deal behind iconic musician/actor Meat Loaf's stage name? The superstar, who was born Marvin Lee Aday in Texas and turns ...

A Meat Loaf A Day Keeps the Successful Acting Career Away | Slog
Myocardial infarction
From Encyclopedia Britannica

Death of a section of the heart muscle, caused by an interruption of blood flow to the area. See heart attack.
Read more
Beyond ‘strings’

• “The rapid growth in publications...makes it no longer sufficient to provide access to content to human readers only...it is equally important to allow machines to analyze information to allow the emergence of new applications that will facilitate the process by which research is accomplished.”

High expectations for content mining in publishing

Scholarly publishers will mine their content for the purpose of content enrichment, semantic tagging and better navigation.

Content mining will rapidly expand into new areas, new applications and new directions.

More new services like Mendeley and Citeseer will emerge as a result of better content mining technology.

Legend:
- very much agree
- somewhat agree
- neutral
- disagree
- disagree strongly
But differing expectations on:

Content mining tools will deliver high precision results in an automated way, without manual curation.

The copyright protection for derivative works (created via mining for example) should be made less restrictive.

The investments needed for semantic tagging of scholarly content will be a limiting factor.

Legend:
- very much agree
- somewhat agree
- neutral
- disagree
- disagree strongly
Derivative information products

• Products that summarize and display the information and relationships as available in the content corpus that was mined
  – Drives traffic
  – Functions as substitute

• Publishers’ policies re: mining requests by 3rd parties
  – 53%: permission declined for creation products that compete/replace their original content offerings
Difficult conversations

• “...the transition from purchased to open access content...will do more to reshape what libraries will be and do in the future...but this has not yet been carefully considered or broadly discussed.”

• “I do think that libraries have a role that goes beyond providing access to content.”
“One key finding was that in 2012, nearly 58% of the bibliographic references to journal articles were freely available from 229 unique sources but that academic libraries provide over half of this content, possibly either through subject or institutional repositories.”

— Budd, J. Free or open access to scholarly documents: Google Scholar or academic libraries. University of Missouri-Columbia. 2013 Dissertations. http://hdl.handle.net/10355/37582
• “Now we, and presumably others, are talking about creating what are essentially consortial-level discovery layers. Surely, the reasoning goes, if we all join forces and collections, then we’ll hit that critical mass that will bring users back to us. Why bother, really? Google won the search discovery wars years ago, and nothing we can do is going to change that.”

— Dale Askey, September 17, 2013
Thanks

• Thanks especially to **Andrew Nagy** at Serials Solutions and **Christine Stohn** at Ex Libris

• [coreyd@uvic.ca](mailto:coreyd@uvic.ca)