



The Evolving Digital Library

What Must be Done to Stay Relevant

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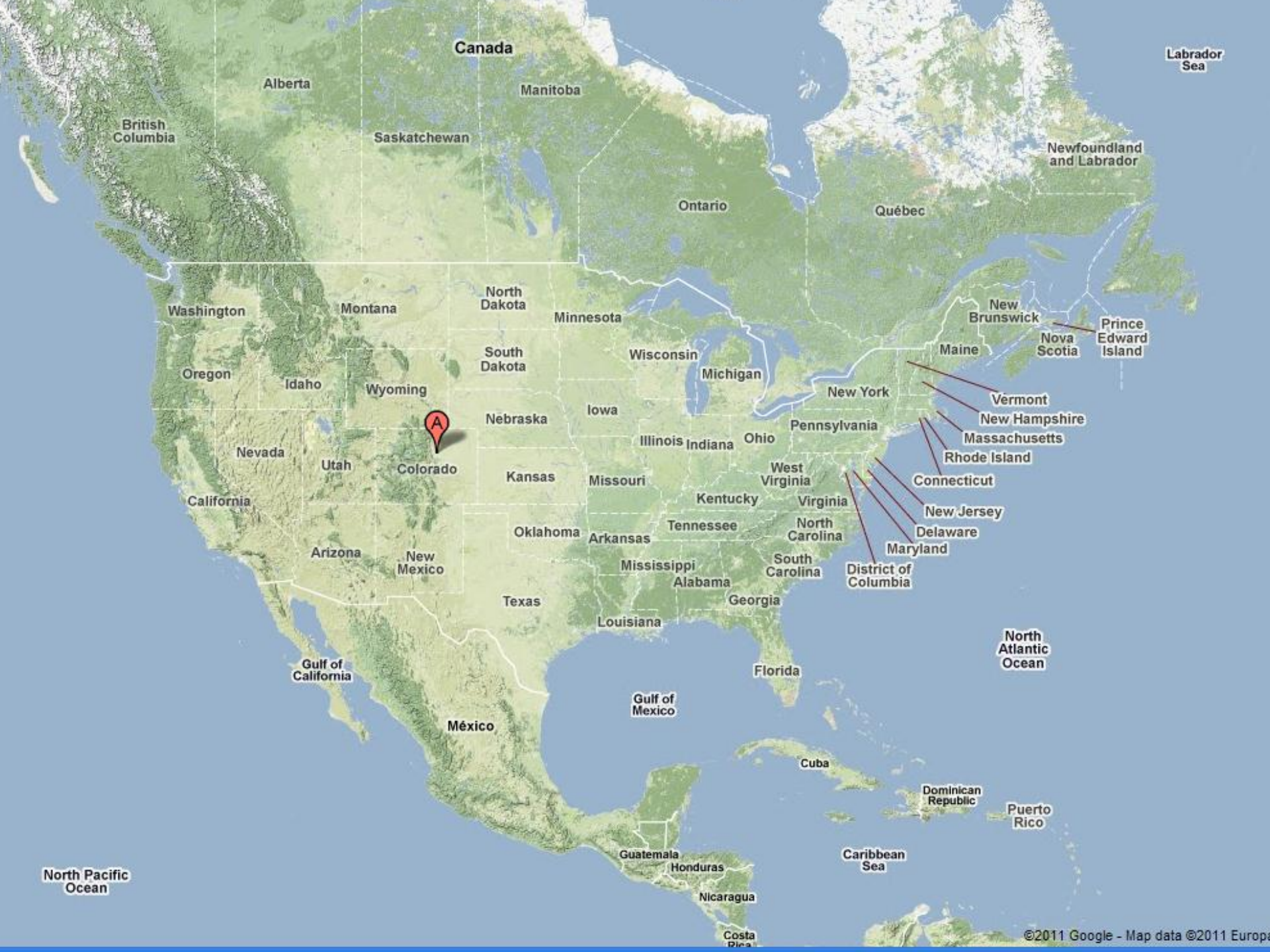
INFORUM 2011

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May 24, 2011

Welcome and Introductions

- George Machovec
 - Associate Director, Colorado Alliance of Research Libraries, 1993-present
 - Head of Library Technology & Systems, Arizona State University 1987-1993
 - Science Reference Librarian, ASU 1977-1986
- Managing Editor, The Charleston Advisor 1999-present
- My cultural heritage is from the Czech Republic, Moravian region



Who Are We?

