

Information Imperatives: Trends in Discovering and Applying Online Business Information

Marydee Ojala

Editor, *ONLINE: Exploring Technology
& Resources for Information
Professionals*

Background Assumptions

- Online isn't new and not necessarily free
- Online is trendy
- ONLINE versus Online
- Online isn't Google
- Search is omnipresent
- Search is misunderstood

ONLINE

- ONLINE is the magazine that I edit
 - 2008 is volume 32
 - New tag line (*Exploring Technology & Resources for Information Professionals*)
- Online isn't just the internet or web-based resources
 - Mobile, wireless
 - Fee-based, subscription-only resources

ONLINE ≠ Google

- Google is but one of many search engines
- Major alternatives: Yahoo, Ask, Microsoft Live
- Other alternatives: Vertical search engines (industry, country)
- Site search

Search

- There are many varieties of search: Web search, enterprise search, visual search, audio search, customized search, universal (federated) search
- Search is everywhere
- But where is research?

Research

- When people say they researched something online, they probably mean they put 2.3 words into Google;
- Or checked Expedia, Wikipedia,
- Or their corporate intranet;
- But probably not Dialog, Bureau van Dijk, or Euromonitor;
- And they should have asked an info pro!

Assumptions About Information

- Amount of information available in electronic form is overwhelming
- Findability is a major problem
 - How to discover useful, relevant information is challenging and not as simple as entering a term in a web search engine's search box
- Analyzing what's been found is crucial
 - Putting disparate pieces together and drawing conclusions

Internal v External Information

- Is information important to your business?
 - Yes
 - But what type? What sources? Cost?
- BI/CI/Strategists/Marketing look internally
 - Customer data, demographics, financials
 - Hard data combined with anecdotal from field sales staff
- Primary research
 - Interviews, focus groups, surveys

External

- Published materials
 - Trade press, government documents, newspapers, journals, newswires, statistical sources, market research reports, books
 - Electronic versions
- Librarians, information professionals, documentalists trained to find external
- Neither is sufficient by themselves

Information v Intelligence

- Information, whether it's externally or internally sourced, becomes intelligence when analyzed
- Critical thinking, imagination, creativity become increasingly important in this transformation as more information becomes findable

Competitive Intelligence

- CI not just about competing companies
- CI looks at entire competitive environment
 - Industries
 - Economy
 - Technology
 - Reputation
 - Law and legislation, regulation
 - Politics

Internet Information

- Made internal external and external internal
- Exploded the definition of information
- Unpublished data, grey literature, group discussions, audio files, videos, photographs, white papers, conference proceedings
- Transparency of corporate data

Convergence and Confusion

- Entire definitions of “information” need to be revised
- Mindsets about research need to change
- Role of human interaction with information needs to intensify

Search Trends

- Technology
- People
- Managing change

Technology

- Life Cycle of Business Information
- Social Search
- Invisible Web Becomes Visible
- Consolidation
- Disaggregation
- Personalization
- Non-Textual Information
- Past Becomes Present

Life Cycle of Business Information

- No longer linear
- Scattershot
 - Press releases
 - Blogs (official and non-official)
 - Rumors
 - YouTube, Flickr, Slideshare
- Issue for info pros: Validity, reliability, remembering to look in offbeat places

Social Search

- Tags, folksonomies, replacing taxonomy
 - Uncontrolled vocabulary displacing indexing
- Popularity as quality measure
- Comments on published articles
- Shared resources (Digg, Reddit, Del.icio.us, etc.); Internal sharing (wikis)
- Issue for info pros: How wise is wisdom of crowds?

Invisible Web Becomes Visible

- Concept of invisible, deep web outmoded
- More information can be surfaced
 - Formats, language, company
- Paradox: Much information remains hidden
 - Pay per view, privacy, withdrawn, directories
- Issue for info pros: Use advanced search, specialized databases, think about formats

Consolidation

- Consolidation of companies that provide premium information
 - Thomson, Reed Elsevier, Wolters Kluwer
 - Barriers to starting information companies
 - Private equity ownership
 - Issues around pricing and functionality
- Market focus changing away from info pros to sales & marketing, back office applications, enterprise search

Consolidation

- Search engine consolidation
 - Google buys Blogger, YouTube
 - Yahoo buys Flickr, AltaVista, AlltheWeb
 - Ask buys Teoma, Bloglines
 - Microsoft bids for Yahoo
 - MySpace owned by Rupert Murdoch
- Web as platform; Search as service?
- Issue for info pros: How to track ownership changes and affect on functionality

Disaggregation

- No more one stop shop
- Specialized search engines
- Data fragmentation
- Locks on the information doors (SEO, registration, subscription prices)
- Issues for info pros: It takes longer to find information, but non-info pros think it should take less

Personalization

- Making search relevant to you
- My search results aren't your search results
- Empowering users, raising expectations
- Search engines know where you are
- Issues for info pros: Does this mean search engines will put all their energy into developing consumer products?

Nontextual Information

- Images, audio, video
- Google Earth
- Precision/recall dubious; Search engines don't usually search on sound, picture
- Issues for info pros: Bibliographic control nonexistent, Relevance for business intelligence, How recently was data captured

Displaying Nontextual Information

- Delisting of results
- Universal search (reinventing the wheel)
- Graphic depiction of results, show relationships (Visible Path, Hoover's)
- Grokker, Kartoo, ManyEyes
(<http://services.alphaworks.ibm.com/manyeyes/home>), Swivel, Data 360
(www.data360.com)
- Issues: Statistical interpretation

Past Becomes Present

- Internet archive (www.archive.org)
- A blog from World War I?
(<http://wwar1.blogspot.com>)
- Digitization projects
 - Manuscripts, books, photos, memorabilia
- Things that weren't findable now are
- Issues for info pros: More fragmentation, Usefulness for business intelligence?

People

- How technology trends affect people
- Information overload leads to information overlook
- Need to remember multiple sources and types of sources
- Information is format agnostic
- Not all information is on internet

People

- Ubiquitous computing – technology part of everyday life, not something you use at work
- Newspaper? What's a newspaper?
- Mobile technologies
- Using networks
 - Facebook, MySpace, LinkedIn
 - Discussion groups

Information Professionals

- Anyone can search the web
- Not everyone can do it well
- Effective research requires an understanding of sources as well as technicalities of search
- Combine internal, external information
- Critical thinking, peripheral vision

Applying Business Information

- Making information actionable
- Internal data mining projects
- Transforming enterprise search into useful information
- Applying new technologies for business/competitive intelligence
- Align discovery and application with business goals

Information Imperative

- Find accurate, reliable, current, relevant information
- Transform information to intelligence
- Assess trustworthiness of sources
- Weave disparate sources into cohesive whole
- Agility, flexibility when discovering and applying business information

Contact

- Marydee Ojala
- Editor, *ONLINE: Exploring Technology & Resources for Information Professionals* (www.onlinemag.net)
- Co-chair, Internet Librarian International (www.internet-librarian.com)
- marydee@xmission.com