

GOOGLE'S TRANSFORMATION FROM GATEWAY TO GATEKEEPER: HOW GOOGLE'S EXCLUSIONARY AND ANTICOMPETITIVE CONDUCT RESTRICTS INNOVATION AND DECEIVES CONSUMERS

EXECUTIVE SUMMARY

Approximately 240 million people in the United States regularly use the Internet, and last year their activity generated nearly \$170 billion in commerce – making the Internet a linchpin of our economy, our society, and of everyday life. Maintaining a competitive environment in which investment and innovation can thrive on the Internet therefore should be a core public policy goal. Yet today, anticompetitive actions of the monopolist search engine, Google, put that goal at serious risk.

Search engines are among the most critical actors on the Internet. With more than one trillion webpages on the Internet and more appearing every day, search is the principal means by which consumers find online businesses and online businesses find consumers amidst an otherwise crowded and confusing landscape. The Pew Internet & American Life Project reports that as of May 2011, 92% of adults online use search engines to find information on the Internet. In July 2011 alone, there were over 17.1 billion search queries conducted in the United States, up 3% from the prior month.

Google controlled at least seven out of every ten of those searches. As antitrust authorities and courts here in the U.S. and abroad have repeatedly concluded, Google has market power in search, giving this single company unprecedented power over what users find, who is found, and what businesses must pay to be found on the Internet. Having gained a monopoly in Internet search and search advertising, Google also has come to control nearly 97% of the fast-growing mobile search market. Users depend on Google to find information, and businesses depend on it to direct traffic towards their sites, so that they can earn the revenue that they need in order to innovate and to provide the online services that users want. In its own words, Google is the “kingmaker” of the Internet.

Concerns about Google's monopoly power and what the company does with it can also be found in the U.S. Congress. On September 21, the Senate Subcommittee on Antitrust, Competition Policy and Consumer Rights held a hearing titled: “The Power of Google: Serving Consumers or Threatening Competition?” During the hearing, Senators of both parties made it clear that they are committed to ensuring that Google is not permitted to use its monopoly in search and search advertising in a manner that harms consumers. “We need to recognize that, as the dominant firm in Internet search, Google has special obligations under antitrust law to not deploy its market power to squelch competition,” Senator Kohl (D-WI) noted in his

opening statement. “Antitrust scrutiny is not about picking winners and losers, but is about fostering a fully competitive environment so that consumers can fairly pick winners and losers.” Likewise, Senator Lee (R-UT) expressed deep concern over Google’s use of its market power to promote its own sites over those of competitors. “No other specialized business or search site can hope to compete on anything close to a level playing field when Google uses its significant market power to disadvantage online competitors, [creating a] clear and inherent conflict of interest,” Senator Lee explained.

Members of the Subcommittee recognized that the dangers arising from Google’s dominance in search and search advertising have grown exponentially due to a fundamental shift in Google’s business philosophy: Google has entered into competition with the very same websites which depend upon Google to reach consumers. Whereas Google at one time sought to direct users as efficiently as possible to the sites most likely to respond to their queries, today Google tries to answer those queries directly with its own products like Google Places (hotels, restaurants and destinations), Google Product Search (product information and price comparisons), Google Finance (investment and other financial issues), Google Maps (location and direction information), and YouTube (video content).

Google’s competing vertical and information content services sites give it the incentive – and its dominance in search and search advertising gives it the ability – to exclude competition from independent sites. Google thereby keeps users within the “Google universe,” where Google can continue to sell ads targeted at those users, and away from competing sites. For example:

- Deceptive display: Steering users toward its own products by displaying them at the top or in the middle of the results page in ways that suggest to consumers that they are natural search results, rather than links to Google’s own sites;
- Search manipulation: Manipulating its search algorithm to exclude or penalize competing sites, effectively “disappearing” them from the Internet;
- Unauthorized content scraping: Stealing content developed by other websites, such as user reviews, without permission and displaying that content on its own pages, sometimes even without attribution;
- Unfair treatment of advertisers: Manipulating advertisers’ quality scores to inflate ad prices and placing restrictions on its “must buy” ad platform that inhibit customers from using competing platforms; and
- Exclusionary conduct in mobile: Buying up companies in the mobile search area that present a nascent competitive threat, and imposing exclusivity restrictions in its Android licensing agreements to maintain and expand its dominance.

Google’s deceptive display tactics –its hard-wiring of search results to ensure that its own products appear more prominently than those of its competitors, thus deceiving consumers into remaining within the “Google universe” for as long as possible – was the subject of an interesting exchange at the recent Senate hearing. Using the example of Google

Product Search to illustrate his concern, Senator Lee noted that Google's own links tend to be ranked very highly in search results, and consistently so, whereas sites like Nextag and Pricegrabber tend to rank lower, and with more variation. Senator Lee asked former Google CEO and current Chairman Eric Schmidt whether Google "cooks" its search results to ensure that its own sites appear more prominently than those of its rivals. Mr. Schmidt denied that Google treats its products more favorably and attempted to skirt the issue by claiming that the Product Search result is a better answer for users:

There's a difference between sites that do product comparison and sites that offer products themselves. . . . [Google Product Search] is an organic search result which is triggered by a product search database which we have gathered by searching and ranking offerings from many different vendors. If you click within that, you go to the vendor that will sell you the product.

In fact, however, when a user clicks on the Google Product Search links that are hard-coded into the search results page, he or she is not taken to a vendor's site, but to yet *another Google page*— the Google Product Search price comparison page, which competes with similar sites such as Nextag, Pricegrabber, and Shopper. A better result for Google, perhaps, but not a procompetitive result for consumers.

Through such exclusionary conduct, Google maintains and extends its dominance into additional markets and thereby increases its profits, while also reinforcing and maintaining its dominance in general search and search advertising. While this helps Google, it is bad for economic growth and consumer welfare. Google's exclusionary conduct damages competition by depriving competing sites of user traffic and advertising revenue, raising rivals' costs as they spend more to place search ads on Google to make up for traffic lost from natural search queries, and in the long run reducing incentives for other businesses to innovate. The result: fewer choices for consumers and businesses, less innovation, and higher prices.

The Internet is too important to let a single company do so much harm. If Americans are to benefit from the full potential of the Internet, antitrust enforcers need to step up and require Google to obey the same rules for competition as everyone else. Indeed, antitrust enforcement already has helped to preserve competition. In 2008, Google and Yahoo! abandoned their proposed partnership in the face of threatened litigation by the Antitrust Division of the Department of Justice. Earlier this year, a federal court in New York rejected the Google Books settlement on the grounds that it "would further entrench Google's market power in the online search market." Also this year, the Department of Justice obtained an antitrust consent decree that imposed conditions on Google's takeover of travel giant ITA Software. Most recently, the antitrust scrutiny of ongoing investigations by the Federal Trade Commission (FTC) and numerous state attorneys general forced Google to take an initial step back from its unauthorized use of content that it has scraped from other sites.

The Senate's hearing was another important development for consumers, but much more needs to be done. The government can pursue concrete, administrable remedies that can help preserve the benefits of competition for consumers. While any remedy should be crafted based on the violations found during an investigation, the information already available

points to examples of relief that an antitrust enforcement action could seek that would help consumers – such as prohibiting Google’s deceptive display bias, its reduction of rankings based on anticompetitive grounds, and its scraping and use of content from other sites without permission.

If, however, competition enforcement officials fail to investigate and take all appropriate action to stop Google from breaking existing antitrust laws, consumers will suffer in at least two ways. First, Google will continue to thwart competition and will dominate more and more of the Internet, magnifying the harms described above. Second, government regulatory officials in the U.S. and abroad could become frustrated with the lack of antitrust enforcement and impose a rigid government regulatory structure on the Internet that itself would stifle innovation and growth. In short, the time to preserve competition, investment and innovation is now.

I. U.S. ANTITRUST LAWS PROMOTE ECONOMIC GROWTH AND CONSUMER WELFARE

As the United States Supreme Court has eloquently explained:

Antitrust laws in general, and the Sherman Act in particular, are the Magna Carta of free enterprise. They are as important to the preservation of economic freedom and our free-enterprise system as the Bill of Rights is to the protection of our fundamental personal freedoms. And the freedom guaranteed each and every business, no matter how small, is the freedom to compete - to assert with vigor, imagination, devotion, and ingenuity whatever economic muscle it can muster.¹

This freedom to compete drives companies to reduce costs, improve quality, and invent entirely new products and services. As explained in this report, Google poses a serious threat to the freedom to compete that drives our free enterprise system.

Section 2 Plays a Vital Role in Preserving Competitive Markets. Section 2 of the Sherman Act stands as a key safeguard of the competitive process by prohibiting firms from engaging in conduct that goes beyond the bounds of merely aggressive competition to conduct that disrupts the competitive process itself.² Although achieving a monopoly or dominant position in a market is not in and of itself barred by Section 2, firms may not acquire a monopoly position by means that subvert competition or the competitive process. Moreover, Section 2 also prohibits a firm from using improper means to maintain or expand its dominance. In other words, although a monopolist is not constrained from engaging in tough competition, a line has been drawn between merits-based competition that ultimately leads to lower costs, greater efficiency, expanded output, and increased consumer welfare, and conduct that forecloses competitors from opportunities to compete.

The Elements of a Section 2 Claim. Section 2 makes it unlawful for a company to “monopolize, or attempt to monopolize, or combine or conspire with any other person or persons to monopolize any part of the trade or commerce” in the United States.³ Monopolization requires two elements:

- (1) The possession of monopoly power in the relevant market;
and
- (2) The willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.⁴

¹*United States v. Topco Assocs., Inc.*, 405 U.S. 596, 610 (1972)

²See, e.g., *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 458 (1993).

³15 U.S.C. § 2 (2000).

⁴*United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966). See also *Lorain Journal Co. v. United States*, 342 U.S. 143, 155-57 (1951); *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 601 (1985). Attempted monopolization requires: “(1) that the defendant has engaged in predatory or anticompetitive conduct with (2) a specific intent to monopolize and (3) a dangerous probability of achieving monopoly power.” *Spectrum Sports*, 506 U.S. at 456.

As discussed below, Google's actions meet the elements of a Section 2 violation. There is no serious dispute that Google is dominant in PC and mobile search and search advertising. Nor is there any serious question that Google is both expanding and reinforcing its dominance. And Google is accomplishing these goals through exclusionary and predatory acts that lack a legitimate justification.

Section 5 of the Federal Trade Commission Act. Section 5 of the FTC Act prohibits unfair methods of competition.⁵ Predatory and exclusionary actions that violate Section 2 of the Sherman Act also violate Section 5. The FTC also interprets this statute as prohibiting additional conduct that may harm competition and consumers. Accordingly, for the same reasons discussed below, Google's actions have violated Section 5 of the FTC Act as well as Section 2 of the Sherman Act.

II. GOOGLE'S ENTRENCHED MARKET POWER IN SEARCH GIVES IT TREMENDOUS POWER IN THE INTERNET MARKETPLACE

**"SEARCH IS CRITICAL.
IF YOU ARE NOT FOUND, THE REST CANNOT FOLLOW."**

—Google (August 23, 2009)

Although the Internet offers extraordinary opportunities, the scope of the Internet also can be daunting for consumers. There are currently more than one trillion webpages and more appear every day.⁶ In order to make the Internet useful, consumers use search engines to locate their own "needle in the haystack" – that is, to find the handful of sites that are most interesting to them within the vast universe of the Web. More often than not, the decision as to whether or not a particular consumer finds a particular site on the Internet rests with a search engine – or, to be more precise, Google.

Search Rankings Determine the Fate of Most Online Businesses. With the exponential increase in the quantity of information available to business and consumers, search (and search advertising) has become the gateway to the Internet economy. In July 2011 alone, there were over 17.1 billion search queries conducted in the United States, up 3% from the prior month.⁷ Approximately 57% of consumers use a search engine to shop online.⁸ The Pew Internet & American Life Project reports that as of May 2011, 92% of adults online use search engines to find information on the Internet, including 59% of online adults who use search on a

⁵ 15 U.S.C. § 45 (2000).

⁶ Jesse Alpert & Nissan Hajaj, *We Knew the Web Was Big* . . ., THE OFFICIAL GOOGLE BLOG (July 25, 2008), <http://googleblog.blogspot.com/2008/07/we-knew-web-was-big.html>.

⁷ Press Release, comScore, comScore Releases July 2011 U.S. Search Engine Rankings (Aug. 10, 2011),

http://www.comscore.com/Press_Events/Press_Releases/2011/8/comScore_Releases_July_2011_U.S._Search_Engine_Rankings.

⁸ EON, *2010 Social Shopping Study Reveals Changes in Consumers' Online Shopping Habits & Usage of Customer Reviews* (May 3, 2010), <http://eon.businesswire.com/news/eon/20100503005114/en>.

daily basis.⁹ These figures are rising steadily, the increase fueled in particular by the high rate of search usage by younger generations.

Search Usage in the United States¹⁰

	Share of each group who ever use a search engine (%)	Share of each group who use a search engine every day (%)
All online adults	92	59
Adults ages 18-29	96	66
Adults ages 30-49	91	64
Adults ages 50-64	91	52
Adults ages 65+	87	37

Just as consumers depend upon a search engine to find online businesses, search serves as the key pathway by which online businesses reach consumers – allowing, for example, an online electronics store to be found at the very moment the consumer has indicated his or her purchasing interests (e.g., by searching for “digital camera”). Search engines make this connection through two types of results:

- “Natural” search results, which are also known as unpaid or algorithmic results. To provide natural search results, a search engine builds and continuously updates an index of webpages, and in response to a search query (e.g., for “restaurants Salt Lake City”) returns a list of webpages ranked according to a range of criteria selected by the search engine.
- “Paid” or “sponsored” search results, in which online businesses bid for the right to have their links appear in response to certain queries. The sale of paid search ads accounts for the vast majority of a search engine’s revenues. The Federal Communications Commission (FCC) recently reported that from 2000 to 2010, search ads went from just 1% of online advertising spending to a whopping 47% – by far the largest single category of online advertising.¹¹

A search engine determines results according to a proprietary algorithm that it programs and over which it has sole control. The way a search engine designs its algorithms and how it ranks one site above another makes a huge difference to a website’s ability to be found through that search engine. Studies show that users are twice as likely to click on the top-ranked search result as on the result immediately below it.¹² The top five results attract 88% of the

⁹ Kristin Purcell, *Search and Email Still Top the List of Most Popular Online Activities*, PEW INTERNET & AMERICAN LIFE PROJECT at 2 (Aug. 9, 2011), http://www.pewinternet.org/~media/Files/Reports/2011/PIP_Search-and-Email.pdf.

¹⁰Id.

