### **Internet Search Competition: Where is the Beef?** David Balto<sup>1</sup>

There can be little question that Internet search has revolutionized how we live, communicate, learn and engage in commerce. Internet search gives hundreds of millions of people access to a wealth of information heretofore unattainable. Barriers to information and communication have fallen as the Internet has become the great marketplace of ideas and

Internet search must be organized as any information system. Search providers all have developed sophisticated algorithms to try to determine relevancy and order information in a timely fashion. Some firms have suggested that search is being misused as a competitive weapon.

The target du jour is Google. Google's critics have crystallized allegations of anticompetitive conduct under the banner of "Search Neutrality." While the allegations take many forms, they boil down to three complaints. First, it is alleged that Google has penalized certain types of websites in its search results rather than basing its results on some objective, universal concept of relevance (if there is such a thing). Second, Google's critics allege that Google unfairly favors its own content in its search results as part of its Universal Search. Lastly, Google's critics challenge Google's transparency with respect to its algorithm and ranking standards.

The European Commission decided to give the Search Neutrality arguments more legs, as it announced on November 30, 2010 that it has opened a formal investigation of Google's business practices pertaining to search.<sup>3</sup> Specifically, the European Commission will investigate whether Google unfairly lowered or demoted the search ranking of European websites that claim to compete with Google, thus harming their ability to generate traffic and ultimately survive.<sup>4</sup> The Commission will also investigate whether Google may have given its own services preferential placement in search results and, if so, whether this was an anticompetitive practice.<sup>5</sup> The European Union's decision to launch a formal investigation is a victory of sorts for the Search Neutrality front.

Search is one of the ways to gain access to online information, and Search Neutrality's support of the "principle that search provider results should be comprehensive, impartial, and based solely on relevance" certainly sounds reasonable.<sup>6</sup> Any genuine concerns of anticompetitive conduct or lack of competition generally, deserve scrutiny. But as we evaluate the merits of the allegations, the proposed remedies, and the policy ramifications of the proposed remedies, we must be clear on the facts, as well as the nature of the search industry.

<sup>&</sup>lt;sup>1</sup> Mr. Balto is a Senior Fellow at the Center for American Progress and the former Policy Director of the Federal Trade Commission. He is very grateful to his colleague Brendan Coffman for his assistance in authoring this article and is grateful to Google for support for this paper.

<sup>&</sup>lt;sup>2</sup> www.searchneutrality.org

<sup>&</sup>lt;sup>3</sup> Charles Forelle & Thomas Catan, Corporate News: Europe Zeroes In on Google – Antitrust Investigation Establishes Internet Giant as EU's Favorite Target, WALL St. J., Dec. 1, 2010, at B2. <sup>4</sup> *Id*.

<sup>&</sup>lt;sup>5</sup> Id. There are also questions regarding whether Google implemented illegal exclusive advertising agreements, and questions about limitations Google may place on the portability or transferability of data. This paper does not address these latter two issues.

<sup>&</sup>lt;sup>6</sup> Search Neutrality, Background to EU Formal Investigation, http://www.searchneutrality.org/ (last visited June 10, 2011).

Unfortunately, Search Neutrality's complaints do not amount to a genuine concern of anticompetitive conduct, but rather appear to be part of a crusade against Google through misinformation regarding search, Google search, and the rules regulating competition on the Internet. In insinuating that Google's actions are actually ploys to deter competition in the field, rather than acknowledging that these tools are part of a larger system for enhancing the utility of search, Google's critics ignore fundamental principles of antitrust law and competition, the inherently subjective nature of search rankings, and common sense. Ultimately they are asking Google play by an entirely different set of rules from smaller-scale information organizers as well as its main rivals: Bing, Yahoo, and Facebook.

This paper begins with a brief discussion of search and how it has evolved, noting some of the specific contributions made by Google. This paper then assesses the primary antitrust issues raised by Search Neutrality advocates, examines the validity of complaints made to the European Union, and assesses the feasibility of some proposed remedies. Lastly, this paper looks at search products from the consumers' perspective. It concludes that competition is alive and well in the search industry, and that government regulation would only stymie an industry that serve as a model for incentivizing continued innovation. From a consumer's perspective, the complaints of search neutrality advocates fall short: as in the famous Wendy's TV Commercial they might question "where's the beef?"

#### I. Background

#### A. Modern Search Engines Were Not Built in a Day

Early search providers were unsophisticated and cumbersome, and often merely matched a query with a result that only technically matched the terms of the query. In a way, this search methodology matched the lack of sophistication of its user—the "ten blue links" delivered by early general purpose search providers was a technological marvel at a time when access to the Internet was new to consumers who were dialing-in with modems through the phone lines. Nonetheless, as the volume of information available and number of websites increased, search providers began developing new and better methods to connect the consumer to relevant information. Consumers soon began relying on these improved methods for sorting through the massive amount of information. The foundation of modern search evolved quickly.

From a technical standpoint, search providers engage in three tasks: crawling the Internet, indexing what it finds, and creating a program to deliver results from the index in response to queries. Starting with the first step, search providers deploy computer programs called spiders or crawlers that scour the web and catalog the information in a series of indices and graphs. The data collected by the spiders include which websites exist, what sites link to these sites, the content of the sites, and their coding. There has been considerable advancement in the sophistication of spiders. Early spiders returned only basic information about the websites they visited, but modern spiders "index the contents of the entire Web page, as well as many different file types such as Adobe Acrobat (PDF), Microsoft Office documents, audio and video, and even

<sup>&</sup>lt;sup>7</sup> It is widely speculated that Microsoft, one of Google's main competitors, is financially and strategically involved in Search Neutrality's efforts against Google.

<sup>&</sup>lt;sup>8</sup> See Viva R. Moffat, Regulating Search, 22 HARV. J. LAW & TECH. 475, 480 (2009).

<sup>&</sup>lt;sup>9</sup> For a good summary of search's early history, see generally Viva R. Moffat, Regulating Search, 22 HARV. J. L. & TECH. 475, 480-81 (2009).

site-specific metadata-structured information provided by site owners about the pages or information being crawled.",10

Search providers compile the massive amount of information gathered by the spiders and turn it into an index. Indexing is the heart of the science behind search. As John Battelle explains, "[i]nnovative companies like Google have made their reputation by studying that database—noting statistical patterns and algorithmic potentials, divining new ways to leverage it toward the ultimate goal of providing [the user] with more relevant results." Advanced information gathering methods combined with sophisticated analytical tools renders a search experience that approaches the ideal: understanding the user's intent and providing the information that best matches this intent.

