

**FALSE ORACLES:**  
**Consumer Reaction to Learning the Truth**  
**About How Search Engines Work**  
*Results of an Ethnographic Study*

A report by

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Based on field research conducted by  
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Released: June 30, 2003

**ACKNOWLEDGEMENTS:**

*Consumer WebWatch would like to thank the following people for their assistance in helping to shape the early phases of this project.*

Sambhavi Cheemalapati, Research Librarian, Information Center, Consumers Union

Denise I. Garcia, Principal Analyst, Media & Advertising, Gartner G2

Sandy Schlosser, New Media Project Manager, ConsumerReports.org

Beverly J. Thomas, Senior Attorney, Internet Advertising Program, U.S. Federal Trade  
Commission

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## **EXECUTIVE SUMMARY**

A year after the U.S. Federal Trade Commission (FTC) determined there was a need for “clear and conspicuous disclosures of paid placement” on search engines<sup>1</sup>, Consumer WebWatch released data from a new study that shows consumers can’t always discern paid search from pure search results.<sup>2</sup> Key findings were released April 24, 2003, in New York City at Consumer WebWatch’s First National Summit on Web Credibility.

This study, which tested 15 major search and navigation sites, used an ethnographic approach that allowed researchers to observe experienced Web searchers in their natural surroundings. Search companies have done their own usability-related studies, but the results are usually proprietary. Context-Based Research Group, a cultural anthropology research firm based in Baltimore, conducted the field research.

Four anthropologists recruited 17 Web consumers from four U.S. metropolitan areas (Kansas City, Mo., Phoenix, Ariz., Providence, R.I., and Raleigh-Durham, N.C.). None of the participants knew about pay-for-placement on search engines prior to joining the study. Each candidate answered a pre-screener open-ended question that asked for his or her understanding of how a typical search engine ranked its results. (See **FIGURE 1: Participant demographic profiles.**)

Once admitted to the study, each consumer performed two online searches (one e-commerce, the other informational) on five pre-assigned search sites while being observed and interviewed by the anthropologist. A total of 163 completed searches were performed in which a participant selected at least one link from the delivered results pages. (The 15 sites assessed in this study were About.com, AlltheWeb.com, AltaVista.com, AOL.com, Ask.com, Go.com, Google.com, InfoSpace.com, iWon.com, Kanoodle.com, LookSmart.com, Lycos.com, MSN.com, Overture.com and Yahoo.com.) See **APPENDIX A: Background and study methodology** for information on how we selected these sites.

After the planned searches, participants were told how pay-for-placement works on each search site under assessment. To lead into this discussion, the ethnographer pointed out each of the “disclosure” pages and “About Search” links posted on each site under evaluation and asked the participant to read through them. (Many of these disclosure pages were located in areas geared toward advertisers, not consumers.) One-on-one field interviews with participants, which each averaged two hours in duration, were conducted pre- and post-enlightenment. After being enlightened, participants were asked to do “homework” assignments, 10 additional searches on sites and topics of their choosing, before a second field interview with the ethnographer. (Participants were asked to record in a search journal their thoughts and behaviors recalled

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<sup>1</sup> Federal Trade Commission letter to Commercial Alert, “Complaint Requesting Investigation of Various Internet Search Engine Companies for Paid Placement and Paid Inclusion Programs.” Available online at <http://www.ftc.gov/os/closings/staff/commercialalertletter.htm>

<sup>2</sup> Paid search (a.k.a., pay-for-placement, pay-for-performance, pay-per-click, paid listings): Guaranteed prominent placement of a Web page link or ad in the search results of a search engine, triggered by keyword terms an advertiser has purchased.

during these “homework” sessions.) The participants’ pre- and post-enlightenment online searching was observed to monitor changes in attitudes and behaviors over time.

Major findings:

- Most participants had little understanding of how search engines retrieve Web pages or how they rank or prioritize links on a results page.
- The majority of participants never clicked beyond the first page of search results. They trusted search engines to present only the best or most accurate, unbiased results on the first page. As a result, two-in-five links (or 41%) selected by our participants during the assigned search sessions were paid search results.
- Once enlightened about pay-for-placement, each participant expressed surprise about this search engine marketing practice. Some had negative, emotional reactions.
- All participants said paid search links on search and navigation sites were often too difficult to recognize or find on many sites, and the disclosure information available was clearly written for the advertiser, not the consumer. Search engine sites that were perceived to be less transparent about these related disclosures lost credibility amongst the group.

**FIGURE 1: Participant demographic profiles**

Name*	Age	Occupation	HH Income	Family Type	Web Use	Web Years
<b>KANSAS CITY</b>						
Lucy	24	Child Daycare Coord.	\$70,000	Married with child	office	7
Jack	28	Graphic Artist	\$15,000	Single, no children	home	8
Kareem	37	Restaurant Owner	\$30,000	Married with child	home/office	5
Geena	48	Legal Asst.	\$35,000	Married with children	office	10
<b>PHOENIX</b>						
Yvonne	32	Physician's Asst.	\$76,000	Single, no children	home/office	12
Penny	34	Stay-at-Home Mom	\$100,000	Married with child	home	12
Gary	40	Environmental Compliance	\$50,000	Married with children	office	8
Bob	46	Consultant, Geographic Info.	\$45,000	Single with child	office	6
<b>PROVIDENCE</b>						
Vivian	19	Full-time College Student	\$5,200	Single, no children	home/school	7
Maria	27	Office Mgr., Non-Profit	\$30,000	Single, no children	office	9
Dennis	40	V.P., Jewelry Comp.	\$160,000	Married with child	home/office	9
Larry	62	Consultant, Marina/Boating	\$120,000	Married with grown children	home/office	17
<b>RALEIGH-DURHAM</b>						
Diane	20	Full-time College Student	\$10,000	Single, no children	home/school	5
Mike	25	Electric Meter Reader	\$18,000	Single, no children	home	5
Sara	30	Elementary School Teacher	\$40,000	Single, no children	office	6
Claude	36	Construction Worker	\$35,000	Single with children	home	6
Anna	55	Retired Banker	\$200,000	Married with grown children	home	5

\*Pseudonyms assigned to participants to protect their privacy. See also APPENDIX E: Individual demographic profiles of 17 participants.

**About Consumer WebWatch:**

Consumer WebWatch is a project of Consumers Union, the non-profit publisher of *Consumer Reports* magazine and ConsumerReports.org. The project is supported by The Pew Charitable Trusts, which invests in ideas that fuel timely action and results; the John S. and James L. Knight Foundation, which promotes excellence in journalism worldwide and invests in the vitality of 26 U.S. communities; and the Open Society Institute, which encourages debate in areas in which one view of an issue dominates all others. Consumer WebWatch's Web site launched April 16, 2002.

<http://www.consumerwebwatch.org>

**Note:** ConsumerWebWatch.org does not participate in any pay-for-placement or paid inclusion/submission program on any search engine or navigation Web site.

**About Context-Based Research Group:**

Context-Based Research Group is an ethnographic research and consulting firm located in Baltimore, M.D. with a global network of cultural anthropologists located around the world. Professional anthropologists Robbie Blinkoff, Ph.D. and Belinda Blinkoff, M.A., A.B.D. created Context in partnership with Chuck Donofrio, the President and C.E.O. of Carton Donofrio Partners, Inc., an international brand experience design firm also located in Baltimore.

<http://www.contextresearch.com>

## **INTRODUCTION**

Consumer WebWatch learned in its first commissioned study - a national telephone survey of 1,500 Web-savvy U.S. adults conducted by Princeton Survey Research Associates - that 60 percent did not know some search engines accept fees in exchange for giving prominent placement to advertiser Web pages within the results pages.<sup>i</sup> In addition, four-in-five respondents (or 80%) said it was important search engines disclose their paid search policies in the search results or an easy-to-find page on the site.

A more recent Consumer WebWatch credibility-related joint study, lead by Stanford University's Persuasive Technology Lab, found half the consumers (or 46.1%) judged the credibility of a Web site based, in part, on superficial aspects such as Web design or overall visual appeal.<sup>ii</sup> These Stanford participants were more likely to assess a search engine site's credibility based on visual cues (52.6% vs. 46.1% overall).<sup>3</sup> In addition, less than four percent of consumers who assessed the 10 search sites in this Web-based study commented about information bias. In comparison, 11.6 percent of information bias-related comments were made about the study sites overall, and 30.2 percent of comments were derived while assessing news-specific sites, where the issue of information bias and sponsorship influence is presumably more understood (and expected) amongst the public.

In this most recent study on search engines and navigation sites, Consumer WebWatch decided to use an ethnographic or anthropological approach in order to dive deeper into how consumers use these popular Web navigational points-of-entry. We commissioned Context-Based Research Group, an ethnographic research and consulting firm based in Baltimore, to conduct this project. Robbie Blinkoff, Ph.D., a managing partner and principal anthropologist, directed the project. **(See also APPENDIX B: The merits of ethnographic research.)**

### The 15 sites assessed in this study:

About.com  
AlltheWeb.com  
AltaVista.com  
AOL Search (AOL.com)  
Ask.com  
Go.com  
Google.com  
InfoSpace.com  
iWon.com  
Kanoodle.com  
LookSmart.com  
Lycos.com  
MSN Search (MSN.com)

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<sup>3</sup> The Stanford study asked participants to assess the credibility of 10 search sites, randomly assigned in pairs, that were pre-selected by researchers for a variety of reasons, including Web design, user interface, brand name, and the presence or absence of disclosure information. The search sites assessed between June 15 – August 15, 2002 were About.com, AlltheWeb.com, Ask.com, Google.com, Insider.com, iWon.com, LookSmart.com, Overture.com, Vivisimo.com and Yahoo.com.

Overture.com  
Yahoo.com

#### Why focus on search engines?<sup>4</sup>

**Switching stations:** Searchers use these navigational portals to move from one site to another, particularly when the user is unsure of where to surf next. Findings from various research reports show at least 85 percent of Web users query search engines with great frequency.<sup>iii</sup> Other research indicates the percentage of search engine referrals worldwide has increased significantly over the past year: up to 13.5 percent of global referrals from 7.2 percent the previous year, according to online marketing analytics firm WebSideStory.com.<sup>iv</sup> (Search sites in the U.S. account for 15 percent of all referrals, up from 8 percent a year ago.) Clearly, online consumers rely on search engine and portal sites to find and to navigate Web pages more quickly and efficiently.

**Paid search factor:** These advertiser-based results can nudge online consumers to click on Web pages, links or ads listed prominently in the results, yet not *necessarily* the most relevant to their search query. Even well informed or Web-savvy users may not know whether a listing is a paid ad. In addition, in the wake of the dot-com advertising bust in 2001, and the decreasing effectiveness of banner ads, online advertisers and marketers are anxious to find tactics that will boost visibility with consumers. Keyword and other forms of paid search can make a significant difference to a company's bottom line. A recent Jupiter Research poll found that 76 percent of marketing executives who have used search engine marketing rate it more effective than banner-style online advertising.<sup>v</sup> About two-thirds (or 64%) said they intended to increase their search engine marketing budgets in the next 12 months. (Indeed, a June 2003 report released by the Interactive Advertising Bureau said keyword search made up 15 percent of last year's total Internet advertising revenues, up from 4 percent in year 2001.) According to industry analysts U.S. Bancorp Piper Jaffray, total paid search revenues in the U.S. will approach \$2 billion by the end of 2003, then jump to nearly \$5 billion by 2007.<sup>vi</sup>

**Consumer detriment:** There's a higher risk to the Web consumer of making flawed buying and other decisions as a result of reliance on information from a prominently ranked site that doesn't necessarily have the most accurate or most authoritative information. This risk factor is highest when consumers search for information on health or financial issues in which actions based on faulty, misleading or incomplete information could adversely affect their health or money matters.<sup>vii</sup> For example, a November 2002 Consumers International study of 460 Web sites found half the sites giving advice on medical and financial matters failed to provide full information about the authority and credentials of the people behind that advice.<sup>5</sup>

#### What Consumer WebWatch hoped to accomplish:

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<sup>4</sup> Consumer WebWatch's definition of a search engine: Any major site with the ability to point or navigate hundreds of thousands of Internet users to different points of entry online, including search services, directories, portals and community sites.

<sup>5</sup> Consumers International (2002), *Credibility on the Web: An international study of the credibility of consumer information on the Internet*.



- First, to elaborate on the Princeton survey statistics about search engines. Consumer WebWatch wanted more confirmation Web consumers are still largely unaware of paid search, and that such paid results might influence the ranking of their search results.
- Second, to assess whether consumers could tell the difference between paid search results and pure or algorithmic search results, or not.
- Third, to assess whether consumers noticed and understood the “About Search” links or related disclosure information posted on such sites a year after the FTC determined there was “the need for clear and conspicuous disclosures of paid placement...so that businesses may avoid possible future Commission action.”<sup>viii</sup>
- Fourth, to understand whether consumers’ online behavior would change once they learned more about search engine pay-for-placement marketing and how related results rankings might be biased toward advertisers.
- Fifth, to alert the search engine community that current marketing and advertising practices could lead to long-term credibility problems for the industry.
- Sixth, to call attention to potential concerns or inadequacies in the FTC recommendations to search engines to make their practices more transparent.

What the study does not cover:

The study did not focus on the concept of paid submission (a.k.a., paid inclusion)<sup>6</sup> because such techniques do not typically taint search engine result relevancy or rankings. In addition, Consumer WebWatch thought that adding the concept of paid inclusion to the concept of pay-for-placement would only confuse and possibly frustrate participants.

Consumer WebWatch decided to focus on consumer understanding of paid placement, as its influence can adversely affect search results positioning, thus potentially denying consumers the ability to make the best buying and related household decisions while online. Further, basing a health- or finance-related decision on inaccurate information can be literally dangerous to a consumer’s well-being.

Secondly, the study did not attempt to determine whether the search results the participants received or clicked on were in fact accurate or relevant to their query. However, we took notice of occurrences in which the participant remarked to the ethnographer about the perceived accuracy or inaccuracy of search results received during search sessions.

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<sup>6</sup> Paid submission: Submitting a Web site or pages for guaranteed inclusion into a search engine's database or listings. This does not guarantee prominent listings or a rankings boost over those pages retrieved from the engine’s indexing (crawlers), but it does guarantee a site is “crawled” more deeply or with greater frequency.

## **STUDY RESULTS AND DISCUSSION**

### **Please note:**

*The names of participants have been changed. Participants were assigned pseudonyms to protect their privacy and to encourage candidness with the ethnographer.*

*Excerpted ethnographer field notes and long quotations from participants appear in block quote format. Direct quotes from participants are set off in double quotation marks.*

*Some participant quotes or ethnographer field notes were edited for grammar or clarity.*

## **PRE-ENLIGHTENMENT ATTITUDES AND BEHAVIORS**

### **1. All participants used one search engine as their sole or primary point of Web search entry.**

Thirteen participants reported using either Yahoo or Google for all or nearly all of their online searching. (Google garnered eight loyalty votes, while Yahoo had five. AltaVista, Dogpile, MSN Search and Search.com each received one vote apiece.)

Users were loyal to Google because they perceived it to deliver “relevant” and “satisfactory search results.” Participants also mentioned its ease-of-use due to an “uncluttered” Web page with “no distractions” like pop-up ads, images and a lot of text. Yahoo’s popularity amongst participants was credited to its perceived delivery of “the best results,” “appearance and accessibility” and “brand name and overall usability.” Three participants admitted heavy usage of one particular search engine simply because it was the default Web home page setting on their PC’s Internet browser.