¹¹ Steven Waldman and the Working Group on Information Needs of Communities of the Federal Communications Commission, *The Information Needs of Communities*, at 129 (June 2011), http://transition.fcc.gov/osp/inc-report/The_Information_Needs_of_Communities.pdf.

¹² Daniel Ruby, *The Value of Google Result Positioning*, CHITIKA INSIGHTS (May 25, 2010), <http://insights.chitika.com/2010/the-value-of-google-result-positioning/>.

clicks, with the first three attracting nearly 79%.¹³ And it is very rare – a chance of 1.11% or less – for a user to click anywhere beyond the 10th site in a search result (basically, after the first page of links).¹⁴

For a sample of 8.3 million links clicked on by Google users in May 2010, the following chart depicts where within the list of results those links appeared on the Google results page.

Percentage of Traffic by Google Result¹⁵

Ranking by Google	Percentage of clicks (%)
1	34.35
2	16.96
3	11.42
4	7.73
5	6.19
6	5.05
7	4.02
8	3.47
9	2.85
10	2.71
11	1.11
12	0.85
13	0.70
14	0.57
15	0.48
16	0.39
17	0.33
18	0.28
19	0.27
20	0.29

In short, the proprietary algorithms designed and controlled by search providers effectively serve as the arbiters of content and quality on the Internet. This role makes search central to how the Internet marketplace functions.

¹³ Online Marketing Research, which observed that “the first five positions get over 88% of the traffic, and the first three 79%.” iProspect, *iProspect Search Engine Behavior Study*, at 3 (April 2006).

¹⁴ Daniel Ruby, *supra* note 12.

¹⁵*Id.*

Google Dominates Search.

“I DON’T THINK ANYONE CAN DENY THAT GOOGLE HAS A MONOPOLY OVER THE SEARCH ENGINE MARKET. IT IS REMINISCENT IN MY MIND OF AT&T IN THE 1920S.”

– Tim Wu, *Columbia Law Professor in the Wall Street Journal*, Feb. 8, 2011
(Wu is currently on a leave of absence to serve as a Senior Advisor to the FTC)

That Google dominates online search in the U.S. is clear to many members of Congress, the federal courts, and the antitrust agencies. As Senator Blumenthal (D-CT) noted during the September Senate hearing:

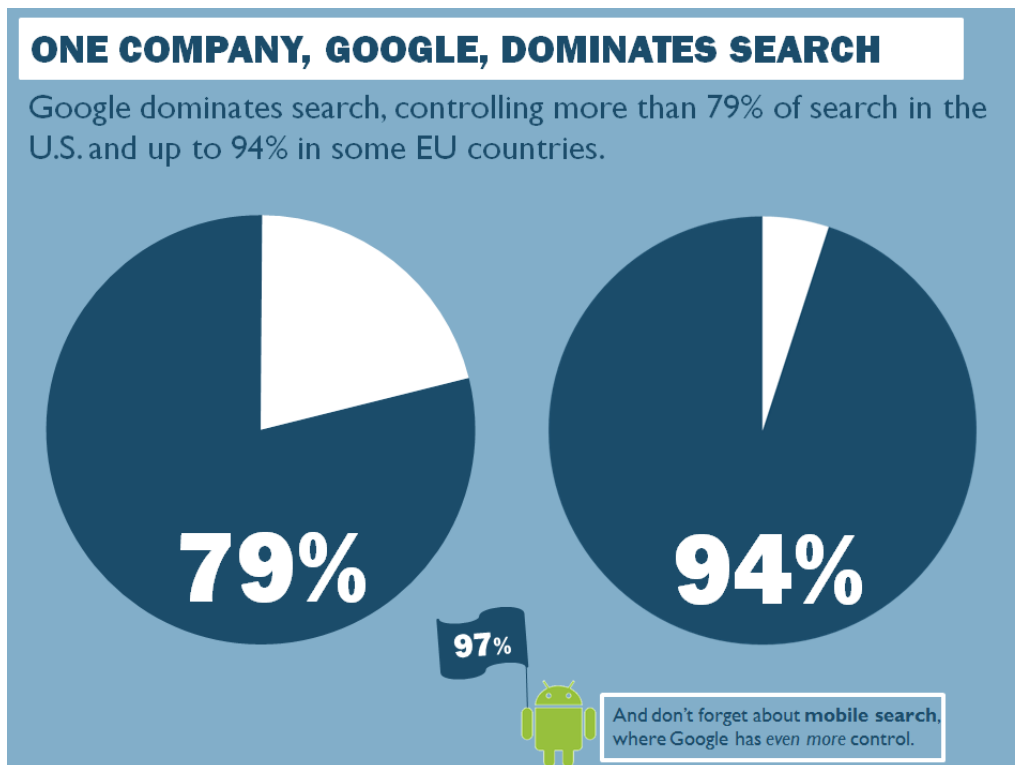
There's no question about the fact that Google is really the behemoth in the search market these days and that it far outsizes its nearest competitor, which has less than 30 percent of the market as compared to Google's 65 percent or 70 percent, more in searches, and an even higher share in advertising revenue, and that the trend will be toward perhaps even more sizable share on the part of Google in the search market. And the reason I say it is that your nearest competitor is losing \$2 billion a year and Google made \$29 billion in 2010.

In response to Senator Kohl's (D-WI) question about whether Google is a monopolist under U.S. antitrust laws, Mr. Schmidt said, "I would agree, Senator, that we're in that area."

Mr. Schmidt's candid admission echoes years of similar conclusions by federal courts and antitrust enforcers. For example, in rejecting a proposed settlement that would have blessed Google's indexing and sole control online over millions of "orphan" books (i.e., books for which the copyright holder cannot be found), the U.S. District Court for the Southern District of New York found that "Google's ability to deny competitors the ability to search orphan books would further entrench Google's market power in the online search market."¹⁶ The U.S. Department of Justice and FTC have likewise noted that "Google already holds a relatively dominant market share" in the search market.¹⁷ At this point, Google faces competition from only one general search engine in the U.S. – Bing, which is a distant second. And in many countries around the world, Google faces virtually *no* competition from another general search engine.

¹⁶*Authors Guild v. Google, Inc.*, 1:05-cv-8136, Order at 37 (S.D.N.Y. Mar. 22, 2011) (Chin, J.) (emphasis added).

¹⁷See *Statement of Interest of the United States of America Regarding Proposed Amended Settlement Agreement*, U.S. Dep't of Justice, Antitrust Div. (Feb. 4, 2010), www.justice.gov/atr/cases/f255000/255012.htm#f; *Statement of the Federal Trade Commission Concerning Google/DoubleClick*, FTC File No. 071 0170 at 3 (Dec. 20, 2007), <http://www.ftc.gov/os/caselist/0710170/071220statement.pdf>.



Google's search dominance has enabled it also to dominate paid search advertising. Indeed, Google's share of paid search advertising exceeds its already dominant share of natural search – controlling 95% of search advertising revenues in Europe and over 75% of search advertising revenues in the United States.¹⁸ Thus, while some people think of Google as a company that provides a free Internet search service, it is in fact an advertising company that makes most of its money by selling access to its users to advertisers. In 2010 alone, the sale of paid search advertisements accounted for nearly 96% of Google's total revenue, or about \$28 billion.¹⁹ These figures are all the more remarkable when one considers that search advertisers only have to pay Google when users click on their ads – underscoring the undeniable truth that businesses across the globe are dependent on Google's search platform for their survival.

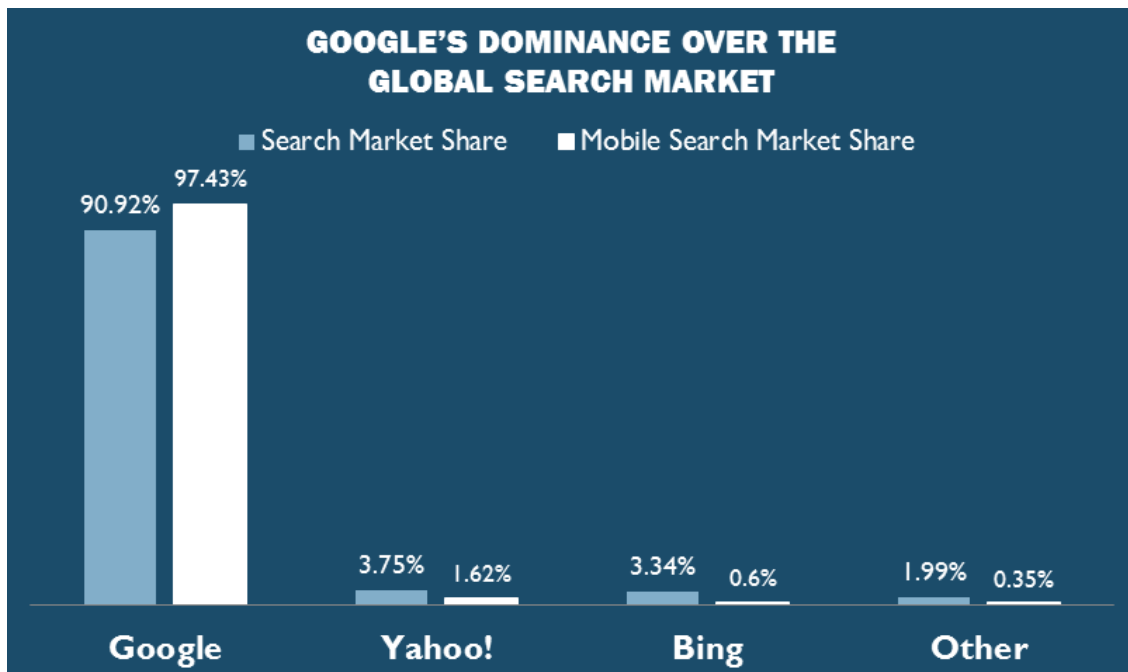
Having gained a monopoly in Internet search and search advertising, Google has recently turned its attention to a sector that continues to grow exponentially in its importance: mobile. It is estimated that Google has nearly 97% of the \$1.1 billion mobile search and search advertising markets.²⁰

¹⁸eMarketer, Inc., *Google's Share of Search Ad Revenues Rises, Unaffected by Bing* (June 8, 2011), <http://www.emarketer.com/PressRelease.aspx?R=1008451>.

¹⁹ Google had over \$29.3 billion of revenue in 2010. Google Investor Relations, <http://investor.google.com/financial/tables.html>.

²⁰See Greg Sterling, *Visualizing Google's Dominance of Mobile Advertising*, SEARCH ENGINE LAND (Feb. 16, 2011), <http://searchengineland.com/picturing-googles-dominance-of-mobile-advertising-65114>; see also Greg Sterling, *Google Controls 97 Percent Of Mobile Paid Search: Report*, SEARCH ENGINE LAND (Mar. 7, 2011), <http://searchengineland.com/google-controls-97-percent-of-mobile-paid-search-report-66876>.

Search and Mobile Search Global Market Shares²¹



Policymakers and other Internet stakeholders should not underestimate the significance of mobile search to the future of the Internet. Over the past few years, there has been an explosive growth in the sales of Internet-enabled smart phones, with over 100 million phones sold worldwide during the first quarter of 2011.²² As anyone who has ridden on a subway, stood in line at the grocery store, or waited in an office lobby knows, smart phones are proliferating throughout society at a rapid pace. Cisco, for example, estimates that annual growth in mobile data traffic between 2010 and 2015 will exceed 90%.²³ Mobile advertising is expected to grow at the same time, with global advertising revenues expected to reach over \$20 billion by 2015.²⁴ That Google effectively controls the entire mobile ad market is an extraordinary development.

Google's Dominance Gives It Immense Control over the Internet. Its market dominance in natural and paid search (including in the mobile sector) accords Google the power to determine who wins and who loses in the online marketplace – transforming Google from a gateway to a gatekeeper. Google thus holds tremendous power over the fate of online

²¹ See StatCounter Global Stats, Top 5 Search Engines from Sept. 2010 to Aug. 2011, http://gs.statcounter.com/#search_engine-ww-monthly-201009-201108 (last accessed Sept. 29, 2011); StatCounter Global Stats, Top 5 Mobile Searches from Sept. 2010 to Aug. 2011, http://gs.statcounter.com/#mobile_search_engine-ww-monthly-201008-201108-bar (last accessed Sept. 29, 2011).

²² Don Reisinger, *Gartner: Android Leads, Windows Phone Lags in Q1*, CNET NEWS (May 19, 2010), http://news.cnet.com/8301-13506_3-20064223-17.html.

²³ Cisco, *Cisco Visual Networking Index: Forecast and Methodology, 2010-2015* (June 1, 2011), http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white_paper_c11-481360_ns827_Networking_Solutions_White_Paper.html.