Finally, an algorithm turns an index of results into a user interface that displays information relevant to the user's query. These types of algorithms have grown more and more sophisticated over time. Google, for example, evaluates over two hundred factors to determine the appropriate results to present in response to a user's query. 12 It is important to remember that this is a formula, not a checklist. There mere presence of one factor does not guarantee success any more than the absence of one predetermines obscurity. Google's algorithm balances these many factors in a way that it has determined is the most likely to connect the user with the relevant results. Bing, Yahoo, Facebook, and any other search provider engages in the same exercise, but with different valuations. This is one of the key areas in which search providers differentiate themselves. 13 The holy grail of search is the delivery of results that are perfectly relevant to the user's query, even when the searcher himself is not sure what he is looking for.

There are two challenges that all search providers face: building it, and building it well. First, while the high-level explanation of search may sound simple, there is astounding complexity within each part of the process. Second, the end goal for search providers—to supply consistently the most relevant result for any query, by any user, in any moment, in any part of the world—is nearly impossible. The interplay between these two realities has opened the door for continued innovation, as search providers of all sizes, and with competing conceptualizations of relevance and user intent, vie to concoct the perfect search provider.

Companies such as Google enjoy success based largely on their ability to recognize and adapt to the new and robust forms of content that are available online. As this occurs, Google and other search providers are able to recalibrate their search algorithm, thereby incentivizing all websites to adapt the most recent and consumer-friendly innovations. These innovations, in turn, are recognized, and the cycle repeats itself. This is undeniably to the consumers' benefit, as they reap the rewards of more sophisticated search and more advanced websites. For instance, Google and other search providers concluded that websites containing embedded RSS feeds<sup>14</sup>

<sup>11</sup> *Id.* at 22.

 $<sup>^{10}</sup>$  John Battelle, The Search: How Google and Its Rivals Rewrote the Rules of Business and TRANSFORMED OUR CULTURE 21 (2005)

<sup>&</sup>lt;sup>12</sup> Danny Sullivan, searchengineland.com, Schmidt: Listing Google's 200 Ranking Factors Would Reveal Business Secrets, http://searchengineland.com/schmidt-listing-googles-200-ranking-factors-would-reveal-business-secrets-51065 (last visited June 10, 2011).

<sup>&</sup>lt;sup>13</sup> See Manish Agarwal & David K. Round, The Emergence of Global Search Engines: Trends in History and Competition, 7 COMPETITION POL'Y INT'L 115, 118 (2011).

<sup>&</sup>lt;sup>14</sup> RSS stands for really simple syndication, formerly RDF site summary or rich site summary, and an RSS feed is an aggregator that tells website readers what new material has been published on the site. Encyclopædia Britannica Online, http://www.britannica.com/EBchecked/topic/1508925/RSS (last visited June 10, 2011).

tend to provide more recent—and therefore often more relevant—information.<sup>15</sup> As a result, search engines adapted to account for this practice, and now this practice is commonplace. This form of adaptation happens more frequently than the average consumer perceives, but it is undeniably to her benefit.

#### B. Search Engines Must Deliver High-Quality, Relevant Results to Survive

Search providers, including Google, need to respond to consumer demand in order to succeed. To appreciate Google's contribution to business of Internet search, it is useful to remember Yahoo!'s model. Before Google, Yahoo! was king. John Battelle explains "Yahoo's directory stood out—it organized the Web in a fashion that made sense to techies and first-time Web surfers alike." But Yahoo! was different from what we think of as a search engine today. Yahoo!'s format was more similar to a directory and even included search results that were paid for by websites. When Google was launched in the late 1990s, it offered a novel approach: results that were not paid for, and not in the directory format.

At that time, in addition to Yahoo!, America Online, Alta Vista, Excite, and Lycos all appeared poised for tremendous success, but failed to match upstart innovation from Google. Google institutionally embraced the concept that the goal of a search provider is to provide the consumer with the most relevant information, as quickly as possible. The most relevant information can take many forms – it could be a link to another website, directions on how to arrive somewhere, the best available price for a product, or countless other services available on the Internet. In any respect, Google has consistently led the industry in innovations, and has played an important role in the evolution of search.

But complacency would lead to certain obscurity. Websites such as Facebook, Amazon, eBay, Expedia, and Wikipedia all aggregate and organize information, steering users away from traditional search providers such as Google, Bing and Yahoo. Facebook is a particularly dangerous threat to the traditional search providers because it not only takes traffic away from Google, Bing, and Yahoo, but it also a growing source of redirected traffic for original content providers. In fact, a May, 2010 Compete.com report indicated that two of the six sampled major information destination websites (Hulu.com and TMZ.com) received as much or more traffic from Facebook than from Google.

This section analyzes innovations in search—led by Google—that have changed industry standards. First, we look at steps search providers have taken to identify relevant information while weeding out less useful information and the evolution of the standards attached to these determinations. Second, we look at evolving methods for divining user intent and providing relevant answers despite ambiguities or user mistakes. Finally, we assess advancements made in

<sup>&</sup>lt;sup>15</sup> Google Search Engine Optimization Starter Guide, 28 (2010), available at http://googlewebmastercentral.blogspot.com/2010/09/seo-starter-guide-updated.html (explaining the benefits of RSS feeds). For more information regarding Search Engine Optimization with RSS feeds, *see* http://www.press-feed.com/howitworks/syndicatecontent.php.

<sup>&</sup>lt;sup>16</sup> Geoffrey A. Manne & Joshua D. Wright, *If Search Neutrality is the Answer, What's the Question?* 15 (Int'l Center for Law & Econ., 2011), *available at* http://ssrn.com/abstract=1807951.

<sup>&</sup>lt;sup>17</sup> BATTELLE, *supra* note 10, at 60.

<sup>&</sup>lt;sup>18</sup> Geoffrey A. Manne & Joshua D. Wright, *Google and the Limits of Antitrust: The Case Against the Case Against Google*, 34 HARV. J.L. & Pub. Pol'y 171, 202 (2011).

<sup>19</sup> Id. at 199.

<sup>&</sup>lt;sup>20</sup> This information is attributed to Compete.com, May 2010.

the display of this information, for even the most relevant of results would be rendered moot if the user does not see them quickly and clearly.