For example, the Kansas City ethnographer reported Geena, 48, a legal assistant who does a lot of work-related searches, has used Yahoo ever since she first went online 10 years ago:

When she first began using the Internet [Yahoo] was set as her default start page. Since then she has not felt a need to change the way in which she searches on the Web. It is also set as her default page at her workplace, however, she did not set it as her start page. She explained that, “it was just like that so I use it.”

MSN.com is the default choice for fellow Kansas City participant Kareem, 37, a restaurant owner and home/office Web user for five years.

MSN serves as the homepage on his computer and he therefore uses it the most frequently... When he first used the Internet, and first got a computer, the homepage was set to MSN, which is the reason he has used it as his primary search engine all along.

## **2. Most participants did not understand how search engines retrieve information from the Web or how they rank or prioritize links on a results page.**

About half the participants (8 of 17) had a vague understanding that search engine results are influenced by keyword or a closest match relevancy. In other words, they had a fuzzy idea search engines relied on the keywords or phrases typed into the search boxes to find Web pages, but didn't understand much else.

For example, Penny, 34, a stay-at-home mom in Phoenix said "the search engine goes out and looks at the keywords in the codes of Web pages and if the words match it pulls it down for the results page." Similarly, Vivian, 19, a full-time college student in Providence, suggested search sites "pull up things that have the closest matches to what you typed in and then maybe it ranks them in order of what page or where on the page the words show up."

Two people characterized search and navigation sites as "something you can give a word to and it goes out and finds matches that most closely match your word" (Sara, 30, elementary school teacher, Raleigh-Durham) or "software that goes out on the Internet using search words to find Web sites." (Yvonne, 32, physician's assistant, Phoenix)

Bob, a 46-year old Phoenix-based geographic consultant with six years online, gave this response:

"A search engine is an interface with a Web page you go to in order to query where to find information. You type in keywords and you get 100,000's of returns [that are] prioritized by how well your keywords match the Web page's keywords."

Likewise, Dennis of Providence, 40, a jewelry-accessories company vice president with a background in trademark law, explained:

"I would say [search engines] allow you to find information about a topic that is located elsewhere on the Internet by clicking in key phrases related to what you are interested in."

Not surprisingly, some participants were more advanced in their understanding than others. Two in particular, Gary of Phoenix (a 40-year-old environmental compliance coordinator) and Larry of Providence (a 62-year-old marina and boating consultant) had the most sophisticated understanding of how search engines work:

Here's how Gary, who manages a personal home page, explains how search engines work to the Phoenix ethnographer:

"[E]ach search engine is set up differently to do Web searches. Each engine has an algorithm that determines how the engine's 'spider' or Web 'crawler' (the information retrieval thing) will chose the Web sites for the results page. Some spiders are sent out to seek 'meta-tags,' but some reject 'meta-tags.' Some accept hidden text, while others reject hidden text. It depends on the search engine's goals, which are determined by whoever runs/owns the search engine."

Larry of Providence, who has experience compiling a database of Web pages related to environmental issues, conveyed a higher level of understanding to the researcher:

“[It] operates on keyword searches, which might be words embedded in text. It scans through and reads names of individual places and products and with some systems, they will even list whatever keyword they think you want to have... That is what gets registered with the search engine.”

Three participants (Jack and Kareem of Kansas City and Mike of Raleigh-Durham) had naïve perceptions of how search engine result links are ranked, believing priority listing was based, in part, on some kind of popularity- or seniority-related measurement.

According to the ethnographer’s field notes, Jack, a 28-year-old graphic artist with eight years of online experience, assumed the results were selected based on the “most frequently visited Web sites.” He also stated that Web sites ended up in the results based on their relevancy to keywords in a query.

Fellow Missouri statesman Kareem, who also maintains a Web page for his small business, “assumes” certain links are ranked higher than others because they are logged on more frequently.

Mike of Raleigh-Durham, 25, an electric meter reader and part-time student with five years’ Web experience, suggested results were ranked based on seniority:

He believes the sites that are ranked higher are there “because they are the most established or oldest. Perhaps because they have the most hits.”

Four participants (Geena of Kansas City, and Anna, Claude, and Diane of Raleigh-Durham) admitted they had little understanding of how search engines prioritize results.

Anna, a 55-year-old retired banker, guessed search engines rank results based on the “more words I entered are on that site.” Claude, 36, a construction worker with six years online, believed search results are ranked, “listed by the best site.” And Diane, 20, an undergraduate university student with five years of Web experience, thought search engines “scanned [the Web]...and the first ones are just like you want it.”

While no participant knew about pay-for-placement on search sites, two participants suspected results rankings weren’t based entirely on a pure search or algorithmic method.

The Kansas City ethnographer noted this about Lucy, 24, a child daycare coordinator with seven years of Web experience:

She alluded to pay-for-placement a tiny bit when asked about the reason certain items are ranked higher than others did in a search result, but then backed off. “I don’t know why, I guess because of pay or something, or actually it’s because of keyword I think.”

Likewise, Providence resident Maria, 27, an office manager for a non-profit art organization with nine years online, suggested there were factors at hand that drive search results other than unbiased or algorithmic rankings.

“I always [thought]...it was depend[ent] on what the search engine wanted to present to people and also what the places [Web sites] kind of give to the search engine. I don't know if it is a money deal or whatever, I don't know if they exchange [money], but it has something to do with helping each other out.”

**3. The majority of participants never clicked beyond the first page of search results as they had trust in the search engine to present only the best or most accurate results on the first page, making it unnecessary to review later results pages.**

Each of the 15 search engines under evaluation was assessed by a minimum of five participants. A total of 170 unique search sessions were performed during the planned browse phases of Field Interview #1, an equal number of commercial searches and informational searches for health, finance or travel information (i.e., 85 searches of each type.) Seven searches were aborted before a result link was clicked because the participant reported he or she didn't see a link of interest to them, or because the results were redundant to those seen on other search engines tested. (There were two aborted searches on MSN.com and one apiece on About.com, Go.com, InfoSpace.com, iWon.com, and Kanoodle.com.)

**(See APPENDIX C: Search engine and navigational sites evaluated, by participant.)**

Not one participant explored search results beyond the fifth delivered page. Of the 163 searches in which a participant selected a link to explore, the majority or 88 percent of the result links selected were located on the first page. The number of pages explored by participants decreased considerably after page one. There were only 16 cases in which a participant viewed the second page of results, two cases where the third page was reviewed, and one case in which the fifth page was scanned.

There was a slight difference between commercial and informational searches. Of the 144 cases in which a link was selected from the *first results page*, 75 were picked during commercial searches, while 69 were chosen during informational searches.

Prior to the planned browse searches, in which the ethnographer probed a participant on his or her searching behavior, *pre-enlightenment*, most participants had a fairly accurate depiction of their online behavior. The majority (or 12 of 17 participants) stated they only clicked on links listed on the first page of search results, which later proved to be accurate once these statements were compared to their actual behavior displayed during respective planned searches.

Two participants, Anna and Diane of Raleigh-Durham, were overly conservative in what they reported to the ethnographer. While each stated she typically stopped at the first page of results, in three of 10 cases during the planned search each reviewed two or three pages of results, certainly far more than the group on average. (Anna assessed About.com, AltaVista.com, Google.com, MSN.com, and Overture.com. Diane assessed Go.com, InfoSpace.com, iWon.com, Kanoodle.com and LookSmart.com.)

Another participant not only reported he was diligent about reviewing a number of pages before making a link selection, but his actual behavior during the planned search bore this out. Kareem

of Kansas City's exchange with the anthropologist indicates how thorough he is when reviewing the results he receives:

He typically scrolls through several pages, "at least three," before choosing a result, however, he said it ranges from one to six [pages]. He explained, "because when I've found my appropriate search phrase, everything will be in those results pages. I click on lots of pages because there's lots of good information." He scrolls through anywhere from "one to twenty to fifty" actual results before selecting a link.

True to form, an analysis of his 10 planned searches revealed Kareem had clicked on a first-page result only three times. He reviewed through the second page of results half the time (5 of 10 times), reviewed through the third page of results one time, and through the fifth page one time. (Kareem performed his 10 planned searches on AOL.com, AlltheWeb.com, Ask.com, Lycos.com, and Yahoo.com.)

There were, however, two participants who *said* one thing, but actually *did* another. (i.e., there was a disconnect in reported behavior versus actual behavior.) The first is Lucy of Kansas City. According to the ethnographer's field notes, Lucy reported the following:

She always scrolls through all the results, glancing at the descriptions quickly, before making any decisions. Then, she zeroes in on the one she wants and reads the details and sometimes the Web address, if it is offered. She explained that, "the top one isn't always the one I want so I look through them all." I noticed that although she looks through "them all," she only looked on the first page. When I asked her about that, she concurred, stating that she "almost never goes beyond the first page because it would take too much time."

It seems the answer extracted from Lucy, triggered by probing from the anthropologist, proved to be most accurate. A review of Lucy's planned searches, in which she assessed AOL.com, AlltheWeb.com, Ask.com, Lycos.com and Yahoo.com, showed she only selected links from the first page of results.

Similarly, the Raleigh-Durham researcher recorded that Mike said:

He typically will "either pick a result on the first two pages, or by the third I may skip to the farthest one I can find, just to see what is there." He will search through three pages of 25 results for a more directed search.

His actual planned searching behavior, however, indicated he never went beyond the first page of results served by assigned sites Go.com, InfoSpace.com, iWon.com, Kanoodle.com and LookSmart.com.

Perhaps more importantly, four participants justified their behavior of stopping at the first page of results because they assumed a search engine would present only the most trustworthy Web sites first, therefore there was no need for them to read beyond the first page.

According to the Providence anthropologist, Larry generally doesn't scroll through any search pages:

Larry chooses one of the first five or so links he sees on his first search results page... If Larry doesn't see anything "in the ballpark" of what he is looking for, he will restructure his search because he believes results are ranked by relevancy and the frequency of the occurrence of his search term in the results that are generated. If he doesn't find what he wants in the first five, he believes that he won't find them further down the screen or on subsequent screens.

Yvonne justified her behavior to the Phoenix ethnographer in this way:

Often she doesn't even scroll down to view all of the results on that page and makes her link choice from the links at the top of the page. It's okay to do this because the search engine has prioritized the links to have the best matches at the top.

Two Kansas City participants expressed similar blind trust of search engines:

Jack claimed, based on his assumption that the first results are the Web sites most frequently visited, that "the most trustworthy sites are the first to come up." When using Google.com, he chose a sponsored link at the top of the results page because he said it looked "trustworthy."

The same ethnographer wrote these notes in reference to Geena:

She does not think there is any difference between the results provided by different search engines.

#### **4. Nearly half the links selected by participants were paid search results.**

Of the 163 searches in which a link was selected, 67 results (or 41%) could be classified as paid search. These included links euphemistically labeled "sponsored" link, listing, match, or result, and "featured site" or "featured sponsor." Most results generated by "pay-for-performance" site Kanoodle were coded as paid search results<sup>7</sup>, as well as all results generated by Overture, whether these Overture results came directly from its home page or picked during a search of partner sites Go.com or InfoSpace.com. Similarly, links that could be attributed to the Google AdWords or Sponsored Links programs were coded as paid search, including some results that appeared on partner sites such as iWon and InfoSpace.com.

Slightly more paid links were selected during the commercial searches compared to the informational searches. A total of 36 links were selected during *pre-enlightenment* e-commerce searches. Fewer paid links (31 to be exact) were selected during informational searches. On the other hand, there were slightly more pure search links selected during informational searches. (50 pure links selected during informational searches vs. 46 pure links selected during commercial searches.)

**(See the POST-ENLIGHTENMENT ATTITUDES AND BEHAVIORS section for information on consumer perceptions of pay-for-placement results received during commercial vs. informational searches.)**

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<sup>7</sup> Other results "powered by Google" were coded as "pure" search results.

There were some cases in which it was difficult for the Consumer WebWatch researcher to determine whether a selected link should be coded as paid versus non-paid. This is because the disclosure and “About Search” page language for a particular engine was so vaguely worded it was impossible to determine what the site classified as a paid search result. That said, the researcher coded 96 links (or, 59%) as derived from pure or algorithmic generated results, including those Web pages in which there was reason to believe they were present due to paid inclusion or paid submission programs.

**5. Very few participants noticed the paid search labeled “sponsored” links or listings, but only when they were easy to see (i.e., at the top of the search page or clearly marked in a box).**

These same participants reported skipping over links labeled “sponsored” because they assumed these results didn’t have what they wanted, even though they couldn’t always articulate why.

For example, the Phoenix ethnographer reported this about Gary:

When he did the search on About.com (a site he had never used before), he quickly skipped the top section of results. On Google, he skipped over the highlighted results and behaved similarly on the other sites. He said he skipped those results because they seemed less (or not at all) relevant. That is when he started noticing the sponsored link notes and other clues to pay-for-placement and recognized those links had paid to be included in searches.

The same researcher noted:

Penny skips over sponsored links on any results page, not because they are pay-for-placement, but because they don’t look right. Because they are highlighted or separated or made to stand out somehow, they don’t fit into the format that she expects on the results page, so she ignores them.

In a different city, the Providence ethnographer recorded similar online behavior for Vivian:

She says she never looks at sponsored links, though she didn’t know they were paid for. When we talk about premium sponsorship on Google, she says she never looks at the information at the top. “I never actually look at them very closely, but I know they are trying to sell me something. I think that these are advertising and that these (points to sponsored links on side) are the same, so I just never look at them.”

The Providence researcher noted Larry also ignored sponsored links, such as those labeled “sponsor matches”:

“I don’t look at those as a general rule if it is in a separate box as I know it is a sponsored thing. Well, you know, I’ll give them a quick glance, but I know that those aren’t what I want.”

**6. Paid search disclosures were overlooked in every case.**



The four ethnographers noted none of the participants in his or her city noticed the “About Search” or other disclosure information pages on the 15 search engines under assessment during the 10 planned searches conducted *pre-enlightenment*.

## **POST-ENLIGHTENMENT ATTITUDES AND BEHAVIORS**

### **1. Each participant expressed surprise after learning about this search engine marketing practice. Some had negative, emotional reactions.**

Sara of Raleigh-Durham reacted emotionally when told about pay-for-placement. The ethnographer recorded this exchange:

“Well, that figures!” I believe she may get a little depressed about this information. She remained quite melancholy throughout the rest of the visit. I could tell her mind was rolling with the repercussions of pay-for-placement. She seems concerned her students [will have to grow up and have] to learn how to see bias while using a computer.

Similarly, fellow North Carolina resident Anna said she was concerned about those more vulnerable to information bias, like children:

“I expect information bias and, therefore, take it into consideration when making decisions because I’m old and jaded.” She later added, “I feel like there are people, like family, that are more gullible and [will] accept anything they read on the Internet as gospel.” When I asked, whom, she responded, “My mother, my daughter, and other people’s families.”

Four participants reacted angrily or expressed a sense of betrayal, including Kareem of Kansas City:

Upon enlightenment, his face contorted a bit. He expressed immediate dismay, stating, “Well, that explains it. No wonder I run into so much [expletive].” Yet, he tempered his displeasure quickly, stating, “I expect it though, I guess I kind of suspected something like this. I just never thought too much about it. It just annoyed me.”

Mike of Raleigh-Durham also had an angry reaction:

I found he is not happy he has to “be careful” when searching “so I don't get sites I don't want,” the ethnographer recorded in the field notes.

Geena of Kansas City was taken aback at first, and then she blamed herself for not noticing disclosure information sooner:

When we visited the disclosure links she was somewhat stunned. She seems to be a very, very trusting person that thinks the best of everyone and everything,

so she was shocked. She felt extremely betrayed. She expressed a slight bit of disappointment with herself because she said she should have visited the disclosure link sooner, but then brought the site to task for not disclosing it in a more explicit manner.