²⁴ TelecomLead.com, *Global Mobile Advt Revenue to Touch \$3.3 Billion in 2011* (July 24, 2011), <http://www.telecomlead.com/inner-page-details.php?id=941&block>.

video and text publishers and other content, services, and applications on the Internet. Indeed, Google has referred to itself as “Kingmaker” of the Internet.²⁵

Examples of this power abound, including the following:

- A Sept. 5, 2011 article in the *New York Times* reports on a phenomenon whereby some otherwise successful local businesses are listed as “closed” on Google Places, the company’s equivalent of the local Yellow Pages. Noting the long delay in any effort by Google to address the problem, an independent online marketing consultant observed: “Google doesn’t understand how much fear and discomfort businesses have about this. *One company gets to decide if you’re open or closed in the online world.*”²⁶
- In November 2009, Google inexplicably stopped indexing the blog of StudioBriefing, an entertainment news service that has been in existence since 1993. Google also sent a perfunctory letter announcing that it would no longer allow Studio Briefing to buy search advertising. Studio Briefing’s owner explained at the time, “We are in no position to battle Google on this . . . [a]nd without StudioBriefing.net being included in Google search results we cannot draw sufficient reads to remain viable.”²⁷

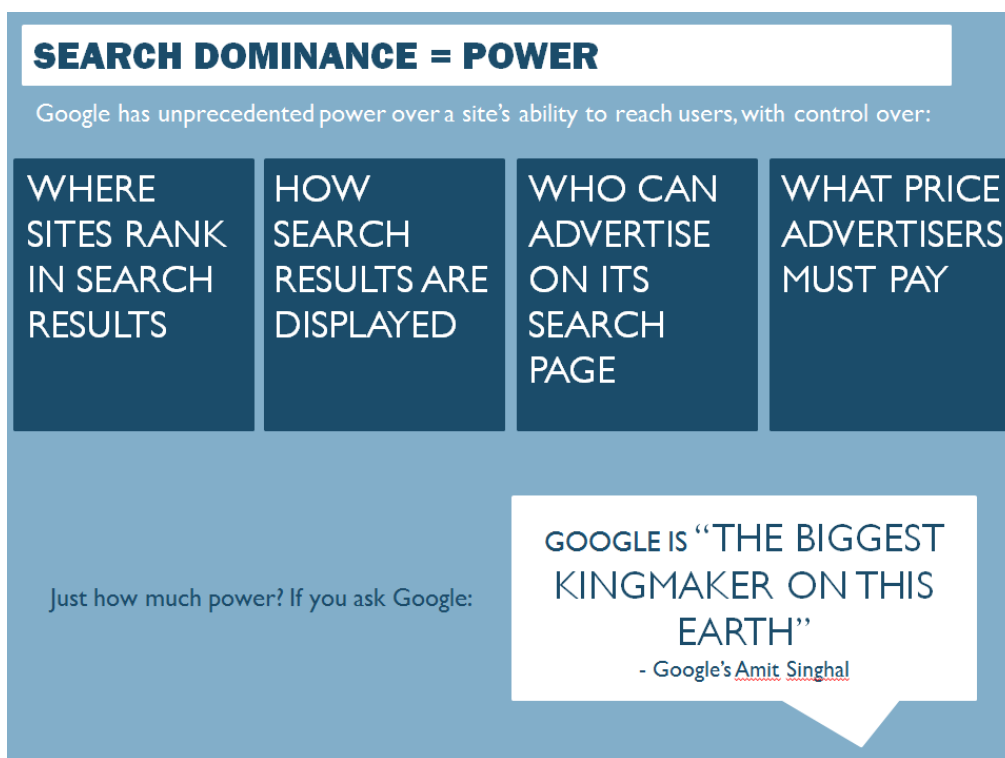
In a competitive market, no single search engine would be able to harm online competition by itself. Consumers would gravitate away from such a search engine if it were believed to be in some way abusing its trusted status as the intermediary between consumers and online services. Yet search today is not a competitive market and, as a result, consumers and the advertisers who need to reach them have no real choice but to use Google. Worse yet, the lack of competition undermines the ability of consumers even to know what Google is doing. *Wired* magazine recently summed up the concern this way: “[T]here is no way for competitors or partners to know whether Google tweaks results to direct traffic to its own properties over theirs. Enter a street address into Google’s search engine, for instance, and Google Maps tops the results. Type in ‘Britney Spears’ and Google News comes up before People magazine or TMC.com. (Google owned YouTube tops the video results, above MTV and MySpace.)”²⁸

²⁵Matt Warman, *Google, Caffeine and the Future of Search*, THE TELEGRAPH (June 17, 2010), <http://www.telegraph.co.uk/technology/google/7833590/Google-Caffeine-and-the-future-of-search.html>.

²⁶David Segal, *Closed, Says Google, But Shops’ Signs Say Open*, NEW YORK TIMES (Sept. 5, 2011) (emphasis added), <http://www.nytimes.com/2011/09/06/technology/closed-in-error-on-google-places-merchants-seek-fixes.html>.

²⁷Lew Irwin, *We Have Been De-googled!*, IMDB (Nov. 28, 2009), <http://www.imdb.com/news/n11239504/>.

²⁸Fred Vogelstein, *Why is Obama’s Top Antitrust Cop Gunning for Google?*, WIRED (July 20, 2009), http://www.wired.com/techbiz/it/magazine/17-08/mf_googlopoly?currentPage=3.



Competition Is Not a "Click Away."

"SO, MORE USERS MORE INFORMATION, MORE INFORMATION MORE USERS, MORE ADVERTISERS MORE USERS, IT'S A BEAUTIFUL THING, LATHER, RINSE, REPEAT, THAT'S WHAT I DO FOR A LIVING. SO THAT'S [WHY] SOMEONE ALLUDED TO THE ENGINE THAT CAN'T BE STOPPED."

— Jonathan Rosenberg, Google VP of Product Management & Marketing

It may be tempting to hope that competitive pressures will emerge to dissuade Google from abusing its dominant position in search. Yet once a search provider acquires the level of dominance enjoyed today by Google, it is virtually impossible for another provider to gain the scale necessary to compete meaningfully. Thus, users do not have the option to click away to another search engine of comparable quality.

Users evaluate a search engine in large part based upon the relevance of the results it returns. Developing the algorithms necessary to return the most relevant results in connection with a search query is a huge engineering challenge. By watching how users react to specific search results – which results they click, how different rankings of results affect their clicks, etc. – search engines continually refine and improve their search algorithms in order to better predict which search results users will consider relevant. The more data a search engine has to develop and improve its algorithms, the more likely it will be to return results that users find relevant. As economists with the Department of Justice have explained, "Search advertising

platforms are successful largely to the extent that they match users with relevant ads, and ‘learning by doing’ is a big part of what helps these platforms improve.”²⁹

This simple fact means that a search engine with fewer searches is less able to innovate as quickly or to provide consumers with as relevant results as a search engine with more searches. Also, because users naturally tend to gravitate towards search engines that provide more relevant results, the gap between the search engine with the most searches and its smaller rivals (all other things being equal) tends to grow over time. This is the opposite of a virtuous cycle, since this self-reinforcing loop enables the dominant search provider to grow its lead over time regardless of investment and innovation by other providers. Even Google’s CEO once acknowledged that “[m]anaging search at our scale is a very serious barrier to entry.”³⁰

The inability of Ask.com to survive in the search market underscores the role of scale as a barrier to entry in search. IAC/InterActiveCorp (IAC) paid \$1.85 billion to acquire the company in 2005, and thereafter invested heavily to transform Ask.com into an algorithmic search engine competing in the same market as Google. Yet Ask.com was never able to obtain the necessary scale to challenge Google, handling only about 4% of searches in the United States. As Doug Leeds, President of Ask.com explained when Ask.com ended its search operation in November 2009, the company “did a great job of holding our market share but it wasn’t enough to grow the way IAC had hoped we would grow when it bought us.”³¹

In short, Google today has massive scale advantages in search and search advertising, which act as powerful barriers to entry for anyone wishing to compete in search. Google, recognizing this, has used a variety of tactics, some of which are described below, to acquire scale and to ensure that no other company gains sufficient scale to challenge its monopoly. While this report focuses principally on Google’s abuse of its dominant position in search and search advertising, it also is noteworthy that Google obtained that power through unlawful means. Some of its most egregious exclusionary actions by which it obtained its dominance in search and search advertising are catalogued in the attached Appendix.

III. A FUNDAMENTAL SHIFT: GOOGLE’S EXPANSION INTO VERTICAL SEARCH AND SPECIALIZED CONTENT SERVICES

The harm arising from Google’s dominance in search and search advertising has been magnified by a fundamental shift in Google’s business philosophy: Once, Google attempted to direct users as efficiently as possible to the sites most likely to respond to their queries. Now, Google tries to provide information that answers users’ queries directly. Put another way,

²⁹ Ken Heyer, Carl Shapiro, & Jeffrey Wilder, *The Year in Review: Economics at the Antitrust Division, 2008-2009* (Nov. 12, 2009), <http://www.springerlink.com/content/fjgkqn217v212p7n/>.

³⁰ John Markoff and G. Pascal Zachary, *In Searching the Web, Google Finds Riches* (April 13, 2003), <http://www.nytimes.com/2003/04/13/business/in-searching-the-web-google-finds-riches.html?src=pm>

³¹ Brad Stone and Scott Pulley, *IAC’s Barry Diller Surrenders to Google, Ends Ask.com’s Search Effort*, BLOOMBERG.COM (Nov. 9, 2010), <http://www.businessweek.com/news/2010-11-09/iac-surrenders-to-google-ends-ask-com-search-effort.html>.

Google now competes with the very websites that depend upon Google to reach consumers. For example:

1. Google Places provides information about hotels, restaurants, and other destinations;
2. Google Finance provides information about investment and other financial issues;
3. Google Maps provides location and direction information; and
4. YouTube provides video content.

“This has transformed Google from a mere search engine into a major Internet conglomerate,” Senator Kohl (D-WI) observed during the Senate hearing. As a result, Google now has an insurmountable conflict of interest – it controls the overwhelming majority of searches while at the same time it has a financial incentive to steer users to Google sites and away from competing sites. And, as discussed in Section IV, Google is indeed using its dominance in search and search advertising to harm those competitors.

Vertical Search and Other Specialized Content Providers Could Put Some Limits on Google’s Dominance. Although Google maintains a stranglehold on the search and search advertising markets, a relatively new category of websites has emerged as at least a partial threat to Google’s dominance: “vertical” search engines. A “vertical” search provider specializes in a particular category of content, such as travel, shopping, finance, local attractions, or video content. Similarly, specialized content sites focus on a discrete category of information – such as local business reviews – of interest to consumers. Examples include brands like Amazon, eBay, MapQuest, TripAdvisor, Kayak, Shopping.com, Yelp, and Hulu. Unlike a site that might offer general search in direct competition with Google, like Microsoft’s Bing, these sites do not need to attract scale comparable to Google’s in order to succeed. By focusing on a specific topic and optimizing their user experience around that narrow slice of the Internet, vertical search engines and other specialized information providers are able to compete effectively with Google within that slice without having Google’s overall scale.

SO DO OTHER WEBSITES HAVE A CHANCE?

Yes, and no.

So far, we've explained "horizontal" (also known as general) search, which Google dominates. In horizontal search, competitors have little chance of catching up.

But, there is an area where competitors still have a chance, "vertical" search.

A "vertical" search provider serves results from a specific category of content. Some examples include



travel



shopping



video



local



maps



financial

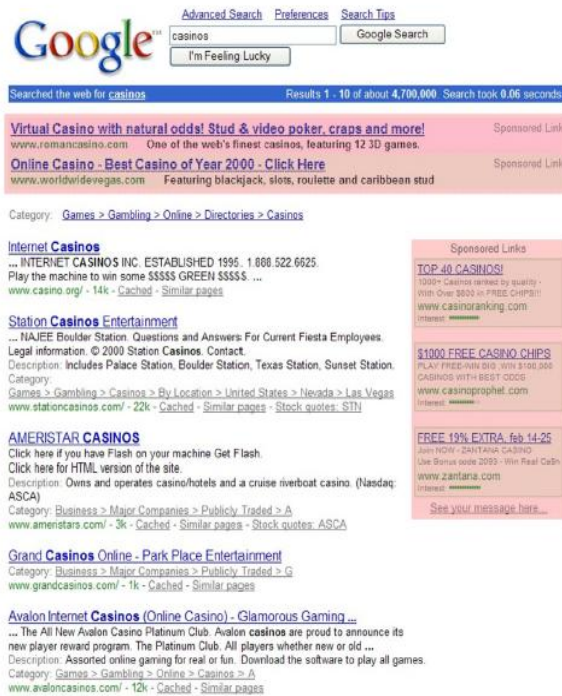
* And, because they focus on a *specific sector in which they are expert*, these companies can compete effectively with Google within that specialized search space *without having to have the same overall scale as Google*.

No vertical site, standing alone, presents a challenge to Google's general search dominance. Indeed, vertical sites largely depend upon Google for traffic. Most users don't navigate directly to vertical sites; instead, they get to the sites via Google's search engine. As a result, for the most part only those sites that appear prominently on Google's search results pages in response to a relevant query (e.g., "flight Honolulu" for a travel search site, "invest index funds" for a financial search site, "bookstore downtown" for a local information service) have a chance at success. And as noted, only those sites in the first few positions within the search page receive a meaningful number of clicks from users. If a vertical site does not appear near the top of the Google results, it might as well not be on the Internet at all.

Google views vertical search and other specialized information services as a competitive threat. Taken together, vertical search and other specialized information sites have the potential to attract significant search traffic—and thus advertising revenue—away from Google. They are also a source of innovative services and functionality that consumers find attractive. And, one or more vertical search sites could develop over time into a more significant platform to challenge Google's general search dominance.

Google has not been blind to the threat of vertical search engines. In fact, to address the MapQuests, Yelps, and Amazons of the world, Google has changed its entire business approach. Back in the early 2000s, Google was a general search engine that sought to direct users to the sites that were most likely to answer their queries. And because Google's business was dedicated to search, it had no incentive to skew its results based on an ulterior economic interest. Take a look at Google in 2001:

Google Search Result for “Casino” (2001)

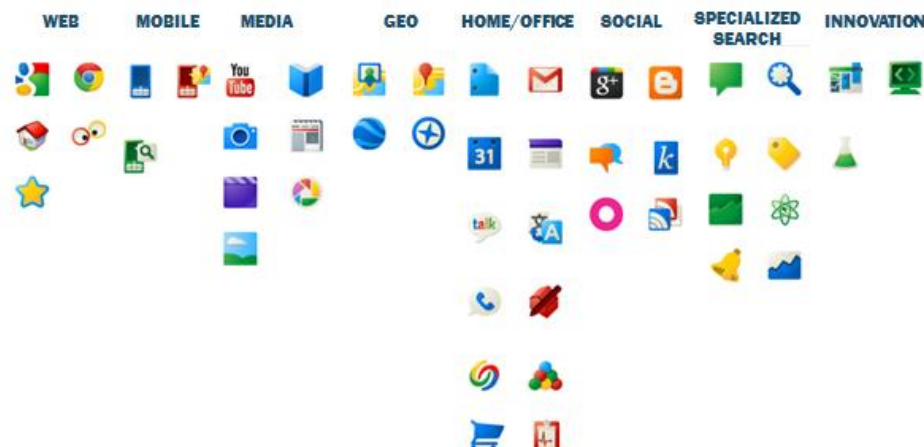


2001 search results for “Casinos”

- Screen estate division:
 - Organic (68%) (white)
 - Paid (32%) (pink)
- Paid placements/advertising are clearly labelled as “sponsored links”
- Clear margin separation from organic search results

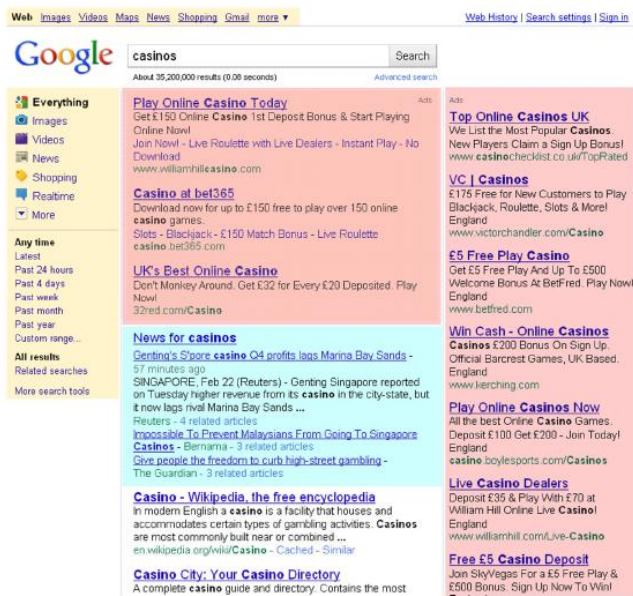
Google’s first big shift in incentives came when it introduced search advertising. Once Google entered the search advertising market, it had an incentive to steer people to “paid” links in which Google has an economic interest. But even with this new incentive, two forces held Google in check. First, search engine competition restrained Google from degrading the user experience by leading users to paid links. If Google returned poor search results, users would have used another search engine, like Altavista or Yahoo!. Second, consumer protection concerns forced Google to disclose its economic interests in those links, which led to the separation of and notice of “sponsored” or “paid” advertising links on the search page.

