Innovation and Libraries

It’s 2010:
Broadband Technology for a Better Future

Stephen Abram, MLS, FSLA
Texas Online Broadband Opportunity Summit
San Antonio, Texas
Nov. 18, 2009
Extended Slides available soon at Stephen’s Lighthouse blog
What Are Libraries Really For?

- Economic Impact – ($6.50 per $1, workforce preparedness, industrial attraction, quality of life, etc.)
- Equity (digital divide, integrating population growth, generations, etc.)
- Student Performance (up to 25 point increase)
- Competitive Advantage (Canada, EC, India, China, etc.)
- Social Glue
- Community
- Learning
- Interaction
The Broadband Opportunity
(TV, WIMAX, WiFi, Sat/LEO, etc.)

Community Needs

LIBRARY

Big Society Trends
What Are the Big Trends?

• Exponential Change . . .
• Demographic
  – e.g. Seniors
  – e.g. Millennials
• Technological
• Global
• And more
Social Media Trends

YouTube

Social Media Revolution (4:22)
http://socialnomics.net/video/

Did You Know 4.0 (4:45)
http://www.youtube.com/watch?v=6ILQrUrEWe8
No Quick Fixes
First known ancestor of the social media consultant.
nancy

WATCH FREE MOVIES!
LISTEN TO FREE MUSIC!
GET FREE INTERNET!
READ THE LATEST GRAPHIC NOVELS FREE!

THREE ROCKS FREE PUBLIC LIBRARY

APRIL 19 2009

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MAN GETS RICH WITH GOOGLE, AND HE’S SHOWING YOU HOW!

By: SUSAN PORTER
On a tip from a Friend Kevin Hoeffer signed up for Googles, “from home”, money making plan and to his suprise he quickly went from rags to riches.

“I was shocked at how easy it was, I got my first check within about 3 weeks and paid off my debt.”

[Image of a check]
How Can We Empower Our Communities?

And Cultivate and Nurture Them?
METABOLISM

The slower it gets, the faster it catches up with you.
Figure 1. Hype Cycle for Emerging Technologies, 2009

expectations

Cloud Computing
E-Book Readers
Social Software Suites
Microblogging
Green IT
Video Telepresence
Mesh Networks: Sensor
Online Video
Corporate Blogging
Wikis
Electronic Paper
Tablet PC
Idea Management
Web 2.0
Social Network Analysis
Over-the-Air Mobile Phone Payment Systems
Developed Markets
RFID (Case/Pallet)

Technology Trigger
Peak of Inflated Expectations
Trough of Disillusionment
Slope of Enlightenment
Plateau of Productivity

As of July 2009

Years to mainstream adoption:
- ○ less than 2 years
- ● 2 to 5 years
- ● 5 to 10 years
- ▲ more than 10 years
- × obsolete
- ○ before plateau

Source: Gartner (July 2009)
• 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. 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.
Will Reading Matter?
Are we 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?

Who is your star recommender?

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

Who is your best teen reviewer?

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

How many dozen are there?

http://www.flickr.com/photos/mthiesson/176153663/
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/
How about gaming? Social communication? Hobbies? Continuing education and distance learning? And more?

http://www.flickr.com/photos/library_mistress/525385511/
The thing about success, is that it’s not about things.
What new projects is your library engaging in to make a difference for end users and your community?

Can you handle rapid change?
  • Demographic?
  • Technology?
  • Content?
  • Global?
  • Social?
  • Government?
What problems do you solve?
Are they librarian or end user problems?

Solve a Problem for Your Readers
What do libraries want?
Relevance
Making a Difference
Observe Your Users
What do they really want?
SEARCH
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 east agree that they don’t merely want whiz bang widgets, gadgets, shiny new tools or any other raw technology?

Let’s address the human condition.
Discovery & Ideas
What is the world heading for with R&D and Discovery?
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 picograms), 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 polyplody (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)

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, Proteocephalus 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

Dates to Remember:

Deadlines
Advance Registration – May 15, 2009
Hotel Reservation – May 20, 2009

Important Notices:

Don't forget to renew your membership for 2009!
Poster and Oral Session acceptance notification has been sent out. Please visit the
The Future Discovered

- Light
- Stem Cells
- fMRI and The Brain
- Cloning
- Wind and other energy
- Nanotechnology
- Robotics
- Book Digitization
- Music
- Streaming Media
- Seed Bank
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.
Diabetes Online

Yes, Stephen did just say Lizard Spit
Luck / Opportunity
Community
Conversations
Community Networks
Life
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?
On your website?
In your OPAC?
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"...
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
Where are the Broadband Opportunities?

- Mobile
- Social networks
- DVD to streaming media
- E-Learning
- Digital Content – from magazines, books to simulations and more.
- Communication – blogs, wikis, etc.
- Content creations and cultural art
Who Are Your Staff Stars?