## 1. <u>Search Providers Must Filter Out Spam and Junk to Deliver High-Quality, Relevant Results</u>

Google defines parameters around what it believes is relevant. Naturally, this includes formulas that rank information and websites believed to be more relevant and useful higher than those it believes are less relevant and useful. The web, however, is filled with junk, or worse. In order to provide useful, relevant results, Google's algorithm seeks to filter content ranging from deceptive or misleading websites that could install malware or endanger consumers to those that provide little to no useful content and exist only to receive "clicks", resulting in a very poor user experience. Search providers strive to keep up with these deceptive strategies, but as with any case of enforcement, the bad guys are often ahead of the good guys.

Producers of these low-quality or deceptive sites often try to "game" the system to improve their ranking in order to receive clicks without actually providing a relevant or useful site. Deceptive practices can take many forms—repetitive "white text" in the background of a website to increase its relevancy in an algorithm; cloaking a website by providing a small HTML text to search providers but providing the consumer with a different content; and doorway pages, which are web pages designed for "spamdexing" a search provider and redirecting the user with a quick redirect, are just some of the methods that low quality websites employ to circumvent search providers' algorithms.

Google continually improves its algorithm to protect users from these sites. But even as recently as January of this year, Google has faced complaints that it is not adequately protecting consumers from these spammers.<sup>21</sup> As Google develops methods to identify and remove spam from its algorithm's results, the spammers are always a step ahead in devising ways to reinsert themselves. Google faces "withering criticism from tech bloggers and search provider experts who say the world's premier gateway to digital information is increasingly being gamed by spammers."22 and search experts and analysts have identified the increasing sophistication of spammers as a key reason for this problem. As described by Vivek Wadhwa, a Visiting Scholar at UC-Berkley's School of Information, "Google has become a jungle: a tropical paradise for spammers and marketers . . . This is created by unscrupulous companies that know how to manipulate Google's page-ranking systems to get their websites listed at the top of your search results."<sup>23</sup> Therefore, while it is inevitable that some non-deceptive, non-spam websites may have a lower ranking as a result of a spam-fighting feature of an algorithm, it is evident that Google, like any other search provider, must continually adapt and tweak its search mechanism to ensure relevant results reach the consumer. Google's spam-fighting efforts may change some websites' rankings, making those websites unhappy. But, it is unquestionable that taking action against poor-quality websites is good for consumers because it permits Google and others to supply a quality product that meets users' demands.

Gaming Google's algorithm is not restricted to small websites. Google must be aware of large, nationally recognized companies as they continue to compete for placement near the top of

<sup>23</sup> Vivek Wadhwa, *Why We Desperately Need a New (and Better) Google*, TECHCRUNCH, (Jan. 1, 2011), http://techcrunch.com/2011/01/01/why-we-desperately-need-a-new-and-better-google-2/.

<sup>&</sup>lt;sup>21</sup> Michael S. Rosenwald, *How You and Google Are Losing the Battle Against Spam in Search Results*, WASH. POST, Jan. 29, 2011, at G01.

<sup>&</sup>lt;sup>22</sup> Id.

search results. For instance, in February of this year, Google became aware of a complex search engine optimization ("SEO") "blackhat" strategy by J.C. Penney.<sup>24</sup> The retailer's website, jcpenney.com, was ranking very high in searches for nearly all of the products it sold. Google recognized that this sort of success is uncommon, and investigated the company's techniques. It turned out that thousands of websites with little or no affiliation to J.C. Penney were linking to jcpenney.com, thereby artificially increasing the site's PageRank results through Google's algorithm.<sup>25</sup> Google announced that its algorithm had already begun detecting the scheme, but also announced that it was taking manual steps to rectify the problem.<sup>26</sup>

#### 2. Providing Relevant Search Results, Even Without Spammers, Is Not Easy

As with everything in search, the discussion comes back to relevancy. Aside from spamfighting, it is important to recognize other advances in search that relate more directly to the ability to return relevant results to a given query. Search providers now are capable of precision that was nearly mythological twenty years ago. They can detect language, understand abbreviations, and make calculated assessments of the user's intent given his location, search profile, and current trends. Search can now provide different results whether someone is searching for Paris Hilton the celebrity versus the Hilton Hotel in Paris. A sports fan in Texas might intend the MLB's Rangers, whereas a searcher in New York would likely want information on the NHL's Rangers. But an avid baseball fan in New York might actually want the Texas Rangers, despite his location. Google's algorithm improves the chances that these users will receive the results they desire. Modern technology has evolved so that correct interpretations are achievable.

One could make the case that search is even getting smarter than the user . . . or at least more attentive to detail. Search providers generally, and Google in particular, have been striving to perfect elements of the algorithm to account for human error, including common typos, misspellings, and inaccuracies. Google now delivers spelling correction in 31 languages. These features even work for people's names, where mistakes are more common. Google is making great strides in making mistakes of this nature consequence-free, as it has new technology that "is based on the concept that people often know something else about the person besides the approximate spelling of his name" and uses this information to offer [the user] better suggestions."

As search gets smarter, it is also growing faster and more capable of managing the vast amount of information efficiently. Danny Sullivan from Search Engine Land provides an excellent example of the achievements made in search over just the past decade. On 9/11, Google was not able to keep up with the demand for a constant flow of information about the

<sup>&</sup>lt;sup>24</sup> David Segal, *The Dirty Little Secrets of Search*, N. Y. TIMES, Feb. 12, 2011, *available at* http://www.nytimes.com/2011/02/13/business/13search.html.

<sup>&</sup>lt;sup>25</sup> Id. See also Vanessa Fox, New York Times Exposes J.C. Penney Link Scheme That Causes Plummeting Rankings in Google, SEARCH ENGINE LAND, Feb. 12, 2011 available at http://searchengineland.com/new-york-times-exposes-j-c-penney-link-scheme-that-causes-plummeting-rankings-in-google-64529.

<sup>&</sup>lt;sup>26</sup> Segal, *supra* note 24.

<sup>&</sup>lt;sup>27</sup> http://googleblog.blogspot.com/2010/04/search-with-fewer-keystrokes-and-better.html

<sup>&</sup>lt;sup>28</sup> *Id*.

 $<sup>^{29}</sup>$  Id.