Fast forward to 2011. Today, Google offers a host of vertical search and other specialized information services, such as Google Books, YouTube, Google Maps, and, soon, Google Travel. As Barry Diller, Chairman of IAC/Interactive Corp. has commented, “[I]t is disturbing that Google is moving into serving individual spaces, rather than being search neutral.”



Where it once sought to direct users to web pages as quickly and efficiently as possible, Google now seeks to steer users to its own websites and to prevent users from going to competing websites. And where it once pointed users in the direction of the information they wanted, Google now attempts to provide that information directly to its users – even sometimes when that information was developed by others and does not belong to Google.

Google Search Result for “Casino” (2011)



2011 search results for “Casinos”

- Screen estate division:
 - Paid (53%) (pink)
 - Google News (16%) (blue)
 - Google products (13%) (yellow)
 - Organic (11%) (white)
- Similar formatting of organic and non-organic results confuses
- Less-clear labelling of sponsored content (small label “Ads” used)
- Confusing generic labelling of own services (e.g. “News”)

This puts vertical sites in a difficult bind. Google competes with Yelp, MapQuest, Kayak, and other vertical sites, yet those same sites depend on Google for traffic. As Senator Lee (R-UT) noted during last week’s hearing, Google has “a clear and inherent conflict of interest. Rather than acting as an honest broker of information, Google now has a strong financial incentive to channel users to its own listings, regardless of their quality.” In other words, Google now has both the incentive and the ability to use its dominance in search to undermine the ability of specialized sites to compete with its general search engine.

Google has not hesitated to use that power. As demonstrated in the next section, Google has expanded its dominance into new areas while reinforcing its dominance of search and paid search advertising. Google’s exclusionary tactics have harmed consumers through higher prices, lower quality, fewer choices, and less innovation.

IV. GOOGLE’S EXCLUSIONARY TACTICS

As a result of its dominance in search and search advertising, Google wields enormous power to direct users around the Internet. Unfortunately for consumers, Google is now abusing that power to undermine competition by steering users to its own sites and foreclosing the visibility of competing sites. These techniques rely on consumer deception and coercive use of Google’s market dominance, not competition on the merits. Such tactics include:

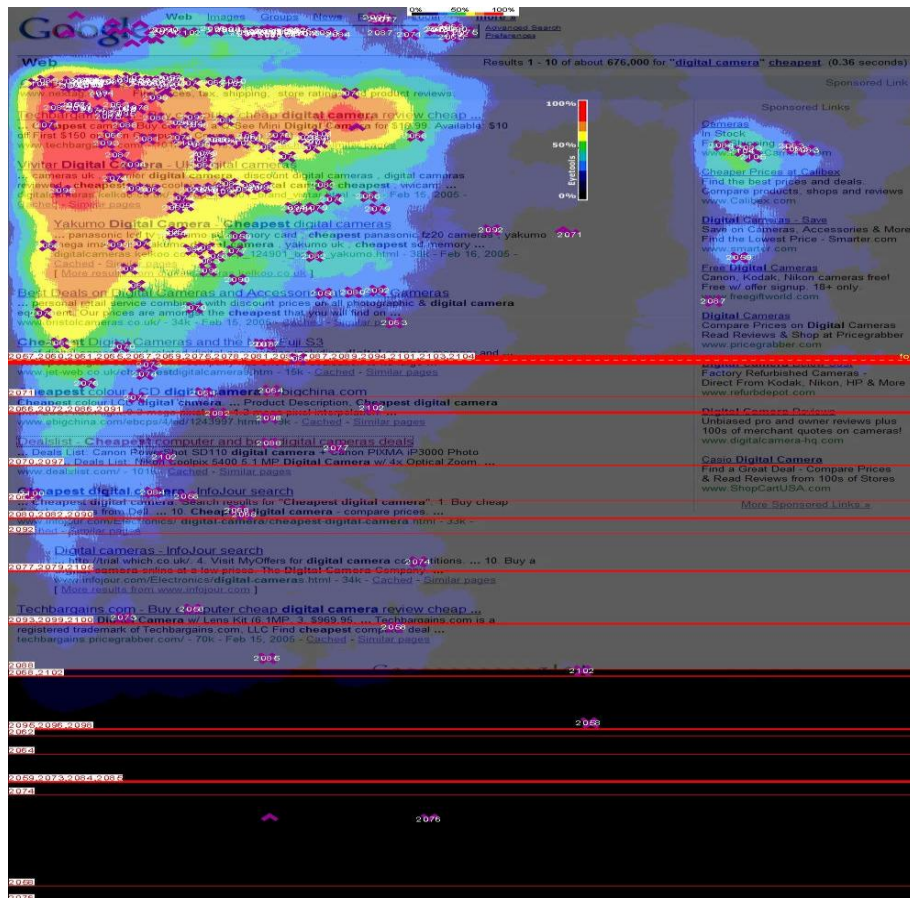
- Deceptive display: Google steers users toward its own products by displaying them at the top or in the middle of the results page in ways that suggest to consumers that they are natural search results, rather than links to Google's own sites;
- Search manipulation: Google manipulates its search algorithm to exclude or penalize competing sites;
- Unauthorized content scraping: Google steals content developed by other websites, such as user reviews, without permission and displays that content on its own pages, sometimes even without attribution;
- Unfair treatment of advertisers: Google manipulates advertisers' quality scores to inflate ad prices and places restrictions on its "must buy" ad platform, which inhibit customers from using competing platforms; and
- Exclusionary conduct in mobile: Google is buying up companies in the mobile search area that present a nascent competitive threat, and imposing exclusivity restrictions in its Android licensing agreements to maintain and expand its dominance.

A. Google's Deceptive Display Bias

Google has conditioned users to expect that its search results are presented in the order of their likely relevance. In reality, Google's search results are far from neutral. To neutralize the growing threat of vertical sites, Google now displays non-algorithmic results at the top or in the middle of the results page in a manner that does not clearly flag for consumers that these results are placed there artificially by Google – frequently with photographs, maps and graphics that draw user attention and that link to Google's own pages. For example, when a user searches for information on the stock of a given company, Google Finance is displayed before any algorithmic results, with no clear label that the link is not a natural, algorithmic result. This artificially pushes rival services, such as Yahoo! Finance, further down the search results page, regardless of whether they are better or more popular.

Google is effectively foreclosing non-Google websites because only the top links on a search page draw user attention. The figure below highlights the areas of a search page where users focus their attention. The image was prepared by recording the movement of users' eyes across a search page when search results are presented. The red field represents the area of the page that attracts most user attention. The orange and yellow fields represent areas that receive somewhat less attention while the green and blue areas are given the least attention by users. As the below figure indicates, the "top-left" section of the search page receives distinctly more attention than any other part of the page.

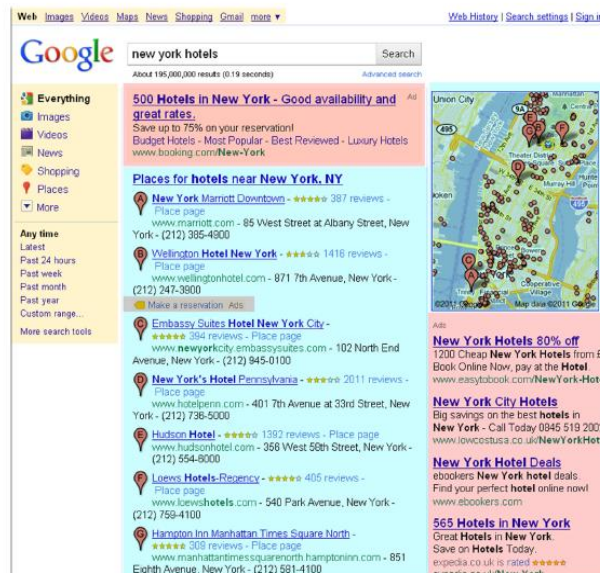
Heat Map Showing How Users Scan A Search Page³²



Google understands that users are drawn to the search results in the top-left hand corner. Consequently, Google displays many of its own pages at the top or in the middle of the results page as if they were natural search results, without clearly identifying them as Google results. Consider a search on Google for “New York Hotels”:

³²Eyetoools, Inc., Eyetracking Google Search Results – Eyetoools Research, http://eyetoools.com/images/blog/2/google/eyetoools_google_search.jpg.

Google Search Results for “New York Hotels” (2011)



2011 search results for “New York Hotels”

- No organic search results above the fold
- Only Google products or sponsored results
- Lost opportunity for SMEs as less independent organic results shown to users
- Screen estate division:
 - Sponsored (pink)
 - Google Places – local results (blue)
 - Google Offering (yellow)

As the screenshot shows, not a single organic search result appears in the area above the fold. Instead, Google ensures that links to its own sites and other sponsored links are placed at the top-left– even when rival verticals are more relevant to users’ queries. As a result, competing sites lose a significant amount of traffic and revenue because independent organic results are not shown to users.

Google executives admit that Google favors its own services such as Google Finance and Google Maps above other results. In 2007, Google Vice President Marissa Mayer offered these remarks:

So we had the five top finance sites in their order of their popularity listed there. We roll out Google Finance, we did put the Google link first. It seems only fair, right? We do all the work for the search page and all these other things, so we do put it first... But that has actually been our policy since then because of Finance. So for Google Maps again, it’s the first link.³³

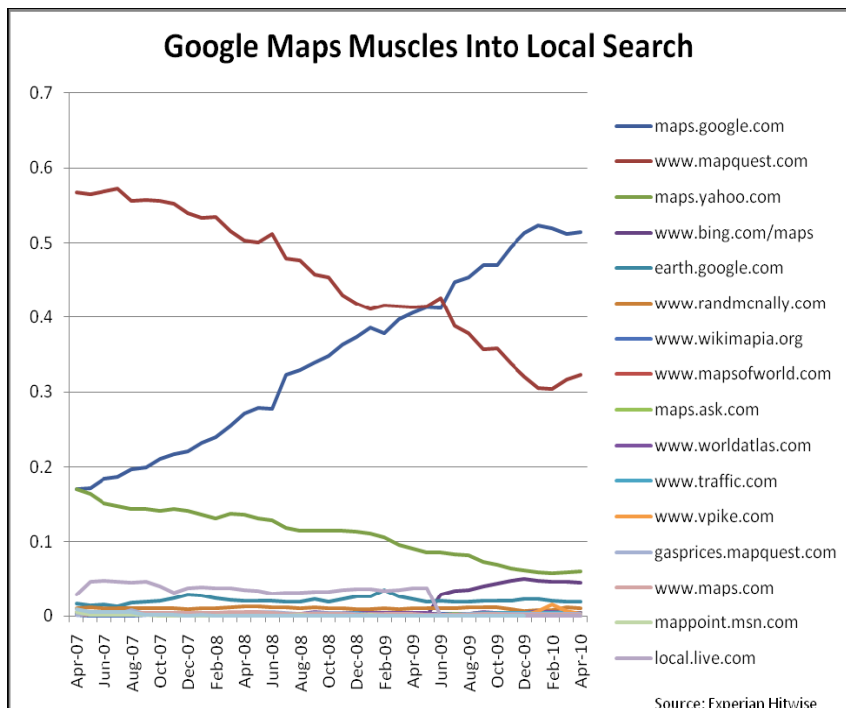
Ms. Mayer did not say that Google Finance or Maps were superior to or more popular than its competitors’ offerings when Google decided to favor its own services by ensuring that they appeared higher in the results. Instead, she justified the move by saying it was the company’s right and prerogative.

³³ Marissa Mayer, Speech on Scaling Google for Every User at the Google Seattle Conference on Scalability at 44:35 (video available at <http://www.youtube.com/watch?v=LTIUFZSbcxE>).

A striking example of the impact of Google's exclusionary conduct is the demise of MapQuest, which in 2010 had only 32% of the market, down from 57% in 2007.³⁴ For many years, Google displayed links to MapQuest and Yahoo! Maps when a user searched for addresses or locations. During that time, MapQuest was so popular that the name "MapQuest" almost became a verb, as in "I'll MapQuest the location" (much like "Google" has become a verb). It had become the leading online mapping site in the world.

In January 2007, Google began to bias its search results by removing links to MapQuest and Yahoo! Maps, instead inserting Google Maps as the top result. MapQuest's usage share immediately began to drop. Within two years Google Maps surpassed MapQuest in the number of visitors and is now the dominant provider of map information with a substantial share of the market. The below figure illustrates the effect of Google's bias. The downward sloping red line shows the decrease in weekly market share of travel-map site visits for MapQuest. The upward sloping blue line shows the corresponding increase for Google Maps.

Weekly Traffic Share of Mapping Verticals (Apr. 2007 – Apr. 2010)³⁵



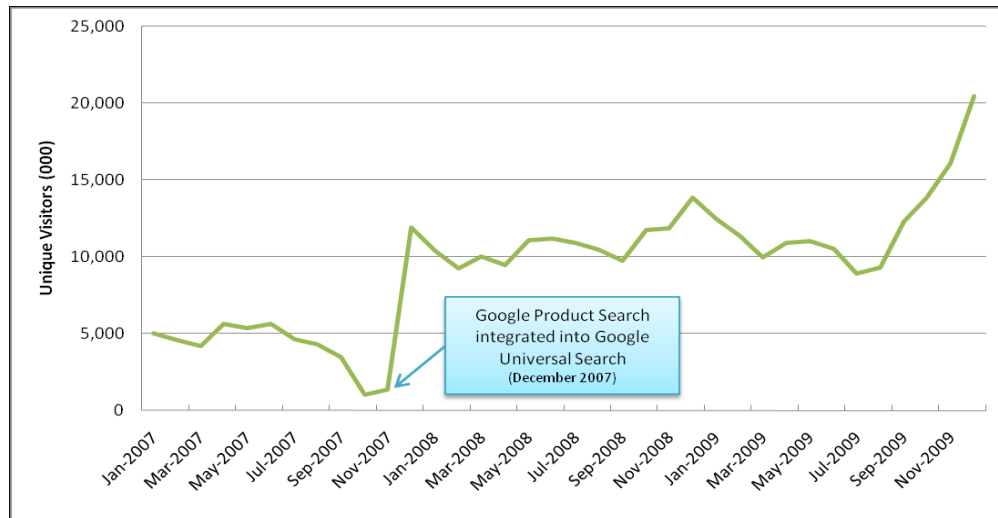
Similarly, Google Product Search is an inferior site that Google has artificially elevated through its search dominance. In December 2002, Google formally announced the launch of its price comparison website "Froogle," which it later renamed "Google Product Search." The site did not fare well: from October 2006 to October 2007, the unique user count for Google Product Search plunged 79%, while the count at rival vertical sites grew or held steady. Many critics concluded that Google Product Search was

simply inferior to other shopping comparison sites.³⁶ Regrettably, Google had a weapon at its disposal that no rival could match: in December 2007 Google simply put Google Product Search at the top of its search page. Traffic to Google Product Search immediately soared.