Do Your Users Know Their Names?
Energy & Engagement

Information Engagement Levels

Dr. Thomas Davenport
Culture

Conservation and Protection
Local history
Roots
American memory
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
What’s Your Experience Look Like?
What’s Your Experience Look Like?
Re-Imagine Your SPACE

What’s Your Experience Look Like?
What changes with ubiquitous access?
Is it Frozen in Time?
Can libraries keep up with change?
The BIG Assumption

“The Internet has now progressed to its infancy”

Search, Social Networks, Learning, Commerce
The Next 17 Slides

“Detail that can be reviewed later online”
Map of Online Communities and Related Points of Interest
Geographic area represents estimated size of membership

(Spring 2007)

(Not a complete survey. Sizes based on best figures I could find, but involved some guesswork. Do not use for navigation.)
Social Graph Platform Wars

- YouTube
- iGoogle
- Bebo
- Google (Open Social)
- Facebook (Rebel Alliance?)
- MySpace (Clone Army?)
- Photobucket
- Gmail
- LinkedIn
- Hi5
- RockYou
- Flixster
- Slide
- iLike
- Gigya
- ClearSpring
- Widgetbox
- Widgets

☆ = announced Platform / API
★ = unannounced Platform / API

& AMAZON

Platform Wars insanity: Dave McClure, 12/12/07
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 Knowledge = [Wikipedia]
- Shared Bookmarks = [del.icio.us]
- Shared News = [Technorati]
- Shared Videos = [YouTube]
- Shared Everything = [myspace.com]
Get Good at The Cloud

Yahoo!

AOL

Microsoft

News Corporation

Facebook

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.

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)

Joe Murphy  Yale Science Libraries  joseph.murphy@yale.edu
ACRL/STS Poster Session 6/30/2008
Be Where Your Users Are
## Library 2.0 Matrix

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

Social places
- Dorms
- Bars
- Parties

Virtual Space
- Facebook
- Instant Messaging
- Cell phones
- Blogs

Libraries
- Study rooms
- Computer labs
- Info. Commons
- Cafes

Instant Messaging
- Virtual Reference
- Flickr
- Blogs
- Wikis
- OPACs

Academic places
- Classrooms
- Office hours

Blackboard
- Registration software
- Blogs
- Wikis
- Websites
Groups include consumers participating in at least one of the indicated activities at least monthly.
### What people are doing

- **Creatives publish**
  - Web pages, write blogs, upload videos to sites like YouTube.
  - [Percentage Chart]

- **Critics comment on**
  - Blogs and post ratings and reviews.
  - [Percentage Chart]

- **Collectors use**
  - Really Simple Syndication (RSS) and tag Web pages to gather information.
  - [Percentage Chart]

- **Joiners use**
  - Social networking sites.
  - [Percentage Chart]

- **Spectators read**
  - Blogs, watch peer-generated videos, and listen to podcasts.
  - [Percentage Chart]

- **Inactives are**
  - Online but don’t yet participate in any form of social media.
  - [Percentage Chart]

### Who participates (U.S. online users)

<table>
<thead>
<tr>
<th>Category</th>
<th>Young Teens 12 to 17</th>
<th>Youth 18 to 21</th>
<th>Generation Y 22 to 26</th>
<th>Generation X 27 to 40</th>
<th>Young Boomers 41 to 50</th>
<th>Older Boomers 51 to 61</th>
<th>Seniors 62+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creatives</td>
<td>34%</td>
<td>37%</td>
<td>30%</td>
<td>19%</td>
<td>12%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>Critics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collectors</td>
<td>24%</td>
<td>37%</td>
<td>34%</td>
<td>25%</td>
<td>18%</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td>Joiners</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spectators</td>
<td>51%</td>
<td>70%</td>
<td>57%</td>
<td>29%</td>
<td>15%</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>Inactives</td>
<td>49%</td>
<td>59%</td>
<td>54%</td>
<td>41%</td>
<td>31%</td>
<td>26%</td>
<td>19%</td>
</tr>
</tbody>
</table>

*Data: Forrester Research*
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
  - Fostering Innovation
    - Internal Innovation
    - Markets
    - Open innovation
    - Database of Intentions
  - Change Management
    - Transformation
    - Communities
    - 2.0 Education
    - Capability
      - Acquisition

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

- **Transformation**
  - Business Remodeling and Restructuring
    - BPM 2.0
    - Employee Communities
    - Cloudsourcing
    - Pull Systems

- **Cost Reduction**
  - Improving productivity and access to value:
    - Enterprise 2.0
    - Open APIs
    - Crowdsourcing
    - Prediction Markets

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 experiences?
Libraries
Creating the Third Path...
Re-Energizing Libraries
The world is going to change with or without you... get ready.
“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 is at the heart of libraries?

Is it you?
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