Web 3.0 and Libraries

Library 2.0 and where we’ve been and where we’re going

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IFLA IT Section  Web 2.0 Pre-Conference
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How Do You Capture Ideas?

And cultivate and Nurture Them?
METABOLISM
The slower it gets, the faster it catches up with you.
• You can’t wait for everyone to change at once.
Bricks, Clicks and Tricks
Are we going to a totally build it yourself world?

Imagine IKEA merging with GM...
Newspapers: Assemble them yourself.
Or Re-imagine the textbook, coursepack, etc.
Yes, this is ancient marketing/sales wisdom: they aren't buying your hammer, they are buying the deck of their dreams. Help them build it.
The thing about success, is that it’s not about things.
Make a list of your last 10 projects. Now describe them in terms that they only solved an end user problem – NOT a library problem.
What problems do you solve?
Are they librarian or end user problems?
Draw a 1 to 7 scale. Plot all projects on it.

One end – Solves end user problems from the end user’s perspective

Other end – Solves library staff problems and pain points?
What do libraries want?
Relevance
Making a Difference
Can you describe end user pain points and dreams and desires in their terms?
What are their real goals?
Search results? HA HA HA!
Observe Your Users
OK – Now let’s ask ourselves what our users really, REALLY want.
Self-Service Web Portal
Context is King, not Content.
Do we truly understand their goals?
Can we at least agree that they don’t want whiz bang widgets, gadgets, shiny new tools or any other raw technology?

Let’s address the human condition.
Discovery & Ideas
Completed in 2003, the Human Genome Project (HGP) was a 13-year project coordinated by the U.S. Department of Energy and the National Institutes of Health. During the early years of the HGP, the Wellcome Trust (U.K.) became a major partner; additional contributions came from Japan, France, Germany, China, and others. See our history page for more information.

Project goals were to:

- identify all the approximately 20,000-25,000 genes in human DNA,
- determine the sequences of the 3 billion chemical base pairs that make up human DNA,
- store this information in databases,
- improve tools for data analysis,
- transfer related technologies to the private sector, and
- address the ethical, legal, and social issues (ELSI) that may arise from the project.
This page provides an up to the minute summary of data currently available in the database. Parameters reported include minimum and maximum reported genomes sizes (in pg), mean genomes sizes with standard error (SE), total number of species assayed, and the methods, cell types, and standards used for all available records. Note that the statistics reported here are based on all records in the database -- for maximum reliability, you are encouraged to evaluate the data for your particular group of interest directly. Note also that these C-value summaries do not currently account for instances of ploidy (though this will be updated in the future).

Because these statistics refer to the database as a whole, they must be cited as follows if used in a publication:


Please select your group of interest from the list:

**Entire Database (i.e., all animals)**
- All Chordates
- Amphibians
- Birds
- Fishes
- Mammals
- Reptiles
- All Invertebrates
- Annelids
- Arachnids
- Crustaceans
- Echinoderms
- Flatworms
- Insects
- Molluscs
- Nematodes
- Methods, Cell Types, and Standard Species

(Other invertebrate groups are insufficiently represented for summary stats)

**Entire Database**

| Number of species/subspecies available: | 4890 (3191 Vertebrates, 1699 Non-Vertebrates) |
| Smallest animal genome size:          | 0.02pg, Pratylenchus coffeae, Plant-parasitic nematode |
| Largest animal genome size:           | 132.83pg, Protopterus aethiopicus, Marbled lungfish |
Welcome!

Who We Are
The Organization for Human Brain Mapping (OHBM) is the primary international organization dedicated to neuroimaging research. The organization was created in 1995 and has since evolved in response to the explosion in the field of human functional neuroimaging and its movement into the scientific mainstream. One of the primary functions of the organization is to provide an educational forum for the exchange of up-to-the-minute and groundbreaking research across modalities exploring Human Brain Mapping. It does this through a growing membership and an annual conference, held in different locations throughout the world.

The 15th Annual Meeting of the Organization for Human Brain Mapping
June 18-23, 2009 in San Francisco, California
The Future Discovered

• Stem Cells
• Cloning
• Wind and other energy
• Nanotechnology
• Robotics
• Book Digitization
• Music
• Streaming Media
• Seed Bank
Yes, Stephen did just say Lizard Spit
Luck / Opportunity
Community
Community Networks
Connection
Personalization
Personalization
I am unique.
Understand me.

It’s personal.
Don’t limit me.
Who are you to limit me?
How many dead ends in your library?
Comfort
Simplicity
Learning
Literacy

- Reading literacy
- Numeracy
- Critical literacy
- Social literacy
- Computer literacy
- Web literacy
- Content literacy
- Written literacy

- News literacy
- Technology literacy
- Information literacy
- Media literacy
- Adaptive literacy
- Research literacy
- Academic literacy
- Etc.
Growing up from books,
Extending the experience
Where and When They Want It
Who Are Your Staff Stars?

Do Your Users Know Their Names?
Information Engagement Levels

Stimulate/Live

Present/Teach

Argue/Defend

Act on/ Discuss

Read/View

Energy & Engagement

Dr. Thomas Davenport
Culture

Conservation and Protection
Progress
These are exciting times.