Similarly, Claude of Raleigh-Durham expressed a sense of betrayal and then became disturbed when he suspected this practice might have influenced his more serious informational searching.

The participant insisted informational searches “are no place for advertising.” The participant made an excellent point when reflecting on pay-for-placement. “People like me may only get to learn stuff online, and if we can’t then that’s just as biased as having to pay lots of money to go to some college to learn.”

The ethnographers recorded three exchanges with participants that indicated they were confused or disappointed.

Vivian of Providence expressed disappointment, but like Geena, blamed herself:

“Oh, I’m such a sucker!” (She laughs.) I tell her she isn’t [a sucker], but that she might want to know this when she is shopping or looking for information. I also point out the different headings for search results as they are listed on sites like iWon, LookSmart and Kanoodle. She hadn’t noticed these before. “My little fantasy world is wrecked!”

Diane of Raleigh-Durham felt somewhat defenseless, as if unsure what to do next:

“I feel helpless and must tolerate it. It’s annoying everywhere it happens, but what can you do about it.”

Lucy of Kansas City was confused at first, until she recalled a previous experience:

When Lucy and I visited the disclosure pages on the search engines, she was a bit puzzled, at least the look on her face seemed to be a mix of bewilderment, confusion, and displeasure. She expressed a sort of ‘ah-ha’ and continued, “So that is why I kept getting sent to eBay and other annoying product sites I didn’t want.” She then expressed her appreciation for being informed of this fact, but then went on to chastise herself for not ever looking at the disclosure links on the search engine homepages.

Two participants questioned the trustworthiness of advertisers that choose to participate in search engine marketing programs.

Gary of Phoenix called into question the ethics of advertisers that pay-for-placement:

“They are being placed there because of money, not content. I am after content.” He summed it up by saying, “the bottom line is, if you’ve got a good Web site don’t pay. Let the search engines do their thing.”

Providence participant Dennis questioned the ethics of some Web companies. He expressed confusion about what is paid and what is not paid, in this case on a Google results page:

Dennis doesn't click on sponsored links on Google because "they are biased. They are paying Google to be there." He appears to still be confused. "The advertisements are over there (motions to right side of an imaginary screen), and the results are over here. Whether they mix them in there, I'm not sure. To get on the first page maybe they do? Because sometimes I have seen, like, why is this on the first page when what I really need is on the third page?"

The last six participants, while initially surprised about pay-for-placement, eventually came to a more philosophical or realistic outlook. They characterized search engine marketing as a sort of price to pay, like other forms of Internet advertising that keep online information free.

The Phoenix anthropologist recorded this response from Bob:

Being as skeptical as he is, he said he "figured" the results were influenced that way, but he had never bothered to investigate. He was very interested in the 'about the search' pages. "[I]nformation bias is tolerable because any venture has to be profitable and if the Internet wasn't profitable it wouldn't exist." Anyway sometimes he's looking for commercial sites so it's good that they pay to get to the top. He said, "Even if the sites didn't pay-for-placement, the listings would still be biased somehow."

Maria of Providence responded in a similar fashion:

Maria seemed surprised by the information, but not outraged. As she said, "I understand how it works." She added, "I kinda had an idea a little bit that that was how it works, but I didn't understand how money was exchanged or how exactly everything is going together. It is interesting, I didn't realize how much of the beginning pages [were] money pages, like people paying. To find the meat of what it is that I want, what I really want, I have to look farther [down the search results.]"

Jack of Kansas City, said he expects information bias to occur in the commercial realm:

Jack seemed unfazed. He said, "Well, I guess I should have known." He went on to express his displeasure with pay-for-placement, stating he "needs to look more into it because my art [stored on an online gallery site] will never get seen because big sites will always get visited first." Jack seemed a bit unsure, but threw out the idea that some corporations are [more] forceful with their money, which leads to some bias [on search engines.]

Yvonne of Phoenix had this reaction:

Yvonne's searches were a great lead in to the pay-for-placement enlightenment. Even though she had noticed the different [pages] of Amazon were coming up in different order, she still hadn't noticed some were listed as "sponsored" or "recommended" sites. She said learning about pay-for-placement is "kind of a big bummer." She was not really surprised, but a little disappointed. She elaborated, "It's a little bit disturbing, especially when I'm searching for information, I don't know. I guess I expect to be duped when I'm searching for things [to buy], but then again when I put in a specific string I don't want that string to get dummied down or dulled by the fact that somebody paid money to

get to the top of the pile.” She compares [her post-enlightenment knowledge of] pay-for-placement on search engines to commercials on television. “It’s like commercials on television. I don’t particularly care [that they are there], but it’s good to know the information you are getting is being filtered through that lens. Then you can adjust your perception of that information. You are buyer beware because you are aware.”

The same Phoenix researcher noted a similar kind of exchange with Penny:

She was very realistic about pay-for-placement saying, “It’s just like going to the mailbox, you just have to filter through the junk—there might be a check for \$1,000 in there, but there will also be at least four pieces of junk mail.” Penny defines information bias as the presentation of material in a manner to achieve a desired outcome. “It’s what people want. They have a particular outcome in mind so they present information in a particular way.” Though Penny isn’t fond of all the advertising on the Internet, especially the flickering ads, she believes that it is worth tolerating because it allows access to the Web sites to remain free of cost.

Providence resident Larry was the sole participant to express an interest in the disclosure information on the search site so he could use it for personal business purposes.

Larry’s reaction to enlightenment about pay-for-placement was that of a businessman... Once made aware, he wanted to use it himself. He hadn’t understood how Google made money. We explored this (how they sell their search services to AOL, to Cox Cable, etc.) and... pay-for-placement. As we read the descriptions of different pay-for-placement programs on [Google], I could see the gears turning and hear his comments, mostly about how he could use this method to get people to look at his not-for-profit Web site and Web-based database for information about marinas he writes for the Federal government.

## **2. No participant stopped using a favored search engine after learning about pay-for-placement practices, although they reviewed search results with a more critical eye.**

For example, Sara of Raleigh-Durham thinks, post-enlightenment, the results across search engines are generally “all the same, but I’m just more in tune to it, or mindful.”

Some participants reported they scrutinized the results pages more carefully. Jack of Kansas City tends to scroll through more options and go to more pages to look for a site to choose, according to a verbal report to the anthropologist.

Some participants used more than one search engine before making a final decision to click a link, as was the case of Lucy of Kansas City:

Since her enlightenment [Lucy] has begun to use more search engines than before because she was previously unaware of all the different engines, but also to compare their results. Prior to enlightenment, Lucy never used a search engine other than Yahoo, and never “went past the first page of results.”

Some participants used a combination of methods to compare results across engines before making a decision to click on a link. For example, Geena of Kansas City reported viewing more results pages across multiple search sites.

[Geena] has become a much more astute and observant searcher and Web user. She went on to explain, “I have begun to go through more pages of results. When I went to look for cruises the other day, I noticed the same results came up multiple times at different spots in the results section.”

Similarly, Yvonne of Phoenix reviews more results pages and checks non-paid links before making a decision to click:

After learning about pay-for-placement she intends to now look at the second half of the results page. “I would never go beyond the Top Ten so I’m [most likely] only getting biased information.” She looks forward to her future Web searches and knows she will look at the search results with a more critical eye. She is sure to check the unsponsored links before she makes her first click.

Another participant sought and read the disclosure information more carefully. After reviewing a homework search conducted by Maria of Providence at work, the ethnographer made this notation:

It was clear Maria was looking at some of the disclosure pages on different search engines, and thinking more critically about where the information that was generated was coming from. Maria now has a better understanding of why the “mom and pop stores” are listed lower in search results than large corporations - because of pay-for-placement.

As previously reported, Jack of Kansas City shared the same concern about smaller businesses being shut out of paid search, or at least segregated to the last, and mostly unseen, results pages.

### **3. The participants were more tolerant of pay-for-placement during commercial or e-commerce searches (yet not informational searches), but only if paid links were clearly marked as such.**

Twelve of 17 participants viewed paid search listings as a helpful tool during e-commerce searches, as it helped them quickly find vendors who sold the products or services they were looking for.

Larry of Providence told his ethnographer the following:

“If I am looking for a product, then that is fine and I will use [sponsored links], but often I am just looking for information and understanding, and I’m not looking for products so [sponsored links] become extraneous garbage I’ve got to skip over or through. But when I’m doing Christmas shopping, however, I pay a lot of attention to the top first hits, and the ones that are on boxes because they may lead me to a [Navy] Peacoat or whatever it is I’m looking for.”

The Raleigh-Durham researcher made this notation about Diane:

The participant did not respond well to any prompt for money while performing her informational searches. She would end her search if this happened instead of returning to her results to look for another site. When performing her commercial searches, the participant showed no amount of frustration related to advertising. She seemed to accept it and often chose sites that were categorized as sponsored.

Vivian of Providence exhibited similar online behavior, according to the anthropologist:

She says she generally ignores sponsored links, when they are labeled “sponsored” unless she is looking to buy something specific, and the sponsored link is exactly what she needs.

Geena of Kansas City reported this to the field researcher:

She expects bias in advertising and therefore tolerates more information bias in the commercial realm. She said she is not really bothered by bias on the Web because she is “interested in finding the best deals and now it’s more competitive for airlines.” If she encounters biased, unreliable information, she goes elsewhere.

The Kansas City researcher also noted this comment from Jack:

He continues to go to sponsored links if he is searching for a product. He qualifies that thought, stating, “at least now I know they’re pay-for-placement. I know they’re paid for and I still go to them.” If he is searching for information, rather than a product, he does not go to sponsored links because he does not expect to find unbiased and useful information on sponsored links.

Dennis of Providence and Claude and Anna of Raleigh-Durham each expressed tolerance of paid search during commercial searching, according to the respective field anthropologists:

Dennis ignores sponsored links if he is looking for “general information” about a topic, and isn’t interested in buying a product. He will click on a sponsored link if he thinks it is “exactly on target” and he is interested in buying something.

Claude said he “does not want to be given incorrect information when searching for anything [non-commercial because he] won’t be able to find out the truth.”

Anna said, “If I’m researching an issue, these activities are [negatively] influenced more than if I’m looking for a product.”

Two participants became irritated when a health-related information search delivered paid results when they had no intention to make a purchase.

Sara of Raleigh-Durham was one such participant:

While she will “moderately tolerate” bias “in a commercial sense” she found bias “intolerable in the informational sphere.” The ethnographer noted he observed some very hostile body posture and language during one of Sara’s informational

searches. The participant had a personal investment in her informational search. If she received the wrong information, then she felt it could affect her health.

Maria of Providence had a similar reaction when looking for information about diabetes:

The results Maria found were mostly from drug companies, which she recognized as paid placement. I asked her how she felt about finding this much paid placement. “I felt kinda weird about it. I just wanted to get the facts, and that’s not what I got. It’s that same feeling you get in a store when someone just keeps asking you if you need help and you don’t, you just want to look. It’s the same feeling. I don’t want to look at advertisements. I just want to find out a little information about [the topic.]”

Two study participants reacted similarly when it came to finding travel planning-related information searches.

Lucy of Kansas City expressed the following to her researcher:

She said when she does certain searches that invite commercial responses she has to be more critical of the results. She also explained when doing a travel search she feels she has to be careful about putting in too general of a search query because it will result in too many pay-for-placement results.

Bob of Phoenix made this entry in his search journal, the result of a homework search for information about Hawaiian vacations:

“I was looking for long-range planning info not immediate booking info. The links all wanted you to spend money by credit card now. They’re looking out for opportunity with short-term time horizon.”

One Kansas City participant, Kareem, held a contrarian view:

“It’s like selling underwear in an auto parts store.” This comment, in addition to the rest of his statements during our discussion and his search behavior, leads me to believe he sees [paid search] advertisements as non-threatening or irrelevant during his information/non-commercial searches because they are so out-of-place they do not tempt him or even get his attention.

**4. The participants unanimously believed paid search links were too tough to recognize on many sites, and the related disclosure information was clearly written for the advertiser, not the consumer.**

Paid search disclosures not easy to find:

Dennis of Providence provided the most poignant response, which he jotted down in his search journal after homework on Overture, even though it could easily apply to most sites evaluated for this study:

“User should not have to dig into layers of information to find disclosures on whether someone is paying to be listed on the search results page.”

Dennis continued by suggesting the search engine industry could provide more transparent paid search disclosures if it modeled them on what already appears in print media.

“...I think advertising is O.K., anywhere in any form, as long as it is disclosed that it is advertising. For instance, if you look in print media there are obvious advertisements. [If] there is a product, and when there is an article that is buried in the newspaper that looks like an article, like part of the newspaper, it will say ‘advertising’ all across the bottom so you know. And above it, it will say ‘paid for by advertising.’ That’s what they do in newspapers.”

Lucy of Kansas City also found it very difficult to see disclosure links during her online experiences.

“I had never even noticed it before [the ethnographer] showed it to me. Beforehand, it wasn’t clear to me what sponsored links were or what it meant, but now, even after you showed me, it’s still vague because I don’t know who’s sending it.”

#### Visual aids make paid listings easier to see:

Dennis also suggested most search engines could use more visual aids to help consumers discern which parts of results pages are paid versus unpaid. During his follow-up interview with the Providence ethnographer, he suggested visual aids such as “boxes” and “bright colors” and “a separate, distinct entity that is conspicuously an advertisement.” He added, “I’ve seen recently search engines make them a little insidious and not so conspicuous.”

Many participants echoed Dennis’ recommendation to make paid search far more conspicuous to the online consumer eye. Suggestions included the use of symbols or icons, placed next to a link or above an ad, to make it clear an advertiser paid for its prominent ranking on the results page.

Larry of Providence also thought “a little logo” with a “this is a paid advertisement” label would convey paid search to the typical consumer.

Sara of Raleigh-Durham suggested placing a dollar sign (\$) beside each paid search site on a results page. “That way if I would like to look at those sites I can and if I want to skip I can, but at least I have the knowledge to make an educated decision. I want complete disclosure no matter what. It would help me save time so I don’t go to that site and get disgusted.” She also suggested the following scheme, based on a search engine’s editorial review, which would help consumers figure out which links are skewed more commercial:

“‘C’ for commercial and ‘I’ for informational next to each site. Next to the ‘C’ sites it would say ‘We do not endorse this site in any way. Use your own discretion.’ It would be for educators and students to use because of the information slant to it. It would be very clear and it would be quicker and easier for those looking for information.”



As with Sara, Vivian of Providence believed the presence or absence of a price tag symbol next to a link could best connote to consumers that it is the equivalent of paid advertising.

Bob of Phoenix also supported what Sara suggested, that is, the clear labeling of purely informational pages “so they are easier to find, rather than paid ads to be labeled.” Likewise, Claude of Raleigh-Durham suggested “an icon or symbol helping you to know it’s an Informational or Commercial site.”

Other participants echoed the need for color to distinguish paid search:

“Orange lettering or some different color [to let me know to avoid paid search].”  
(Kareem of Kansas City)

“Highlight all ‘pay-for-placement’ and label as such.” (Sara of Raleigh-Durham)

Some consumers underscored the idea that physically separating paid search from non-paid search, if on the same results page, was the best way to go.

According to Diane of Raleigh-Durham, search engines “shouldn’t intertwine [paid search] with your [algorithmic] results. They should put it separate.”

Fellow state resident Anna also said she would prefer a more clear delineation between paid and unpaid search results:

The participant [Anna] claims to be able to recognize paid placement information “if it’s labeled in a section of your search results as sponsored sites. If it’s blended into my results, I don’t know it. I would like for them to indicate sponsored sites by grouping up first, or putting an asterisk next to it. It probably would be easier to do it that way. Keep it simple. It would simplify my search if it were consistent [across search engines], like a symbol or a graphic.”