- Colorado Alliance of Research Libraries
- A non-profit consortium of 13 libraries founded in 1974 – 12 academic libraries and 1 public library
- History of innovation
 - CARL ILS (sold in 1995) – now TLC
 - UnCover (sold in 1995) – now Ingenta
- No relationship to current TLC/CARL

Who Are We?

- Member of ICOLC
- What does our consortium do?
 - Database licensing, shared collection development
 - > \$10 million (USD) in shared licensing
 - Prospector Union Catalog and other hosting services
 - With over 40 libraries (public, academic, special)
 - Alliance Digital Repository
 - Fedora/Islandora open source institutional repository service for seven libraries
 - Gold Rush
 - Electronic Resource Management System (ERMS)
 - A-Z/Open URL Link Resolution/Content comparison
 - A hosted service licensed to about 80 libraries in North America



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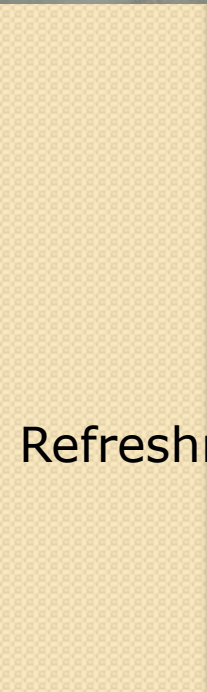
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ATIONAL
WORKA

University of Denver Library

- Peak of Spring Semester 2011
 - Books/Journals are in perfect order
 - No faculty/staff/students
 - Where are the people?
- Repeated at academic libraries all over the United States

Reference Collection is online, people want computer access to everything



Reference Desk

Refreshments

Where is the collection going?

The University of Denver is moving 80% of its collection to offsite storage

- 20% of high use items will remain
- Special Collections

Building is being renovated for people

- Collaboration
- Study areas
- Workstations
- WiFi and Power
- Media Development
- Research Assistance
- Group Meeting Spaces
- Galleries



Offsite storage

Regional Catalogs for Patron Initiated Borrowing



The screenshot shows the Prospector website interface. At the top, there is a navigation menu with links for News, About, Map, Help, and Classic Search. The main heading is "Prospector" with a colorful bar below it. A search bar is prominently displayed with the text "Find books, movies, music, and more!" and a "Search" button. To the right of the search bar is an illustration of a person in a hat crouching. Below the search bar, there are two main sections: "Popular Searches" and "Prospector News".

Popular Searches

- 
- 
- 
- 

Prospector News

Six New Libraries Join Prospector
May 2nd, 2011 3:39pm
On May 2, 2011 Eagle Valley Library District, Garfield County Public Library, Grand County Library District, Gunnison County Library District, Town of Vail Library and Wilkinson Public Library went live in the Prospector system. This means that their library holdings are available for lending and patrons of each of these libraries may now borrow from...

Temporary Deactivation Of University Of Denver Penrose For Lending
April 19th, 2011 10:39am
In preparation for the exciting re-building of Penrose Library at the University of Denver, Penrose will turn off Prospector Lending from April 18 through April 30. It's a first step in the tremendous task of moving its collections while construction gets underway. Patrons from DU will be able to continue to borrow items through Prospector...