Choose between achieving a dynamic and exciting future vision or longing for a nostalgic past.
What is at the heart of libraries?

Learning
Interaction
Community
Innovation
Passion
Progress
“You have to sit by the side of a river a very long time before a roast duck will fly into your mouth.”

— Guy Kawasaki
What’s Your Biggest Problem?

Intelligence

Where does it come from?
What’s Your Experience Look Like?
What’s Your Experience Look Like?
What’s Your Experience Look Like?
What’s Your Experience Look Like?
What’s Your Experience Look Like?
What changes with ubiquitous access?
Is it Frozen in Time?
Blow Up The Library!
What's Your Bread and Butter?
Publishers! Writers!
Shelf Check Presents:
Nonexistent Books
That, If Written, Should
Be Wildly Popular with
the Public, Given
the Number of Failed
Library Catalog Searches
On Their "Titles"...

...Exhibit A!

DAIRY OF A
WIMPY
KID
Can libraries keep up with change?
No Quick Fixes
Even if People are Changing too

• Or our understanding of them is improving!
• The new human genome (Shyness, dyslexia, math, music, etc.)
• Human understanding – Bloom’s taxonomy
• MRI’s of reading
• Eye tracking, etc.
• And of course increases in IQ and decreases in fact-based knowledge and mechanical skills.
Imaging techniques allow us to see which areas of the brain control various functions.
Eye Movement Changes
Learning Styles

- Visual/Spatial (**Picture Smart**)
- Verbal/Linguistic (**Word Smart**)
- Musical/Rhythmic (**Music Smart**)
- Logical/Mathematical (**Number Smart**)
- Bodily/Kinesthetic (**Body Smart**)
- Interpersonal (**People Smart**)
- Intrapersonal (**Self Smart**)

— Piaget, Bloom, Gardner, etc.
The BIG PICTURE Changes

How much of your effort is related to all kinds of information fluency and are your communities fully prepared?
The BIG Assumption

“The Internet has now progressed to its infancy”

Search, Social Networks, Learning, Commerce
Map of Online Communities and Related Points of Interest

Geographic area represents estimated size of membership.
Social Graph Platform Wars

Google / Open Social
("The Empire"?, "Coalition of The Willing")

Facebook
("Rebel Alliance"?)

MySpace
("Clone Army"?)

Photobucket

Gmail?

LinkedIn

Hi5

iGoogle

Bebo

Friendster

RockYou

Flixster

Slide2

data

Platforms Wars insanity: Dave McClure, 12/12/07

= announced Platform / API
= unannounced Platform / API

& AMAZON
http://www.flickr.com/photos/nessman/2590572476/
The new Web 2.0 era distribution models remain largely untapped

Potential Reach Power and Network Effect
(Lowest Cost Per Customer/Partner)

The Sharing Economy
“Web 2.0 generally refers to a second generation of services available on the WWW that lets people collaborate and share information online.” Wikipedia

- Shared Pictures: flickr
- Shared Bookmarks: del.icio.us
- Shared News: Technorati
- Shared Videos: YouTube
- Shared Everything: myspace.com
Get Good at The Cloud

Yahoo!
AOL
Facebook
Microsoft
News Corporation
myspace.com
zotero
Zoho Docs
delicious
Google Chrome
Science Info on the Go: Enhancing Traditional Sci-Tech Library Services w/ Mobile Devices

Joe Murphy - Yale Science Libraries - joseph.murphy@yale.edu

Mobile devices help libraries meet the evolving information needs of the sci-tech community by expanding traditional services and exploring new opportunities.

Enhancing / Expanding Services

Mobile Reference = Answers on the go
- Mobile librarians to meet the diffuse information needs of our specialized clientele.
- Email
- Instant Messaging
- Phone
- In person and outreach

New Opportunities

Text Messaging Reference
- Answers from anywhere by SMS
- Expert assistance at point of need

Social Networking
- Mobile devices facilitate library 2.0 and social networking initiatives.
  - Twitter
  - Facebook
  - Flickr

Considerations

- Choosing a technology
- Identifying New Workflows
- Establishing Management Models: Staffing, Training
- Exploring Best Practices for a Quality Service
  (shifting communication styles and user expectations)
Be Where Your Users Are