#### Explicit disclosures needed to explain how search engines rank results:

Gary of Phoenix asked search engines to “make it easier to find the ‘about the search’ information.”

Geena of Kansas City demanded:

...More explicit and clear explanations of the order of results disclosed, which explains why “number one is one, two is two, and fifty is fifty.” She feels there should be explicit disclosure on any sites that use any variation of pay-for-placement and that there should be some type of indicator to show purchased keywords.

Sara of Raleigh-Durham expressed a similar sentiment, although she wanted search engines to go a step further. She believes consumers should receive “a notice [that] should pop-up before [the search] results to say the first 20 results [for example] are pay-for-placement results and are not necessarily the most appropriate links to your desired info.”

Bob of Phoenix was in favor of a seal-of-approval approach:

He suggested some sort of disclaimer for each link or page showing who put the page together, the source of any information, and its business practices. Maybe there should be a [third-party] network that ethical companies could join and mark the links to those sites.

Disreputable advertisers should share the blame with search engines:

Vivian of Providence was not sure of how best to convey paid search to consumers, in part, because some of the companies that participate in search engine marketing may not be honest when it comes to the keywords they buy.

“I think part [of the problem] is that people’s ads are really sneaky, so it’s not like a commercial where you can clearly tell it is different from the show you are watching, or a billboard, clearly it is on the side of a building.”

As with fellow Rhode Island resident Dennis, Vivian made reference to advertising disclosures used in offline situations, according to the researcher notations:

[Vivian] makes comparisons to “special advertising sections” in magazines that are sometimes difficult to tell are ads, even when they are labeled.

**5. Nearly all participants said the commonly used paid search term “sponsored” was confusing and potentially misleading to the consumer. They also expressed frustration a better label had not already been adopted as an industry standard, and used consistently across all search and navigation sites.**

“Sponsored” label is too vague:

The majority of participants thought the commonly used labels “sponsored link,” “sponsored listing,” “sponsored results,” “sponsored search listing,” or “sponsored match” were too vague and easily misinterpreted. Other labels such as “featured sites,” “partner sites,” and “additional listings” were universally panned as being confusing.

For example, Kareem of Kansas City said he considered the term sponsored to mean “something that someone has paid for,” but he admitted, “until now, pay-for-placement wasn’t in my lingo, so before now I didn’t think sponsored meant pay-for-placement.”

Fellow Kansas City resident Geena told the same ethnographer she believes the word sponsored “should be changed to ‘paid’ because it sounds too benign.”

Paid search label euphemisms were also problematic, in this case for Maria of Providence:

The word “featured” was confusing to Maria. She wasn't sure if it meant paid for or not. She would not like this term to be used.

Not surprisingly, the participants were vocal about recommending better paid search labeling. The most commonly suggested terms were “paid advertisement” or “advertisement.” One person

(Yvonne of Phoenix) thought “advertised link” most clearly stated the motivation of the company behind the paid search ad.

In addition, Jack of Kansas City recommended that such label terminology appear “at the bottom of the search engine’s main page, not on another link. It should be no longer than a paragraph and it should be at the bottom of the page no matter the search.”

“Sponsored” label is misleading:

A number of participants thought the term “sponsored” suggested to consumers the company behind the paid search ad had philanthropic motivations, rather than those more commercial in nature.

According to Yvonne of Phoenix, “the term sponsored probably isn’t the best word to be used to denote pay-for-placement links. If I were naïve, sponsored would mean they were donating to [a company’s] charitable arm or something.”

Fellow Phoenix resident Gary and Raleigh-Durham resident Diane agreed:

“Using the word sponsored sounds almost charitable.”(Gary)

“Sponsored sounds like charity, so I don’t like that as a possible label.” She prefers the term “Paid Links’ because it reminds me more of businesses and money, which is what they’re trying to get from you.” (Diane)

The responses of other participants suggested they assumed a positive intent on the part of the company behind the paid search ad.

For example, the Providence ethnographer recorded this exchange with Maria:

Maria recognized the term sponsored as conveying “some sort of money deal.” She based this on how [her non-profit employer] accepts sponsorship from Dunkin’ Donuts and other large companies. She did, however, see sponsorship as a kinder term than paid. This ties into Maria’s explanations during the first interview of Web sites “helping each other out.” [Maria later explained]: “I think sponsored is a pretty good word. I don’t know if it’s really a ‘helping word’ but it kinda shows [companies that participate in paid search] are helping [search engines] keep [their] Web site going. So that is fine. It’s again part of our society. People need money to keep going.”

Fellow Providence resident Larry associated the word sponsor with charitable organizations.

“I get sponsors for my programs (Boy and Girl scouting), so I know what they are. Sponsor to me is someone who gives money to help support a program that is going to happen. A community play has sponsors who donate \$50 to help pay the costs. And, in a commercial program there are sponsors on TV like Ford Motor Company or a soap company or whatever.”

The Providence ethnographer recorded a verbal exchange, this time with Vivian, that suggests she, too, assigns positive values to search links from companies bearing a sponsored paid search label.

Anthropologist: What does sponsored or similar terms convey to you?

Vivian: It is a Web site that contributes money to the engine, not necessarily. Well it's less harsh than saying they pay money to them to be Number One, but there is a reason why this site did come up in the search results.

Anthropologist: So it's a less harsh term than paid for placement?

Vivian: Yeah.

Anthropologist: So sponsored – what other ways do you use that term or hear it used?

Vivian: What do you mean?

Anthropologist: I'm just trying to figure out how you think that sponsored sounds less harsh.

Vivian: Well, when I think of sponsored, I think of PBS [TV's Public Broadcasting Service] and or like, you know, you sponsor someone in a race. It's more of a friendly term if I think about it, I guess.

Anthropologist: And that is the term that you think would be good?

Vivian: Yeah, I think so.

(We discuss a little more why she likes this term.)

Vivian: I would understand what it is...it would make more sense for the actual engine to put [sponsored] up rather than "paid for by." It might be more honest if it was rigorously truthful about where it was coming from, that might be more honest, but I don't think that anyone would do that. I mean if InfoSpace put up links that said, "these are sponsored" I might still look at it, but if [InfoSpace] said everything was ranked based on money, then I probably wouldn't use the site at all.

Anthropologist: Does the word sponsor convey to you pay-for-placement?

Vivian: It conveys to me there is money involved and that the search engine isn't out – its sole purpose isn't to help me.

#### Industry-approved, standard labeling for paid search ads:

Two Providence residents said search engines should be more editorially consistent.

According to Maria:

“There should be a uniform category for all sites that are paid for. It shouldn't be all these different categories like ‘featured’ and ‘sponsored’ and ‘topics.’ It should just be cut and dry, one thing - like ‘sponsored’ or ‘paid’ that would be ideal.”

Larry echoed the same belief:

“Whatever system is used should be consistent across the board, no matter what it is. Let's not keep changing it. And I'd like to see it consistent across the different search engines. It could be a standardized industry-wide logo that means the same thing.”

**6. Some sites were better than others at making clear which results were paid for and at highlighting related disclosure information.**

Even though participants were asked to review a limited number of search engines, several participants noted situations in which a particular navigation site did well or poorly in this area. Participant comments are broken out by search engine in alphabetical order. Some comments comparing a number of search engines appear at the end of this section.

About.com:

Dennis of Providence (in reference to the “On the About Network” labeled links):

“I assume these search results aren’t true search results, that there is a keyword I typed in that relates to a list they have of people who paid to be on the About network that may or may not be relevant to my search. I’m assuming if the search engine works properly this stuff is on the Web (pointing at listings under the heading ‘On the Web.’) is going to find me truer results.” (He looks at screen. Scrolls to bottom of the screen to see if he can find disclosure information.) “Oh, it doesn’t really tell you. I guess I could go and spend some time here to visit some of these links” (small links to ‘about us’ and ‘User agreement’). “I don’t know what the hell is going on.”

AlltheWeb.com:

(verbal exchange between Larry and the Providence ethnographer):

Anthropologist: Did you see the word sponsor?

Larry: No.

Anthropologist: In tiny letters here (pointed at word sponsor next to each link title)

Larry: Oh, I didn’t see that. O.K. There we go. O.K. I didn’t see that. I didn’t see that. I mean clearly – I’m looking right at it now and I didn’t see that until you pointed it out.

AltaVista.com:

Maria of Providence:

“The way this search engine places ads on every page. ...A lot of the sites seem the same.”

Maria of Providence:

She noted AltaVista was really unclear about its results because there were so many different headings. She found this misleading and confusing. She seemed

outraged by the blatancy of the advertising (for example, the ads at the bottom of each result page on AltaVista.com).

Dennis of Providence:

“I noticed that there is some small type that says ‘preferred vendors’ or they use some language and then they give you 4 or 5 results and then it says ‘Web results.’ I recall that, but if you are not paying attention, mixed into those Web results, and that is a little devious I think, are paid results.”

Dennis of Providence on a different search:

“But the interesting thing is the sponsored matches give me four choices and then it says AltaVista found 25,000 some results, so I am assuming that those 25,000 results would be unsponsored until you get further down the page and then you see another sponsored site (at the bottom of the listings on the page).... It’s very vague. That could basically mean anything. I have no way of knowing what I’m actually looking at.”

AOL.com:

Sara of Raleigh-Durham:

After a post-enlightenment homework search on AOL.com she wrote in her journal: “I like the way AOL shows ‘sponsored links’ with very brief descriptions – that way you know what you’re getting into before you waste your time on those sites.”

Ask.com:

Larry of Providence after a homework search:

“Don’t like obviously paid sponsors at top [Sponsored Web Results] – but at least they are in [a] box so [they] can be seen easily.”

Dennis of Providence:

Dennis seemed to know there was advertising on the results page on Google, but not that the paid placements are sometimes integrated into search results ‘seamlessly’ (as AskJeeves pitches it to potential advertisers). He also seemed to classify the ‘advertisements’ as different from the search results. (They were on a different part of the page; they were labeled).

Google.com:

Gary of Phoenix:

Before starting this research he was a loyal Google user and now he has even more respect for Google because “it was easy to find the advertising information and the paid links are clearly marked.” He added, “The sponsored links are colored, which is very helpful.”

Maria of Providence:

During a price comparison travel-related search, Maria wrote in her search log: “Chose a green square to the right [Google AdWords ad] for Priceline.” She recognized this as a [sponsored link] advertisement.

Maria of Providence:

“I like that it's so clear on Google. It actually highlights [paid links] so I can ignore them completely.”

Jack of Kansas City:

After a homework informational search on Google, he noted: “Recommended guidelines: Better disclosure notice.”

Larry of Providence:

“Google lists [paid links] to the side and they are in a little box and they are clearly labeled ‘sponsor’ and that is fine.”

Dennis of Providence (on building his own consumer-friendly search engine):

“I would disclose it clearly and conspicuously, people would know. Separated from the normal search like Google does. I think what they do is honorable. Don’t bury it in the middle, keep it to the side, or put it at the top in different colors.” (He is talking about sponsored links, not disclosure).

InfoSpace.com:

Geena of Kansas City:

She explained her first impression of InfoSpace.com was that it was not as biased as other engines, however, after a little reflection, she said, “Or maybe it did seem biased and I just couldn’t tell. On most search engines it seems the results could be broken up into categories, such as, first ones – very expensive ads, second ones – middle range, and the third ones – not paid for at all. But before I learned this pay-for-placement stuff, I didn’t notice these levels. Oh yeah, also there are the sponsored links, but it seems that all the engines did not have these exact levels.”

Kanoodle.com:

Penny of Phoenix:

She does think some of the sites are more “cheesy” than others in the way that they handle pay-for-placement. Kanoodle.com shows the cost to the advertiser right under the paid link and she said it made her feel kind of yucky, so she has no plans to ever use that site again.

#### LookSmart.com:

(recorded verbal exchange between Vivian and the Providence ethnographer):

Vivian: I think LookSmart isn't good because they don't offer an immediate way to find out what is sponsored.

Anthropologist: Oh, but they do. (Pointed out the link that says “sponsored listing” at the top of the section of sponsored links – off to the far right.) You didn't see that, did you?

Vivian: No, it's so small. I don't think they would make it bigger. It's like the Surgeon General's warning they have on cigarette and alcohol ads, but they don't make it the biggest part of their ad... They are not totally clear what they are.

#### MSN.com:

Lucy of Kansas City (a search journal entry after a homework search):

“I noticed more of the sales-end of the searches, such as [after] the word that is put in some items for sale come up. I think it would be nice to have a separate location for items that are being sold.”

Maria of Providence:

She did seem to like MSN.com, and explained that their headings for results were clearer. (But then we did the final planned search, and this threw this [previous thought] into doubt.) She did, however, have difficulty figuring out if the heading ‘featured site’ connoted pay-for-placement, or simply an editor at the Web site “choosing to highlight” the listing. The more she thought about it the more she realized that this act of choosing was probably due to financial compensation, but she wasn't entirely sure.

#### Overture.com:

Dennis of Providence:

Dennis didn't notice the inclusion of text such as “sponsored link” at the end of search results descriptions on Overture.... He said he found a listing that was labeled “additional listing” [supplied by Inktomi] and clicked on the “additional listing” link to see what this meant. “I wanted to know if it was a sponsored site.” He explained to me that the explanation he found was not satisfactory. It basically said – maybe someone paid for this or maybe they didn't.



Dennis of Providence (ethnographer note about a revisited homework search on Overture):

He looked at the disclosure pages on Overture after noticing an ad on the search page about “Get listed in these results” [box at top of the results page.] Once he read the disclosure, he was so disgusted with Overture’s lack of clear disclosure about its business practices he doesn’t plan on using the search engine again.

Maria of Providence (ethnographer note):

She noticed Overture was...all sponsored sites.

Anna of Raleigh-Durham:

“Some [search engines] will have the same Web site for each result, but on a different page. Overture.com was really bad about that.”

Yahoo.com:

Larry of Providence:

During the second interview, we looked through Yahoo’s search result print outs from the First Interview, and I asked if he could tell what was sponsored. He said, “Yes, the ones at the top under ‘sponsored matches.’” I reminded him of how I explained exactly how Yahoo generates Web results, some of them come from Inktomi and are paid for. “That’s not clear at all! And in that regard, you know, if Yahoo is getting things from Inktomi and from Overture, why not acknowledge it [with] ‘from Overture’, or ‘from Inktomi?’ Why not have a little box?”

Two or more comparisons of search sites:

Larry of Providence (ethnographer notation):

Larry thinks [his preferred site] Google has a lot less bias than the other search engines we used [AOL.com, Ask.com, AlltheWeb.com, Lycos.com, and Yahoo.com] because of the way it displays sponsored results. Also he talks about Yahoo.com as being “very biased” because it has a cluttered search page, full of advertising.

Larry of Providence (ethnographer notation):

During my observation of Larry during the planned browses, he recognized sponsored links as advertisements on some engines (AOL.com, Yahoo.com, Lycos.com, and Ask.com), but not on others (AlltheWeb.com).

Dennis of Providence (ethnographer notation):

He will use Google because they have the clearest disclosure about what is paid and what isn't paid. He won't use Overture. He doesn't like AltaVista either.

Vivian of Providence (ethnographer notation):

What is interesting about her description of how she intuits that some things on the Google result pages are advertisements is that it clearly has to do with graphic layout including lack of numbers on sponsored results and use of colored backgrounds. She doesn't recognize advertising or pay-for-placement on other search engines [Go.com, InfoSpace.com, iWon.com, Kanoodle.com, LookSmart.com], when they are listed in the center of the screen and numbered, under headings such as "featured sites" etc....

