Knowledge, Information and the 21st Century

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Dallas, TX

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Chief Strategist, SirsiDynix Institute
So what should we be paying attention to?
The world is going to change with or without you... GET READY
• You can’t wait for everyone to change at once.
Let’s Look At the Supposed Limits to the Future
Happily, There Are None.
Or, sadly, there are a lot.

- National Debt and National Borrowing
- Sub-prime Mortgage Crises and Property taxes
- Bankruptcies – corporate and personal
- Gold Prices
- Oil Prices and supply
- War and Famine
- Ignorance and Prejudice
- Globalization and world trade
- Global Warming and weather – floods, hurricanes
- Mergers and Acquisitions
- Technoschism and Technolust
The Perfect Storm?

- Facebook gets a $750,000,000.00 equity investment from Microsoft and two equity capital firms.
- Facebook et al introduce social ads and their F8 development platform (Beacon)
- Google heads past 10,000 licensed traditional publishers
- Google adds new libraries all the time to Google BookSearch and APIs
- MySpace acquires Dow Jones and the Wall Street Journal and soon more.
- Thomson acquires Reuters.
- Google announces that everyone except Microsoft and Facebook have joined Google’s OpenSocial - their new "open" platform for development anywhere.
- Just about everyone like MySpace, Facebook, Yahoo! and Google are cooperating on identity management through OpenID
- Google introduces Google OpenMobile Open Handset Alliance / Android development platform and first phone out this week
- The Canadian dollar has soared past the US $
- Massive interest in copyright, IP and patent law...
- The first US Boomer applied for their pension in November 2007.
- Strap yourself in, 2009 is going to be a fine ride. Enjoy.
Global Change (China, India, EMEA)
Stuff Will Change Much Faster Now

- Over the next 13 years an iPod size device will hold:
  - iPods can hold year’s worth of **video** by **2012**
  - Or ALL the commercial **music** ever created by **2015**
  - Or ALL **content** ever created (in all media) by **2020**
  - Videogames outsell most content – combined!
  - Jeez – Ring tones are even big
  - Amazon + Audible + OpenSocial, F8, MySpace Developer, Android . . . Microsoft + Yahoo + Facebook + 40 ads engines? Or AOL!!
  - Pocket-sized devices will dominate
  - Your avatar will parallel your life by IBM – Gartner predicts 85%...
What’s New (or new enough)?

- Semantic Web (Twine)
- The Cloud (Google, Amazon, Zoho and MS etc.)
- No choice search engines
- GIS oriented search and ads
- Virtually unlimited fulltext books
- Streaming media and spoken word search
- Personalization 3.0
- Microblogging (Twitter)
- SaaS and Registries
- Open Source, Open Access, Open Content
- Device proliferation (Kindle, iPhones, etc.)
- What’s old? Attacks on research, rights, intellectual freedom, access, filters, blacklisting, copyright balance, privacy, DRM, patents, trademarks, voice, etc.
Our Careers Have Seasons
State Library of Queensland

http://www.flickr.com/photos/katie_hannan/615283599/
Retail Sales Down? NO
Titles Down? NO
Circulation Down? NO
Reading Down? NO
Teen Reading Down? NO
Academia? ?
Will Reading Matter?
What do the world do?

- K-12 schools
- Hospitals
- Government
- Public Libraries
- Academia
- Colleges
- Government and Business
The Pattern Effect
Optical Illusions
Nano, Light, BioTech, Genome, Web 2.0
2000 Light Stopped
2001 Light Slowed to Bicycle Speed
2002 Light Sent into Future
2003 Light Transported
(in Australia!)
Boyd's team collected data showing light traveling 'backwards,' seemingly faster than light speed.

Image credit: Univ. of Rochester
What Does It All Mean?
We’re looking too close
The Landscape Today
The Emerging Landscape

Internet Traffic 2007-2010

Mainly the Foothills
Can We Invent the Future?
Wireless Ubiquity
• WiMax, WiFi, G3/G4
• Copper/Telco/cable
• Fibre
• Dark fibre
• Satellite
• Wireless
• Hydro
• ‘Baseballs’
• TV Whitespace
• Starbucks
Google invests in wired ...
Bidirectional wireless module
This is what 2.0 means.