³⁴ Consumer Watchdog.org, *Traffic Report: How Google is Squeezing Out Competitors and Muscling into New Markets* (June 2, 2010), <http://www.consumerwatchdog.org/resources/TrafficStudy-Google.pdf> (citing U.S. data from Experian Hitwise).

³⁵Id.

Unique Monthly US Visitors to Google Product Search (Jan. 2007 – Nov. 2009)³⁷



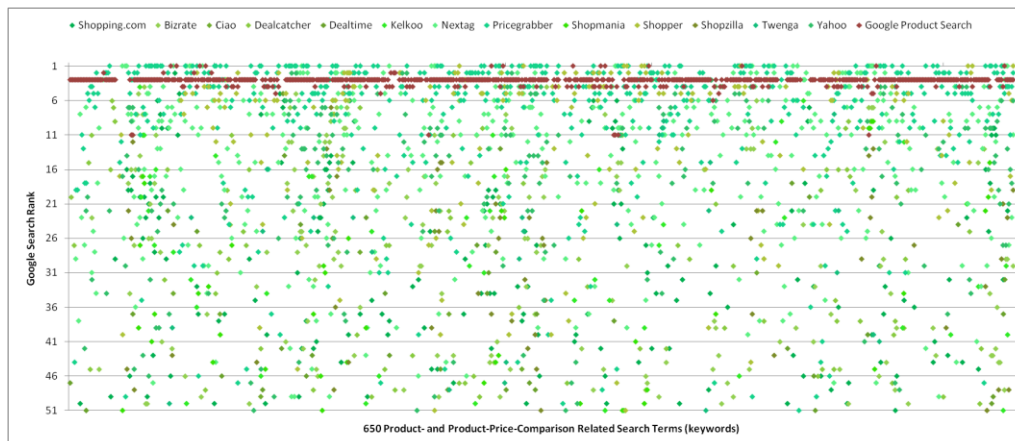
The pervasive nature of Google’s display bias and its “hard-coding” of links to its own sites is well-illustrated with Google Product Search. Even though Google Product Search is widely panned by critics as an inferior product,³⁸ Google routinely inserts links to this inferior product at the top of the display of search results. For example, in the results for 650 separate product and product-price-comparison search results, Google consistently ranked at or near the top in comparison to popular price-comparison sites such as Shopper, Nextag, Pricegrabber, and others.

³⁶See, e.g., CNNMoney.com, *Google’s Pitch So Far Failing With Shoppers* (Dec. 13 2007), http://www.pronto.com/CNNMoney2_12_12.pdf (“Traffic to Google Product Search . . . has plummeted in the last year, while competing services from rivals . . . have grown or held steady But Google Product Search, so far, represents for the Internet juggernaut a not particularly rare failure Google Product Search . . . saw its October [2007] unique visitor count decline a huge 79% from October 2006, according to market tracker comScore.”).

³⁷See Comments of Foundem, *In re Preserving the Open Internet Broadband Industry Practices*, GN Docket No. 09-191, WC Docket No. 07-52, at 6 (F.C.C. Feb. 23, 2010), <http://fjallfoss.fcc.gov/ecfs/document/view?id=7020389727> (citing data from comScore).

³⁸See Glen Hamilton, *Google Product Search / Shopping Optimization*, INSTANTROI (Nov. 26, 2008), <http://instantroi.com/index.php/2008/11/26/google-product-search-shopping-optimization> (describing Froogle as “inferior in its presentation and usability to some of the other leading shopping search engines”); Jack Schofield, *Google’s Growth, by comScore Numbers*, THE GUARDIAN (Dec. 23, 2007), <http://www.guardian.co.uk/technology/blog/2007/dec/23/googlesgrowthbycomscorenum> (describing Froogle as “not very good”).

Google Product Search vs. Leading US Price Comparison Sites³⁹



When presented with these results of bias by the Senate Subcommittee in September, Google took its misleading actions to a new level by providing blatantly inaccurate testimony on the core issue of whether it preferences its own products in the display of results. In an effort to avoid admitting that Google does, in fact, preference its own price comparison product over competing price comparison sites, Google Executive Chairman Eric Schmidt surprisingly asserted (under oath) that these Google Product Search links take the user directly to a vendor and that they should not be compared to price comparison sites like Nextag, Pricegrabber, and Shopper:

There's a difference between sites that do product comparison and sites that offer products themselves. . .

[Google Product Search] is an organic search result which is triggered by a product search database which we have gathered by searching and ranking offerings from many different vendors. If you click within that, you go to the vendor that will sell you the product.

³⁹SearchNeutrality.org, *A Quick Fact-Check on Some of Mr. Schmidt's Testimony Before the Senate Antitrust Sub-Committee* (Sept. 21, 2011), at <http://www.searchneutrality.org/foundem/quick-hearing-fact-check>.

However, a simple search on Google for a digital camera illustrates that clicking on the Google Product Search result does not take you straight to the vendor, as Mr. Schmidt claimed. Instead, Google takes you to yet *another Google page* – the Google Product Search price comparison page.

The screenshot shows a Google search for "canon EOS rebel xsi". The search results include links to Canon's official website, Amazon, and CNET. A "Shopping results for canon eos rebel xsi" section is highlighted with a red box, showing a list of products with their prices and ratings. A mouse cursor is pointing at one of the results.

Shopping results for canon eos rebel xsi

- Canon EOS Rebel XSi Digital SLR Camera with Canon EF-S 18-55mm IS II Lens (Black) - \$410 - 39 stores
- Canon EOS Rebel XSi Digital SLR Camera (Body Only) - \$315 - 12 stores
- Canon EOS Rebel XSi Digital SLR Camera (Body Only) - \$315 - 12 stores

Amazon.com: Canon EOS Rebel T1i 15.1 MP CMOS Digital SLR ...
 www.amazon.com/Canon-T1i-Digital-18-55mm.../B001XURPQS
 429 reviews - \$649.00 - In stock
 Canon EOS Rebel T3 12.2 MP CMOS Digital SLR with 18-55mm IS II Lens and ... In comparison, the Canon XSi SLR (which the T1i replaces), also has a 3" ...

Canon EOS Rebel XSi Review - Digital cameras - CNET Reviews
 reviews.cnet.com/.../canon-eos-rebel-xsi/4505-6501_7-32891057.ht...
 45 votes
 Sep 1, 2008 - User Rating: 4.0/5 from 45 users; Very fun little camera! Pros: Long exposure noise reduction (great for night photography), beautiful RAW, ...

Canon XSi/XSi Starter Kit
 \$99.99 - Staples
 Free Shipping on Orders \$45+

Canon Eos 450d / Rebel Xsi Kit With Ef-s 18-...
 \$788.00 - eBay
 Buy It Now with Free Shipping!

Canon EOS rebel XSi
 www.jr.com/Canon...
 jr.com is rated ★★★★★
 Many Low Priced Canon Cameras. Orders \$100+ Ship Free, Code FS100

Canon EOS Rebel XSi
 www.bhphotovideo.com/Search...
 bhphotovideo.com is rated ★★★★★
 Low Prices Great Service Selection! Browse CANON EOS Rebel XSi @B&H
 Show products from this advertiser

Canon EOS Rebel
 www.bestbuy.com
 Save 5% And More On Select Digital Cameras, Plus Free Shipping. 5799 Leesburg Pike, Falls Church, VA

The screenshot shows the Google Product Search page for "canon eos rebel xsi". The product listing includes a photo of the camera, its name, price, and a description. Below the listing is a table of online stores with their prices and ratings.

Canon EOS Rebel XSi Digital SLR Camera with Canon EF-S 18-55mm IS lens (Black)
 \$410 online
 ★★★★★ 1,339 reviews

Canon - SLR - Optical Viewfinder - 12.2 megapixel - Crop Sensor - 3 x optical zoom - CMOS - Standard SD - SDHC - Pop-up Flash - ISO 1600 - 16.8 ounce

For stunning photography with point-and-shoot ease, look no further than Canon's EOS Rebel XSi. The EOS Rebel XSi brings staggering technological innovation to the masses. It features Canon's EOS Integrated Cleaning System, Live View Function, a powerful DIGIC III Image Processor, ... more »

with Canon EF-S 18-55mm IS lens - Black - \$410 new Add to Shopping List

Online stores Nearby stores Reviews Details Related items Accessories

Relevance	Seller rating	Condition	Tax and shipping (estimated)	Total price	Base price
Amazon.com Show all 2	★★★★★ 6,223 seller ratings	New	No tax + Shipping: \$6.49	\$496.44	\$489.95
Sears	★★★★★ 2,294 seller ratings	New	Tax: \$44.16 + Shipping: \$6.95	\$780.11	\$729.00
Buy.com	★★★★★ 262,789 seller ratings	New	No tax + Shipping: \$8.94	\$707.94	\$699.00
Adorama Camera Show all 4	★★★★★ 15,686 seller ratings	Used	No tax + Shipping: \$8.00	\$482.00	\$474.00

In short, contrary to Mr. Schmidt's testimony, Google hard-codes its own products to appear in the top few search results. Meanwhile, competing sites are pushed to the bottom of the search results page, making it more difficult for users to choose among competing sites based on the merits.

Google Maps and Google Products are not isolated examples. Google’s exclusionary tactics can be seen across a growing range of vertical services, such as weather, shopping, news, video and social media products.

Examples of Google’s Bias in Favor of Its Own Verticals⁴⁰

VERTICAL	MOST POPULAR VERTICAL SITES	EXAMPLE QUERY	RANKING OR POSITION OF GOOGLE’S OWN VERTICAL SITE IN SEARCH RESULTS
Finance	Yahoo Finance, MSN Money	“finance”, stock symbols	Google Finance: #1
Maps	MapQuest (Prior to Jan 2009)	Addresses: “420 west 25th street, new york, ny”	Google Maps: #1
News	CNN, New York Times	Current news: “obama jobs bill”	Google News: #1
Movies	IMDB, Yahoo! Movies	Movies: “Contagion”	Google Movies: #1
Blogs	Blogger, Federated Media, Technorati	General search: “blogs”	Google’s Blogger: #1
Dictionary	Dictionary.com, Merriam Webster	Generic search term: “definition of homogeneous”	Google Dictionary: #1
Travel	Expedia, TravelAdNetwork, Orbitz	Flight origin & destination: “Boston to Denver”	Google Flight Tracker: #1
Video	YouTube, Break Media Network, Google Video Search	“Labrador puppy video”	Google YouTube: 4 /6 top results
Weather	The Weather Channel, Weatherbug	“Denver weather”	Google Weather : #1
Images	Google Image Search, Photobucket, Flickr	“Iceland volcano image”	Google Images: #1
Mortgage Quotes	Bankrate.com, Lendingtree.com	“California mortgage rates”	Google Mortgage Rate Quotes Lead Generation: #1 Ad

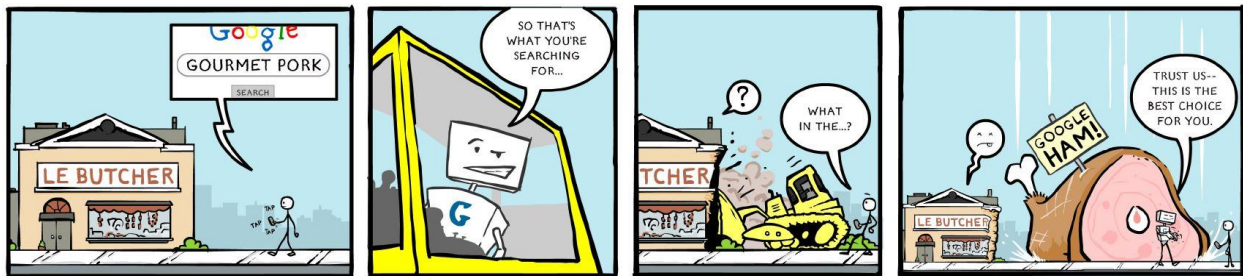
In response to questions at the Senate hearing about whether Google’s vertical services are subject to the same algorithmic search standards as its competitors’ sites, Mr. Schmidt told Senators: “I believe so. As I understand your question, I believe the answer is yes. I’m not aware of any unnecessary or strange boosts or biases [for Google’s own services].” Senator Franken (D-MN) rightly expressed concern about Mr. Schmidt’s vague answer: “That seemed like a pretty fuzzy answer to me coming from the chairman. If you don’t know, who does?”

⁴⁰ The table presents a sample of search results from the Google search engine. It provides a representative sample of the Google verticals and the types of searches and results observed at the time the table was created. The most popular vertical sites within each vertical category have been identified based on unique visitor volume as reported by comScore for the United States.

While Google continues to hide the facts, the evidence strongly suggests that Google manipulates its display of results by promoting its own products at the top of the results page. Worse yet, Google does not clearly flag for consumers that these results are placed there artificially by Google. The result? Users click on Google's artificially placed links, regardless of whether those links are the most relevant to their queries. Competing sites are pushed to the bottom of the search results page, denying consumers a fair and unbiased choice between alternatives. And Google profits at the expense of consumers.

B. Google's Search Manipulation

Search rankings are determined by algorithms developed by the search provider that are supposed to identify the sites most likely to be relevant to the user's query. Google is now taking advantage of its supposedly neutral algorithm by manipulating the results to return Google sites with a high ranking and lowering the ranking of competing sites. Google can make whatever change it wants to the algorithm, at any time, and without providing warning to the sites that depend on Google for traffic.



While the complexity of Google's search algorithm makes it difficult to know which variables have been set, it is well known that even minor changes make an enormous difference on a website's opportunity for success. Google's own founders, Larry Page and Sergey Brin, recognized the risk of search manipulation in their seminal paper, *Anatomy of a Large-Scale Hypertextual Search Engine*:

[S]ince it is very difficult even for experts to evaluate search engines . . . a search engine could add a small factor to search results from 'friendly' companies, and subtract a factor from results from competitors. This type of bias is very difficult to detect but could still have a significant effect on the market.⁴¹

Mr. Page and Mr. Brin accurately predicted how Google would eventually exploit use of search engine bias and systematic lack of transparency. There are several well documented allegations of Google penalizing selected vertical search sites under the pretense that the website suffers from a low quality when, more likely, Google viewed each such vertical as a competitive threat. For example, in 2006, Google altered its algorithmic search results to penalize Foundem, a popular UK-based shopping comparison site. As a result, Foundem

⁴¹Sergey Brin & Larry Page, *The Anatomy of a Large-Scale Hypertextual Web Search Engine* (1998), <http://infolab.stanford.edu/pub/papers/google.pdf>.

essentially disappeared from Google's search page and faced significantly increased minimum prices for paid search advertising keywords it sought to buy.

