

FACT SHEET

August 28, 2015

**Search Engines, Advertising, and Auctions**

The vast amounts of content available over the Internet can be overwhelming. Search engines – such as Google, Yahoo, Bing, and a variety of other smaller search engines – help users find what they are looking for online by finding web pages that match user-entered keywords. Search engines are free to users, but typically earn revenue through paid advertising. Most search engines have online auctions for keyword-driven graphic- or text-ad placement, or placement in sponsored search rankings; bids are usually on a per-click basis. Like shopping malls and computer operating systems, search engines are economic *platforms*: they provide a service by bringing several groups of users together.

Overview**These issues arise in discussions of search engines:**

- There is a tension between search engines' need to make money (and stay in business), and privacy issues related to information about users – information that search engines routinely collect, use, and retain. The easier availability of content through search engines may lead to commoditization of content. However, if content is free or low cost, it may be difficult for those who produce it (like journalists) to make a living.
- As search engines upload massive quantities of data of many types and sources (copies of copyrighted books, audio and video; pictures of streets and houses; information from mobile devices pinpointing where individual users are), it may become easier for malicious parties to exploit the data in ways not previously thought of.
- There are a number of search engines, but the market is dominated by a few big players. This leads to scrutiny over competition between search engines and mergers with other online platforms and services. It also raises concerns about search neutrality, since only a few entities control access over the flow of information, news, and business on the web. The term “search neutrality” refers to the desire to ensure search engines do not manipulate search results to give them an advantage over competitors, or to put forward political positions favorable to their interests.
- Economists are interested in how the design of ad auctions affects search engine revenues, and how access to the Internet – and thus to search engines – affects retail prices and possibly leads to higher prices for certain consumers.

Search Engines, Advertising, and Auctions Sources

The papers listed below are a good place to start in learning about search engines and advertising. [John Palfrey](#) and his coauthors look at how search engine results affect hiring in “[We Googled You.](#)” In “[Position Auctions with Consumer Search,](#)” [Susan Athey](#) and [Glenn Ellison](#) look at how search engines' advertising auction practices affect consumers. [Hal Varian](#) describes how search patterns might affect product prices in “[Conditioning Prices on Purchase History.](#)” [Daniel Spulber](#) writes about how search engines affect consumers and commerce in his paper “[The Map of Commerce: Internet Search, Competition, and the Circular Flow of Information.](#)”

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For media inquiries on a range of TAP topics, or for assistance facilitating interviews between reporters and academics, contact TAP@techpolicy.com.

Glenn Ellison's paper "[Lessons about Markets from the Internet](#)" talks about what economists have learned from the Internet. [Randall Picker](#) writes about how privacy and competition might conflict in "[Competition and Privacy in Web 2.0 and the Cloud](#)." [Richard Gilbert](#) and [Michael L. Katz](#) write about problems arising from copyrighted content being made available through search engines in "[When Good Value Chains Go Bad: The Economics of Indirect Liability for Copyright Enforcement](#)."

Please note that all links on this fact sheet are accessible from the online version at www.techpolicy.com/search.aspx.

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