**7. Once they were aware of pay-for-placement, the majority of participants had lowered trust in search engines in general. Some even distrusted the accuracy or the credibility of links on the first page of results.**

Once enlightened, Vivian of Providence assumed *all* links on the first page were biased:

(ethnographer notation):

She took my detailed explanation of pay-for-placement on the five different search engines we used last time [Go.com, InfoSpace.com, iWon.com, Kanoodle.com and LookSmart.com], and came to the conclusion all search engines use pay-for-placement...all of the first links listed on any search engine are paid for, including search results in [preferred search engine] Google. (Which are not, only the sponsored links are). She took what she thought was my word – "It's all paid for" and applied it to everything she saw on the Web.

Dennis of Providence, who searched on About.com, AltaVista.com, MSN.com, Overture.com, and preferred site Google.com, conveyed how a lack of paid search disclosure could hurt a search engine's credibility:

If a search engine "were up front, I would probably use it more because I know where the information is coming from. They've got to be honest in telling me what the scoop is, so maybe [when I] look at their search engine I won't feel so used."

Lucy of Kansas City said search engines should "definitely disclose [paid search] that is much more trustworthy." She specifically commented "pay-for-placement [as it now stands] makes the Internet and search engines less trustworthy." (She assessed search sites AOL.com, AlltheWeb.com, Ask.com, Lycos.com, and her preferred site, Yahoo.com.)

Likewise, Yvonne of Phoenix was disturbed by the idea the highest bidders got the best placement on search sites. "The idea of a search engine is to find the best matches, not the best matches that paid 50 bucks." (She visited the same sites as Lucy during the planned search sessions.)

Yvonne went a step further, hypothesizing – correctly – that search engines began using paid search labels and disclosures only after warned to do so by U.S. government regulators.

[Yvonne] hypothesizes the search engines must be required to mark paid links due to some FCC (or some government agency) rule because “if they could get away without doing that they would.” She notices some engines put sponsors on the results page even though they aren’t good matches for the keywords. This makes Yvonne less likely to use that engine.”

Kareem of Kansas City, who reviewed AOL.com, AlltheWeb.com, Ask.com, Lycos.com and Yahoo.com, took a different tack. He worried small businesses such as his would suffer from paid placement, as consumers are being nudged toward companies that can afford to participate in search engine marketing programs. “My small business shouldn’t have to compete for informational listings.”

Bob of Phoenix, who searched on About.com, Go.com, Kanoodle.com, MSN.com and preferred site Yahoo.com, said:

Pay-for-placement and online advertising, in general, bothered him because “[search engines] are trying to disguise taking your money as something else— if there is nothing wrong with it, why are you trying to hide it?”

Mike of Raleigh-Durham reported he would be “pushed away” from search engines that did not separate “objective search results” from “advertisements.” (Mike performed planned searches on Go.com, InfoSpace.com, iWon.com, Kanoodle.com, LookSmart.com.)

Several participants suggested their perception had changed about the companies that participate in paid search marketing.

Geena of Kansas City, who assessed the same sites as Mike of Raleigh-Durham, expressed mixed sentiments:

“In some ways it may be they have enough money to pay for this ad because they are a stable company, so I may think they are more reliable or safer to buy from online. But, on the other side, maybe I should give a smaller company a chance.”

Diane of Raleigh-Durham expressed frustration with search engine advertisers who “force me to look at [their ad] or trick me into reading them” when the sites do not match what she was searching for. She reported her irritation is present whether or not she “falls for it, because somebody out there will, and that’s not right.” (She assessed Go.com, InfoSpace.com, iWon.com, Kanoodle.com, and LookSmart.com.)

**8. Most participants generally did not comprehend the inter-company deals within the industry and didn’t understand how these deals might influence their search results. This ignorance was due to a tendency to use only one or two engines for their online searching.**

Among participants who searched on Overture.com, no one noticed or seemed to understand why Overture paid search listings also appeared on partner sites such as Go.com or InfoSpace.com, until the planned search phase, or in some cases, not until it was pointed out by the anthropologist. Similarly, participants did not always realize Google sponsored links also appeared on partner sites such as AOL Search (AOL.com) and Kanoodle.com, whether Google.com was their preferred search engine or one site evaluated for the purpose of this study.

As they completed the planned searches during the first field visit, during which they were instructed to use search engines they had never heard of or used before, they began to pick up clues about how business deals affect the search results.

Dennis of Providence demonstrated, in trying to explain Google's business model, how consumers don't truly understand search engine business models.

He held up Google as an example of an "independent" search engine, and couldn't understand how the site was profitable. He mentioned almost immediately Google had ads, but they were "subtle." He couldn't figure out how Google was such a big company. Again, he had "read somewhere it's one of the largest search engines out there." During the enlightenment phase of the interview, Dennis was surprised to see how Google financed itself. (We explored both the advertising on Google itself, and how Google sells its services to other portals and search engines, like AOL.com. This information was found under the "search solutions" link on the Google search page.)

On a related note, several participants were surprised to see Google results "powered" or "enhanced" the listings of other search and navigation sites. Larry of Providence noticed Google results on the AOL.com and Cox Cable (home) page, but he didn't understand how it worked.

Larry pointed out at the very beginning of the interview Cox Cable used Google as their search engine (something he had just noticed and found confusing). When we visited AOL.com (which he thought he would not be able to use because he was no longer a member of AOL), he similarly noticed its search engine was Google. He was skeptical, however, it truly was Google, as he felt the search results were not as specific as [what] he usually gets from the Google Web site.

Vivian of Providence didn't connect the financial dots between Google.com, iWon.com and Kanoodle.com until the field researcher drew the line.

She was surprised to see iWon.com was "powered by Google" and when I pointed out to her Kanoodle.com was also "powered by Google," she was a little surprised, but immediately recognized stylistic similarities between the two engines (lack of extra content on the search page, etc.)

In other words, Vivian did not recognize the financial relationships between the three navigational sites pre-enlightenment. But once it was pointed out to her, she figured the relationship between Kanoodle and Google made sense, as Kanoodle not only shared Google's results, but the site also shared what she perceived to be Google's sparse and simple user interface appearance.

Similarly, Gary of Phoenix demonstrated how consumers are not aware of how pervasive paid search is on the metasearch engines. During a homework assignment search on MetaCrawler.com, he saw a "very lengthy" list of paid sponsorship links at the top of the search page. He skipped down and "looked at unpaid links." He noticed the "descriptions were very short and appear to be the same ones from the previous search on www.dogpile.com." This is an indication Gary had no understanding that MetaCrawler.com and Dogpile.com are owned and operated by the same parent company, InfoSpace, Inc.

## **9. The role of the U.S. government or third parties in regulating search engine marketing practices.**

Participants were mixed about what role, if any, U.S. federal regulatory agencies should play in monitoring search engine marketing practices.

Four consumers strongly recommended regulatory agencies increase their scrutiny.

For example, Maria of Providence supported the notion of government intervention, particularly when search engine marketing might affect more vulnerable Web users, like children.

It would be good for the Federal government to set up guidelines for how advertisements are labeled on the Web, but she doesn't think this is possible because of the very nature of the Internet. The one area where she really thought there should be Federal regulation was for Web sites and search engines targeted at children. (We had discussed AJKids.com.) "There should be areas, like with children. They shouldn't be targeted. Kids should be searching online for [information], and not to find things to buy."

Geena of Kansas City suggested government regulation might be warranted:

"Most people don't think about [paid search] and everyone I talked to said they didn't know. A friend said, 'you're kind of conditioned to think number one is the best and on down the line.' When you search for airfares, the cheapest is first and the most expensive is last in the list. There should probably be a disclaimer that shows Number One isn't necessarily the best."

Fellow Missouri resident and daycare coordinator Lucy echoed, not surprisingly, a similar concern about younger online users:

"[Paid search on search engines] should be regulated because anything can be on there. I'm personally thinking of the kids because frequently inappropriate things are slipped in and the advertisers or whoever are not concerned about the effect on kids."

Mike of Raleigh-Durham expressed a similar idea:

"I think it would be cool if someone made a rule everyone had to obey, that restricted pop-ups and advertisements that trick people. Who ever can do that should do it. I don't know if the free-marketplace would be capable of doing that."

The bulk of participants, however, suggested the onus of search engine site transparency should fall mainly on the industry itself.

Two participants, Larry of Providence and Jack of Kansas City, best articulated the thoughts of a number of participants:

Larry doesn't think the government should get involved. "Let the free market do it. I don't favor government inclusion into everything...I think they should be doing it voluntarily, the industry itself. I'm sure there is an industry organization and they get together and discuss issues of conduct. I would recommend that they do something like, something about truth in advertising. I mean there are truth in advertising laws, and I would think those laws would also apply to [search engines] as they do to publishing and television and other things. I think those [laws] should apply, and if a search engine isn't doing it, there may already be laws on the books that somebody could challenge them."

Likewise, the researcher reported Jack said:

...Businesses are, or should be, "trustworthy" and that government intervention may be necessary if they are not trustworthy. He believes search engines that use pay-for-placement or paid advertisements should have to disclose those facts. He feels that regardless of the type of search you are engaged in, the site should have to disclose their business practices.

Two participants suggested monitoring by an unbiased third party might be a better solution.

Claude of Raleigh-Durham suggested the Better Business Bureau. Bob of Phoenix would like to see a scenario in which there is "some regulation that requires all the advertisers to contribute to a public information source. This would be a kind of [no-advertising accepted National Public Radio/Public Broadcasting Service]-ish search engine where people could go to find quality, non-commercial information online."

## **SUMMARY AND CONCLUSIONS**

Consumer WebWatch researchers probed a diverse group of online searchers for this project, which included, coincidentally, four people who have experience managing their own Web sites or online databases. Although each person had a minimum of five years' of online experience, they did not understand how search engines prioritize results or how the inclusion of paid search listings might influence the types of Web pages they see first. For example, several participants didn't realize search engines are moneymaking businesses. No one realized the ranking of results they received could possibly be influenced by the inter-industry business deals between two or more search companies, until pointed out by a researcher.

These misconceptions about search sites suggest the less-experienced Internet user is even more in the dark about pay-for-placement on search engines than our panel of 17 consumers with broadband access.

Our findings show Web searchers in this ethnographic study chose links from the first page of results nearly 50 percent of the time because they trusted search engines to present only the best or most accurate results first. This *trust* led them to believe it was *unnecessary* for them to review later results pages.

This “first equals best” mentality among Web consumers, along with the quick-fire nature of the Internet, makes them more likely to click prominent paid search listings, particularly if such listings are not clearly demarcated from pure search results. This confusion among consumers about what is paid search and what is pure search is exacerbated by unclear or vague labels search sites use, such as “sponsored,” which almost every participant thought was confusing, possibly even misleading.

This tendency to click on paid search results makes consumers vulnerable as they are more likely to encounter faulty or biased information on Web pages of companies that can afford to be listed on the first results page, yet do not necessarily have the most accurate or unbiased information. If the information received is acted upon during, say, an informational search, the consumer’s decision could adversely affect his or her health. In these situations, it’s possible a lower-ranked search listing could have been better suited for what the consumer was seeking.

In addition, the participants did not notice the disclosure links or “About Search” pages on the 15 sites under review until pointed out by the ethnographer, including such disclosures that appeared above the search results or next to individual listings. Most participants said these disclosures were too small for consumers to see or were hidden in areas the typical consumer would not think to look. The issue is even more elusive when applied to meta-search engines, in which disclosures that appear on the originating search site, even if flawed, are in some cases stripped away once these results are fed through a new meta-search filter and ranking mechanism.

Each participant was surprised once told about how pay-for-placement works on these popular search engines. Several participants had negative reactions, ranging from anger and betrayal to a sense of helplessness and disappointment. Most participants expressed a lowered trust in search engines, while some were more suspicious about advertisers whose prominent listings they perceived to be irrelevant.

The consumers we talked to at length became more critical of the search results they received and began to use different methods of screening the delivered search results before making a final decision to click on a listing. These strategies included reviewing more results pages and making an effort to first review pure search listings before making a decision to click on a link. Participants were even more adamant about this practice while seeking information online, particularly when they had no intention of making a purchase and did not want to see paid ads.

When asked how the search engine industry could make paid search listings easier to spot, the participants overwhelmingly suggested clear and conspicuous labeling, such as the term “paid advertisement.” They also supported the use of visual aids on search sites that would help Web consumers to quickly see what areas of the results page, or individual listings, were paid for, including the use of boxed advertisements, and advertiser-only segregated areas.

The consumers in our study expressed frustration the search engine industry had not already come to a consensus about what disclosure labeling to use, which would promote consistency from search engine to search engine. The participants demanded the search engine industry, or a trade group representing industry concerns, make some decisions in this area. In addition, a sizeable number of consumers in our study felt the U.S. government regulatory agencies should increase scrutiny in this area.

The research of other groups supports Consumer WebWatch’s ethnographic findings. Last May, SearchEngineWatch.com, an online marketing resource, assigned estimated “disclosure ratings” to 11 search sites based on how well each complied with FTC guidelines on paid placement and paid

inclusion disclosures.<sup>ix</sup> (The sites evaluated were AlltheWeb.com, AltaVista.com, AOL Search, Ask.com, Google.com, HotBot.com, Lycos.com, MSN Search, Netscape.com, Teoma.com and Yahoo.com.) Seven of the 11 sites were issued “FAIL” or “QUALIFIED PASS” ratings, an indication that better paid search disclosure is needed in the interest of the Web consumer. (Three of these seven sites made it hard for searchers to see disclosure links specifically about paid placement, according to SearchEngineWatch’s evaluation.)

Other researchers have produced data that supports our consumer behavior findings. For example, an analysis of 1 million search queries made by 200,000 users on Excite.com found more than 70 percent looked at two pages of search results or fewer.<sup>x</sup> A study released by iProspect.com, a search engine marketing company, reported that half of all the Web users make their selection after reviewing the first page of results because “they expect that the Web sites with the highest search engine listings are the top in their field.”<sup>xi</sup> In a health-information-specific focus-group study, conducted in March 2001, the authors reported that in 97 percent of cases consumers chose a search result ranked among the top 10 search results.<sup>xii</sup> (In 206 of 289 cases, the participants selected a link from the top five results.)

Many of the participants in this ethnographic study said they do not believe paid search on search engines is “evil.” In fact, a majority of participants reported using paid search listings as tools during commercial searches, which helped them hone in on vendors selling the products or services they desired, when ready to make a purchase.

But even so, all consumers have the right to know in advance that a prominent search result listing may be the equivalent of a paid advertisement before they make a decision to click or to buy. Education about such online practices improves consumer choice. Consumers also have the right to know that information better suited to them, such as a company Web page from a small business site or a non-profit organization that cannot afford to participate in paid search, might appear several results pages from the top. Poor disclosure limits consumer choices online, as expressed by Dennis and recorded by the Providence ethnographer:

Dennis compared pay-for-placement to another type of advertising on another medium: TV commercials. “It’s like shutting the television or changing the channel when you are watching the news. If I knew [that a link was a paid listing], it would change my perspective and I would be more likely to move on to another choice. I would probably choose to use another Web site.”

Based on the voices and experiences of our 17 consumers, it’s clear search engine companies need to work hard to maintain the trust of their users, rather than focusing on their bottom lines.

## **CONSUMER TIPS**

Search engines provide a valuable service to millions of Web consumers each day, including many sites not evaluated as part of this ethnographic study. Before embarking on your next search, keep these tips in mind:

### **You need to understand:**

The major search engines, like any business, need to make money:

These companies are businesses, not independent, philanthropic or research-based in nature. The cost of indexing billions of Web pages each month can be very expensive, so search companies that



provide algorithmic, keyword relevancy-based search services, like Google.com, AlltheWeb.com and Teoma.com, need advertising revenue to support their daily operations.