Adams State College Joins Prospector
April 1st, 2011 4:14pm
On April 1, 2011 Adams State College went live in the Prospector system. This means that their library holdings are available for lending and

Interesting Facts About Prospector

- Welcome to our new look
- We have incorporated facets for limiting results, book jackets and other design elements
- If you prefer our classic interface it is still available
- Prospector has over 10 million unique titles and 30 million copies
- Status of Denver Public Library

Discovery Interfaces

Efficient Consolidation in Research

global warming antarctica - Summon - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Colorado Alliance of Research Libraries - ... x global warming antarctica - Summon x +

http://du.summon.serialssolutions.com/search?s.q=global warming antarctica

Most Visited Getting Started Latest Headlines

Off Campus? Log in to access full text and more content

UNIVERSITY OF DENVER
PENROSE LIBRARY

global warming antarctica Search Library Advanced Search

Keep search refinements New search

Search Results: Your search for **global warming antarctica** returned **9,154** results

Refine your search

- Items with full text online
- Limit to articles from scholarly publications, including peer-review
- Exclude Newspaper Articles
- Add results beyond your library's collection

Content Type

- Any
- Newspaper Article (5,912)
- Journal Article (3,016)
- Dissertation (141)
- Trade Publication Article (58)
- Conference Proceeding (11)
- eBook (5)

more options

Subject Terms

- Any
- global warming (1,310)
- climate change (983)
- ice (376)
- research (359)
- studies (319)
- climate (254)

more options

Publication Date

Any

to

2011 Summon | Powered by Summon™

Relevance

Recommendation: We found one or more specialized collections that might help you.

- Environment Index

GLOBAL WARMING HAS ANTARCTICA'S MARINE LIFE MOVING

Full text

Author: DAVID PERLMAN San Francisco Chronicle
Seattle Post - Intelligencer ISSN: 0745-970X Date: 03/13/2009 Description: A.8
Subjects: Global warming, Plankton
Scientists monitoring the effects of **global warming** in **Antarctica** report that rising temperatures have triggered a chain reaction that is rapidly altering...

Content Type: Newspaper Article
Availability: Full Text Online

Study finds 'classic global warming' over Antarctica: Chicago Final Edition

Full text

Author: Los Angeles Times
Chicago Tribune ISSN: 1085-6706 Date: 03/31/2006 Description: 13
"We have the classic **global warming** signal," [John Turner] said. "It is like the blanket on the bed: When we wrap the Earth with a blanket of greenhouse gases..."

Content Type: Newspaper Article
Availability: Full Text Online

Global warming satellite crashes near Antarctica

Full text

Author: Alicia Chang
Toronto Star ISSN: 0319-0781 Date: 02/25/2009 Description: A.2
The loss of the \$280 million (U.S.) mission came a month after Japan launched the world's first spacecraft to track **global warming** emissions. The failure dealt...

Content Type: Newspaper Article
Availability: Full Text Online

Chance to study global warming in Antarctica: FIRST Edition

Full text

Author: Paul Rowland
Western mail (Cardiff, Wales : 1956) Date: 01/25/2007 Description: 38
..., an English teacher at Cardiff High School, will join explorer Robert Swan on a 15-day trip to the Antarctic to examine how **global warming** has affected the continent's...

Content Type: Newspaper Article

Saved Items (0)

What has made print largely obsolete in many disciplines?

- Journal Literature
 - Most scholarly content now online by publishers (began in mid-1990s)
 - Many major publishers have digitized their backfiles
- Backfile Projects – such as
 - JSTOR, 1,400 titles back to their inception
- High Speed Interlibrary Loan to the Desktop
 - RapidILL (<http://rapidill.org/>)
 - IDS Project (<http://idsproject.org/>)

What has made print largely obsolete in many disciplines?