<sup>&</sup>lt;sup>30</sup> Danny Sullivan, *Google & the Death of Osama Bin Laden*, SEARCH ENGINE LAND, May 2, 2011, http://searchengineland.com/google-the-death-of-osama-bin-laden-75346.

attacks on the World Trade Center and the Pentagon.<sup>31</sup> The engine simply could not keep up with the combination of minute-by-minute changes and the sheer quantity of people demanding information.<sup>32</sup> As a result Google's homepage directed users to turn on television or listen to the radio. Fast-forward to May 2011, when it was announced by President Obama that Osama Bin Laden had been killed in his compound in Pakistan. Google learned from its experiences in 2001, and the inability to adequately serve users then led to the creation of Google News.<sup>33</sup> Google News processes the information more quickly, identifies the most relevant search topics, and, most importantly, displays this information at the top of search results.<sup>34</sup> Instead of the unhelpful results listing the World Trade Centers Association's website at the top that users who searched "world trade center" on 9/11 would have received up to several hours after the attack; users who searched about Osama Bin Laden's death on May 1, 2011 had links to relevant news stories within minutes.<sup>35</sup>

We are just beginning to see the true implications of these advances in relevancy determination and speed. Owners of cell phones with Google's Android operating system need only type in a few letters of their intended destination before it appears on the screen, and need only touch the screen to receive door-to-door directions. It is possible to get the answer to simple questions by typing in only a few letters, without ever leaving the landing page. And consumers can become more connected to their own community by seeing results that are most pertinent to them. This is a great outcome for consumers.

#### Relevant Results Does Not Always Mean A List of Links 3.

Fighting web spam and gamesmanship by poor-quality content providers and interpreting user intent are just two of the massive challenges facing search providers. Different media formats and imprecise queries pose another challenge: how do you ensure that the most relevant information appears on the result page when relevant sources span several media platforms? For some potential queries, the best results may actually be a combination of sources from a variety of media, such as links, images, and video. To provide only one of these, or rank one over the other, might not match the user's intent. Google was the first in the industry to offer a potential solution to this challenge when it unveiled Universal Search in 2007. <sup>36</sup> Universal Search displays pertinent results from a variety of different media formats in one convenient result.<sup>37</sup> The user no longer has to juggle confusing displays, or guess which link will lead him where he wants to go.<sup>38</sup> Instead, a simple search provides a bevy of information, through various media and specialized search indices, all but ensuring that he obtains the information that he is looking for. Competitors like Bing and Yahoo have followed suit, and offer cross-platform results for certain queries.<sup>39</sup>

<sup>31</sup> *Id*.

<sup>&</sup>lt;sup>32</sup> *Id*.

 $<sup>^{33}</sup>$  Id.

<sup>&</sup>lt;sup>34</sup> *Id*.

<sup>&</sup>lt;sup>36</sup> See Press Release, Google Begins Move to Universal Search (May 16, 2007) available at http://www.google.com/intl/en/press/pressrel/universalsearch 20070516.html.

<sup>&</sup>lt;sup>37</sup> *Id.* <sup>38</sup> *Id.* 

<sup>&</sup>lt;sup>39</sup> See, e.g., Press Release, New Yahoo! Search Makes Web Search Effortless for Consumers (Oct. 2, 2007) available at http://pressroom.yahoo.net/pr/ycorp/266828.aspx.

Prior to Google's introduction of universal search—an innovation that has been adopted by other general purpose search providers—images or video could only be accessed through a separate, specialized portal search provider that a user had to actively choose to employ. Universal Search provides a quicker, more comprehensive display. For example, a user seeking an image of the Eiffel Tower on Google used to have to do a specific search on Google Image Search, a separate portal. Now, universal search functionality allows Google to deliver various formats within the main, web results page: a search for "Eiffel Tower" might pull in images of the Eiffel Tower, a news feed about the Eiffel Tower, and videos of the Eiffel Tower, rather than simply showing a list of websites. When Google introduced it, it described the goal of universal search as "to break down the silos of information that exist on the web and provide the very best answer every time a user enters a query." It is difficult to dispute that Universal Search is an innovation designed to provide a better user experience by integrating various content sources so that users quickly find what they seek.

Sometimes, delivering the most relevant result, quickly, involves the delivery of a direct answer to a query rather than providing a link to an outside website. Questions with simple answers should not require complicated methods for obtaining that answer. As explained by Professor Eric Goldman, in 2004 Google stated that one of its goals was to "have users leave its website as quickly as possible" but in 2006, that same goal was modified to be "have people leave our homepage as quickly as possible." In its most basic form, if a user types a simple question into the search bar, such as "how many feet in a mile", the top result will be the answer itself: "1 mile = 5280 feet." For more complicated queries, Google, Bing, and Yahoo routinely include their own content on their own search results pages rather than a list of links to other websites, which simplifies and accelerates the delivery of a relevant answer. For example, when you type NYC-LAX into Bing, you get a flight search tool. When you type an address into either Google or Bing, you get a map that is provided and branded according each respective company. This makes sense in both cases—it provides the most relevant information, and as quickly as possible.

Universal Search is just a recent example of Google's efforts to mold search to users' intent. Its success has demonstrated that it is popular with consumers. Moreover, successful innovations such as Universal Search properly incentivize search providers to continue developing new tools and methods for performing search. As we discuss in the next section, this is an ideal scenario: competitors vie for approval of consumers by constantly providing new and better products.

#### 4. Search Providers' Incentives Are Aligned With Consumer's Interests

Fortunately for consumer and regulators alike, the advertising business model of modern search providers ensures that the long term financial incentives of search providers align with providing a positive consumer experience.<sup>42</sup> Advertisers value Google because it reaches many people.<sup>43</sup> Google reaches many people because it provides highly relevant search results in a

<sup>&</sup>lt;sup>40</sup> Press Release, *Google Begins Move to Universal Search* (May 16, 2007) *available at* http://www.google.com/intl/en/press/pressrel/universalsearch 20070516.html.

<sup>&</sup>lt;sup>41</sup> Posting of Eric Goldman to Technology & Marketing Law Blog, Portalization of Google, Redux (Sept. 8, 2010) http://blog.ericgoldman.org/archives/2010/09/.

<sup>&</sup>lt;sup>42</sup> Manne & Wright, *supra* note 16, at 35.

<sup>&</sup>lt;sup>43</sup> Agarwal & Round, *supra* note 13, at 120. *See also* Manne & Wright, *supra* note 18, at 208 (noting that the amount advertisers are willing to pay search engines is a function of both scale and quality of a search engines users).

digestible format. If Google were to fail in returning the most relevant material for a given query, or if Google became unable to ensure consumer protection from viruses, malware, or other harmful material, consumers would quickly move on to another search provider, or a new entrant would jump in to address unfulfilled demand for quality search results. Advertisers will follow the consumers. Simply put: Google, and any search provider, is financially rewarded for making search as useful and appealing as possible to consumers.