orkut beta
facebook
bebo
mixi

myspace.com a place for friends

Ning

Linkedin

plaxo

knol A unit of knowledge

MySpace Developer Platform a place for developers

opensocial
## LIBRARY 2.0 MATRIX

<table>
<thead>
<tr>
<th>Resource Environment</th>
<th>Web 2.0 as Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Library catalogue</strong> - MARC compliant</td>
<td><strong>E-learning 2.0 environment</strong> - LMS, ELGG, LAMS etc.</td>
</tr>
<tr>
<td><strong>Web 2.0 platform 24/7</strong> - adaptable user interface</td>
<td><strong>Social Networks</strong> - MySpace/Facebook, Blogs &amp; Wikis, Read/Write web functionality, Social Bookmarking, Images &amp; multimedia sharing, Podcasting &amp; vodcasting</td>
</tr>
<tr>
<td><strong>Information services</strong> - Online, Virtual Learning spaces</td>
<td><strong>Folksonomy</strong> - Tagging for personalisation</td>
</tr>
<tr>
<td><strong>Blended digital Web Collections</strong></td>
<td><strong>Searching</strong> - Browser and desktop API, Blogs &amp; social networks, Visual &amp; metasearch engines</td>
</tr>
<tr>
<td><strong>Blended digital repository</strong></td>
<td><strong>Mobile computing</strong></td>
</tr>
<tr>
<td><strong>Digital access for personal organisation</strong> - E-reserve, Borrower loan access</td>
<td><strong>RSS feeds and Mashups</strong></td>
</tr>
<tr>
<td><strong>Digital access for licensed collections</strong> - e-books, videos &amp; multimedia, images, learning objects, etc</td>
<td></td>
</tr>
<tr>
<td><strong>Federated searching</strong> - Z39.50</td>
<td></td>
</tr>
<tr>
<td><strong>Taxonomy</strong> - supported by global metadata standards</td>
<td></td>
</tr>
</tbody>
</table>

The diagram illustrates the overlap between social and academic places in both physical and virtual spaces. Social places include dorms, bars, parties, Facebook, instant messaging, cell phones, and blogs. Academic places encompass study rooms, computer labs, infoshared commons, cafes, classrooms, office hours, blackboard, registration software, blogs, wikis, and websites. The libraries are central to both sets, offering virtual reference, instant messaging, virtual labs, and OPACs.
Groups include consumers participating in at least one of the indicated activities at least monthly.
How to Survive and Thrive in Business Today with 2.0

**Innovation**
- Leveraging Innovation
  - Product Incubators
  - Open Supply Chains
  - Product Development 2.0
  - Some Rights Reserved

**Growth**
- Creating new rapid growth online products powered by:
  - Peer Production
  - Jakob's Law
  - The Long Tail
  - Blue Ocean
  - Network Effects
- Reinventing the customer relationship to drive revenue:
  - Customer Communities
  - Customer Self-Service
  - Marketing 2.0

**Current Business State**
- Change Management
  - Transformation
  - Communities
  - 2.0 Education
  - Capability Acquisition
- Business Remodeling and Restructuring
  - BPM 2.0
  - Employee Communities
  - Cloudsourcing
  - Pull Systems
- Improving productivity and access to value:
  - Enterprise 2.0
  - Open APIs
  - Crowdsourcing
  - Prediction Markets

**Transformation**
- Fostering Innovation
  - Internal Innovation Markets
  - Open Innovation
  - Database of Intentions

**Cost Reduction**
- Driving costs down through less expensive, better 2.0 solutions:
  - Lightweight IT/SoA
  - Enterprise mashups
  - Expertise Location
  - Knowledge Retention

What are the Real Challenges?

• Scalability (and this doesn’t mean web scale)
• Retreading our colleagues - quickly
• Prejudice about users & Disrespect of users
• Demographic Mosaic Change
• Lack of Accountability and Urgency to Act
• Demand for Reproducibility and Proofs
• Coordination and Sharing
• Vision
• Leadership
• Financial Resources (excuse vs. reason)
The BIG PICTURE Changes

What is at the core of usability?
(Hint – It’s not about clickthroughs.)
Are we ready for the post book world?

http://www.flickr.com/search/?q=book+sculpture&page=44
Can we get our heads out of book-centric content?
Will Reading Matter?
Are your staff confusing books and reading?

Audiobooks, Cengage and eBooks . . . And Google
What does your best borrowed report look like?

Is your Community different?

http://www.flickr.com/photos/blu_blue/262096844/in/pool-booksandportraits
What does your book and article or website recommendation blog/RSS feed look like?

http://www.flickr.com/photos/matthk/2054262239/
How do your community content reviews do?

http://www.flickr.com/photos/cjanebuy/340249608/in/pool-booksand
How are your web based communities doing?

http://www.flickr.com/photos/mthiesson/17
Do your users like your video author interviews?

Your YouTube DVD trailers?

http://www.flickr.com/photos/lori_an/319433801/
Do you offer podcasts?

Do you record every story time?
Every lecture?
Are you making sense of your collections in a community context:

• BiblioCommons
• ChiliFresh
• LibraryThing for Libraries
• Delicious
• Digg
• YouTube

http://www.flickr.com/photos/lorian/319433802/in/photostream/
Can you circulate books from anywhere?

Like the parking lot, lecture hall, classroom, sidewalk sale, or nursing home?

http://www.flickr.com/photos/library_mistress/525385533/
Inventing the Future

• How much time do you spend having a clear view of it?
• How is it shared with your colleagues and clients?
Libraries
Creating the Third Path...
What is the scariest scenario for libraries? I have an archaeology background . . .
Re-Energizing Libraries
The World is Going to Change with or without You... Get Ready.
What is at the heart of libraries?

Is it 2.0?
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