Interactive Online Reference

Tom Beyer, iFactory
Sue Polanka, Wright State University
Agenda

- Where are we going
- Data Centered Features
- User Centered Features
- Future
- Survey Results
I work for a:

1. Library
2. Publisher
3. Vendor
4. Other
How often do you use online reference products?

1. Daily
2. 2-3 times week
3. Weekly
4. Monthly
5. Never
What do we want from an online reference product?

– Authoritative
– Credible
– Quick
– Thorough

– Answers
Interactive Reference

• Context Matters
• Clearly not all content requires all features
• Full tool set
• Develop an interface vocabulary
Enriching Text – the obvious stuff

• Why?
  – Improve comprehension
• Images
  – Are they important enough to warrant their own search
  – Slide shows
• Audio
  – Automatic translation
  – People
  – Download mp3’s
• Video / Animation
  – How to search
  – How to Chunk
Enriching Text - Simulation

- Make use of the math in your content
- Find & Create simulations to explain concepts
Would patrons use these features?

1. Audio
2. Video
3. Animation
4. Simulation
5. Translation
Content in the Aggregate

• Can we do a better job showing the relationship between multiple pieces of content
• What interfaces are appropriate?
• What value are we providing?
• What is important in these relationships?
Ezra: Chapter 1

1 In the first year of King Cyrus of Persia, in order that the word of the LORD by the mouth of Jeremiah might be accomplished, the LORD stirred up the spirit of King Cyrus of Persia so that he sent a herald throughout all his kingdom, and also in a written edict declared:

Thus says King Cyrus of Persia: The LORD, the God of heaven, has given me all the kingdoms of the earth, and he has charged me to build him a house at Jerusalem in Judah.

Any of those among you who are of his people—may their God be with them—are now permitted to go up to Jerusalem in Judah, and rebuild the house of the LORD, the God of Israel—he is the God who is in Jerusalem; "and let all survivors, in whatever place they reside, be assisted by the people of their place with silver and gold, with goods and with animals, besides freewill offerings for the house of God in Jerusalem."

The heads of the families of Judah and Benjamin, and the priests and the Levites—everyone whose spirit God had stirred—got ready to go up and rebuild the house of the LORD, the God of Israel.

The decree of King Cyrus of Persia.

The LORD, the God of the heavens, has given me all the kingdoms of the earth, and he has charged me to build him a house at Jerusalem in Judah. Whoever among you belongs to his people, may his God be with him; and let him go up to Jerusalem in Judah, and build the house of the LORD the God of Israel, the God who is in Jerusalem. Let every Jew among you, wherever he is settled throughout the country, be helped by his neighbours with silver and gold, goods and livestock, in addition to the voluntary offerings for the house of God in Jerusalem.

Thereupon the heads of families of Judah and Benjamin came forward, along with the priests and the Levites, all whom King Cyrus of Persia had set over them.
v73 v74
269 269 (8) The user can select a subset of Admin via a palette. The Admin selection controls will function as they did in the GoN, only appearing if a country with Admin is selected.
269 269 * This functionality would mirror that of the GoN.
270 270 * The additional filter palette for Admin would only appear if any existed for the Admin (this feature will be disabled until Columbia is ready with enough content).

270

271 271 *** Admin ***
272 272 * The Admin filter palette only appears if the selected Admin has Admin children.
272 272 * This Admin functionality will be included (brought over with other GoN code), but will be disabled due to lack of content. This feature will be activated later, possibly under a maintenance agreement.
271 274
272 275

313 316 The Entry Display page displays the information for a single entry.
314 317

315 315 *** (1) Search Results New ***
316 316 Entries that were reached from a search will include links to view the previous and next entries in the result list. When the entry is accessed via the Browse page, the previous and next arrows will still be displayed, but will move the user through the alphabetic list of entries instead. When reached through a cross reference, the next / prev links will no appear.
318 318 *** (1) Search Results Navigation ***
319 319 Entries that were reached from a search will include links to view the previous and next entries in the result list. When the entry is accessed via the Browse page, the previous and next arrows will still be displayed, but will move the user through the alphabetic list of entries instead. When reached through a cross reference, the next / prev links will no appear.
317 320
318 321 *** (2) Bread Crumb Trail ***
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321

Document version analysis
Timelines & Maps

• We live in spacetime
• Date & location information are common metadata for many different kinds of content
• Make use of this to visualize the relationships of your data
Explore the 100 years of Harvard Business School through the lens of the School’s innovations, people, and associated topics.