#### Paid search is not evil:

Don't assume just because a listing has been paid for that it is not relevant to your search query. That site may well have the information you're looking for, however, you'll be more likely to spot any bias in the site's information before you make a final decision. Also keep in mind that just because a search engine offers paid search listings doesn't mean every listing it delivers or every result on the first page is tantamount to a paid ad.

#### Follow the dollars:

Some companies have different business models than others. The major companies sign deals that may affect the types of results you receive. Sites that provide algorithmic search results often provide these, and sometimes paid search results, to other companies in exchange for a fee. Some sites like Kanoodle.com, LookSmart.com and Overture.com primarily list the Web pages of companies that have paid. This is also why the listings of companies that have paid LookSmart.com to be listed in its database may also appear on partner sites About.com, InfoSpace.com and MSN.com.

Some companies own more than one search site, each of which carries its own, consumer-friendly name. For example, InfoSpace, Inc. owns InfoSpace.com, Dogpile.com, Excite.com, MetaCrawler.com, and WebCrawler.com. AskJeeves, Inc. also owns Teoma.com and DirectHit.com. And, as reported earlier, Overture recently acquired AlltheWeb.com and AltaVista.com. This may explain why you may see the same search results or Web pages appear on each search property under the same corporate umbrella.

### **Searching tips:**

1. Make choices: Before you decide which search engine to use, consider whether the use of paid search is important to you, or, if paid search would matter to you during an information search versus one in which you are seeking to buy something.

2. Use multiple search engines: It's okay to use a favorite search engine time and time again, particularly if you're looking for less serious information such as the latest sports scores. But once a decision is made to do a serious search, say, for health or financial information, consider searching for the same query on several engines before making a final decision. Compare the results listings you receive from the sites you've queried and take note of any listings that appear at the top of the rankings, along the sides, or those that pop up on more than one site. This may be an indication that that search result is a paid advertisement.

Caveat: Some searchers like to use meta-search engines such as Dogpile.com, Excite.com or MetaCrawler.com because these sites search and rank listings from several search engines simultaneously. Although these sites can be great time-savers, you should realize the results would be skewed. Meta-search sites, which tend to provide the first few links retrieved from each engine, are more likely to present sponsored links. And in some cases, the meta-search engine removes the valuable disclosure links information that appears on the originating search engine.

3. Read further: Be sure to review several pages of results before you decide to click on a result. You might find the product or information you're looking for, on, say, page 10, provided by a smaller company or a non-profit organization that cannot afford to pay for a page-one search position.

4. Look for telltale labels:

Look for signs a result has been paid by an advertiser. If a search engine separates some search results from others, either in a special section at the top, at bottom or to one side, advertisers most likely support these segregated listings. You should also look for labels such as “Sponsored Listing,” “Sponsored Match,” “Sponsored Site” or “Sponsored Link.” Don’t be confused by other labels such as “Featured Sites” “Partner Sites” or “Additional Listings,” which usually refers to advertisers or businesses who have financial deals with a particular search service. Instead, look for listings or sections labeled “Web results” or “Web Page Results” where you’re more likely to find search results that have typically been generated algorithmically.

5. Click on disclosure links and read “About Search” pages:

Each search engine presents identity information differently, and some make it harder to find than others. Look for link description terms such as “About,” “About Search,” “Info,” “Help,” or “Results.” These pages typically include information on where a search engine gets its paid search listings, as well as searching tips exclusive to that site. Even if a site does not clearly label its paid search listings, you might be able to find information on these pages, or in advertiser and investor sections, about business deals the site has that might affect the search results and rankings you receive.

6. Know the marketing lingo: Look out for search engine marketing terms such as “paid search” or “paid inclusion.” Serious Web searchers might consider reading industry news and articles written about the nuts-and-bolts of search engine marketing by visiting sites such as SearchEngineWatch.com.

## **RECOMMENDED GUIDELINES FOR SEARCH AND NAVIGATION SITES**

### **CONSUMER WEBWATCH GUIDELINES FOR SEARCH ENGINE AND NAVIGATION SITES**

We believe Web sites that provide search and navigation services will promote Web credibility, improve trust among users and increase usability if they adopt Consumer WebWatch's guidelines for all Web sites and the following industry-specific guidelines:

1. Search engine sites should provide consumers with a comprehensive list of major advertisers and content sponsors with whom they do business, particularly those relationships that would influence search rankings or results page presentation. This list should be prominently displayed and easy to find, with a current date of last update. The better sites will display this information on each of the search results pages or provide an easy-to-see link (and label) from each results page.
2. Sites should provide consumers with basic explanations of how ranking and prioritizing technologies work (i.e., Web indexing, spidering, crawling, human-compiled directory, etc.) For instance, what criteria are used to determine keyword relevancy, or, how advertiser-paid results are fed into the results page.
3. Sites that provide an internal editorial review of keyword-triggered paid search advertisements and links should prominently disclose this fact and provide a basic explanation of how the editorial process works, and how much it costs the advertiser before acceptance. Sites should also provide a basic explanation of how they determine relevancy weighting for paid search results versus those derived from unbiased algorithms.
4. Sites should tell consumers if search results from a business partner or third party are exclusive to that site, and which results from that partner are pure search versus those that have been paid for, and a last date of update. For example, sites should explain what is meant by terms placed next to the search box, such as “Enhanced by Search Engine X” or “Powered by Search Engine Y.”
5. The better search and navigation sites will use clear and conspicuous terms to label paid search results, whether they appear as links or in other formats, like boxed advertisements. Consumer WebWatch recommends the term “paid advertisement,” which is modeled after the newspaper and magazine publishing industries. The better sites will use colored text and/or contained boxes or standard Web page areas in which to place paid search advertisements or links, making them easier for consumers to distinguish from pure results.
6. The better search and navigation sites will provide clear options for search customization at the earliest possible step of the search. Site search architecture should focus on consumer requirements, as opposed to focusing on business agreements.
7. The better sites will include a disclaimer or tutorial page for consumers explaining “first doesn’t necessarily mean best,” in results returns.

8. Sites should provide an explanation or basic definitions of frequently used search engine marketing terms such as “cost-per-click,” “paid search,” “paid placement,” “pay-for-placement,” “pay-for-performance,” “pay-per-click,” “paid inclusion” and “paid submission.”

9. Sites that offer paid search marketing programs for advertisers should avoid making claims such as “the best,” “most relevant” results or “most matches.”

10. In the special case of meta-search engines, in which a number of search service providers feed their paid results to the search engine property: Clear and conspicuous disclosure should be made to indicate to consumers that many such results are the equivalent of paid advertisements.

## **APPENDICES**

### **APPENDIX A: Background and study methodology**

#### **Choosing the search engine and navigation sites:**

##### The 15 sites assessed in this study:

About.com  
AlltheWeb.com  
AltaVista.com  
AOL Search (AOL.com)  
Ask.com  
Go.com  
Google.com  
InfoSpace.com  
iWon.com  
Kanoodle.com  
LookSmart.com  
Lycos.com  
MSN Search (MSN.com)  
Overture.com  
Yahoo.com

##### How we selected these sites:

Consumer WebWatch started the selection process by including only the top 30 most-trafficked search and navigation sites based on ComScore Media Metrix and Nielsen//NetRatings monthly and quarterly Web traffic data. We also looked at additional Nielsen data, commissioned by SearchEngineWatch.com, which ranked the major search engines based on where Internet users actually spent the most searching hours per month or per week.<sup>xiii</sup> We also incorporated global market share analysis produced by the Amsterdam-based analytics firm OneStat.com. Lastly, we looked at WebSideStory.com data, which indicated those search and navigation sites providing the most online shopping-related referrals to e-commerce shops during the 2002 holiday shopping period.<sup>xiv xv</sup> This was an important component to our study, as we aimed to track any behavioral or attitudinal differences of participants as they conducted e-commerce or commercial searches versus informational only searches.

Next, Consumer WebWatch needed to be able to gauge how well consumers discerned and understood pay-for-placement disclosures after the Federal Trade Commission (FTC) letter-writing action in June 2002. Consumer WebWatch made the decision to include at least one search property from each parent company that received a letter from this U.S. Federal government agency.<sup>8</sup>

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<sup>8</sup> According to the FTC, 14 parent companies were sent action letters in June 2002: About, Ask Jeeves, AltaVista, AOL Time Warner, Teoma (DirectHit), Walt Disney, Google, InfoSpace, iWon, LookSmart, Microsoft, Overture, Terra Lycos and Yahoo. A July 2001-dated complaint letter, filed by consumer advocacy group Commercial Alert,

In the interest of fairness, only the most heavily trafficked search property within a corporate family was included for assessment in this study. Consumer WebWatch did not think participants should assess more than one search property from the same corporate family. For example, we included AOL.com, but did not include popular navigation properties Netscape.com, the Open Directory Project (dmoz.org) or Compuserve.com. Likewise, we included Ask.com, but did not include subsidiary Teoma.com, or DirectHit.com, which redirects to Teoma.com. To avoid repetition within the top corporate families, we included the popular pay-per-click-only site Kanoodle.com.

Not surprisingly, we found the most-searched sites and most-trafficked sites were more or less the same properties as those previously sent letters by the FTC.

While we aimed to select only one search property from each corporate family before the study entered the field, the ever-changing nature of the search engine industry slightly altered the site selection process. Three major acquisition deals were announced mid-study: Yahoo! announced it would acquire paid inclusion service Inktomi in December 2002. (The transaction closed on March 19th of this year.) Overture announced it would acquire CMGI's AltaVista.com and FAST Search's AlltheWeb.com in February 2003. (The AlltheWeb.com deal closed on April 21; the AltaVista.com transaction closed April 28.)

#### The test cities:

Consumer WebWatch wanted to record varied consumer voices for this study. We decided to avoid markets like New York City, Boston, Los Angeles and Silicon Valley. Instead, we chose the medium- to large- metropolitan areas of Kansas City, Mo. City, Phoenix, Ariz., Providence, R.I., and Raleigh-Durham, N.C., which we believed, would provide more variance in offline and online consumer experiences.

#### Recruiting the participants:

The final 17 recruited participants in this study represented a cross-section of ages, geography, and level of Web searching proficiency. In addition, each person has been online a *minimum* of five years. The *average* is eight years online. **(See also APPENDIX E: Individual demographic profiles of 17 participants.)**

Each potential participant had to answer a series of prescreening questions before he or she was considered for this study.

First, we only selected participants with access to high-speed Internet connections (i.e., cable modem, Digital Subscriber Line) at home, at work and/or at school. Since our research budget limited us to 17 participants, it was imperative each person's online experience during the study wouldn't be hampered by technological problems typical of a dial-up Internet user's experience.

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triggered the FTC investigation. This complaint specifically named AltaVista Co., AOL Time Warner, Inc., Direct Hit Technologies, iWon, Inc., LookSmart Ltd., Microsoft Corp. and Terra Lycos S.A. Click here to read a copy: [http://www.commercialalert.org/index.php/article\\_id/index.php/category\\_id/1/subcategory\\_id/24/article\\_id/33](http://www.commercialalert.org/index.php/article_id/index.php/category_id/1/subcategory_id/24/article_id/33)

We didn't want to run the risk of participants possibly assigning less credibility to a search engine site due to a technological or other problem outside its control. In addition, we knew broadband users would be more likely to see the full effect and range of online advertisements on search engines, including pop-ups, with less risk of computer crashes or freeze-ups. We anticipated being able to recruit seasoned, Web-savvy users who felt very comfortable with the technology and thus would be more likely to search more aggressively. As one recent Pew Internet & American Life Project study said: "An open Internet is appealing to broadband users....As frequent searchers for information using their always-on connection, broadband users seek out the greatest range of sources to satisfy their thirst for information."<sup>xvi</sup>

Second, we did not want anyone who possessed "insider" or "expert" knowledge of how search sites processed search queries and prioritized their results. As a result, we screened out people like information technologists, librarians, journalists, and industry analysts. In addition, each person was prescreened further to ensure he or she was not already aware of pay-for-placement advertising strategies on search engines and navigation sites prior to the start of our study. A participant's ignorance of this search engine marketing practice was derived based on how he or she responded to an open-ended question that asked how a typical search engine prioritizes its results. Most consumers we recruited for the study had little understanding of how search engines work or how they prioritized search results.

Third, a potential participant had to report he or she searched online at least three times per week, for an average of 30 minutes of search time per day. In addition, at least three of a potential participant's search sessions had to last 20 minutes or more per day.

Consumer WebWatch selected the final mix of participants for each city from the pool of candidates recruited by Context anthropologists. This was done to ensure greater diversity by gender, occupation, household make-up, and ethnicity. We also tried to maintain a balance amongst participants living in city, suburban and rural environments.

Each participant was paid \$300 in exchange for their confidential participation, which helped to defray costs resulting from the added wear and tear to their personal computer and printer (toner, paper, etc.)

#### Study methodology:

Anthropological researchers monitored each participant's behavior before and after "enlightening" them about pay-for-placement practices on search engines, and then studied how this knowledge altered or modified their online behavior. This was done through "homework" assignments as well as one-on-one observational interviews with each participant in his or her computer setting.

#### **FIELD VISIT #1:**

***Step 1: Contextual Interview*** – Researchers spent the first part of the interview getting to know the participant better by getting more information on his or her experience and history using the Web and search engines.

***Step 2: Planned Topic and Search Engine Browse*** – Context assigned to each participant a pre-selected grouping of five search sites to be assessed. This pre-selection process was done to

encourage participants to use each search engine and to think about pay-for-placement on different types of navigational sites, whether they've used the sites before to find information online or not.

Each participant was asked to browse these five search engines and perform both a commercial and an informational or research search. For the purposes of this study, a commercial search involved the participant looking to buy a product or service online. (The participants were not required to complete a sales transaction online, although one person did.) The informational search, on the other hand, was research-focused, meaning participants sought referrals to sites with presumably accurate or relevant information based on the keyword terms used.

For both scenarios these were “vested” searches, meaning the participant was allowed to pick subject matter (and the related keyword search terms) of importance to them. The participant was asked to use the same term for each search category (informational and commercial), a rough testing ‘control’ mechanism we hoped would bring out differences in search results across several sites. (For example, would the participant notice different sites are ranked differently on the various engines even though the same keyword term was used?) For the informational search, we asked participants to limit their vested searches to the health, finance or travel categories, as inaccurate or misleading information in these areas could adversely impact a consumer’s health or wallet. For the commercial search, each participant was asked to choose a topic of study of vested interest, but not necessarily from the health, travel or finance categories.

As part of the study, the researchers had each participant print out, in landscape format, the search results pages derived for each session performed on the five search engines under evaluation. These print outs were reviewed and annotated by the individual ethnographer and later analyzed by Context-Based Research Group and Consumer WebWatch.

***Step 3: Personal Web Search Strategy Flow-Chart*** – After the planned browse, the researcher reviewed the participant’s strategy for garnering online information using a personal Web search strategy flow chart. The result was a visual flow chart illustrating the meta-steps the person went through as they made decisions about accessing information online.

***Step 4: The Enlightenment*** - The ethnographer enlightened the participant about pay-for-placement on search engines in a face-to-face meeting. These discussions were guided by taking a participant to *each* of the “disclosure” pages or “About Search” links a particular engine posted on its site, which were typically buried in areas best suited for advertisers or investors, not for consumers.

For example, if a participant was assigned AOL Search (AOL.com) she read the contents of the “About AOL Search” link (<http://search.aol.com/aolcom/about.jsp>), as well as the link leading to Google’s AdWords and Sponsored Links programs (<https://adwords.google.com/select/>) since Google is AOL.com’s search partner as of press time. Participants assigned to assess meta-search engine InfoSpace.com were asked to review as many as seven pages and links, including disclosures from multiple search partners Ask.com, Google.com, LookSmart.com and Overture.com.