- Trusted 3rd party archiving
 - Portico (<http://www.portico.com>) dark archiving
 - > 12,000 journals from over 120 publishers
 - > 65,000 ebooks
 - > 40 digital collections
 - LOCKSS (CLOCKSS) peer to peer archiving
 - > 6,700 journals from 450 publishers
 - CLOCKSS selected dark archived titles using LOCKSS technology
 - Technology also used for private networks and digital repositories (e.g. MetaArchive)

Trusted Print Archiving Just in Case

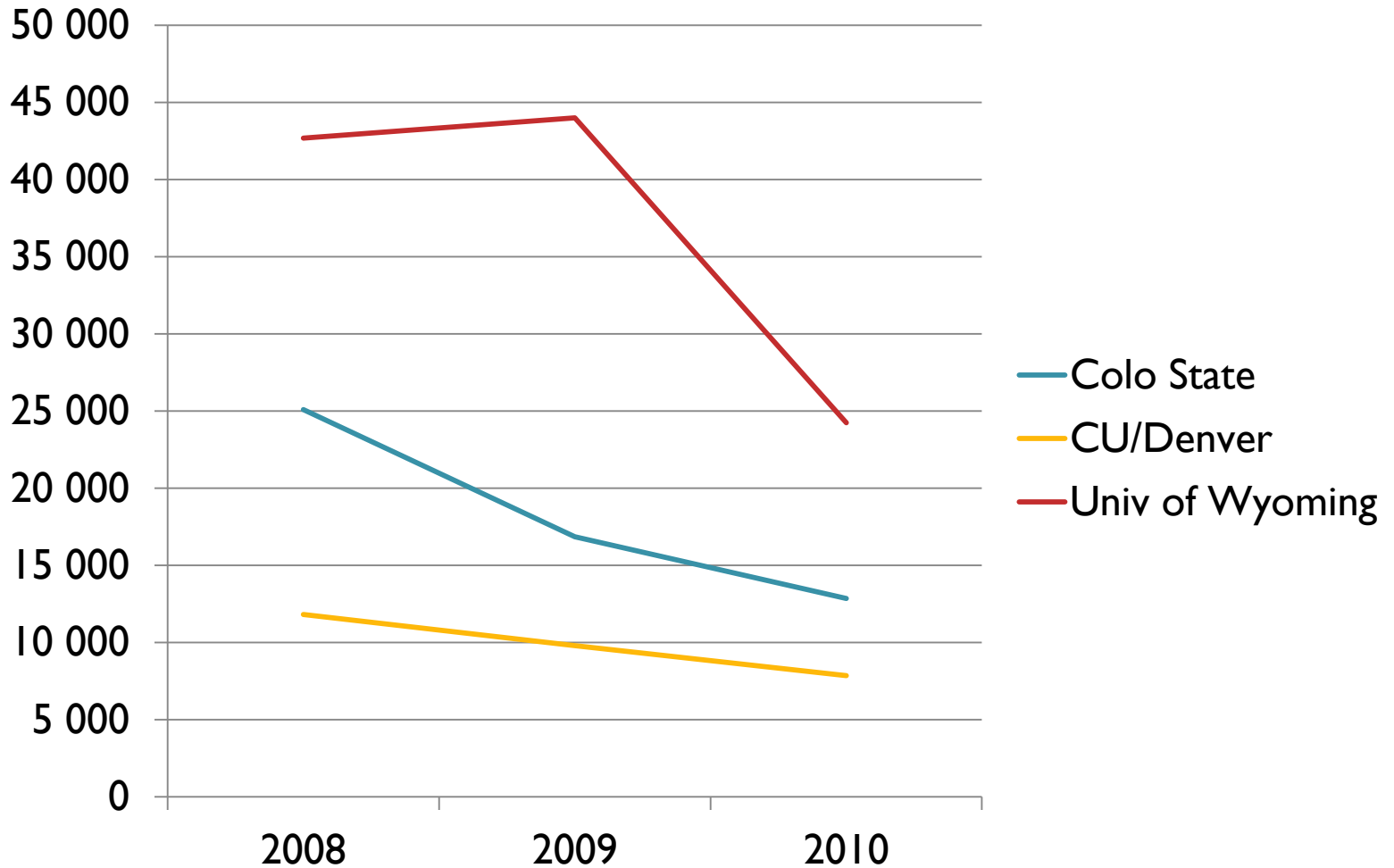
- Center for Research Libraries Print Archives
 - Regional storage repositories and academic library archiving of print
 - Developing standards for journal backfile storage retention
 - Print Archives and Preservation Registry to record who is storing which titles, under what conditions,
 - <http://www.crl.edu/print-archives>