Although Google may have an impressive position in the search arena, it faces numerous threats. Consider Facebook's meteoric rise to online prominence. The story is well-known by now, but what is important in this context is recognizing that a new competitor emerged and has introduced a new methodology for providing search. Facebook has discovered and capitalized upon a new paradigm of relevance—connecting a user to search results based on his social networking identity—and the consumer has responded. There are rumors Facebook may be preparing to launch a traditional search provider to compete directly with these firms. Whether or not Facebook launches a traditional search provider, the fact remains that Google still faces competition, and that search is still an evolving idea.

Moreover, while Google is the global leader in search, that does not equally hold true on a country-by-country basis. <sup>46</sup> Despite Google's efforts to make inroads in the Russian market, Yandex maintains a leading market share in the Russian search market. <sup>47</sup> Like Google's success in the U.S. and most European markets, Yandex's market leadership has also been a function of its focus on consumers. Yandex initial success can be attributed to its focus on the Russian language; however, Yandex has maintained its position by consistently improving the quality of its search results and expanding into related services, such as mapping services, in response to consumer demands. <sup>48</sup>

To wrap it all up, because the technology for finding and organizing vast amounts of web content information is so complex and has enormous potential to benefit consumers; the key public policy goal should be to encourage high quality and innovation in these markets. <sup>49</sup> So far, Google has proven to be the most innovative company in the search provider business in terms of both technology and associated business practices, and has successfully identified innovations that customers like and trust. <sup>50</sup> Competition in this industry has effectively produced an outcome that regulation could only strive to achieve, but would almost certainly fall short of: to ensure that consumers get what they want out of a search provider. <sup>51</sup> Therefore, in assessing complaints originating with Google's competitors—like those of received by the European Union—rather than consumers, regulators need to tread very carefully lest they impose a cure that is worse than any alleged problem. <sup>52</sup>

<sup>&</sup>lt;sup>44</sup> Eric Goldman, *Search Engine Bias and the Demise of Search Engine Utopianism*, 8 YALE J.L. & TECH. 188, \_\_\_ (2006) ("Search engines that disappoint (either by failing to deliver relevant results, or by burying relevant results under too many unhelpful results) are accountable to fickle searchers. There are multiple search engines available to searchers, and few barriers to switching between them.").

<sup>&</sup>lt;sup>45</sup> Greg Sterling, *With So Much Money Is a Facebook Search provider Inevitable?*, SEARCH PROVIDER LAND, Jan. 3, 2011 *available at* http://searchengineland.com/with-so-much-money-is-a-facebook-search-engine-inevitable-60047. <sup>46</sup> Agarwal & Round, *supra* note 13.

<sup>&</sup>lt;sup>47</sup> *Id.* at 124-25.

<sup>&</sup>lt;sup>48</sup> *Id*.

<sup>&</sup>lt;sup>49</sup> See Manne & Wright, *supra* note 18, at 244 (citing risk of false positives which have a chilling effect on innovation that provides immense benefits to consumers).

<sup>&</sup>lt;sup>50</sup> See id. at 189.

<sup>&</sup>lt;sup>51</sup> See Manne & Wright, supra note 16, at 31.

<sup>&</sup>lt;sup>52</sup> See Manne & Wright, supra note 18, at 244.

#### II. Concerns Raised by Search Neutrality Proponents Are Unfounded

#### A. It Is Google's Right Build an Algorithm that Disfavors Lower-Quality Sites

Complainants to the European Commission suggest that Google's algorithm reduced their websites' rankings in search results in response to queries for specific product names.<sup>53</sup> If anyone has visited complainants websites, it is hard to argue that Google did anything wrong. Most of them contain largely duplicative content and are little more than a conduit between the user and the link he really wants to find. It is hard to imagine that consumers searching to buy, say, a Sony Cyber-shot camera would find it a positive experience to type "Sony Cyber-shot" into Google's search bar, only to receive a list of websites that, if clicked upon, would divert the user to yet more websites. Google is clearly providing a more positive consumer experience when it delivers results that take a user directly to where it thinks the user may want to go, rather than sending the user to a bottleneck.<sup>54</sup>

While it is certainly understandable that the website operators described above—like *every* web operator—would be eager to garner a top position in Google search results (which is, at least for commercial entities, often a *result* of building a successful business, and not something that is fundamental right), the fact that Google lists them, say, on the fifth, tenth, or eleventh page of search results in response to specific searches is not in and of itself evidence of anticompetitive conduct. As explained by Professors Manne and Wright, the economic concept of scarcity necessarily constrains the output of any search engine because a search engine is limited in the number of hits it can both query and display, albeit less so for the former than the latter. For one site to feature prominently in Google results, another has to feature less prominently. This is an inherent characteristic of search, regardless of the search provider.

A third party simply does not have a right to a spot on Google's webpage. If regulators were persuaded that Google must maintain certain web search rankings, then Google would not be able to remedy a situation where a poor quality or even a destructive website contain malware weasels its way to the top. Not to mention the situation when a better website appears on the scene or a current competitor takes steps to improve its website (and perhaps simultaneously, its rank). Google should be able to determine, unilaterally, which search results deliver the best experience for its users, even if it harms the businesses of Google's so-called competitors. Consumers themselves are safeguards against bad conduct, because Google's incentives are to provide the best possible user experience, or else users will look elsewhere.

Presumably, a website unhappy with its rankings would quickly counter that they are good, high-quality websites and do not deserve to a low position in Google's results. In its submission to the European Commission, and referenced on www.searchneutrality.org, the British company Foundem<sup>59</sup> points to a "credential" that *The Gadget Show*, a British television

<sup>&</sup>lt;sup>53</sup> Press Release, *Antitrust: Commission Proves Allegations of Antitrust Violations by Google* (Nov. 30, 2010) http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/1624.

<sup>&</sup>lt;sup>54</sup> See Manne & Wright, supra note 16, at 30 ("There is no economic justification for requiring a search engine . . . to offer another site's rather than its own simply because there happen to be other sites that do, indeed, offer such content (and would like cheaper access to consumers).")

<sup>&</sup>lt;sup>55</sup> See Manne & Wright, supra note 16, at 2.

<sup>&</sup>lt;sup>56</sup> *Id*.

