

Commerce Related Web Search: Current Trends

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Introduction

- Web search is an important part of e-commerce and the marketing of products over the Web
- Queries entered into Web search engines are an important part of e-commerce purchasing of goods and services online
- Web Search Project: 1997-2007
- Current study analyzed commerce-related on Web search engines for 2004, 2005 and 2006

Web Search Project: 1997-2007

- Track Web search trends and characteristics
- Web query transaction logs collected in 1997,1999, 2001, 2003, 2004, 2005, 2006 and 2007.
- Combined dataset of 20 million+ Web searches
- Web search engines: Alta Vista, Ask Jeeves, Excite, AlltheWeb, Vivisimo & Dogpile
- Transaction log analysis studies

Web Search Project: 1997-2007

Web Search Project goals:

- Insights, understanding and develop theory
 - User modeling
 - Trends analysis
 - Implications for Interface/systems design & user training
- Focus on Web search search analysis for competitive advantage
 - 180+ publications from our Web search studies
 - Amanda Spink & Jim Jansen (2004). **Web Search: Public Searching of the Web**. Springer.

Research Design

- Web query data set analyzed from 2004, 2005 and 2006
- Random sample of approximately 2,500 queries was qualitatively classified by the researchers into one of eleven categories

Web Data Sample

Query	UID	Cookie	Date/ Time	Browser	Location	Vertical	Organic_ Clicks	Sponsored_ Clicks
jamie pressly	66.215.238 .179	29NIJYMA4 TB385Y	2006-05- 15 00:00:00	msie6.0	usa	Images	0	1
maytag parts	206.192.19 7.53	2UGJ23KA4 T2TCMV	2006-05- 15 00:00:00	msie6.0	usa	Web	1	0
free gay porno videos	65.23.175. 149	KSKNPKA4 TB22ER	2006-05- 15 00:00:00	msie6.0	usa	Web	0	1

Transaction Log Analysis (TLA)

- File or log of communications between user and system
- File recorded on a server – side recordings
- Log or file formats vary but there are fields common to most (e.g., IP address, cookie, time stamp, query, vertical, click thru)

Vivisimo 2004

2004 Vivisimo (3600 Queries)	%
People, Places or Things	15%
Commerce, Travel, Employment or Economy	21%
Computers or Internet	13%
Health or Sciences	6%
Education or Humanities	5%
Entertainment or Recreation	2%
Sex and Pornography	4%
Society, Culture, Ethnicity, or Religion	9%
Government or Legal	3%
Performing or Fine Arts	3%
Non-English or Unknown	19%
	100.0%

Dogpile 2005

2005 Dogpile (2500 Queries)	%
People, Places or Things	16.0%
Commerce, Travel, Employment or Economy	30.4%
Computers or Internet	5.7%
Health or Sciences	8.9%
Education or Humanities	5.6%
Entertainment or Recreation	7.0%
Sex and Pornography	3.8%
Society, Culture, Ethnicity, or Religion	4.7%
Government or Legal	3.65
Performing or Fine Arts	0.5%
Non-English or Unknown	13.2%
	100.0%

Dogpile 2006

2006 2,500 Dogpile.com Queries	%
Commerce, Travel, Employment or Economy	28.7%
Entertainment or recreation	16.4%
Sex or pornography	13.1%
People, places or things	10.5%
Health or sciences	8.6%
Education or humanities	5.1%
Society, culture, ethnicity or religion	5.08%
Computers or Internet	4.9%
Unknown or Other	4.4%
Government or legal	2.5%
Arts	.3%
	100%

Commerce Queries - Trends

- People use Web search engines to find information on a broad range of information tasks
- Shift from 1997 to 2005 towards the use of the Web as a commerce information resource and tool (Spink & Jansen, 2004)
- Commerce related queries increased as a proportion of Web queries from 13.3% in 1997 to now the most frequently occurring category (30.4%)
- From 1997 to 2005, Web queries related to commerce, computers and people increased as a proportion of all Web queries

Commerce Queries - Trends

- Web commerce queries are short, infrequently modified and simple in structure (Jansen, et al., 2007; Spink and Jansen, 2004)
- Few commerce queries include advance search features or Boolean logic
- Many commerce queries contain spelling mistakes that lead to failed searches.
- Commerce Web searchers view few result pages and do not generally view beyond the first or second page of results

Commerce Queries - Trends

- Commercial Web site developers need to be aware of how people search for commerce related information and trends in commercial Web searching
- Sponsored links have emerged as major financial drivers for Web search engine companies (Jansen & Spink 2007)
- We need better HCI and information behaviour models of users' interactions with Web search engines

Conclusion

- Continuing to analyze Web data from InfoSpace, Inc.
- Track trends in Web search
- Jansen, B. J., Spink, A., & Taksa, I. (Eds.). (2008). *Handbook of Web Log Analysis*. Idea Group Publishing
- Spink, A., & Zimmer, M. (Eds.). (2008). *Web Searching: Multidisciplinary Perspectives*. Dordrecht: Springer

QUESTIONS?

Thank You