Ebooks versus the printed monograph

- Thomas Frey, Futurist at the DaVinci Institute predicted that academic libraries will be buying NO printed scholarly monographs in 10 years
 - <http://www.davinciinstitute.com/>
- It may not be true in all disciplines but it will be mostly true if current trends continue
- The explosion of tablets, ereaders and mobile phones has made the difference



Printed Monograph Purchasing at Three Academic Libraries



What these libraries spent in 10 years for monographs

- Purchase statistics for 8 academic libraries in the Colorado Alliance of Research Libraries, 1999-May 2008
- 566,401 titles
- 2.44 copies owned per title (high of 4.91, low of 1.60)
- 1,383,233 books
- 145,603 books purchased annually
- 59,621 titles purchased annually
- \$107,892,173 spent (based on avg cost of \$78.00)
- \$11,357,070 spent annually

Printed Monograph 10 Year Study

Titles Never Circulated

Colorado Alliance

- Colorado State University 39.14% 278,650 titles
- University of Colorado at Denver 39.46% 129,914 titles
- University of Denver 47.77% 208,248 titles
- University of Colorado at Boulder 49.41% 348,181 titles
- Colorado College 50.89% 67,250 titles
- University of Northern Colorado 51.57% 116,799 titles
- Regis University 52.41% 55,848 titles
- University of Wyoming 59.62% 133,645 titles

Patron Driven Acquisitions

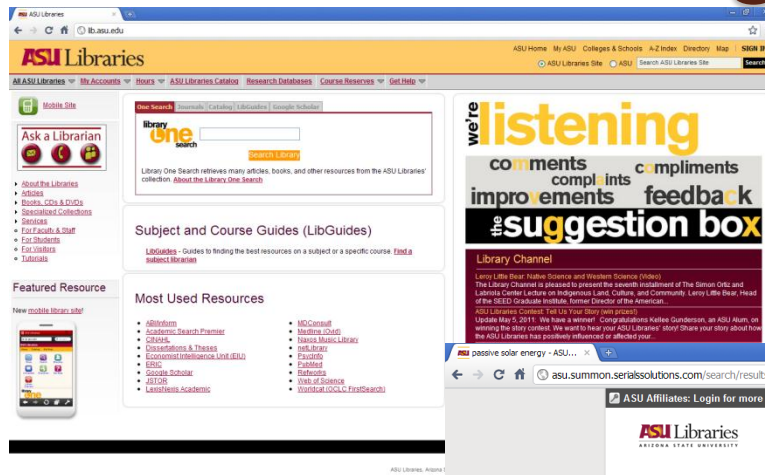
- A very popular way to purchase ebooks
 - A body of MARC records usually loaded in a catalog
 - As patrons use titles short term loans or purchases are triggered
- A library only pays for what is used
- Pay at the point of need
- More titles can be exposed to the reader