Timeline Example
Subject Browse & Visual Search

• A-Z becomes less important in a world where there isn’t a need to order pages
• 1 or more Subject-based browse orderings are usually possible
• Typically these have been handled using lists or tree-views
• Is there a value to providing a more visual way to browse these collections?
Mercury Vehicles 2009: View Mercury Cars & SUVs
Mariner - Milan - Grand Marquis - Mountaineer
www.mercurymachines.com/ - Cached - Similar -

Mercury Marine
Manufacturers of outboards motors and MercRiser inboard engines, with over 7000 dealers worldwide.
www.mercurymarine.com/ - Cached - Similar -

Mercury (mythology) - Wikipedia, the free encyclopedia
Mercury has influenced the name of a number of things in a variety of scientific fields, such as the planet Mercury, and the element mercury,
Network of Segall, Benjamin

Name: Segall B
First name: Benjamin
Publications: 52
Connections: 27

[Network Viewer]

Java is required to show the Network Viewer. Download from www.java.com
Issues

• Is the metadata of the same quality as the data?
• Is it complete?
• Are there artifacts in the data that show up in the timeline or map?

• Is the visualization usable or is it just a spiderweb?
• Entry heads or an explicit taxonomy?
• If there is a taxonomy
  – Publishers need to become taxonomy experts
  – Need to vet taxonomy to the same level as the content
  – Does the taxonomy and content map back and forth well?
Would patrons use these features?

1. Side by side comparison
2. Timelines
3. Maps
4. Visual search
User Centered Interactivity

• Help the user with their task
• We use personas to understand our users better when developing new products
• One Classic persona is the ‘slovenly student’
• What is the killer feature for them?
Use Cases

- Student
  - Doing research for a paper
- Faculty
  - Doing research for a class
  - Putting together class materials
- Librarian
  - Configuring product
  - Helping users
Mental Models

• How do the different people involved view what is going on with online reference in the library?

• What is their mental model when they are using the software?
Technical Model
Librarian’s Model
User’s Model
Everyone: It all starts with Search

- Advanced Search
- Quick Search – make it better – mostly invisible
- Search Results – facets
  - Facets
  - Refinement
  - Links to other products
- Did you mean?
- Same visualizations as browse
  - Timelines
  - Maps
  - Topic maps
Saving information

• Lots of content – each user is only interested in a small subset
• Saving searches and content during the session
• Saving across sessions requires users to create an account
  – Tension with user model
  – Do users want to save in the product?
• Alerts
• Organize saved content to groups
  – Allow content to be reordered within group
  – Annotations added to groups
Saved Groups

• Potentially there’s real value in the group
• What can you do with your organized content?
  – Make public – Granger’s
  – Email - Credo
  – eBook - PubFactory
My Granger's: Columbia Grangers - COLUMBIA UNIVERSITY PRESS

The Columbia Granger's World of Poetry

Poet:  

Poem:  

GO  

Advanced Search  |  Search Tips

Subjects  |  Biographies  |  Commentaries  |  History & Criticism  |  Poetry Sources  |  Glossary  |  Listening Room  |  Browse

My Granger's

Your saved lists:

1. Sonnets  
2. My Grandfather  
3. Poems I Like

Make Public  |  Edit  |  Delete  
Make Private  |  Edit  |  Delete
Would patrons use these features?

1. Did you mean?
2. Saving searches
3. Organize topical content
4. Share content
5. Bundle for download
6. Alerts
7. Citation Builders
8. Single search platform
Faculty: Social Networking / Collaboration

• Teaching Tools
  – Sharing of lesson plans?
  – Community of teachers?

• Social Networking
  – Will network happen within product or should product be linked to existing networks?

• Vertical Integration
  – For resources aimed at the professional level
  – Does the society model work in the technical world?
Librarians: Fitting a Product into the Library

- Search Widgets
- Cross Product Linking
  - Within the product – similar results
  - Understand the position of the product within the larger landscape
  - Or allow the librarian to position it within the larger landscape
  - Links to other products
- Customization for specific user groups
  - Within product: Gale Virtual Reference Library Subject Clusters
  - Across products: Springshare
Credo Example for product cross linking

Mercury, the innermost planet, is never easy to study from Earth. It is small, with a diameter of only 4,878 kilometers (3,030 miles), it always stays in the same region of the sky as the Sun, and it never comes much within 80 million kilometers (50 million miles) of us. Moreover, when it is at its nearest it is new, and cannot be seen at all except during the rare transits.

