User Assumptions and Information Seeking Patterns of Electronic Information

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User Assumptions and Information Seeking Patterns of Electronic Information

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http://www.uky.edu/~lhjeng00/h-comm
Personal Information Infrastructure (Marchionini, 1995)

- Dictionaries, phonebooks
- Trusted friends and coworkers
- TV, radio, news
- Books, magazines
- The Internet
Resources on the Internet

- Web directories, Clearinghouses, Hot lists
- Search Engines
- Databases
- The Hidden Internet
Web Directories

- Extensive list of web sites organized by categories
- Sites filtered by experts
- Summaries of content
- Searchable categories
- Frequently updated
<table>
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<tr>
<th>Categories</th>
<th>Web Sites</th>
<th>All/Use</th>
<th>News Stories</th>
<th>New Events</th>
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</thead>
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<td>Found 1 category:</td>
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</tr>
<tr>
<td>Yahoo!: Category</td>
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<tr>
<td>Matches (1 of 1)</td>
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<tr>
<td>Health Internet</td>
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<tr>
<td>Dating Service</td>
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<tr>
<td>Category:</td>
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<tr>
<td>AIDS.gov</td>
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<td>Yahoo!: Alta Matches</td>
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<tr>
<td>AIDS.gov</td>
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</tr>
</tbody>
</table>

* Click Process: AIDS Housing - Learn more about Charities, how AIDS Housing, and ways you can help keep it running.
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Internet Search Engines

- Full text indexing
- Statistically ranked results
- Continually updated
- Unfiltered
Basic Internet Searching

- Keywords

- Full text searching

- Relevancy = number of keywords + number of times the keyword appears

- Document with highest number of frequency of occurrences displayed first
Refining Features

- **Boolean**: AND & OR | NOT ! ( )
- **Uppercase sensitivity**
- **Phrase search**: " "
- **Truncation**: * Must + Exclusion -
- **Qualifiers**
- **Segment searching**
(hospice OR "palliative care") AND (cost OR expense) AND (medicare OR medicaid) AND (benefit OR payment)
Health Care Financing Administration (HCFA)

This is a commercial site providing rapid access to large amounts of federal and state data at a reasonable cost. We are not a government agency.

For more data about the Health Care Financing Administration, visit our site on the Internet.

- About Health Care Financing Administration
- Health Care Financing Administration Data Available From OPM

http://www.uky.edu/~lhheng00/h-comm/sld013.htm

10/13/2003
Searching Alta Vista Hits

library of congress 925,990
Library of Congress 848,720
Library and Congress 848,720
“Library of Congress” 60,455
“Library of Congress”
and domain:gov 18,490
title:”Library of Congress”
and domain:gov 507
Common Problems of Internet Search Engines

- **Disorganization, fragmentation**
  - A page, a graph, a picture
  - Home v. linked pages

- **Unfiltered, false drops**

- **keywords, concepts, natural language**
  - All v. any
  - "More Like This"
  - "Save My Settings"
  - Word appearance v. concept analysis
Common Problems of Internet Search Engines (Cont.)

- **Self-serving nature**

- **No search engine is complete**
  - When hot links are cold
  - 2 weeks to 3 months out of date
  - 50 millions is too limited
Databases

- Constructed by subject experts
- Indexing and abstracting quality
- Controlled vocabulary
- Specialized query language
Where are the Databases?

- On the web
- Campus library systems
- Database producers
- Online commercial vendor systems
- CD-ROMs
PubMed
Advanced MEDLINE Search

- Enter one or more search terms.
- Search terms should be entered in the form #A#B, but #A#B are optional.
- Terms may be entered in all solid MEDLINE acronyms, as in ISSN numbers (not ISSN numbers for ISSN numbers).
- The pull-down menu to specify fields and search more.
Current Query

Add Term(s) to Query:

Search for:
Search Mode:
Search Terms:

Number of Documents to Display:
Display Date:

Search for:
Search Mode:
Search Terms:

Number of Documents to Display:
Display Date:
Electronic Information: Comparison

- Web directories
  - General topics
  - Browsing
  - Searching for Web sites

- Internet Search Engines
  - Specific topics
  - Free text searching in full text
  - Knowledge of special search features
Electronic Information: Comparison (Cont.)

- **Databases**
  - bibliographic information
  - Subject specific data
  - Better recall & precision
  - Search query sophistication

- **The Hidden Internet (Notess, 1997)**
  - Current information
  - News groups
  - Gopher, FTP Log On Sites
  - Institution specific information
Who are Health Information Users?

- **Health science researchers**
  
  Need: Bibliographic information
  
  Demand: High relevancy, minimum false drops
  
  Skills: Willing to learn basic commands

- **Health science clinical practitioners**
  
  Need: Specific, factual information
  
  Demand: Speed and accuracy
  
  Skills: Not interested in learning except for fun
Who are Health Information Users?

- **Consumers of health information**
  
  Need: Basic, educational, referral information
  
  Demand: Low. Less concern of quantity
  
  Skills: Varied but mostly minimum

- **Health information specialists**
  
  Need: Wide range
  
  Demand: Low tolerance for poor quality
  
  Skills: Professionally trained sophistication. Organization, personalized service, customized system design.
References