University of Denver EBL Pilot

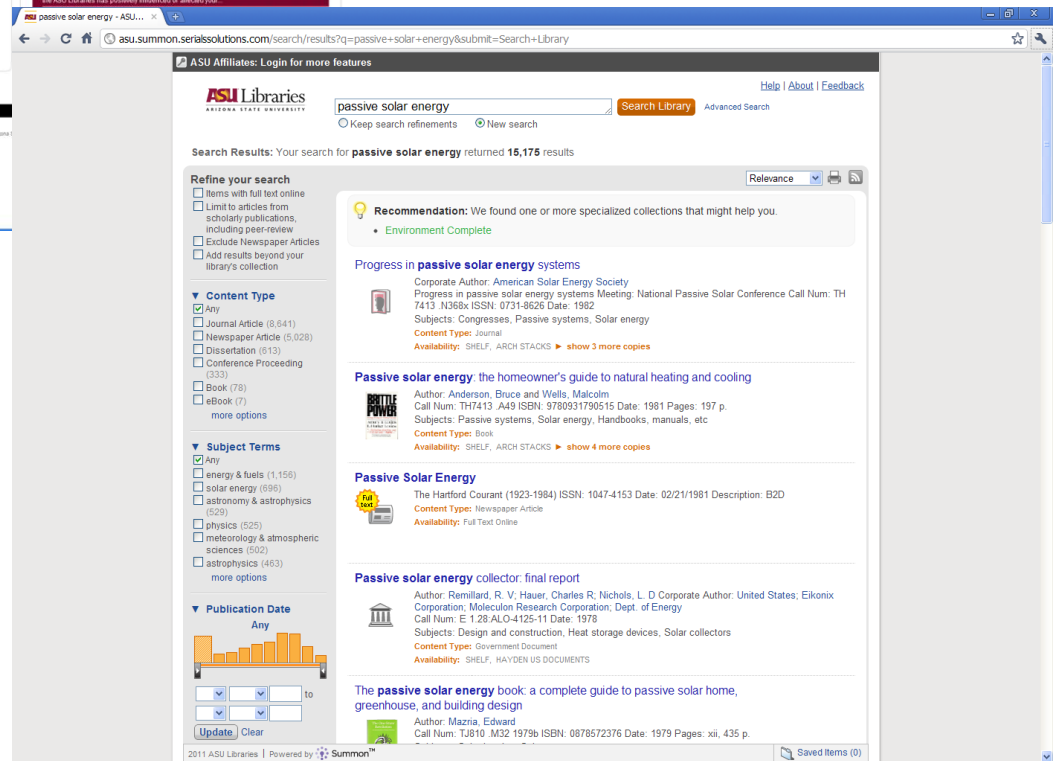
	List	Actual
• 255 titles purchased	\$19,510	\$19,510
• 2,988 titles with STL*	\$39,831	\$214,974
• 5,397 titles with browse	\$0	\$436,691
• <i>Total (8,640 titles)</i>	<i>\$59,341</i>	<i>\$671,175</i>
• Savings	\$611,834	

*includes titles with an STL and auto-purchases, 63,000 MARC records loaded in the pilot

Discovery Interfaces Portals into our Digital Holdings



The screenshot shows the ASU Libraries homepage. At the top, there's a navigation bar with 'ASU Libraries' and 'lib.asu.edu'. Below that, a search bar is visible. The main content area is divided into several sections: 'Ask a Librarian' with a chat icon, 'Subject and Course Guides (LibGuides)', 'Most Used Resources' listing various databases and services, and a 'Featured Resource' section. A large banner on the right side reads 'we're listening' and 'the suggestion box', encouraging user feedback.



The screenshot displays the search results for 'passive solar energy' on the ASU Libraries website. The search bar at the top shows the query and the number of results: 15,175. The results are filtered by 'Content Type' (Journal Article, Newspaper Article, etc.) and 'Subject Terms' (energy & fuels, solar energy, etc.). A 'Recommendation' section suggests 'Environment Complete'. The main results list includes 'Progress in passive solar energy systems', 'Passive solar energy: the homeowner's guide to natural heating and cooling', 'Passive Solar Energy', 'Passive solar energy collector: final report', and 'The passive solar energy book: a complete guide to passive solar home, greenhouse, and building design'. Each result provides details like author, date, and availability.

