


Information 'Satisfaction':
How searchers *really* search

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Information Satisfaction



Of needles and haystacks

- How many needles?
- How many haystacks?
- Which needle/s?
- Does it help when all the haystacks are thrown at you?

Information Satisfaction




To satisfice / satisfaction

“decide on and pursue a course of action satisfying the minimum requirements to achieve a goal”
(thefreedictionary.com)

“settling for the minimum amount of information to meet an immediate need”
(Marylaine Block, *ExLibris*, March 12, 2004 .)

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... and when do we want it?

"[Typical] search engine designers want users to become fluent in Boolean logic, learn the exact syntax of their search engine despite the fact that it is drastically different from any other, and include any and all keywords in their query, separated by as many Boolean, proximity, and other operators as necessary, to insure that every resulting link has what they are looking for."

Typical Searchers:
Just want to type in one word and come up with **The Link**.

Marc L. Resnick & Rebeca Lergier

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Of human nature

- Only librarians like to search; everyone else likes to find.
- All things being equal, one place to search is better than more.

Roy Tennant


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Searchers aren't perfect!

- Studies show that searchers often have high opinions of their online search skills; not always borne out in their finds (Monoi, O'Hanlon & Diaz; Ren; Waldman; and others) .
- Many students are satisfied with what they find using Google – but they shouldn't be, especially at the highest levels of education (Grassian)

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Is “good enough” good enough?

- Much depends on what you’re searching for
- Much of the time, the searcher finds the right answer / the only answer
- Advanced research
- Process as well as product?
- Not all information is equal


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The goalposts keep moving!

- The Internet is changing constantly
- Searchers *are* getting better, changing strategies and techniques
- The search tools are constantly changing


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How DO search engines search? And how do they report what they find?

- Do they use default OR or default AND?
- Do they use a most-used-word algorithm or a page rank algorithm, or perhaps something else?
- Do they safe-filter their results?
- How much of the web/ internet do they cover?
- Do they place sponsored ads at the top of the page (and if so, are they clearly “Sponsored Ads”)?
- Are they prone to Googlebombs?

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Search Engines aren't perfect!

- The internet is not the *only* source of information.
- Problems of relevancy.
- Problems of coverage: search engines are NOT equal.
 - The rest of the 'net / the invisible web / lack of overlap


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The studies

- All searches made using specific search engines/databases
 - Transaction logs, search voyeurs : analyze real searches
- Free searches made at a specific site
 - Spy techniques and analysis, index.dat
- Search habits of individual searchers
 - Surveys, questionnaires, interviews
- Reported and/or observed responses to set questions
 - Observation and records


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Specific search engines Transaction logs

- All searches made using specific search engines and databases
 - What they searched for (the search terms)
 - Show the hits
 - Show which hits were clicked on
 - Show how long each hit was followed-up
 - Show what the searcher next searched for
- **Unknown population / sample**


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Specific search engines Transaction logs

- Typical findings:
 - Most searchers use just one search term per query
 - Few searchers use Boolean or other modifiers
 - Many who do use Boolean use it wrongly/ incorrectly.
 - Most searchers view just the top page of hits
 - Many searchers view just one hit per query
 - Most search sessions are short
 - Most searchers don't spend much time viewing those hits they do look at


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Specific search engines Search Voyeurs

- All searches made using specific search engines and databases
 - What they searched for (the search terms)
 - Easily replicated – other people's searches
- **Unknown population / sample**


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Specific search engines Search Voyeurs

- Typical findings:
 - Most searches are one or two words only.
 - Few searchers use Boolean or other modifiers
 - Many who do use Boolean use it wrongly/ incorrectly.

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The studies

- All searches made at a specific site
 - Key spies / index.dat
 - The population is known, but anonymous
- **Replicable, but may need programming knowledge or equipment**


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Free searches at specific site

- Typical findings:
 - Many typed the URL into the SE search box
 - Many queries are single word
 - Boolean rarely used
 - Quotation marks infrequently used
 - Many searchers misspell their search terms


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The studies

- Reports of searches and search strategies
 - Known population
 - Replicable
- **Subject to general problems of surveys**


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Surveys

- Typical findings:
- Most searchers use only one SE
- Few use Advanced Search
- Naivety abounds.
- Widespread belief that most or all information found on the Internet is reliable and accurate (falling)
- Most searchers are satisfied with SE returns
- Large majority rate their information seeking skills as good or very good


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The studies

- Searches made by individual searchers (Set questions)
 - Known population, known tasks
 - Permit real analysis
 - Very replicable, lead to good teaching points
- Limited sample size?


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Set questions

- Typical findings:
- Most searchers start with SEs; Google is the most popular
- Many go straight to the top hit, regardless of how relevant it might be
- Many have higher opinions of their search skills than is proved in actuality
- Students **know** that information on the Internet may be unreliable and untrustworthy ... but they still accept most of the information they find

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Information sources are not perfect!

➤ “Sadly, many [students] have arrived at the mistaken notion that all sources are created equal...”

(Patrick Hall)


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From satisfaction to satisfaction

- Need to identify specific types of search
- Need to understand the nature of the internet
- Need to understand how search engines work
- Need to use critical thinking & evaluation skills
- Need awareness of when good enough is NOT good enough

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