According to Foundem, Google's AdWords Evangelist Fred Vallaey's "confirmed in a conference call that Foundem had been hit by new algorithms designed to penalize certain types of vertical search sites, including price comparison and travel search."⁴² A mere thirteen months later, Google reversed course: "Google granted Foundem immunity from its AdWords penalty by manually 'whitelisting' the site names Within hours, all of Foundem's quality scores and costs per click returned to normal."⁴³ Google 'whitelisting' is the practice of manually overriding quality scores so that, like in Foundem's case, a site can receive high ranking even in light of a low quality score.

Recently, Google acknowledged that it manually manipulates its search engine results, sometimes on a site-specific basis, after denying for years that it engaged in the practice.⁴⁴ There is little standing between Google manipulating its search algorithm to remove sites like Amazon, eBay, and Expedia from Google's natural search results – even though those sites depend on Google for traffic. If left unchecked, this power could result in Google dominating more and more of Internet commerce – with consumers and businesses having fewer choices, enjoying fewer benefits of innovation, and paying higher prices.⁴⁵

⁴² John Lettice, *When Algorithms Attack, Does Google Hear You Scream? Inside Google's Search Penalties Gulag*, THE REGISTER (Nov. 19, 2009), http://www.theregister.co.uk/2009/11/19/google_hand_of_god/.

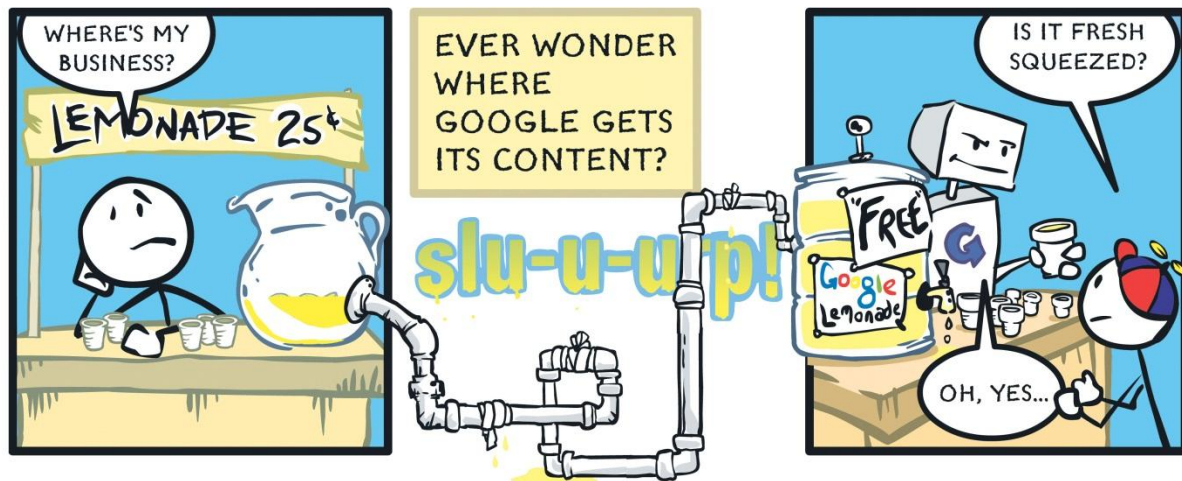
⁴³ Search Neutrality.org, *Foundem's Google Story*, <http://www.searchneutrality.org/foundem-google-story>. Whitelisting is the practice of manually overriding quality scores so that, like in Foundem's case, a site can receive high ranking even in light of a low quality score.

⁴⁴ Amit Singhal, *Being Bad to Your Customers is Bad for Business*, THE OFFICIAL GOOGLE BLOG (Dec. 1, 2010), <http://googleblog.blogspot.com/2010/12/being-bad-to-your-customers-is-bad-for.html> ("[I]n the last few days we developed an algorithmic solution which detects the merchant from the Times article along with hundreds of other merchants that, in our opinion, provide an extremely poor user experience.").

⁴⁵ Professor Benjamin Edelman of Harvard University conducted a study that found that Google engineers manipulate ("hard-code") search results to provide special treatment to other Google services. Benjamin Edelman, *Hard-Coding Bias in Google "Algorithmic" Search Results* (Nov. 15, 2010), <http://www.benedelman.org/hardcoding/>.

C. Google's Unauthorized Content Scraping.

Most of the “content” that Google provides in its sites such as Google Places is not generated by Google through its own investment. Rather, Google scrapes the content developed by other websites and displays it on a Google page. This enables Google to earn advertising revenues and to deprive the other website of user traffic. When the creators of that content object to Google's conduct, Google presents them with an ultimatum – acquiesce to Google's theft of their content or wall off their site completely from Google's search engine. But this would be “webicide” because no site can afford to cut itself off from the traffic that Google generates.



The recent dispute between TripAdvisor, Yelp and others and Google illustrates this practice. Sites like TripAdvisor and Yelp spend years and many millions of dollars developing a collection of user reviews that provide a valuable resource to users selecting hotels and restaurants. Ratings and opinions are contributed directly to the sites by members. At the same time, those sites are dependent on Google search results directing users to their sites.

As a result, TripAdvisor and Yelp must allow Google to “crawl” their sites to index their content, so that the content will be displayed in Google search. But that is not all Google does. Instead of making its own investment to acquire information and content directly from users, Google uses its access to crawl sites to scrape content from those sites without their permission. Google then uses that content – reviews, photos, and other information – to populate its own competing services, like Google Places and Google Maps.

Google's Use of Scraped Content

The screenshot shows the Google Maps interface for 'Rasika' restaurant. The main content area displays the restaurant's name, address, phone number, and a list of reviews. A sidebar on the right contains three distinct sections: a red box for 'Paid placement/advertising' (French Indian, Bakers Cafe), a blue box for 'Google-sponsored content' (Best Indian Food), and a green box for 'Content scraped from competing search/review site' (Local Coupons, The Restaurant Coupons). The reviews section shows a list of user reviews with their ratings and dates.

Nearly half of the page is populated with content scraped from other sites (in this case, TripAdvisor, Yelp and Zagat). Though these other sites are cited as sources, the information presented is often incomplete and there is little incentive for users to click through to see the content in its entirety.

- Paid placement/advertising
- Google-sponsored content
- Content "scraped" from competing search/review site

Google gives them the choice of consenting to what is basically theft, or committing “webicide” by having their pages removed from Google’s dominant search results altogether.

In response to TripAdvisor’s and Yelp’s objections to Google’s use of its content, Google presented them with a choice of either consenting to what is basically theft, or committing “webicide” by having their pages removed from Google’s dominant search results altogether. Essentially, Google is leveraging its dominance in search to extract valuable content coercively from competitors, which it uses for its own competing services. This allows Google to drive traffic to its own services artificially, capturing more traffic and advertising revenue for those services.

It is bad enough that Google steals content – it often also presents the information in an inaccurate or misleading manner. As the screenshot below illustrates, Google scrapes the reviews from TripAdvisor and Yelp and displays them on Google Places pages in a manner that creates a number of erroneous impressions about the information. The reviews are often double-counted, unrepresentative, and outdated, for example. These misleading impressions undermine competitors’ ability to convey correct information to users about the quality of their products and thereby substantially distort competition in favor of Google.

Reviews from around the web

tripadvisor.com - 912 reviews
 ★★★★★
 "We had some extra time, so decided to spend the Thanksgiving holiday in NYC (and catch the Macy's parade). We wanted a brand hotel and not a boutique place. We also wanted to be downtown. The hotel itself is in an absolutely fantastic location. Access to pretty much all ..." - Mar 1, 2011
 "On behalf of the Millennium Hilton, we would like to first tell you how pleased we are that we will be your home away from home for your upcoming wedding. So happy to hear that the trial run went well. The hotel is currently working on a self solution and hope to have it ..." - Feb 21, 2011
www.tripadvisor.com/Hotel_Review-g60763-d262330-Reviews-...

tripadvisor.in - 911 reviews
 ★★★★★
 "The Millennium Hilton is located at the foot of the WTC complex. The construction is right across the street, literally outside your window. The hotel is a modern 55 story tower with well appointed public and rooms. Staff is friendly, surrounded by numerous subway stops ..." - Feb 25, 2011
www.tripadvisor.in/Hotel_Review-g60763-d262330-Reviews-...

travelpod.com - 908 reviews
 ★★★★★
 "Let's face the main fact first. Every room in this hotel directly - and I mean directly - overlooks the World Trade Centre pit. If you're not happy with this, don't stay here. However, you'd be missing out. This is a new hotel (1999ish) and, in any event, had to be ..." - Feb 25, 2011
www.travelpod.com/.../Millennium_Hilton-New_York_City_Ht...

travelpod.ca - 906 reviews
 ★★★★★
 "going this route. In Bangkok we are spending the first 3 nights at a simple hotel then we have booked 2 nights at the 5 star Millennium Hilton for a bit of much needed luxury. Our time in Bangkok will be spent applying for a visa for Burma (Myanmar) and ..." - Feb 25, 2011
www.travelpod.ca/s/millennium+hilton+discourt

booking.com - 98 reviews
 ★★★★★
 "I liked best the reputation that the title Millennium Hilton radiates to people especially its customers. The room I stayed in was everything I expected, and the hotel was close to all the destinations I wanted to visit. The noise from the construction site across the road." - Feb 16, 2011
www.booking.com/hotel/us/millennium-hilton.en.html

More from around the web

Reviews by Google users Been here? Sign in to rate

Nagesh - Jun 24, 2011
 ★★★★★ **Testing**
 Was this review helpful? Yes - No - Flag as inappropriate

GMDickghSuck1234rea - May 16, 2011
 ★★★★★ **F*** this place I hate it**
 Liked: Service, Location Disliked: Rooms
 Was this review helpful? Yes - No - Flag as inappropriate

More reviews by Google users (39)

Only 39 reviews left by users directly on Place Page, out of 8,230 advertised on SERP and top half of Place Page above

Once again, Google's deceptive conduct exemplifies a fundamental shift in Google's business model from an algorithmic search platform to a vertically integrated service provider. The resulting impact on incentives is clear and predictable. Google is leveraging its dominance in algorithmic search into a range of other markets including those in which vertical websites compete. Google's Places is significant part of that strategy. By creating place-specific (e.g., hotel- or restaurant-specific) pages that contain enough of the information users want, Google can keep users within the Google universe, where it can continue to monetize them.

Recently, Google responded to the increased level of antitrust scrutiny and modified its use on Google Places of content from other sites. This concession, while significant, underscores the need for antitrust scrutiny and enforcement for two reasons. First, without a formal enforceable order, Google could simply re-implement its prior practice at any time. In fact, only a week after Google publicly announced that it would cease scraping Yelp's content, Google Places once again began using Yelp's content without authorization.⁴⁶ Second, Google had consistently ignored complaints from TripAdvisor, Yelp and Citysearch that Google effectively stole their content and posted it on Google's own pages. Google's willingness to change its policy in response to an antitrust investigation by the FTC suggests that continued government attention will be necessary to bring any change in Google's deceptive practices.

⁴⁶ Testimony of Jeremy Stoppelman, Senate Committee on the Judiciary, Subcommittee on Antitrust, Competition Policy and Consumer Rights, at 3 (Sept. 21, 2011), <http://judiciary.senate.gov/pdf/11-9-21StoppelmanTestimony.pdf>

D. Google's Unfair Treatment of Advertisers

Google also manipulates search ad results on its AdWords platform to harm competing vertical sites. The most common form of Google's bias is its manipulation of opaque "quality scores" on advertisers and the imposition of penalties. The Internet industry even has a term for these penalties: "Google slaps."

The placement of ads on Google is determined through an auction in which advertisers submit bids for keywords associated with search queries. The bid is the amount that the advertiser is willing to pay each time a user clicks on its ad. But Google handicaps each advertiser with a "quality score." The lower a website's quality score, the higher a price the advertiser has to bid to win the auction.

Advertisers aim to have ads placed in the best possible positions on the search engine results pages to obtain the greatest visibility and therefore the highest number of clicks. Unfortunately for advertisers, Google refuses to disclose its method for determining individual quality scores. As a result, Google can lower an advertiser's quality score at any time and without explanation. For example, an ad that links to a comparison shopping page, or any other vertical, can be assigned a lower quality score to keep it off, or very low down on, the sponsored results on the search page.



Given the opaque and subjective – and advertiser-specific – process, Google has the ability to manipulate paid search to undermine competitors. Numerous companies have complained about Google raising minimum bids to prohibitively high levels, without warning and with little or no justification. For example, TradeComet is a vertical search directory that was victimized by a sudden and unexplained change in quality score. Early on, Google embraced TradeComet’s website, SourceTool, which comScore ranked as the second-fastest growing website in the world in March 2006. SourceTool was so successful that Google named it an AdSense “Site of the Week.”⁴⁷

According to The New York Times, “[s]uddenly and without warning, Google raised SourceTool’s minimum bid requirement from 5 or 6 cents to \$1, and in some cases to as much as \$5 or \$10.”⁴⁸ When SourceTool tried to work with Google to address the issue, Google told it that the increase was due to low “landing page quality.”⁴⁹ When SourceTool pled with Google to change its views on its landing page quality, Google stated that the pages “will continue to require higher bids” resulting in “low return” on investment and that “AdWords may not be the online advertising program for” TradeComet.⁵⁰ And when SourceTool’s CEO tried to work with Google to correct the problem, he was asked in an email to “please refrain from repeatedly contacting our team.”⁵¹ Unable to afford the price increase, SourceTool lost most of its traffic and was eliminated as a competitive threat.

Google’s dominance in search has made its advertising platform, AdWords, a must buy for advertisers. Yet Google’s competing vertical and information service sites give it the incentive to penalize, or “slap”, the very same advertisers that depend on Google. As the SourceTool situation shows, Google has not been shy about manipulating its advertising platform to undermine healthy competition.

E. Google’s Exclusionary Tactics in Mobile

Having achieved dominance in PC search and search advertising, Google has now turned its attention to mobile phones. One of the most significant recent developments in the online economy is that consumers are increasingly using wireless devices to access online content. Consider the following:

- According to a recent study published by Cisco, the annual growth in mobile data traffic in the next four to five years will exceed 90%.⁵²

⁴⁷ Complaint at ¶ 6, *TradeComet.Com LLC v. Google, Inc.* (S.D.N.Y. Feb. 17, 2009) (09-cv-1400).