- things you can do
- people you know

POSTED BY JESSICA HAGY AT 5:44 AM
What’s Normal Now?

Daily Internet Activities (% internet users)

- Visit social networking site: 13%
- Surf web for fun: 28%
- Research hobby: 29%
- Check weather: 30%
- Check news: 39%
- Online search: 49%
- Email: 60%
Figure 1. Hype Cycle for Emerging Technologies, 2008

- RSS
- Blogs
- YouTube
- Social Networks
- Tagging
- Facebook
- MySpace
- Wikis
- SEO
- GIS

Source: Gartner (July 2008)
The Dynamics of Crossing the Chasm

- Innovators 2.5%
- Early Adopters (13.5%)
- Early Majority (34%)
- Early Adopters (13.5%)
- Innovators 2.5%

Alex Iskold for Read/WriteWeb
Miss Rogue’s Currently Frustrating Chasm Dialogue

circa 2006

1. You are here
2. And you should be trying to enter here...

Innovators  Early Adopters

Early Majority  Late Majority  Laggards

3. But you are overly concerned about being here

4. So, instead, you get nowhere.
Technology Adoption Life Cycle

Groups are distinguished from each other based on their characteristic response to discontinuous innovations created by new technology.

- **Mainstream Markets**
  - **Early Markets**
    - Visionaries: Get ahead!
    - Techies: Try it!
  - **Late Market**
    - Skeptics: No way!
- **Innovators**: 2 1/2%
- **Early Adopters**: 13 1/2%
- **Early Majority**: 34%
- **Late Majority**: 34%
- **Laggards**: 16%

@Chasm Group
The new Web 2.0 era distribution models remain largely untapped.
Libraries & Universities are Social Institutions
Scholars’ Citations Go Social
And, what does social mean?

- Sharing
- Networking
- Collaboration
- Learning together
- Shared discovery
- Democracy
- The Invisible College
- Telling others of progress
- Publishing in any way
The Sharing Economy
MAP OF ONLINE COMMUNITIES AND RELATED POINTS OF INTEREST

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

Spring 2007
### What people are doing

- **Creatives** publish, write blogs, upload videos to sites like YouTube.
- **Critics** comment on blogs and post ratings and reviews.
- **Collectors** use Really Simple Syndication (RSS) and tag Web pages to gather information.
- **Joiners** use social networking sites.
- **Spectators** read blogs, watch peer-generated videos, and listen to podcasts.
- **Inactives** are online but don’t yet participate in any form of social media.

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

<table>
<thead>
<tr>
<th></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><strong>Creatives</strong></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><strong>Critics</strong></td>
<td></td>
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<tr>
<td><strong>Collectors</strong></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><strong>Joiners</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spectators</strong></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><strong>Inactives</strong></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

Chart by ANO CHELF
95% of students in clients like U of Toronto, NCSU, Stanford, etc.

Over 80% of all college and University students in North America.

A sustainable social network for life.
Alliance, Charlotte, San Jose SU Europe (2X) McMaster
Wild Cards
Amazon, MS/Yahoo!
The User-Centered Universe
## Millennial Behaviours

<table>
<thead>
<tr>
<th>Principled / Values</th>
<th>More Friends</th>
<th>More Diverse</th>
<th>Respect Intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimistic / Positive</td>
<td>Internet Natives</td>
<td>More Choices</td>
<td>Format Agnostic</td>
</tr>
<tr>
<td>Balanced Lives</td>
<td>Adaptive / Flexible</td>
<td>Civic Minded</td>
<td>High Expectations</td>
</tr>
<tr>
<td>Collaborative</td>
<td>Nomadic</td>
<td>Gamers</td>
<td>Experiential</td>
</tr>
<tr>
<td>Independent</td>
<td>Confident</td>
<td>Direct</td>
<td>More Liberal and more conservative</td>
</tr>
<tr>
<td>Multi-taskers</td>
<td>Inclusive</td>
<td>Patriotic</td>
<td>Entrepreneurial</td>
</tr>
<tr>
<td>Healthy Lifestyle</td>
<td>Family Oriented</td>
<td>Graphical</td>
<td>Achievement Oriented</td>
</tr>
</tbody>
</table>