This list of “disclosure” links and “About Search” pages was compiled by Consumer WebWatch and updated through February 26, 2003, just days before the study entered the field.

**(See APPENDIX D: “About Search” and disclosure links reviewed by participants, by search engine.)**



## **BETWEEN FIELD VISITS #1 AND #2:**

Over a series of days, the participants were asked to capture post-enlightenment attitudes and behaviors in three ways, any one of which could bring to the surface shifts in online and offline attitudes and behaviors over time:

- By performing 10 homework online searches on navigational sites and topics of their choosing and jotting thoughts down in a search journal.
- By using a disposable camera to articulate feelings via narrative and photo essay.
- By making note of their current search strategy using a flow-chart.

## **FIELD VISIT #2:**

***Step 1: Photo Essay & Web Log Debrief (attitudinal and behavioral changes post-enlightenment)*** – For the first part of this visit, the participant reviewed his or her digital photos and search journal, and had a conversation about their feelings about being online based on the narrative they created using these photos. Ethnographers then asked the participant to talk about his or her experiences online, reflecting on his or her journal and how his or her attitudes and behaviors may have changed.

***Step 2: Personal Web Search Strategy Flow-chart*** - The participant showed his or her current strategy for online information Web searching access using a flow chart they created.

***Step 3: Planned Browse*** –The participant went on a single planned browse on one of the search engines they visited during the Field Interview #1, which allowed the ethnographer to take note of any changes in behavior, attitude or searching strategy. The participant was allowed to select the search engine he or she revisited in this planned browse session.

***Step 4: Guidelines*** - The second visit ended after having a participant go over his or her list of recommended guidelines for better pay-for-placement disclosures on search engine sites, which were based on their searching experiences before and after enlightenment. These guidelines were for both the search engine industry as well as for other online consumers.

Over the course of the two interviews, the ethnographer probed for information from each participant based on a number of questions and issues of interest to Consumer WebWatch, which were used by the ethnographers as a conversational structural guide during interchanges with a participant. For example, the anthropologist attempted to get a participant's responses to, as well as record any resulting behaviors, by asking questions such as:

- *How many search engines are you aware of and can you name?*
- *What is your primary search engine?*
- *Why are some sites ranked higher than others on the search results page?*
- *How do you define information bias?*

As with any anthropological project, it's imperative the researcher observes and takes copious notes of participant activities in a manner that is not obtrusive or distracting to the participant. For this Consumer WebWatch project, it was important that conversations between the

ethnographer and participant remained relaxed and free flowing, yet formal enough to stimulate a one-way exchange of information (from participant to the researcher).

Ethnographers used a combination of journalistic and anthropologic techniques to discreetly extract information from participants, including:

- Standard Question-and-Answer sessions (*reported* attitudes, beliefs and behaviors)
- Gleaning information based on observations of a participant's actions, physical and emotional reactions in his or her natural setting as they interacted with the technology (*actual* behaviors)
- Receiving information the participant volunteered or that which came unprompted during the course of a typical two-hour, one-on-one interaction, which happened to address a particular question or issue.

Not surprisingly, there were occasions in which a participant said they did X online or understood Y issue, yet their actual online behavior, as observed by the ethnographer, conflicted with the participant's verbal response.

#### **Field study dates:**

The study was in the field from March 1 to 29, 2003.

#### **How we analyzed and coded ethnographer notes:**

After interviews were completed, the anthropologist wrote detailed field notes about a participant, the contents of which were culled from the two interviews, planned search sessions, and homework assignments. In other words, an ethnographic profile was written for each participant in a given test city. In addition, the researcher wrote a "final analysis" summary, which highlighted the recurring themes, attitudes and patterns of behaviors observed among the four or five participants from the same locale.

These field notes and other study materials were submitted to Context-Based Research Group, where an initial line-by-line *qualitative* analytic coding was performed to pull out general recurring themes, attitudes and patterns of behaviors found among the group of 17 participants. Consumer WebWatch performed a deeper qualitative analysis to seek more complex issues or themes (i.e. the evidence of a disconnect between what was *said* vs. what was *done*), plus a second layer of coding for *quantitative* analysis and reporting (i.e., the frequency of similarly held attitudes or behaviors among the group.)

#### **APPENDIX B: The merits of ethnographic research**

Perhaps the best way to envision what is involved in an ethnographic study of this nature is to relate it to the late Margaret Mead, who is perhaps most famous for her field studies of South Pacific cultures. If she were alive today in this technology-driven world, she might be inclined to observe how Internet users use search engines to find information online, and how they perceive these important Web navigational tools.

The advantages of anthropological study of search and navigational sites, versus other research methods, are at least five fold:

- **Natural Settings:** By using an anthropological approach, researchers can observe Web users in natural settings as they perform online searches, whether that is in their homes, their offices or at their school. As a result, this approach is more likely to yield compelling results than those set in artificial test settings such as in a computer lab or a two-way mirrored market research focus group session.
- **Real-time exchanges:** Researchers are able to capture participants' actual online behavior and ask questions about their online decisions as they search in real-time.
- **Real Behavior, not Opinion:** The ethnographers can observe what people *actually* do while searching online, and not just what they *say* they do.
- **The *Why*, Not Just What:** Ethnography research gets at the *why* - or the reasons people do the things that they do.
- **Extended Time with Participants:** This provided approximately *six hours* of contact time with each participant over the course of two separate visits, allowing researchers to *capture pre- and post-enlightenment* differences in behavior regarding pay-for-placement on search sites. This also would allow participants to recognize how their attitudes and online behaviors shifted or changed over time.

**APPENDIX C: Search engine and navigational sites evaluated, by participant**

	<b>Anna</b>	<b>Bob</b>	<b>Claude</b>	<b>Dennis</b>	<b>Diane</b>	<b>Gary</b>	<b>Geena</b>	<b>Jack</b>	<b>Kareem</b>
About	X	X	X	X		X		X	
AlltheWeb									X
AltaVista	X		X	X		X		X	
AOL									X
Ask									X
Go		X			X		X		
Google	X		X	X		X		X	
InfoSpace					X		X		
iWon					X		X		
Kanoodle		X			X		X		
LookSmart					X		X		
Lycos									X
MSN	X	X	X	X		X		X	
Overture	X		X	X		X		X	
Yahoo		X							X

	<b>Larry</b>	<b>Lucy</b>	<b>Maria</b>	<b>Mike</b>	<b>Penny</b>	<b>Sara</b>	<b>Vivian</b>	<b>Yvonne</b>
About			X					
AlltheWeb	X	X				X		X
AltaVista			X					
AOL	X	X				X		X
Ask	X	X				X		X
Go				X	X		X	
Google			X					
InfoSpace				X	X		X	
iWon				X	X		X	
Kanoodle				X	X		X	
LookSmart				X	X		X	
Lycos	X	X				X		X
MSN			X					
Overture			X					
Yahoo	X	X				X		X

**APPENDIX D: “About Search” and disclosure links reviewed by participants, by search engine**

(Retrieved on February 26, 2003)

**ABOUT.COM:**

“About Search” page (see reference to Sprinks): [http://search.about.com/library/search\\_tips.htm](http://search.about.com/library/search_tips.htm)

The following entities provide search results:

Sprinks, About.com’s “pay-for-placement” and “sponsored link” program:

<http://sprinks.com/faq/index.htm>

and here, <http://sprinks.about.com/faq/faq.htm>

AskJeeves.com provides “Related Searches”

AskJeeves “Advertisers” pages begin here: <http://sp.ask.com/docs/advertise/advertising.html>

Pay-for-placement programs, specifically, here: <http://sp.ask.com/docs/advertise/premier.html>  
(premier listings)

and here: <http://sp.ask.com/docs/advertise/response.html> (branded response)

Inktomi.com paid inclusion provides some “On the Web” results:

[http://www.inktomi.com/products/Web\\_search/sms.html](http://www.inktomi.com/products/Web_search/sms.html)

**ALLTHEWEB.COM:**

General “About search” page: <http://www.alltheWeb.com/info/aboutresults.html>

The following entities provide search results:

FAST Search, AlltheWeb’s parent company:

[http://www.alltheWeb.com/help/Webmaster/submit\\_site.html](http://www.alltheWeb.com/help/Webmaster/submit_site.html)

Lycos.com’s paid placement and paid inclusion programs, specifically the “AdBuyer” program:

<http://insite.lycos.com/searchservices/default.asp?co=atw>

**ALTAVISTA.COM:**

“About AltaVista results”: [http://www.altavista.com/help/search/types\\_Web](http://www.altavista.com/help/search/types_Web)

New owner Overture provides “sponsored matches”:

<http://www.overture.com/d/USm/adcenter/index.jhtml> (advertiser center) for details on  
“How Overture Works”

**AOL SEARCH (aol.com):**

“About AOL Search”: <http://search.aol.com/aolcom/about.jsp>

Results supplemented by Google, including Google Sponsorships and AdWords:  
<http://www.google.com/ads/index.html>

### **ASK.COM:**

“About Search” page under “HELP”: [http://sp.ask.com/docs/help/help\\_glossary.html](http://sp.ask.com/docs/help/help_glossary.html)

The following entities provide search results:

AskJeeves “Advertisers” pages begin here: <http://sp.ask.com/docs/advertise/advertising.html>  
Pay-for-placement programs, specifically, here: <http://sp.ask.com/docs/advertise/premier.html>  
(premier listings)  
and here: <http://sp.ask.com/docs/advertise/response.html> (branded response)

Ask’s “About Teoma Search”: <http://sp.teoma.com/docs/teoma/about/searchwithauthority.html>

Results supplemented by Google Sponsored Links: <http://www.google.com/ads/index.html>

### **GO.COM:**

[Editor’s Note: Mid-study (March 10, 2003), the Walt Disney Internet Group announced Google’s Web search and Sponsored Links program would power the results for Go.com, replacing Overture. Some study participants who assessed Go.com reviewed Overture’s disclosure pages, while others reviewed Google’s advertisers’ page.]

Go.com’s “What are sponsored results?”: [http://srch.overture.com/d/search/p/go/what\\_sss.jhtml](http://srch.overture.com/d/search/p/go/what_sss.jhtml)

Overture “advertiser center”: <http://www.overture.com/d/USm/adcenter/index.jhtml>, including details on “How Overture Works”

As of March 10, 2003: Google named sole search provider:  
<http://www.go.com/static/aboutLinks.html>

Google Sponsored Links and AdWords programs: <http://www.google.com/ads/>

### **GOOGLE.COM:**

Closest thing to an “About Search” page: <http://www.google.com/help/interpret.html>

Google Premium Sponsorships and AdWords: <http://www.google.com/ads/index.html>

### **INFOSPACE.COM:**

“About Results” page:

[http://www.infospace.com/\\_1\\_I9YTHF03OUSVME\\_\\_home/dog/help/about.htm](http://www.infospace.com/_1_I9YTHF03OUSVME__home/dog/help/about.htm)

Sampling of entities that provide search results:

Overture provides “sponsored matches”: <http://www.overture.com/d/USm/adcenter/index.jhtml> (advertiser center) for details on “How Overture Works”

AskJeeves “Advertisers” pages begin here: <http://sp.ask.com/docs/advertise/advertising.html>  
Pay-for-placement programs, specifically, here: <http://sp.ask.com/docs/advertise/premier.html> (premier listings) and here: <http://sp.ask.com/docs/advertise/response.html> (branded response)

Google Sponsored Links Program: <http://www.google.com/ads/index.html>

LookSmart’s paid inclusion program: <http://looklistings.looksmart.com/>

### **IWON.COM:**

Search powered by Google, including Google Sponsored Links and AdWords Program:  
<http://www.google.com/ads/index.html>

Sponsored listings (sponsored matches) by Overture:  
<http://www.overture.com/d/USm/adcenter/index.jhtml> (advertiser center) for details on “How Overture Works”

(Note: iWon.com has an “About Search Results” link at the very bottom of the search results page, but disclosure opens as a pop-up box rather than a separate page.)

### **KANOODLE.COM:**

Search powered by Google, including Google Sponsored Links and AdWords Program:  
<http://www.google.com/ads/index.html>

“About Search” page equivalent here: <http://www.kanoodle.com/about/about.cool>

### **LOOKSMART.COM:**

Looklistings, Paid Inclusion programs: <http://looklistings.looksmart.com/>

(Note: The “About Search” pages open up as pop-up windows, not as separate pages. See the “About Sponsored Listings” and the “About Reviewed Web Sites” links that appear on the upper right side of page.)

### **LYCOS.COM:**

Lycos.com’s paid placement and paid inclusion programs, specifically the “AdBuyer” program:  
<http://insite.lycos.com/searchservices/default.asp?co=atw>

Lycos search powered by FAST Search (a.k.a., AlltheWeb): [FAST Search, AlltheWeb's parent company: http://www.alltheWeb.com/help/Webmaster/submit\\_site.html](http://www.alltheWeb.com/help/Webmaster/submit_site.html)

(Note: About search “info” disclosure is provided, but pops up in separate box. Click on “info” link that appears on the results page, just above the results.)

#### **MSN SEARCH (msn.com):**

These entities provide search results:

LookSmart's paid inclusion listings: <http://looklistings.looksmart.com/>

Overture: <http://www.overture.com/d/USm/adcenter/index.jhtml> (advertiser center) for details on “How Overture Works”

(Note: MSN Search general disclosure page opens as a pop-up box at right screen. Click on the mini “ABOUT” link that appears to the right of the first “Featured Sites” listing. You can also click on the “ABOUT RESULTS” link that is located at the very bottom of the search results page.)

#### **OVERTURE.COM:**

<http://www.overture.com/d/USm/adcenter/index.jhtml> (advertiser center) for details on “How Overture Works”

(Note: “About Search” page equivalent pops up as a separate window. Click on the “Sponsored Listing” link on the search results page, which includes a link to “How Overture Works”)

#### **YAHOO.COM:**

“What are sponsored matches”: <http://help.yahoo.com/help/us/ysearch/sponsor/sponsor-01.html>

“Yahoo search results” page: <http://help.yahoo.com/help/us/ysearch/ysearch-03.html>

Yahoo's Sponsored Matches provided by Overture:

<http://www.overture.com/d/USm/adcenter/index.jhtml> (advertiser center) for details on “How Overture Works”

Recently acquired Inktomi: [Inktomi.com paid results:](http://www.inktomi.com/products/Web_search/sms.html)

[http://www.inktomi.com/products/Web\\_search/sms.html](http://www.inktomi.com/products/Web_search/sms.html)



## **APPENDIX E: Individual demographic profiles of 17 participants**

*Pseudonyms assigned to protect participant privacy. (Location of broadband Internet access)*

### **KANSAS CITY:**

#### **Lucy** (office user)

Age: 24

Gender: Female

Annual HH Income: \$70,000

Marital/Family Status: Married with one daughter

Ethnicity: Caucasian

Occupation: Child Daycare Coordinator for a county parks and recreation department

Education: B.S., Early childhood education

How long online: approx. 7 years

Preferred search engine: Yahoo.com

Operating system: Windows 2000

Web browser: Internet Explorer 5.0

Internet connection: DSL

Service provider: AT&T

Screen size: 15 in.

#### **Jack** (home user)

Age: 28

Gender: Male

Annual HH Income: \$15,000

Marital/Family Status: Single with no children

Ethnicity: Caucasian

Occupation: Graphic Artist

Education: B.F.A.

How long online: approx. 8 years

Preferred search engine: Dogpile.com

Operating system: Mac OS 9.1

Web browser: Internet Explorer

Internet connection: cable modem

Service provider: Time Warner

Screen size: 15 in. & 17in. (Two monitors)

Note: His artwork appears in an online art gallery.