<sup>&</sup>lt;sup>57</sup> *Id*.

<sup>&</sup>lt;sup>58</sup> *Id* 

<sup>&</sup>lt;sup>59</sup> Foundem is just one of several companies who have made their complaint to the European Commission public.

program, named Foundem the "best price comparison site." Who conferred this ability to appoint such laudation to *The Gadget Show*? This program certainly does not have any more ability to make such a determination than Google. This insinuation that Google should adjust its ranking policies to conform to nearly anonymous third party ratification is absurd. Let Google run its own show, and let *The Gadget Show* run its own.

To conclude, Google's algorithm assigns greater value to websites with original content. Some may say this is paternalistic. Maybe so. It is very possible that Google's method is not the ideal manner to index, rank, and display search results. If they are not, someone will devise a better method, and Google will find itself playing catch-up. This is precisely the environment that we should be encouraging.

# B. It is Google's Right to Provide the Results It Deems Best, Even If That Means Favoring Its Own Methods for Packaging the Information Available on the Internet.

Retail sites and price comparison aggregators believe that Google uses Universal Search to place Google Products shopping results higher than they would otherwise be. These complainants, however, fail to acknowledge basic principles of search. The question is not whether one particular website, or even one particular class of websites such as aggregators of retail information, necessarily belongs at the top of results provided by a search provider. The question, very simply, is "do consumers benefit from the efficiencies created through Universal Search, i.e. being able to ask all sorts of questions in the same box?" The answer to this question is yes, but only because the results are relevant and returned quickly.

Frequently cited examples of "markets" in which Google has used Universal Search to "leverage its overwhelming dominance" are factually misleading. One commonly raised comparison is between Google Maps and MapQuest, with Google's competitors claiming that Google Maps' popularity is a result of Universal search. But Google Maps was enjoying considerable success over competitors such as MapQuest and even Yahoo! Maps well before the introduction of Universal Search. In fact, this may be a case of mistaken causation—arguably the success of Google Maps was one of the factors in Universal Search being so effective. In any event, Google Maps is a truly innovative and useful product. The abilities to toggle between map and satellite views, to access a street view of a destination, and to scroll across the entire map with the click of a button provide an intuitive and useful experience that far surpasses MapQuest. Most users would likely prefer Google Maps as a result rather than a competitor, regardless of search provider. Similarly, Google Video does not owe its success to Universal Search. Google acquired YouTube in 2006. YouTube was then, and remains today, one of the most popular video platforms on the Internet.

Moreover, there are many products and services that Google *could* promote in its results over other, competing products, but does not because, presumably, Google knows its users would prefer others' products. For example, many people may not be aware of Knol, Google's

<sup>60</sup> http://www.searchneutrality.org/

<sup>&</sup>lt;sup>61</sup> Google Maps was launched in February 2005. Joel Stonington, *Google's Greatest Hits and Misses*, BLOOMBERG BUSINESS WEEK, http://images.businessweek.com/slideshows/20110510/google-s-greatest-hits-and-misses/slides/13

<sup>&</sup>lt;sup>62</sup> Andrew Ross Sorkin and Jeremy W. Peters, *Google to Acquire YouTube for \$1.65 Billion*, N.Y. TIMES, Oct. 9, 2006, available at http://www.nytimes.com/2006/10/09/business/09cnd-deal.html.

attempted response to Wikipedia.<sup>63</sup> Like Wikipedia, Knol allows the general public to "contribute knowledge" in a collaborative manner.<sup>64</sup> Knol has not been wildly popular. Most noteworthy, however, is that Knol seems to appear in Google's search results rarely, if ever. Instead, queries regarding general topics often display Wikipedia solutions near the top of the page. This is evidence of Google's commitment to relevance, and that Google is not willing to compromise search by substituting its own inferior product for the clearly superior independent product.

Let's also not forget that Google has its share of failures. In 2004, when Facebook was just a fledgling website still limited to elite private universities, Google introduced Orkut, its response to the then imminent social networking craze. <sup>65</sup> Needless to say, it did not turn out to be Facebook. Orkut experienced considerable success in Brazil, and has since moved all of its operations there. Google Finance likewise pales in comparison to Yahoo Finance's popularity.

The point of all this is twofold. First, Google continues to try and innovate, and has the incentive to do so, as discussed above. Innovation requires trial and error, but the successes are worth the failures. Second, Google is not able to leverage its success in search across any platform it chooses—Google has had to fight for the success it has had. This indicates a healthy marketplace.

In essence, the complaints about Universal Search are lodged by intermediaries like Foundem that hope to send off traffic to merchants in exchange for a commission. And even if Google does favor its own products over others in its *own search results*, it is not clear why this is undesirable. As Google engineer Amit Singhal explains:

What you're calling Google products are just different ways of aggregating the same information that's out there on the Web. Google News is a search service that aggregates news articles on publishers' sites and sends traffic off the publishers' sites. Google product search aggregates product offerings, so it's just a different aggregation of information. Calling it a Google product in competition with competitors is not how we see it. We see it as another way of presenting information in a far richer way to users and sending all the traffic out to the open Web. 66

If consumers don't like the search results they are receiving from Google, they will look elsewhere, and we can be sure that plenty of tech players will be ready to meet that unsatisfied demand.

#### C. Search Engines Should Be Transparent, But Not Too Transparent.

Complaints that Google's criteria for ranking are insufficiently transparent are a little more amorphous. Search Neutrality supporters concede that Google should not have to disclose its algorithm, but also assert that search providers should not be allowed discriminate in favor of

<sup>&</sup>lt;sup>63</sup> Posting of Udi Manber, VP Engineering, Google, *Encouraging People to Contribute Knowledge* (Dec. 13, 2007) *available at* http://googleblog.blogspot.com/2007/12/encouraging-people-to-contribute.html.

<sup>&</sup>lt;sup>65</sup> Stefanie Olsen, *Google Spawns Social Networking Service*, CNET (Jan. 22, 2004) *available at* http://news.cnet.com/2100-1026-5146006.html.

<sup>&</sup>lt;sup>66</sup> James Temple, *Amit Singhal of Google Disputes Antitrust Claims*, SAN FRANCISCO CHRONICLE, Feb. 14, 2011, *available at* http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2011/02/14/BUN21HLE9N.DTL&type=tech

their own services.<sup>67</sup> How this could be enforced without revealing an algorithm is unclear. What is the standard? There is no set, agreed-upon standard for what is and what is not relevant in response to the hundreds of millions of queries a search provider might receive every day. If we as a society want to prohibit search providers from delivering a search result that keeps a user within its family of web pages—even when that is what the search provider believes is the most relevant, useful, result—then a search provider could never present anything more useful than a list of links to other websites; for to direct the user to the curated results would be clearly discriminatory under this standard. In any event, what is the harm of promoting one's own curated result over another's site? If your audience does not like the product, they will look elsewhere, and certainly there will be some other search provider ready to welcome them.