⁴⁸ Joe Nocera, *Stuck in Google’s Doghouse*, NEW YORK TIMES (Sept. 13, 2008), <http://www.nytimes.com/2008/09/13/technology/13nocera.html?pagewanted=print>.

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² Cisco, *Cisco Visual Networking Index: Forecast and Methodology, 2010-2015* (June 1, 2011), http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white_paper_c11-481360_ns827_Networking_Solutions_White_Paper.html.

- Analysts predict that in 2011 “there will be over 2 billion users on the Internet and about half of those will access the Internet through a non-PC mobile device – a more than tenfold increase in just the past five years.”⁵³
- The worldwide smartphone market is expected to grow 49.2% in 2011 as more consumers and enterprise users turn in their feature phones for smartphones with more advanced features.
- Some estimate that smartphone vendors will ship more than 450 million smartphones in 2011 compared to the 303.4 million units shipped in 2010.⁵⁴

The dramatic shift towards mobile phones has enormous implications for search and search advertising. First, as search engines are the primary means by which consumers navigate the Internet, search is going mobile. In many ways, search services are even more valuable to mobile users than to PC users because mobile users often need specific information quickly and are less able to sift through large amounts of content on a smaller screen. Google’s Eric Schmidt, the company’s Executive Chairman, acknowledged the importance of mobile search in a recent article: “As I think about Google’s strategic initiatives in 2011, I realize they’re all about mobile.”⁵⁵

Second, the growth of mobile search is also transforming search advertising. It is expected that worldwide mobile advertising revenues will rise from \$3.5 billion in 2010 to \$24 billion by 2015.⁵⁶ “This is the place that Google is essentially betting its future on,” said Karim Tamsamani, Google’s head of mobile advertising, a role created in September 2010.⁵⁷ Like mobile algorithmic search, mobile search advertising enjoys fundamental value advantages such as the ability to target ads to users’ location. Mobile users tend to be inclined to take immediate, “real world” decisions, such as decisions to visit a given place or to try out a restaurant.⁵⁸ Hence, the conversion rates of search ads, and thus the revenues they generate, are higher on mobile devices than on PCs for a growing number of products and services.⁵⁹

In these new markets, Google holds an even more dominant position than in PC search and search advertising. Google has an estimated 97.03% share of all searches conducted on mobile devices and a 96.8% share of mobile search advertising. Google obtained those

⁵³See Frank Gens, *IDC Predictions 2011: Welcome to the New Mainstream* at 11, IDC (Dec. 2010).

⁵⁴Press Release, IDC, *IDC Forecasts Worldwide Smartphone Market to Grow by Nearly 50% in 2011* (Mar. 29 2011), <http://www.idc.com/getdoc.jsp?containerId=prUS22762811>.

⁵⁵Eric Schmidt, *Preparing for the Big Mobile Revolution*, HARVARD BUSINESS REVIEW, <http://hbr.org/web/extras/hbr-agenda-2011/eric-schmidt>.

⁵⁶Shailendra Pandey, *Press Release: Global Mobile Advertising Revenues Will Be Worth US \$3.5 Billion in 2010*, INFORMA TELECOMS & MEDIA (Oct. 27, 2010), <http://blogs.informatandm.com/1399/press-release-global-mobile-advertising-revenues-will-be-worth-us3-5-billion-in-2010/>.

⁵⁷Claire Cain Miller, *Google a Giant in Mobile Search, Seeks New Ways to Make it Pay*, NEW YORK TIMES (Apr. 24, 2011), http://www.nytimes.com/2011/04/25/technology/25mobile.html?_r=1.

⁵⁸Greg Sterling, *Google Controls 97 Percent of Mobile Paid Search: Report*, SEARCH ENGINE LAND (Mar. 7, 2011), <http://searchengineland.com/google-controls-97-percent-of-mobile-paid-search-report-66876> (according to Google’s Surojit Chatterjee, “Mobile users are more prone to take immediate action. People searching on mobile have a higher intent. The time between intent and action has been narrowed.”).

⁵⁹Greg Sterling, *Yelp: 35 Percent of Searches Mobile Now*, SEARCH ENGINE LAND (Feb. 4, 2011), <http://searchengineland.com/yelp-35-percent-of-searches-mobile-now-63518>.

dominant shares through a similar strategy it used in PC search and search advertising: consumer deception and coercive use of its market dominance, not competition on the merits.

1. *Google's Exclusive Dealing.* Google has signed multiple exclusive search default deals to ensure that no other company gains sufficient scale to challenge its monopoly. In 2007, Google locked up the primary source of queries from mobile devices through an exclusive search default deal with Apple's iPhone. In doing so, Google eliminated a future source of competition and foreclosed rival search engines from achieving distribution through the leading handset. Until recently, the iPhone was the most popular mobile device used to access the Internet, accounting for around 65% of HTML mobile page views in December 2009.⁶⁰ It has Google search installed as default.

Google did not limit itself to the iPhone. Later, Google concluded exclusive search default agreements with top mobile carriers by offering carriers revenue-sharing agreements, the "generous" terms of which are made possible by the profits generated by the monopoly Google acquired in search and search advertising in the PC environment.

2. *Tying Google Search to Android.* Google is also attempting to monopolize mobile search and search advertising through the Android operating system. In the United States, the installed base of Android devices has now surpassed that of the iPhone, commanding a market share of 48%. The default search service on each of the millions of handsets reflected in the market shares of Android and the iPhone is Google. According to some, Google is "not trying to make a profit on Android or [its web-browser] ChromeIn essence [by giving Android away for free], they are not just building a moat; Google is also scorching the earth for 250 miles around the outside of the castle to ensure no one can approach it."⁶¹

Google protects this dominant position by making it very difficult for mobile operators to remove Google search from Android phones. The principal way that Google has closed and controls the Android platform is via its "compatibility program," a set of technical requirements imposed by Google. The Android compatibility program determines what devices can be branded as "Android" devices. According to the Android project website, "if a manufacturer wishes to use the Android name with their product, or wants access to Android Market, they must first demonstrate that the device is compatible."⁶² In practice, this means that Google must certify that a mobile device is "compatible" before the device maker is (i) allowed to license the core Android applications (such, as for instance, the all-important Android Market); and (ii) use the Android trademark (without which the device is unlikely to get any commercial traction). The compatibility program thus gives Google control of what applications and services are provided on Android devices. Others have put it more bluntly: "manufacturers can't build true Android devices unless they play by Google's rules."⁶³

⁶⁰ Morgan Stanley Research, *The Mobile Internet Report* (Dec. 15, 2009),

http://www.morganstanley.com/institutional/techresearch/pdfs/mobile_internet_report.pdf.

⁶¹ Bill Gurley, *The Freight Train That is Android* (Mar. 24, 2011), <http://abovethecrowd.com/2011/03/24/freight-train-that-is-android/>.

⁶² See Android Compatibility FAQs, <http://source.android.com/faqs.html#compatibility> (last visited Sept. 16, 2011).

⁶³ Cade Metz, *Steve Jobs Vindicated: Google Android is Not Open*, THE REGISTER (Mar. 24, 2011), http://www.theregister.co.uk/2011/03/24/google_will_not_open_source_android_honeycomb_on_release_of_first_devices/.

Google uses and interprets its compatibility requirements in ways that make it difficult to replace its services on Android devices, including Google search. For example, in a September 2010 lawsuit in Massachusetts state court, Skyhook Wireless, a pioneer in location-based services for use in mobile phones, alleged that Google used its control over Android to force smartphone makers not to use its services. Skyhook, a small Boston-based company, developed a technology (known as “XPS technology”) for determining geographic location using Wi-Fi as the underlying reference system. Google offers a competing service to Android phone makers and carriers. Skyhook’s location technology, which was viewed by many in the industry as superior to Google’s,⁶⁴ raised interest among mobile device makers, including Motorola and Samsung. After several years of testing and commercial discussions, Skyhook and Motorola entered into a licensing agreement in September 2009. As part of this process, Skyhook’s XPS software was tested for Android compliance based on Google’s own test suites. Motorola confirmed that the software met Android’s compatibility requirements, and the parties agreed to roll out XPS on Motorola’s next Android device, planned to be released in July 2010.

According to the lawsuit filed by Skyhook, Andy Rubin, Google’s Vice President of Engineering, called Sanjay Jha, Chief Executive of Motorola’s mobile devices business, multiple times to stop Motorola from shipping Android wireless devices featuring Skyhook’s XPS client software. The alleged reason for this “stop shipment” order was that Motorola had embedded Skyhook’s XPS technology into the Android wireless device in a way that would render the device no longer Android-compatible.

Google’s motivation for excluding Skyhook is revealed in emails made public by the Massachusetts state court. In one such email, a Google employee points out that losing business to Skyhook “would be awful for Google, because it will cut off our ability to continue collecting data to maintain or improve our location database.” That was enough for Google to thwart legitimate competition by forcing Motorola to discontinue their plan to use Skyhook’s services on their Android phones, even though they viewed Skyhook’s location services to be more accurate than Google’s.⁶⁵

The Skyhook example demonstrates that Google supplies Android for free to mobile device manufacturers with a view to consolidating its monopoly over search and search advertising. Google exercises tight control over that device maker’s products, as well as its ability to use rival applications and services. What was deceptively presented by Google as a pro-competitive instrument (the Android open platform) is in fact an exclusionary tool.

The combined effect of Google’s exclusionary tactics is particularly serious and harmful due to Android’s explosive growth in all parts of the world, including Europe. Mobile devices using Android now have a leading position in the United States and Asia. Nearly half of all

⁶⁴ Kevin C. Tofel, *Locale Adds Skyhook Wireless for Better Location on Android*, GIGAOM (Mar. 24, 2009), <http://gigaom.com/mobile/locale-for-android-homes-in-on-skyhook-wireless/> (“The standard Android OS location platform is notoriously unreliable. Increasingly, Android developers turning are Skyhook to improve their location-aware applications.”).

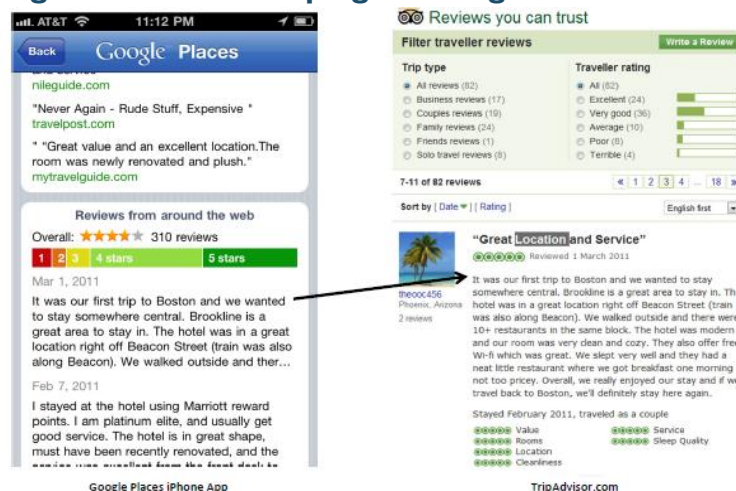
⁶⁵ *Skyhook v. Google*, Complaint (Mass Sup.Ct. Apr. 28, 2011) (Civ. No. 2010-03652).

smartphones shipped worldwide run the Android platform.⁶⁶ The only other significant source of mobile search traffic is the iPhone on which Google search is also the default search engine. By means of Android and the distribution agreement with Apple, Google has secured a virtual monopoly on mobile search and search advertising.



3. *Unauthorized Scraping of Content.* Google scrapes content from sites like TripAdvisor and Yelp and uses it for its Google Places Mobile app. Unlike Google Places on the PC, however, Google sometimes does not even bother to link back to the original sites or give proper attribution. The below screenshot illustrates how the Google Places iPhone app takes reviews from TripAdvisor without even attributing the review to TripAdvisor.

Google's Content Scraping on Google Places iPhone App⁶⁷



As in PC search, Google is leveraging its dominance to exclude competing vertical search providers. By scraping content from rivals' sites and using it without permission, Google keeps users within the "Google universe," where Google can continue to sell ads targeted at those users.

⁶⁶See Brad Reed, *Android Market Share Nears 50% Worldwide*, NETWORK WORLD (Aug. 1, 2011), <http://www.networkworld.com/news/2011/080111-canalys.html>.

⁶⁷ Erick Schonfeld, *Google Places Now Borrowing Reviews Without Attribution In iPhone App*, TechCrunch (June 1, 2011), http://techcrunch.com/2011/06/01/google-places-borrowing-yelp-iphone-app/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+Techcrunch+%28TechCrunch%29

Julius Genachowski, the Chairman of the FCC, has noted that “[w]e have an incredibly bright mobile future ahead of us, if we seize it.”⁶⁸ Google’s conduct, however, raises serious concern about our nation’s ability to realize that vision. Put simply, the mobile wireless sector is too essential to American innovation and consumer welfare to leave at risk to Google’s exclusionary conduct.

F. Google Has No Justification for its Exclusionary Conduct

Google seeks to defend its actions through several arguments, all of which lack merit.

First, Google claims that it is not dominant in any market and that meaningful competition is one click away, so it cannot harm competition. At the Senate hearing in September, Google’s lawyer Susan Creighton repeated this claim – which, as demonstrated above, does not pass the proverbial straight face test. Google’s dominance is not subject to any serious dispute. The reality is that Google is overwhelmingly dominant in the U.S. and Europe, facing only two viable competitors in general search (Bing and Yahoo!) and a handful of other nascent threats that have yet to erode its market share of 80% worldwide (and as high as 95% in some countries). This dominance insulates Google from what little competition remains.

Second, Google claims that its unauthorized use of content created by others is merely a part of its search functionality that benefits the sites. As Mr. Schmidt claimed in the context of scraping Yelp’s content, “I felt that Yelp would be very happy with us pointing to their site and then using a little bit of their reviews.” Such an assertion is not only wrong, it is offensive. Google steals content from others and uses it to generate advertising revenue without paying compensation to the companies that have spent many years and many millions of dollars developing the content. And it does so in a way that does not provide additional traffic (or any other benefit) to those sites.

Third, Google asserts that its display of links, including links to its own sites in which it has a direct economic interest, is part of its efforts to give users what they want. This is demonstrably false. Google’s best estimate of what is most relevant to a given user query is embodied in its algorithm for returning natural search results (at least to the extent that Google has not manipulated its algorithm for anticompetitive purposes). Google has to hard-code its own links to appear at the top or middle of its search results pages precisely because those sites cannot compete on the merits and earn the top position in the natural search results. Further, the fact that Google feels the need to display these links in a manner that does not clearly indicate that they are not natural search results or that Google has a direct economic interest in them confirms that Google knows that its products cannot compete on the merits.

