Collaborative resource discovery: researchers needs for navigation in a sea of information

OCLC Membership Meeting
• The online world
• Scholars and their environment
• Libraries
• Collaboration: needs and models
Times of change
Winds of change

Change: It’s Okay. Really.
Since 1768. Really.
What Happens in an Internet Minute?

- 639,800 GB of global IP data transferred
- 20 New victims of identity theft
- 47,000 App downloads
- 61,141 Hours of music
- 20 million Photo views
- 320+ New Twitter accounts
- 100,000 New tweets
- 3,000 Photo uploads
- 204 million Emails sent
- $83,000 In sales
- 277,000 Logins
- 20 million Facebook views
- 6 million Facebook views
- 30 Hours of video uploaded
- 1.3 million Video views
- 2+ million Search queries

And Future Growth is Staggering

Today, the number of networked devices = the global population
By 2015, the number of networked devices = 2x the global population
In 2015, it would take you 5 years to view all video crossing IP networks each second
**Pew research**

**Digital devices**

<table>
<thead>
<tr>
<th></th>
<th>Millennials (18-34)</th>
<th>Gen X (35-46)</th>
<th>Younger Boomers (47-56)</th>
<th>Older Boomers (57-65)</th>
<th>Silent Generation (66-74)</th>
<th>G.I. Generation (75+)</th>
<th>All online adults (18+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell phone</td>
<td>96%</td>
<td>94%</td>
<td>87%</td>
<td>84%</td>
<td>77%</td>
<td>52%</td>
<td>88%</td>
</tr>
<tr>
<td>Desktop computer</td>
<td>55%</td>
<td>67%</td>
<td>62%</td>
<td>61%</td>
<td>48%</td>
<td>29%</td>
<td>57%</td>
</tr>
<tr>
<td>Laptop computer</td>
<td>70%</td>
<td>63%</td>
<td>58%</td>
<td>49%</td>
<td>32%</td>
<td>14%</td>
<td>56%</td>
</tr>
<tr>
<td>iPod or MP3 player</td>
<td>69%</td>
<td>57%</td>
<td>36%</td>
<td>24%</td>
<td>10%</td>
<td>5%</td>
<td>44%</td>
</tr>
<tr>
<td>Game console</td>
<td>63%</td>
<td>63%</td>
<td>38%</td>
<td>19%</td>
<td>8%</td>
<td>3%</td>
<td>42%</td>
</tr>
<tr>
<td>e-Book reader</td>
<td>19%</td>
<td>25%</td>
<td>18%</td>
<td>12%</td>
<td>9%</td>
<td>5%</td>
<td>19%</td>
</tr>
<tr>
<td>Tablet, like iPad</td>
<td>23%</td>
<td>23%</td>
<td>16%</td>
<td>14%</td>
<td>8%</td>
<td>3%</td>
<td>19%</td>
</tr>
</tbody>
</table>

http://www.pewinternet.org/Presentations/2012/Mar/NROC.aspx
iPads even a 2 year old can use them

Is a 2 year old a model for researchers?
Locking up access to information

- Deep web
- When is open really open
- Risks to research, teaching and learning and collaboration
- Locking up is more than big publishers
- Up to 75% of government “publications” disappear in a decade
What is happening in the academy

mrkurod.tumblr.com/
After ipad?

## Dense information

<table>
<thead>
<tr>
<th>Mobile and tablets vs print</th>
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</thead>
<tbody>
<tr>
<td><strong>Read short segments</strong></td>
</tr>
<tr>
<td>browse</td>
</tr>
<tr>
<td>annotations – an impossible dream</td>
</tr>
<tr>
<td>Access to lots of information – reliable, long term?</td>
</tr>
</tbody>
</table>
Debates

• Joseph Konrath “Amazon will destroy you”
• Emma Wright. “The future of the book business”
  – Publishing quality
  – Reading (esp children)
  – Market and value
• Neil Gaiman - publishers must be like dandelions
Remembering and knowing

• Students operate in print and e environments

• Garland study
  – Small differences but
  – More repetition required for digital texts to impart the same information
  – Book readers digest material more easily

(Szalavitz, Maria “Do e-books make it harder to remember what you just read?”)
A future narrative

• Digital coevolution (Nick Harkaway)

• Nicholas Carr “Is Google making us stupid?”
Game changes

• Google
• What is a publication? What is Data?
• Open access
Google: licence to hunt

data vs publishing

http://datavisualization.ch/showcases/just-landed-a-twitter-visualization-in-processing/
Pulse of the Nation:
U.S. Mood Throughout the Day inferred from Twitter

All times are Eastern Standard Time (EST)

Mood Variations
A number of interesting trends can be observed in the data. First, overall daily variations can be seen in the image; with the early morning and late evening being the highest level of happiness. Second, geographic variations can be observed in the image; with a significantly higher west coast than is consistently three hours behind the east coast.