The truth is that Google is far more transparent than most companies. Google has set a common standard that has encouraged better practices and improved the industry, has clear policies and processes to help content providers and users alike navigate the service, and has improved choice while not excluding competition.<sup>68</sup> Google's transparency gives users and content providers the capacity to understand how the search works, including ranking and filtration of certain terms and content. For example, Google is forthcoming about what SEO practices help a site achieve a higher ranking. 691 These standards are well understood and, indeed, an entire SEO industry has grown around understanding the best practices in this field. Content producers can, through trial and error, understand why their ranking may be low and seek to improve it. Though content providers and aggregators are quick to criticize search companies for "bad" or "distorted" results if they are unhappy with their low ranking, they in fact have a clear course of action to improve their ranking.

Google also maintains Webmaster Central, where website operators can see how Google perceives their site, learn how to improve their chances at getting ranked, and ask questions that will be disseminated to all via the Webmaster Central blog.<sup>70</sup> Lastly, Google equips all webmasters with the tools to make the necessary changes. The Webmaster Guidelines provides guidance over three major topics: design and content, technical, and quality. The design and content section includes information about how to map a website, the use of text instead of images in important names or content, and a link to image guidelines to ensure that webmasters publish the best images.<sup>72</sup> The technical section provides information to webmasters on how to make sure the site is open to Google's crawlers, optimize load times, and manage advertisers' content. Tastly, the quality section provides instructions on how to—and how not to—build a website, including avoiding link schemes, keywords, and hidden text, just to name a few.<sup>74</sup>

<sup>&</sup>lt;sup>67</sup> http://www.searchneutrality.org/ ("Note that none of these proposals require Google to publish details of its algorithms, let alone seek permission for any changes from a government commission. Indeed, Foundem's EU Complaint went out of its way to make clear that it is 'not seeking to require Google to publish details of its ranking algorithms'.").

<sup>&</sup>lt;sup>68</sup> Some examples of these practices include Google's Webmaster Guidelines (available at http://www.google.com/support/webmasters/bin/answer.py?answer=35769), and Google's Search Engine Optimization page (available at http://www.google.com/support/webmasters).

Google Search Engine Optimization Starter Guide, (2010), available at

http://googlewebmastercentral.blogspot.com/2010/09/seo-starter-guide-updated.html.

<sup>&</sup>lt;sup>70</sup> Webmaster Central Blog, http://googlewebmastercentral.blogspot.com/.

<sup>71</sup> Webmaster Guidelines, http://www.google.com/support/webmasters/bin/answer.py?hl=en&answer=35769. <sup>72</sup> *Id*.

<sup>&</sup>lt;sup>73</sup> *Id*.

<sup>&</sup>lt;sup>74</sup> *Id*.

These are all efforts on behalf of Google to provide as much transparency as possible while protecting their business model, trade secrets, and the integrity of search.

Remember, if everyone had complete access to understanding Google's algorithm and rankings, search would be rendered useless, as the cheaters would move more quickly than those complying with the rules.

#### III. The Proposed Remedies Make No Sense

Opponents of Google have long struggled to outline a reasonable, fair, and enforceable remedy structure if the government decided to take action. Legal commentators such as Frank Pasquale are quick to identify problems, but fail to provide actionable and realistic solutions to the problems they identify. In fact, although there are several articles on the so-called problems involving search, few if any propose any meaningful remedies. As mentioned above, Search Neutrality supporters concede that forcing Google to disclose its algorithm would be ineffective. However, three remedies have repeatedly been mentioned. Two of these remedies make little sense, for the reasons outlined below. The third appears to be a good idea initially, but raises an important caveat that at least requires consideration.

First, as discussed briefly above, complainants argue to the European Commission that a search provider should not be able to discriminate in favor of its curated content. Discrimination is a very difficult word to apply in this context because it requires an agreed-upon base level of treatment. At its core search is based upon relevancy and relevancy is in itself subjective, and if it were not, there would be no need for competing search providers, as they would all provide the same results. Society is actually better off without a single standard of relevancy -- it is this opaque subjectivity, and the possibility that different consumers want different results, that leads to competition and innovation, and allows for multiple firms to simultaneously succeed. Nor would a popularity baseline work, as new websites would never be able to compete (and quite possibly Google would continue its success with such an opaque standard). Any other baseline would be equally impossible. Search's entire function is to devise ways to quickly sort through information and provide the best results. Therefore, search's entire function is to discriminate.

It appears as though what these complaints are really getting at with this argument is that there should be some type of "objective relevance." But this idea is completely unworkable. This proposed standard does not articulate a method for making uniform the wholly subjective determination that is relevancy. Relevance is the primary goal of all search providers, and the

<sup>&</sup>lt;sup>75</sup> See generally, Oren Bracha & Frank Pasquale, Federal Search Commission? Access, Fairness, and Accountability in the Law of Search, 93 CORNELL L. REV. 1149 (2008).

<sup>&</sup>lt;sup>76</sup> http://www.searchneutrality.org/ ("Indeed, Foundem's EU Complaint went out of its way to make clear that it is 'not seeking to require Google to publish details of its ranking algorithms'.").

http://www.searchneutrality.org/foundem-google-story/eu-launches-formal-investigation/

<sup>&</sup>lt;sup>78</sup> Manne & Wright, *supra* note 16, at 7 ("Relevance is a slippery and subjective concept, different for every user and every query, and there is no *a priori* way to define it . . . .")

<sup>&</sup>lt;sup>79</sup> *Id.* at 29 ("[B]y making search engine results uniform, competitors would no longer have an incentive to differentiate themselves from one another upon margins that consumers value."). *See also* Goldman, *supra* note 44, at \_\_ (predicting a migration away from "one-size-fits-all algorithms" to "personalized ranking algorithms . . . [that] produce search results that are custom-tailored to each searcher's interests, so searchers will see different search results based on your past searches, as well as the search results and news headlines you've clicked on").

80 *See id.* at 7.