Google Scholar

- Alex Verstak and Anurag Acharya began looking at a consolidated super index
- Beta launch in November 2004 – still has a “beta” designation in 2011!
- A separate search island from the main Google index with some overlap

Google Scholar

- Additions to GS over the last few years have included
 - “Cited by” feature which mimics ISI citation indexing but uses Web citing instead
 - Related articles
 - Interaction with local link resolvers through proactively sending holdings via an XML file
 - Citation exporting feature
 - Incorporation of some Google Books content
 - Links to open access and publisher pay-per-view
 - Patents are now included
 - Who knows what will come out of the mind of Google next!
 - Oh yes, and its FREE

And the Problem is ---

- Nobody knows exactly what is in Google Scholar
- Nobody knows the overlap between Google, Google Scholar, Google Books and the other Google islands
- Linking to your local resolver can be very sloppy and you only see the link to what you own
- It's not branded
- More local integration and control

An opening →

Library Discovery Interfaces

- Began with a focus on the traditional OPAC
 - AquaBrowser
 - Encore
 - Primo
 - VuFind (open source)
 - OCLC WorldCat Local
 - Build your own (Lucene, SOLR)
 - etc, etc etc
- After a couple of years a quick realization that we also need a solution for journal literature

Common Discovery Interfaces That Include Everything

- Summon (SerialsSolutions)
- EBSCO Discovery Service (EDS)
- WorldCat Local (OCLC)
- Primo/PrimoCentral (Ex Libris)
- Encore/Encore Synergy (Innovative Interfaces)

Discovery Interfaces

- Puts much of the library digital content in a single search
- Libraries can control what to include
- Libraries can control branding
- Can include journal articles, monographs, digital repository materials – virtually anything digital
- Users can revert to native interfaces or silos if advanced specialized searching is needed

Other Changes on the Horizon

- Integrated Library Systems (ILS)
 - Web Scale Management Systems (e.g. OCLC)
 - Local ILS vendors moving to optional SaaS (software as a service) and redesigned environments
 - Alma for ExLibris
 - Sierra for Innovative Interfaces
 - Open source movement
 - Who will prevail? No one knows but the ILS world is in flux

Digital Repositories

- Digital repositories become the place for libraries/campuses to host their unique content
 - Special collections (photos, manuscripts, audio, video)
 - Theses/dissertations
 - Raw research datasets
 - Virtually anything digital or that can be digitized

Digital Repositories

- Open source solutions are extremely popular
 - Dspace
 - Fedora
- Commercial solutions include
 - ContentDM (OCLC)
 - Digitool/Rosetta (ExLibris)
 - Digital Commons (BePress)
- Cloud hosting as primary or secondary storage
 - DuraCloud (<http://DuraCloud.org>)

The Role and Impact of Consortia

- Consortia are still hot!!!!
- Almost every library belongs to one or more consortia
- Purchase collectively whenever possible
- Vendors are now aware of collective purchasing
- International Coalition of Library Consortia
 - Two annual meetings – one in Europe and the other in North America
 - ICOLCI 3th Europe / Asia Meeting in Istanbul, Turkey from 18th to 21st September 2011

Staying Relevant

- Libraries must be the licensing agent for electronic content
 - Journal literature
 - Monographic literature
 - Music and Video content
- Discovery interfaces – make everything easy to find!
 - Simple but powerful interfaces
 - As encompassing as possible
 - Reduce barriers to discovery and access

Staying Relevant

- Digital repository management and services
 - Digitize and consolidate library and campus content and research
 - Be the recognized place to store campus intellectual property – otherwise content will be spread all over and not properly managed
 - Take the lead

Staying Relevant

- Rethink your physical library
 - How can it be redesigned to meet the needs of people
 - What services are necessary
 - Redeploy staff into new roles to maximize their effectiveness
 - What needs to be kept in the building and what can be paged from storage when necessary?

Staying Relevant

- Deploy mobile interfaces
 - Provide user interfaces that work well on mobile phones
- Participate in social networks
 - Provide ability to push library information to Facebook, Twitter, email and other tools
- Develop a presence, where appropriate, on social media
- Keep your Website modern and up-to-date
- Participate in consortial or group purchasing to maximize your buying potential

Staying Relevant

- Without change libraries will become museums
- Without change libraries will decline in value



Thank You!

George Machovec

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