Weekly Variations
Weekly trends can be observed as well, with weekends much happier than weekdays.

About the Data and Visualization
The plots were calculated using over 300 million tweets (May 2009 - Aug 2010) collected by MM's research team, represented as density preserving cartograms. The model of each tweet was inferred using ANEW (Bradley, M.A., & Lang, P. J. Affective norms for English words (ANEW). Technical report C-1, The Center for Research in Psychonometrics, University of Florida). County area data was taken from the U.S. Census Bureau at http://factfinder.census.gov. The base U.S. map was taken from Wikimedia Commons. User locations were inferred using the Google Maps API, and mapped into counties using PostGIS and U.S. county maps from the U.S. National Atlas. Mood colors were selected using Color Brewer 2.

About Cartograms
A cartogram is a map in which the mapping variable is the case; the number of tweets is substituted for the true land area. Thus, the geometry of the actual map is altered so that the area of each region is equal to the number of tweets that originate from that region. This result is a density equalizing map. The cartograms in this work were generated using the cart software by Mark E. J. Newman.

Northeastern University
College of Computer and Information Science
Center for Complex Network Research

Harvard University
Publish negative data

In doing this, other researchers will not duplicate the work but instead may publish with your previously wasted figures.

"Data which are determined to be a matter of public record and can therefore be made freely available, without restriction, are categorised as Public Access".

"Data must be properly curated throughout its life-cycle and released with the appropriate high-quality metadata."

"NERC is committed to supporting long-term environmental data management to enable continuing access to these data."

Gaussian Job Archive for C8H1002S

Fileset 12.05.2013
Open access

But a total conversion will be slow in coming, because scientists still have every economic incentive to submit their papers to high-prestige subscription journals. The subscriptions tend to be paid for by campus libraries, and few individual scientists see the costs directly. From their perspective, publication is effectively free.

(Van Noorden, 2013)
Government information

• President Obama’s Executive Order directs government to make more accessible to entrepreneurs and others as fuel for innovation (9 May 2013)
Libraries
Libraries

Where academics are obtaining articles:

- Library: 67% (UK), 69% (US), 55% (Australia)
- Website: 14% (UK), 13% (US), 8% (Australia)
- Personal: 15% (UK), 11% (US), 5% (Australia)
- Colleague: 7% (UK), 7% (US), 6% (Australia)
- Other: 6% (UK), 10% (US), 8% (Australia)

Library as a source of postgraduates’ readings in Australia and US
Collections

• What makes a collection?
• Curation
• Corpus of knowledge
• Collaboration

http://www.flickr.com/photos/paullew/3487810383/
Resource discovery

• All for one and one for all?
• Defining content
• Scholar needs

• What value is location?
• Collaboration a new frontier?
Maximizing Australia's Asia Knowledge

Repositioning and Renewal of a National Asset

Australia in the Asian Century
• MOOCs new environment – many opportunities beyond traditional academic outcomes

Small beauty By SharonPerrett
http://www.flickr.com/photos/81494696@N00/287199385/
• Are we “run over by technology”?
• Sir Bruce Williams Boyer lecture 1982

• What must we do to demonstrate value? Flexibility, evolution
... the electronic screen lends the text within its frame the eternally pristine appearance of a newly cut page, and this produces in me a distancing feeling that, like Brecht’s dramatic techniques, allows me a freer reading, uncluttered by the sense of labouring under previous perusals by myself and others.

Alberto Manguel cited in Barmé
Either you print things out, and find yourself oppressed by piles of documents you’ll never read, or you read online, but as soon as you click onto the next page you forget what you’ve just read, the very thing that has brought you to the page now on your screen.

Alberto Manguel cited in Barmé
References


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