#### **Geena** (office user)

Age: 48

Gender: Female

Annual HH Income: \$35,000

Marital/Family Status: Married with three sons

Ethnicity: Caucasian  
Occupation: Legal Assistant for a law office  
Education: Associates Art Degree  
How long online: approx. 10 years  
Preferred search engine: Yahoo.com  
Operating System: Windows 98  
Web Browser: Internet Explorer 5.0  
Internet connection: DSL  
Service provider: Newvox  
Monitor size: 15 in.

**Kareem** (home and office user)

Age: 37  
Gender: Male  
Annual HH Income: \$30,000  
Marital/Family Status: Married with one son  
Ethnicity: Caucasian  
Occupation: Restaurant Owner (part-time construction worker)  
Education: High School (some college-level classes)  
How long online: approx. 5 years  
Preferred search engine: MSN.com  
Operating system: Windows 98  
Web browser: Internet Explorer 5.0  
Internet connection: DSL  
Service provider: AT&T  
Screen size: 15 in.  
Note: Maintains a Web site for his restaurant.

PHOENIX

**Bob** (office user)

Age: 46  
Gender: Male  
Annual HH Income: \$45,000  
Marital/Family Status: Single with one son  
Ethnicity: Caucasian  
Occupation: Geographic Information Systems Consultant for an engineering company  
Education: near completion, Ph.D., Environmental Geography  
How long online: approx. 6 years  
Preferred search engine: Yahoo.com  
Operating system: Windows 2000  
Web browser: Internet Explorer 5.0  
Internet connection: DSL  
Service provider: Winstar  
Screen size: 15 in.

**Gary** (office user)

Age: 40  
Gender: Male  
Annual HH Income: \$50,000  
Marital/Family Status: Married with children

Ethnicity: Caucasian  
Occupation: Environmental Compliance Coordinator for a construction materials company  
Education: near completion, M.B.A.  
How long online: approx. 8 years  
Preferred search engine: Google.com  
Operating system: Windows 2000  
Web browser: Internet Explorer 6.0  
Internet connection: DSL  
Service provider: Winstar  
Screen size: 17 in.  
Note: Maintains a personal Web page.

**Penny** (home user)

Age: 34  
Gender: Female  
Annual HH Income: \$100,000  
Marital/Family Status: Married with one infant daughter  
Ethnicity: Caucasian  
Occupation: Stay-at-home mother (former environmental compliance planner)  
Education: M.A., Environmental Planning  
How long online: approx. 12 years  
Preferred search engine: Google.com  
Operating system: Windows 98  
Web browser: Internet Explorer (unsure of version)  
Internet connection: cable modem  
Service provider: Cox Cable  
Screen size: 17 in.

**Yvonne** (home and office user)

Age: 32  
Gender: Female  
Annual HH Income: \$76,000  
Marital/Family Status: Single with no children  
Ethnicity: Caucasian  
Occupation: Physician's Assistant at a pain clinic  
Education: B.S., Molecular and Cellular Biology, B.S., Medical Science  
How long online: approx. 12 years  
Preferred search engine: Search.com  
Operating system: Windows 98  
Web browser: Internet Explorer 6.0  
Internet connection: cable modem  
Service provider: Cox Cable  
Screen size: 14 in.

PROVIDENCE

**Dennis** (home and office user)

Age: 40  
Gender: Male  
Annual HH Income: \$140,000 - \$160,000

Marital/Family Status: Married with one son (from a previous marriage)  
Ethnicity: Caucasian  
Occupation: V.P. of Operations for jewelry-accessories mass-market importer and distribution  
Education: B.A., English, J.D. (law school)  
How long online: approx. 9 years  
Preferred search engine: Google.com  
Operating system: Windows 98  
Web browser: Internet Explorer 5.0  
Internet connection: Cable modem with wireless network system  
Service provider: Cox Cable  
Screen size: 17 in.

**Larry** (home and office user)

Age: 62  
Gender: Male  
Annual HH Income: \$100,000-\$120,000  
Marital/Family Status: Married with three grown children (2 sons, 1 daughter)  
Ethnicity: Caucasian  
Occupation: Independent Consultant for the marina and boating industry  
Education: B.A., Agricultural Sciences, M.A., Adult Education  
How long online: approx. 17 years  
Preferred search engine: Google.com  
Operating system: Mac 9.2.2  
Web browser: Netscape 7.0  
Internet connection: cable modem  
Service provider: Cox Cable  
Screen size: 21 in.  
Note: Maintains a database of Web pages related to environmental pollution and boating issues and a not-for-profit Web page about the Dominican Republic.

**Maria** (office user)

Age: 27  
Gender: Female  
Annual HH Income: \$30,000  
Marital/Family Status: Single with live-in boyfriend, no children  
Ethnicity: Caucasian  
Occupation: Office Manager of a non-profit art organization (part-time waitress-bartender)  
Education: Fours years of college courses, no degree (Art History)  
How long online: approx. 9 years  
Preferred search engine: Google.com  
Operating system: Windows 2000 Professional  
Web browser: Internet Explorer 6.0  
Internet connection: cable modem  
Service provider: Cox Cable  
Screen size: 17 in.

**Vivian** (home and school user)

Age: 19  
Gender: Female  
Annual HH Income: approx. \$5,200  
Marital/Family Status: Single with no children

Ethnicity: Asian American  
Occupation: Full-time University Student (part-time babysitter)  
Education: B.A. expected in 2005  
How long online: approx. 7 years  
Preferred search engine: Google.com  
Operating system: Windows XP  
Web browser: Netscape 6.0  
Internet connection: Ethernet connection to University server  
Service provider: University  
Screen size: 15 in., HP laptop

### RALEIGH-DURHAM

**Anna** (home user)

Age: 55  
Gender: Female  
Annual HH Income: \$200,000  
Marital/Family Status: Married with grown children  
Ethnicity: Caucasian  
Occupation: Retired Banker  
Education: Two years of college  
How long online: approx. 5 years  
Preferred search engine: Google.com  
Operating system: Windows 2000  
Web browser: Internet Explorer 5.0  
Internet connection: cable modem  
Service provider: Time Warner Cable  
Screen size: 18 in.

**Claude** (home user)

Age: 36  
Gender: Male  
Annual HH Income: \$35,000  
Marital/Family Status: Single (with two children living with mother)  
Ethnicity: Caucasian  
Occupation: Concrete Worker for a construction company  
Education: High School  
How long online: approx. 6 years  
Preferred search engine: AltaVista.com  
Operating system: Windows 98  
Web browser: Internet Explorer 5.0  
Internet connection: Cable modem  
Service provider: Charter Cable  
Screen size: 15 in.

**Diane** (home and school user)

Age: 20  
Gender: Female  
Annual HH Income: \$10,000  
Marital/Family Status: Single with no children

Ethnicity: Caucasian  
Occupation: Full-time University Student (works two part-time jobs)  
Education: B.A. expected in 2004  
How long online: approx. 5 years  
Preferred search engine: Yahoo.com  
Operating system: Windows 2000  
Web browser: Internet Explorer 5.0  
Internet connection: cable modem  
Service provider: Time Warner Cable  
Screen size: 14 in.

**Sara** (office user)

Age: 30  
Gender: Female  
Annual HH Income: \$40,000  
Marital/Family Status: Single with no children  
Ethnicity: African-American  
Occupation: Elementary School Teacher (3<sup>rd</sup> grade)  
Education: M.A., Teaching  
How long online: approx. 6 years  
Preferred search engine: Yahoo.com  
Operating system: Windows 2000  
Web browser: Internet Explorer 5.0  
Internet connection: cable modem  
Service provider: Time Warner Cable  
Screen size: 14 in.

**Mike** (home user)

Age: 25  
Gender: Male  
Annual HH Income: \$18,000  
Marital/Family Status: Single with no children  
Ethnicity: Caucasian  
Occupation: Electric Meter Reader (part-time student)  
Education: One year of college  
How long online: approx. 5 years  
Preferred search engine: Google.com  
Operating system: Windows 2000  
Web browser: Internet Explorer 5.0  
Internet connection: cable modem  
Service provider: Time Warner Cable  
Screen size: 14 in.

## **REFERENCES:**

“Response to Commercial Alert Complaint Requesting Investigation of Various Internet Search Engine Companies for Paid Placement and Paid Inclusion Programs.” *Federal Trade Commission* (2002) Available online at <http://www.ftc.gov/os/closings/staff/commercialalertletter.htm>

“Complaint Requesting Investigation of Various Internet Search Engine Companies for Paid Placement and Paid Inclusion Programs.” [Letter sent to search engines] *Federal Trade Commission* (2002) Available online at <http://www.ftc.gov/os/closings/staff/commercialalertattatch.htm>

Fogg, B., Soohoo, C., Danielson, D., Marable, L., Stanford, J., & Tauber, E. (2002). “How Do People Evaluate a Web Site’s Credibility? Results from a Large Study.” *Consumer WebWatch* Available online at [http://www.consumerWebwatch.org/news/report3\\_credibilityresearch/stanfordPTL\\_abstract.htm](http://www.consumerWebwatch.org/news/report3_credibilityresearch/stanfordPTL_abstract.htm)

Princeton Survey Research Associates (2002) “A Matter of Trust: What Users Want From Web Sites. Results of a National Survey of Internet Users.” *Consumer WebWatch* Available online at [http://www.consumerWebwatch.org/news/1\\_abstract.htm](http://www.consumerWebwatch.org/news/1_abstract.htm)

Rashtchy, S., Avilio, J. (2003) “The Golden Search: Dynamics of the Online Search Market and the Scope of Opportunity.” *U.S. Bancorp Piper Jaffray*

“Nielsen NetRatings Search Engine Ratings.” *SearchEngineWatch.com* (February 25, 2003) Available online at [http://www.searchenginewatch.com/reports/print.php/34701\\_2156451](http://www.searchenginewatch.com/reports/print.php/34701_2156451)

“Google, Yahoo, MSN, and AOL Account for More Than 90 Percent of Search Referrals to Shopping Web Sites.” *WebSideStory.com* (2002) Available online at <http://www.Websidestory.com/pressroom/pressreleases.html?id=175>

“Google Challenges Yahoo as the No. 1 Search Site in the World.” *WebSideStory.com* (2002) Available online at <http://www.Websidestory.com/pressroom/pressreleases.html?id=149>

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## ENDNOTES

- <sup>i</sup> Princeton Survey Research Associates (2002) "A Matter of Trust: What Users Want From Web Sites. Results of a National Survey of Internet Users." *Consumer WebWatch* Available online at [http://www.consumerWebwatch.org/news/1\\_abstract.htm](http://www.consumerWebwatch.org/news/1_abstract.htm).
- <sup>ii</sup> Fogg, B., Soohoo, C., Danielson, D., Marable, L., Stanford, J., & Tauber, E. (2002) "How Do People Evaluate a Web Site's Credibility? Results from a Large Study." *Consumer WebWatch* Available online at [http://www.consumerWebwatch.org/news/report3\\_credibilityresearch/stanfordPTL\\_abstract.htm](http://www.consumerWebwatch.org/news/report3_credibilityresearch/stanfordPTL_abstract.htm)
- <sup>iii</sup> Princeton Survey Research Associates (2002) "A Matter of Trust: What Users Want From Web Sites. Results of a National Survey of Internet Users." *Consumer WebWatch* Available online at [http://www.consumerWebwatch.org/news/1\\_abstract.htm](http://www.consumerWebwatch.org/news/1_abstract.htm).
- "Search Engines: Project Data Memo." (2002) *Pew Internet & American Life Project* (July 2002) Available online at [http://www.pewinternet.org/reports/pdfs/PIP\\_Search\\_Engine\\_Data.pdf](http://www.pewinternet.org/reports/pdfs/PIP_Search_Engine_Data.pdf)
- <sup>iv</sup> "Search Engine Referrals Nearly Double Worldwide." *WebSideStory.com* (2003) Available online at <http://www.Websidestory.com/pressroom/pressreleases.html?id=181>
- <sup>v</sup> Stein, G. "Search Engine Marketing: Agency Positioning Strategies." (2003) *Jupiter Research* (May 20, 2003)
- <sup>vi</sup> Rashtchy, S., Avilio, J. (2003) "The Golden Search: Dynamics of the Online Search Market and the Scope of Opportunity." *U.S. Bancorp Piper Jaffray*
- <sup>vii</sup> Stanford, J., Tauber, E., Fogg, B., Marable, L. (2002). "Experts vs. Online Consumers: A Comparative Credibility Study of Health and Finance Web Sites." *Consumer WebWatch* Available online at [http://www.consumerWebwatch.org/news/report3\\_credibilityresearch/slicedbread\\_abstract.htm](http://www.consumerWebwatch.org/news/report3_credibilityresearch/slicedbread_abstract.htm)
- "Credibility on the Web: An international study of the credibility of consumer information on the Internet." (2002) *Consumers International* Available online at [http://www.consumersinternational.org/documents\\_asp/news\\_display.asp?regionid=135&id=162&categoryID=677&langid=1](http://www.consumersinternational.org/documents_asp/news_display.asp?regionid=135&id=162&categoryID=677&langid=1)
- <sup>viii</sup> "Complaint Requesting Investigation of Various Internet Search Engine Companies for Paid Placement and Paid Inclusion Programs." *Federal Trade Commission* (2002) Available online at <http://www.ftc.gov/os/closings/staff/commercialalertattach.htm>
- <sup>ix</sup> Sullivan, D. (2003) "Search Engine Disclosure Ratings: May 2003." *SearchEngineWatch.com* (May 30, 2003)
- <sup>x</sup> Spink, A., Jansen, B., Wolfram, D., Saracevic, T. (2002) "From E-Sex to E-Commerce: Web Search Changes." *IEEE Computer*, 35(3), 107-109
- <sup>xi</sup> Watlington, A., Smith, G. (2002) "Marketing Tactics of Big Brands Not Meeting Web User Expectations." *iProspect.com*
- <sup>xii</sup> Eysenbach, G., Kohler, C. (2002) "How do consumers search for and appraise health information on the world wide web? Qualitative study using focus groups, usability tests, and in-depth interviews." *BMJ* [British Medical Journal] (March 9, 2002, Vol. 324)
- <sup>xiii</sup> "Nielsen NetRatings Search Engine Ratings." *SearchEngineWatch.com* (February 25, 2003) Available online at [http://www.searchenginewatch.com/reports/print.php/34701\\_2156451](http://www.searchenginewatch.com/reports/print.php/34701_2156451)



---

<sup>xiv</sup> “Google, Yahoo, MSN, and AOL Account For More Than 90 Percent of Search Referrals to Shopping Web Sites.” *WebSideStory.com* (2002) Available online at <http://www.Websidestory.com/pressroom/pressreleases.html?id=175>

<sup>xv</sup> “Google Challenges Yahoo as the No. 1 Search Site in the World.” *WebSideStory.com* (2002) Available online at <http://www.Websidestory.com/pressroom/pressreleases.html?id=149>

<sup>xvi</sup> “The Broadband Difference: How online Americans’ behavior changes with high-speed Internet connections at home.” *Pew Internet & American Life Project* (2002) Available online at [http://www.pewinternet.org/reports/pdfs/PIP\\_Broadband\\_Report.pdf](http://www.pewinternet.org/reports/pdfs/PIP_Broadband_Report.pdf)

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**PREFERRED CITATION:**

If you use this material, please reference it in the following manner:

Academic citation:

Marable, Leslie (2003) “FALSE ORACLES: Consumer Reaction to Learning the Truth About How Search Engines Work. Results of an Ethnographic Study.” *Consumer WebWatch* Available online at <http://www.consumerwebwatch.org/news/searchengines/index.html>

Media citation:

Consumer WebWatch’s “Ethnographic Research Study of Search Engines.” Available online at <http://www.consumerwebwatch.org>