Fourth, Google asserts that it downgrades sites in its algorithmic results if they contain too little original content and too many links to other sites, because Google deems such sites to be of “low quality.” Google uses this grossly overbroad generalization to mask its efforts to

⁶⁸ FCC Chairman Julius Genachowski, Remarks on Spectrum, The White House (April 6, 2011), <http://www.fcc.gov/encyclopedia/julius-genachowski-speeches>

quash the nascent competitive threats offered by vertical search sites. By definition, vertical search sites have relatively little content of their own and include many links to other sites – that is precisely what a search engine does! Indeed, Google.com – Google’s general search engine – has essentially no original content and is comprised mainly of links to other sites (albeit increasingly with links to other Google sites).

V. GOOGLE’S EXCLUSIONARY AND ANTICOMPETITIVE CONDUCT HARMS CONSUMERS

The explosive growth of the Internet represents a major opportunity for American consumers. But Google threatens to undermine this potential through its exclusionary strategy to monopolize search, search advertising, vertical search, and many search-dependent content services. Google thereby threatens economic growth and consumer welfare in multiple ways:

1. *Google’s Exclusionary Conduct Harms Competition.* Google’s dominance and exclusionary conduct inhibit other Internet businesses from competing by denying them the user traffic and advertising revenue they need in order to develop products and offer services. By stifling competition and expanding its dominance, Google has harmed the competitive process that drives economic growth and benefits consumers.

Google suggests that it cannot harm consumers because it provides its search product to consumers for free. This argument is obviously flawed. As an initial matter, users suffer lower quality service when they are misled into clicking on lower quality Google sites instead of higher quality sites suppressed by Google. More generally, as discussed below, Google is extracting increasingly large sums of money from the Internet, and these costs are ultimately paid by consumers. Indeed, Google’s more than \$30 billion in annual advertising revenue underscores the size of Google’s impact on consumers.

2. *Google’s Exclusionary Conduct Raises Its Rivals’ Costs.* Websites lose critical traffic – and the associated advertising revenue – when Google steers users to its own or preferred partners’ sites and forecloses the visibility of rival sites. To recapture some of that lost traffic, sites have little choice but to increase their advertising spend on Google’s dominant, “must-have” advertising platform. Thus, Google wins three different ways. First, Google keeps more users on its pages, where it can continue to make money off of them. Second, Google reduces traffic to its vertical search rivals, not through competition on the merits, but through abusing its dominance in search. And third, Google earns still more revenue as those rivals are forced to spend more for paid search, in order to re-acquire some of that lost traffic. This strategy is good for Google, but bad for consumers.

3. *Google’s Exclusionary Conduct Raises Advertising Fees.* As Google maintains and extends its dominance – as it goes from being a “must have” to being advertisers’ only choice – advertising rates inevitably rise even higher. With Google’s dominance growing and now virtually unchecked, publishers and distributors have come to share less in Google’s advertising revenues and advertisers pay higher prices because they have less choice. Those higher rates are passed on to consumers in the form of higher prices.

4. *Google's Exclusionary Conduct Reduces Innovation.* Perhaps most fundamentally, if Google continues to steal content and foreclose the ability of sites to be seen by users, established vertical sites will see less reason to continue to invest in innovation and new sites will be less willing to risk entry. This is not just a theoretical concern. As Nextag CEO Jeffrey Katz explained at the Senate hearing, he would not attempt to launch his company in today's market given Google's dominance in search and the ways that Google abuses that dominance to advance its own search products over those of its competitors.

I don't think we could do it. Our merchants – we have a lot of shoppers on our site. Sixty-five percent of our shoppers come to us from Google today either through natural search or paid search, so we simply couldn't do it with the Google that exists today where roughly the top half of the page is dominated by Google-related product interests and the right half of the page where paid advertisers compete is beginning to be dominated by unique ad placements which competitors such as our self can't even purchase.

Over the long run, Google will dominate more and more of Internet commerce – with consumers and businesses having fewer choices, enjoying fewer benefits of innovation, and paying higher prices.

VI. ANTITRUST ENFORCEMENT IS CRITICAL

If Americans are to benefit from the full potential of the Internet, antitrust enforcers must require Google to obey the same rules for competition as everyone else. Indeed, antitrust enforcement already has helped to preserve competition:

- When the Department of Justice stopped Google from taking over much of Yahoo!'s search advertising operations in 2008, the DOJ helped to preserve some competition in search and search advertising.
- The Department of Justice consent decree in the Google/ITA Software transaction helps to ensure that innovative websites in the travel industry – such as Kayak.com and TripAdvisor.com – will continue to have access to ITA's crucial flight search technology.
- Most recently, antitrust scrutiny from the investigations by the Federal Trade Commission and numerous state attorneys general forced Google to step back from its unauthorized use of content that it has scraped from other sites.

Much more needs to be done.

The government can pursue concrete, administrable remedies that can help preserve the benefits of competition for consumers. While any remedy should be crafted based on the violations found during an investigation, the information already available points to examples of relief that an antitrust enforcement action could seek that would help consumers:

1. Prohibiting Google's deceptive display bias, including requiring clear notices to consumers of those links in which Google has an economic interest and/or that Google has placed on the search results page through any process other than its normal search algorithm;
2. Prohibiting Google from reducing the ranking of any site because it competes with a Google site;
3. Prohibiting Google's scraping and use of content from other sites without their permission;
4. Separating the general search and paid search business from products that provide specialized search or information content services;
5. Prohibiting Google from entering into exclusive agreements that relate to any product in which Google is dominant, including search and paid search advertising; and
6. Requiring prior notice to the government of all acquisitions by Google.

Google's final argument against antitrust enforcement is that it operates in a complex, dynamic industry that should not be subjected to "antitrust regulation." Again, Google's argument fails.

First, a bipartisan group of highly qualified experts recently conducted a three year evaluation of whether the antitrust laws require modification, particularly as applied to the "new economy" in which Google operates. This Antitrust Modernization Commission rejected Google's argument and reaffirmed that antitrust enforcement principles can and should apply to companies like Google.⁶⁹

Second, as the United States Supreme Court has explained, antitrust enforcement is the Magna Carta of our free enterprise system. Antitrust enforcement ensures that companies have the opportunity to compete. Further, if antitrust enforcement fails in this context, Google's dominance will grow to unprecedented levels. There will be growing pressure for the government to step in with a broad regulatory regime that will be more burdensome and rigid than any antitrust enforcement action and that itself can stifle the innovation and competition that drives our free enterprise system. In short, the time to preserve competition, investment and innovation is now.

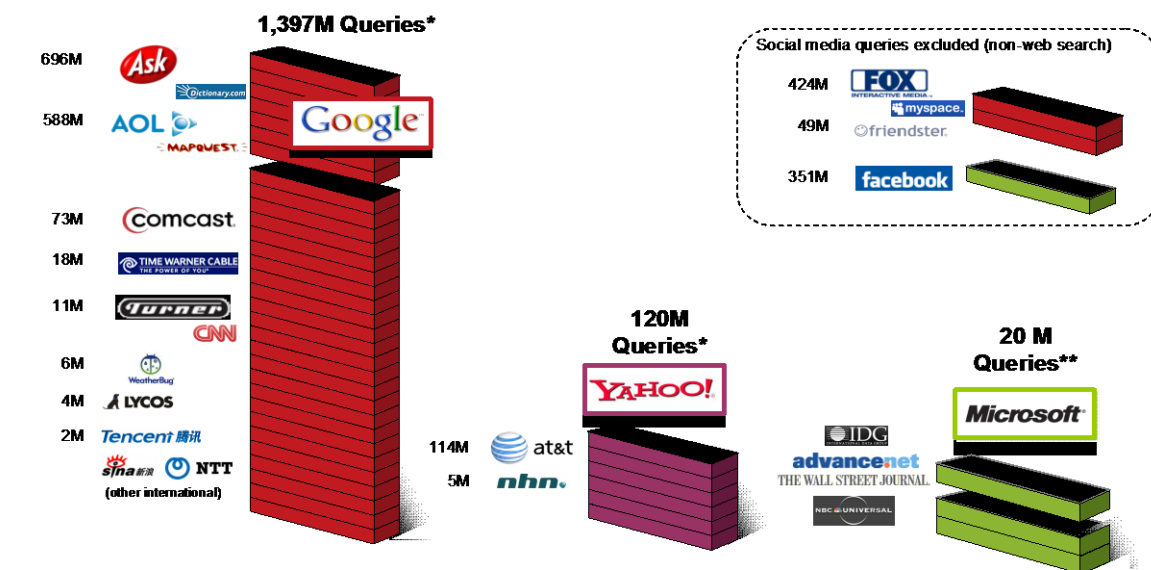
⁶⁹Antitrust Modernization Commission, *Report and Recommendations* at 31-42 (Apr. 2007), http://govinfo.library.unt.edu/amc/report_recommendation/amc_final_report.pdf.

APPENDIX:

Examples of Google's Unlawful Acquisition and Maintenance of Monopoly Power in Search

1. *Exclusive Agreements.* Google has entered into a series of strategic exclusive agreements with other websites (“powered by Google”) to ensure that search traffic that might originate on those sites is directed to Google alone. For example, in May 2002, Google secured an exclusive search intermediation agreement with AOL in the US. At the time, AOL had 34 million subscribers. The deal increased Google’s U.S. market share in search from 64% to 78% overnight, thereby adding significantly to its global scale. Today, Google is the exclusive search provider for some of the most heavily trafficked websites on the Internet. Examples include AOL, Amazon.com, Ask.com, Ask Jeeves, AT&T, buy.com, CNN.com, EarthLink, Eniro, Photolog.com, Fox Interactive Media, lost properties, Friendster, Glam Media, IncrediMail, News Digital Media, Newsweek Interactive, Terra Lycos, Walt Disney, Washington Post, and weather.com. Thus, even when consumers think they have left Google, competition is far from a “click away.”

Overview of Search Syndication Providers



* December 2009 comScore analysis. US keyword ad supported web search. Social media queries excluded. Analysis based on top level comScore Property level.

** MSFT syndication partner volume based on internal estimates.

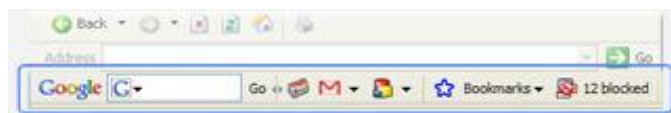
2. *Google “Defaults”.* Google insists on exclusivity for the distribution of its Google Toolbar and for web browser search default settings. Consistently, Google’s exclusivity denies rivals the possibility of sustaining or growing their businesses via these important distribution routes.

- Google captured virtually the entire mobile search sector and the associated ad revenues by convincing mobile handset manufacturers to use its Android operating

system based on promises of an open and pro-competitive system – one for which “no industry player can restrict or control the innovations of any other.”⁷⁰ In fact, however, Google has imposed tight control over the Android operating system that effectively blocks manufacturers from using any mobile service or technology that competes with Google’s products and services.

- Google has exclusive agreements with web browser vendors such as Mozilla Firefox, Opera Mobile, Opera Mini, and Safari. These deals provide that the search defaults in all of these browsers are set to Google’s search engine. Google’s own Chrome browser is also set to Google search as a default.
- Google has locked up distribution with some of the most pervasive software applications. These applications include Adobe and Java, which reach 99% and 73% of Internet-enabled PCs, respectively.⁷¹
- Google has exclusive toolbar distribution deals with a large number of distributors. Searches made using the Google Toolbar, which installs on browsers from all the major vendors, are directed to the Google search engine.

Screenshot of the Google Toolbar



- To reinforce the foreclosure effect of these arrangements, Google has also used so-called default-defender software which prevented users from uninstalling Google’s toolbar. A user that attempted to change the default search provider away from Google was blocked, and a message like the one below appeared.⁷²

Google Toolbar Notifier



⁷⁰ Android, *Welcome to Android*, <http://source.android.com/> (last visited Sept. 16, 2011).

⁷¹ Adobe, *Technology Breakdown*, http://www.adobe.com/products/player_census/flashplayer/tech_breakdown.html.

⁷² This “defensive” scheme is hardly consistent with Google’s pledge that “*software should not trick you into installing it*. It should be clear to you when you are installing or enabling software on your computer and you should have the ability to say no. An application shouldn’t install itself onto your computer secretly or by hiding within another program you’re installing or updating. You should be conspicuously notified of the functions of all the applications in a bundle.” Google Corporate Information, *Software Principles*, http://www.google.com/corporate/software_principles.html (emphasis in original) (last visited Sept. 16, 2011). See *What is GoogleToolbarNotifier.exe*, <http://quarterbacks.org/GoogleToolbarNotifier/GoogleToolbarNotifier.asp>, for an example of a user who tried to deny the forced change 85 times without success.

3. *Strategic Acquisitions.* Finally, Google has purchased a series of companies that eliminated nascent threats to its search dominance. For example, in October 2006, YouTube attracted more search traffic than anyone other than Google itself. By buying YouTube at that time, Google took control over this threat to its search dominance. Similarly, the Department of Justice recently challenged Google's acquisition of ITA Software and obtained a consent decree limiting Google's ability to abuse its control over this key technology for travel search.

PURSUIITS OF COMPETITIVE THREATS

2005 - mobile

Understanding the potential for growth in mobile search, (i.e., that the number of mobile internet users will surpass the number of users browsing the internet via a desktop computer by 2014), Google bought the Android technology in 2005. Google is "not trying to make a profit on Android or Chrome... In essence [by giving Android away for free], they are not just building a moat; Google is also scorching the earth for 250 miles around the outside of the castle to ensure no one can approach it." [[abovethecrowd](#) 3/24/11]

2005 - video

Google bought YouTube, the world's largest video search engine, for \$1.5 billion. YouTube performs more searches than Yahoo! and by some measures, is the second largest search engine. Through this acquisition, Google captures **more than 83% of unique viewers** among top U.S. online video properties. [[comScore](#) 3/17/11]

2010 - travel

"In mid-2010, Google got serious about travel. Given that over half of travel sales are consummated online, Google wasted no time with DIY solutions. It went shopping and bid \$700 million in cash to buy ITA Software, a Cambridge (Mass.)-based travel software company that was founded in 1996 by scientists at MIT to provide search services for airlines and other travel operators." [[Bloomberg](#) 2/13/11] **In April 2011 the Justice Department placed strong conditions on the deal.**

2010 - shopping

"The vast majority of Google's revenue comes from ads placed next to search results. **But growth in that core business has slowed from several years ago, leading the company to add websites that go deeper into categories like comparison shopping.**" [[The Wall Street Journal](#) 12/12/10] To support its existing product search, Google acquired visual search engine, Like.com.