<sup>&</sup>lt;sup>81</sup> *Id*.

grounds on which search providers compete. As James Grimmelmann explains, "Telling a search provider to be more relevant is like telling a boxer to punch harder." Relevance is an obvious goal, but the intentions of Search Neutrality supporters and their singular focus on taking down Google are less obvious.

In any respect, Google is already doing what its competitors are calling for. The rankings reflect the algorithmically anticipated utility of websites for users. This analysis is fair and non-discriminatory in that any website could be deemed the most relevant by the algorithm. And, as described above, Google provides ample transparency and guidance with respect to this process. Ultimately Search Neutrality is calling for Google to maintain its business model, and retain its safeguards. With this understanding, Search Neutrality's efforts appear more guided at frustrating Google than at identifying any legitimate concerns.

A second proposed remedy is a transparent adjudication system for disputes regarding ranking and punishments. However, it is unclear how such a system would work. First, a punished company would need to know that it was punished—this would require insight into the Google algorithm, something that Search Neutrality has already conceded, and emphasized, is not what they are asking for. Second, such a system would threaten to so overly burden Google as to render itself useless. With access to an adjudication system, every company not occupying the first space in ranking would clamor for the top position. Just like the flaws in the arguments for pure relevancy, a transparent adjudication process suffers from a lack of standardization that makes it equally unfeasible.

But in any event, Google is taking steps to bridge the gap between perfect adjudication and feasibility. Google has begun notifying Webmasters when their sites are in violation of Google's policies in an effort to be more transparent. At this stage Google offers an opportunity to appeal the determination before the website experiences a change in its rank. It is admittedly a system that is impossible to perfect given the sheer numbers of websites in the index, but Google is taking steps to simplify and clarify the process.

Third, some competitors have suggested that Google, or any search provider, should clearly label any instance in which it provides a curated presentation of information as a search result. This would be similar to the current FTC rules requiring search providers to denote sponsored search results from organic search results. This is a reasonable suggestion, but not something important or even consequential enough to warrant a mandate. It is also something

\_

<sup>&</sup>lt;sup>82</sup> James Grimmelmann, *Some Skepticism About Search Neutrality*, in The Next Digital Decade: Essays on the Future of the Internet (Berin Szoka & Adam Marcus eds., TechFreedom 2010)

<sup>&</sup>lt;sup>83</sup> See e.g., Frank Pasquale, Beyond Innovation and Competition: The Need for Qualified Transparency in Internet Intermediaries, 104 Nw. U. L. Rev. 105, 168-69 (2010) (proposing an Internet Intermediary Regulatory Council that could assist the Federal Communications Commission and the Federal Trade Commission in assessing complaints against search engines).

Matt McGee, Google Adding New Spam Warnings in Webmaster Tools, SEARCH PROVIDER LAND, Jan. 6, 2011 available at http://searchengineland.com/google-adding-new-spam-warnings-in-webmaster-tools-60582 (the article provides an example of Google's efforts to notify one Website of a potential cloaking violation); Barry Scwartz, Google E-mailing Webmasters for Bad Links, Cloaking & More, SEARCH ENGINE ROUNDTABLE, Jan. 6, 2011, available at http://www.seroundtable.com/google-unnatural-links-warnings-12761.html.

<sup>85</sup> http://www.searchneutrality.org/foundem-google-story/eu-launches-formal-investigation/

<sup>&</sup>lt;sup>86</sup> See Letter from Heather Hippsley, Acting Associate Director, Division of Advertising Practices, Federal Trade Commission to unnamed search engine company, June 27, 2002, available at http://www.ftc.gov/os/closings/staff/commercialalertattatch.shtm (declaring FTC has the power to determine whether search engine is violating §5 of the Federal Trade Commission Act, 15 U.S.C. § 45(a)(1),(1) by failing to disclose advertisements are inserted into search engine result lists).

that Google already does, as grouped results appear under a clear header. Furthermore, Google has communicated this tool and its functionality to the public, so any more notice would likely be duplicative.

All of these measures seem disproportionate to any potential harm. Not surprisingly consumers see little reason to regulate Internet Search. A recent survey by Rasmussen Reports reinforces the argument against regulation, as 77 percent of those surveyed said they did not believe that there is a need for search regulation. As much as Google's competitors are trying to drum up to the need for regulation, consumers simply have not been convinced.

## IV. The Search Industry Self-Regulates and that Regulation Is Better Than Any Government Regulation

Competition among search providers and other information organizers to attract users by providing the most relevant results achieves competitive balance better than any government regulation ever could. 88 It is worth restating the fundamentals. Antitrust and consumer protection laws are designed to enhance the lives of consumers. Search providers, like most of the technology sector, build their products with the purpose of attracting consumers. Because search is provided for free, the consumer is mobile across alternatives, and able to demand the highest level of performance from all competitors. Advertisers pay for traffic, which doubles the incentive of search providers to build something that will attract and keep consumers. This cycle is ideal. The only outcome regulation, oversight, investigations, or standardization could achieve would be to lessen the value of this already functioning cycle.

#### **Conclusion**

The debates over Google's market power, search neutrality, and commercial freedom in the technology sector are just beginning. It is vital for lawmakers and regulators to consider not only the motivations of those raising complaints, but also the likely ramifications of imposing constraints on those companies that are most dynamic and innovative. While Google's methods may be frustrating for those who are not at the top of search results, we must focus on the fact that Google is just one search provider that is implementing just one possible method of performing search. We cannot make the mistake of assuming that there is an inherent right to placement on a landing page, or a divining rod for relevancy that will make the results for all queries crystal clear. Instead, we must recognize what search is: a new frontier in technology that poses many more questions than provides answers.

We must also recognize what Google is: a success story and catalyst for innovation, but also a nascent company in a dynamic and competitive industry. Topics like Universal Search, algorithms, and even relevancy are just the beginning of the issues the search industry must confront. It is best to allow the sector to continue to grow, and allow the consumers to continue to reap the rewards of a competition designed purely for their benefit. Relevance is by its very nature subjective, and consumers want search providers to continue striving to achieve the most relevant search results, as quickly as possible.

\_

<sup>&</sup>lt;sup>87</sup> Most Say No to Government Regulation of Search providers, *available at* http://www.rasmussenreports.com/public\_content/lifestyle/general\_lifestyle/january\_2011/most\_say\_no\_to\_govern ment\_regulation\_of\_search\_engines.

<sup>&</sup>lt;sup>88</sup> See Manne & Wright, supra note 16, at 31.