Credit: Richard Sweeney, NJIT
Report on the Usability and Effectiveness of SirsiDynix SchoolRooms for K-12 Students

In Quarter 2006
Conducted under the auspices of the Kent State University School of Library and Information Science and the Information Architecture/Knowledge Management Program (IAKM)

by

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July 2006
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.
Information Literacy

• Standard Curriculum Components
  – Mathematics / Arithmetic
  – Science, Biology, Physics & Chemistry
  – English, Languages
  – History, Geography, Politics, Sociology
  – Music, Art, Phys ed.
  – Guidance, Religion
Information Literacy

- Information literacy is integrally tied every aspect of the curriculum:
  - Mathematical logical thinking skills
  - Math and Arithmetic
  - Mathematical logical thinking skills
  - Math and Arithmetic
  - Scientific method - Sciences
  - Criticism, interpretation and comprehension - English and K-12 Information Literacy
  - Analytical thinking - History, Geography
  - Interpretive and imaginative - music, art, and phys ed.
  - Inter and Intrapersonal skills - Religion, Guidance, etc.
  - There is an imperative for people to have a lifelong curriculum - a personal learning strategy
Ohio
Boston + Philadelphia
Delaware
California
South Carolina...
Here's What They Expect and Keeping Them Motivated

1. 'TEACH ME.'
2. 'MENTOR ME.'
3. 'THIS JOB IS NOT MY LIFE.'
4. 'TRUST ME.'
5. 'REWARD ME.'
6. 'DON'T TAKE ME FOR GRANTED.'
Be More Open to New Paths
Be More Open to the Users’ Paths
Start Your Mobile

- Up 30% in Q2/08
- Japanese top 10 bestsellers
- iPhone hacks
- TV in Korea
- TXT focus groups on OZ
- TXT trumps voice calls
A projector the size of a sugar cube
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)
Be Where Your Users Are
How does your presence appear?
Personal, Professional, Departmental, Institutional
Get Good at The Cloud

Yahoo!

AOL

Microsoft

News Corporation

Bebo

Google

Facebook

Zotero

Zoho Docs

delicious

Google Chrome
Play at e-Books

Japan
Top 10
Get Serious on Literacy
GIS Ads Ads Ads
Transformation
Do no evil... or, Search, Ads and Apps
I ♥ my customers
Google Docs
Google Spreadsheets
Google Calendar
Google Base
Google Maps
Google Wallet / Cart
G-Mail
GTalk
Google Scholar
GooglePhone
iGoogle
Google Presentations
YouTube
Orkut
Hundreds more

Google States for free
Google Librarian
Google Educator Certification
Fool me once …
Do No Evil?
Get Serious about eLearning

Blackboard

ANGEL LEARNING

Sakai
Just Expand

iTunes 7
Understand Influence & Politics

1. YouTube
2. Second Life
3. MySpace
4. Facebook
5. Wikipedia
6. Ning
7. Twitter
8. Mozes
9. NowPublic
10. MyBlogLog

Top 10 Most Influential web tools for the 2008 elections

Check out the Olympics
Two Kinds of People
Humans are our Competitive Edge

If we evolve
Being Open to Lifelong Learning
METABOLISM

The slower it gets, the faster it catches up with you.
Be Important

**EXPENDABILITY**

Kirk, Spock, McCoy, and Ensign Ricky are beaming down to the planet. Guess who's not coming back.
“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
Honest to G*d – Have Fun
We must learn that when we study something to death, *Death was not our original goal.*

The risk is in slowness.
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Open Source Questions

- Scalability
- SaaS
- API
- Portlets (JSR168)
- Speed
- Support – size and dimensions
- Financial Auditability
- Military partnerships
- Contracts

- Architectural flex
- Kernel persistence
- Developer market
- Hiring
- Indemnification
- Sustainability
- Cost, investment
- User experience
- Testing
- Training
CPAmerica International
A National Network of Select CPA Firms Connecting Global Resources to Benefit Clients