Mercury has a low escape velocity, and it has always been clear that it can have little in the way of atmosphere. The orbital period is 88 days. It was once assumed that this was also the length of the axial rotation period, in which case Mercury would always keep the same face turned toward the Sun, just as the Moon does with respect to the Earth; there would be an area of permanent day, a region of everlasting night, and a narrow 'twilight zone' in between, over which the Sun would bob up and down over the horizon — because the orbit of Mercury is decidedly eccentric, and there would be marked libration effects. However, this has been shown to be wrong. The real rotation period is 58.6 days, or two-thirds of a Mercelian year, and this leads to a very curious calendar indeed. To an observer on the planet's surface, the interval between sunrise and sunset would be 88 Earth-days.

The orbital eccentricity makes matters even stranger, because the heat received at perihelion is 2.7 times greater than at aphelion. At a 'hot pole,' where the Sun is overhead at perihelion, the temperature rises to +127 degrees C, but at night a thermometer would register -183 degrees C. Mercury has an extremely uncomfortable climate.

To an observer situated at a hot pole, the Sun will rise when Mercury is at aphelion, and the solar disk will be at its smallest. As the Sun nears the zenith, it will grow in size, but for a while the orbital angular velocity will be greater than the constant spin angular velocity; our observer will see the Sun pass the zenith, stop, and move backward in the sky for eight Earth-days before resuming its original direction of motion. There are two hot poles, one or the other of which will always receive the full blast of solar radiation when Mercury is at perihelion. An observer 90 degrees away will have a different experience; the Sun will rise at perihelion, so that after first coming into view it will sink again before starting its climb to the zenith. At sunset it will disappear, and then rise again briefly before finally departing, not to rise again for another 88 Earth-days.

Mercury has a globe which is denser than that of any other planet apart from the Earth. There seems to be an iron-rich core about 3,600 kilometers (2,250 miles) in diameter (larger than the whole of the Moon), containing about 80 per cent of the total mass; by weight Mercury is 70 per cent iron and only 30 per cent rocky material. The core is presumably molten, and above it comes a 600-kilometer (370-mile) mantle and
Products inter-connected by level and subject
Would your patrons use these features?

1. Social networking
2. Search other content
3. Link to Facebook
4. Custom links
5. Custom content
6. Course Packs
Pay attention to your users

• Recommendations
  – Let users know what has worked for previous users
  – Remember we are in an environment where there is a great deal of cyclical behavior – make use of it

• Passive vs. Active Knowledge
  – Can you create a situation to ask them? Ratings. Profiles.
  – Build up your knowledge of them over time

• Tagging
  – Will they tag?
  – What’s in it for them?
  – Can this augment existing taxonomies
  – Example: Slideshows
Mobile Support

• What do you need to do?
  – Web browser support is getting better
  – Beware of Flash

• Does creating an app make sense?

• What new capabilities do the devices bring?
  – Location sensitive
  – They can hear
  – They can be able to see
Would your patrons use these features?

1. Recommendations
2. Tagging
3. Mobile support
4. Location specific results
Survey Results
Survey Demographics

• 30 questions
• 119 people started the survey
• 93 finished (78%)
• 85 to 93 votes received per question
• 14 vendors, but only 7 finished
• 104 librarians or library employees (3)
Survey Response Options

No Category:
- Ridiculous, no one will use
- Cool, but nobody will use

Yes Category:
- Librarians will use
- Patrons will use
- Librarians and patrons will use
Most Favorable Options

- Did You Mean? Spelling Suggestions
- Citation Builder
- Single platform (search all content)
- Mobile Devices
- Discipline grouped content
- Video
- Interconnectivity – send search to journals
Least Favorable Options

- Social Networking within database
- Linking to social networks
- Visual Searching
- Share teaching aids
- Share resources (link, email to friends)
- Sound
- Reference Interview (computer asks questions)
Survey Response Options

No Category:
• Ridiculous, no one will use
• Cool, but nobody will use

Yes Category:
• Librarians will use
• Patrons will use
• Librarians and patrons will use
Who will use these features?

Librarians will use:
- Did you mean? Spelling suggestions
- Single platform – search all content
- Group content by topic
- Save Searches
- Search other content
- Course Packs
- Maps
- Share (email to friends, make public)

Patrons will use:
- Did you mean? – spelling suggestions
- Single platform – search all content
- Citation builder
- Mobile device
- Video
- Maps
- Translation
7 vendor responses

Most Favorable Options

- Animation
- Map
- Timeline + Map
- Did U Mean?
- Tags
- Mobile
- Share
- Single platform
- Citation Builder
- Group Resources by Discipline

Least Favorable Options

- Share Teaching aids
- Visual
- Recommend
- Bundle for device
- Social network in database
- Ref interview
- Share resources
Tom Beyer
Director of Publishing
iFactory
tom@ifactory.com
617-235-5869

Sue Polanka
Librarian
Wright State University
sue.polanka@wright.edu
937-775-3142